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May 1, 2025

Mr. Richard E. Tallman, P.E.
Environmental Engineer
Bureau of District Mining Operations
PA Department of Environmental Protection
5 West Laurel Boulevard
Pottsville, PA 17901-2454

SUBJECT: NPDES Permit Modification – Response to Technical Deficiency Letter (NPDES)
Heidelberg Materials Northeast LLC
Rock Hill Quarry Operation – SMP No. 7974SM1
NPDES Permit No. PA0594121
East Rockhill Township, Bucks County
EARTHRES Project No. 061003.052

Dear Mr. Tallman,

On behalf of Heidelberg Materials Northeast LLC (Heidelberg), Earthres Group, Inc. (EARTHRES) is submitting one (1) original and two (2) copies of a response to the Pennsylvania Department of Environmental Protection (PA DEP) Review Letter dated April 1, 2025. For ease of reference, your comments are listed below in *italics* and our response in **bold**.

The following documents are included with this response to comments update:

- Water Quality Assessment Report;
- Application for Individual NPDES Permit Associated with Mining Activities;
- Anti-Degradation Supplement;
    - Attachment Section 1-C
- Map View of Area (Site Location Map);
- NPDES Discharge Modification Report;
- Hydraflow Hydrograph Output Report;
- Module 6.2: Environmental Resources Map;
- Module 8: Hydrology;
- Module 9: Operations Map;
- Module 12: Erosion and Sediment Control;
    - E&S Site Plan; and
    - Hydraflow Drainage Area Map.

1. *Water Quality Assessment – Anti-Degradation Sampling Data. The flow data submitted in Attachment B of the Water Quality Assessment appears to reveal a discrepancy in the flows*

entering the Unnamed Tributary to Bog Run. The samples taken for the development of Antidegradation limits show the following:

a. *Flows upstream of the Clarifying Pond appear to be stormwater driven with little apparently flow contributing to the flow recorded at NPDES Outfall 001.*
b. *The flow from the Clarifying Pond which originates from the quarry pit and flows by gravity appears to average approximately 0.06 MGD (0.093 cfs) in the absence of pumping from the quarry.*
c. *The stormwater flow from Sediment Basin 1 appears to average approximately 0.02 MGD (0.031 cfs).*
d. *The stormwater flow from Sediment Basin 2 as indicated appears to average 0.0 MGD (0.0 cfs) as it appears to infiltrate.*
e. *The sampling data shows that flow discharge from the Rock Hill Quarry and permit through Outfall 001 appears to average 0.33 MGD (0.51 cfs) in the absence of any quarry pit dewatering or operational permit discharges (0.238 MGD).*

It appears there is flow in the Unnamed Tributary leading to Outfall 001 that is generated from some other source than the existing quarry infrastructure as the flow from the clarifying pond and sedimentation basins does not add up to the discharge quantity through Outfall 001. That flow appears to be:

0.33 MGD- (0.06 MGD + 0.02 MGD) = 0.25 MGD flow leaving the quarry permit through present Outfall 001 area without the quarry pit contributing 0.238 MGD from operational permit discharges.

Please explain the presence of flow of water and account for its probable source. Title 25 Pa. Code §77.457.

Response: The Tributary gains flow gradually downstream of the Clarifying Pond as it descends in elevation and encounters the local water table resulting in groundwater seepage to the Tributary. Other intermittent contributions of flow to the Tributary include discharge from the onsite sedimentation ponds and stormwater runoff from the western portion of the watershed including overland flow and intermittent subsurface flow following rain events.

2. *Please revise the Water Quality Assessment for the anti-degradation average monthly discharge limits for the Clarifying Pond at 0.238 MGD (present limit without quarry dewatering) as well as for the proposed Phase I and Phase II operations. Title 25 Pa Code §77.457.*

Response: The Water Quality Assessment has been revised to include an evaluation of the water quality based on the present discharge limit of 0.238 MGD.

3. *It appears that Outfall 001 must be maintained as a stormwater outfall. Please modify the NPDES application keeping Outfall 001 at its present location and redesignate the clarifying pond as a fourth NPDES outfall with the discharge point limit of 0.238 MGD. Title 25 Pa. Code §77.457.*

   Response: Application for Individual NPDES Permit has been revised to reflect the updated Outfall 001 stormwater conditions and redesignated Clarifying Pond discharge as Outfall 004.

4. *Please describe the treatment program that will be put in place to meet the anti-degradation average daily discharge limits. Title 25 Pa. Code §77.457.*

   Response: Heidelberg will utilize best practices to maintain onsite treatment facilities (Sedimentation Basin No. 1, No. 2, and the Clarifying Pond) during operation of the quarry to maintain existing water quality. The facilities will be regularly cleared of vegetation and dredged as necessary to maximize settling capacity. Additionally, the quarry will employ additional best management practices as described within Module 12 and 10 including water reuse, manual dewatering devices (during pit dewatering when authorized by PA DEP), sediment basin ratio of greater than 4:1 length to width, sediment basins with 4-7 day detention, channels, collectors and diversions lined with permanent non-erosive materials, and sediment traps with infiltration trenches.

5. *Please update the following Modules to show the proposed modification to the NPDES permit:*
   a. *Module 2: Application for Individual NPDES Permit Associated with Mining Activities.*
      i. *Section C. Outfall Information on page 3.*
         1. *Add the fourth Outfall at the Clarification Pond, Title 25 Pa. Code §77.128.*
         2. *Add information for the Non-Discharging Sediment Traps and groundwater infiltration points, Title 25 PA Code §77.128.*

   Response: The Application for Individual NPDES Permit has been updated to identify the proposed outfalls 001, 002, 003 and 004 as well as the three (3) non-discharging sediment trap location information.

      ii. *Section D. Effluent Characterization*
         1. *Outfall 001 – Revise flow to the estimated combined discharge (Stormwater plus Non pumped Clarifying Pond Discharge of 0.238 MGD) Title PA. Code §77.457.*
         2. *Outfall 004 – Complete a Section D. Effluent Characterization page for the Clarifying Pond Outfall 001, Title 25 Pa. Code §77.457.*

3. *Question 28: Conventional and Nonconventional Pollutant - Please check the following: Nitrate-Nitrite, Oil and Grease, and Phosphorus*

Response: The Application for Individual NPDES Permit has been revised to include Outfall 001 as a stormwater outfall with no average or design flow limitations. Additionally, an effluent characterization section page for the proposed NPDES Discharge 004 has been added and Nitrate-Nitrite, Oil and Gease and Phosphorus have been indicated to be present (at extremely low levels) based on historical sampling data.

iii. *Please complete Section 2 of the Anti-Degradation Supplement. Title 25 Pa. Code Section 93.4c(b)(1)(i)(A).*

Response: Section 2 of the Anti-Degradation Supplement has been completed and provided with this response package.

iv. *Map View of Area, Title 25 Pa. Code §77.454(a)(6,10).*

Response: Map View of Area (Site Location Map) has been revised to identify updated outfalls and site features.

v. *Update the NPDES Discharge Modification Report to reflect four outfalls. Title 25 Pa. Code §77.457*

Response: The NPDES Discharge Modification Report has been updated to include revised outfall designations and limits.

vi. *Update the Hydraflow Hydrograph Output Report as necessary.*
    1. *Include the 0.238 MGD flow from the Clarifying Pond. Title 25 Pa. Code §77.457*

Response: Hydraflow Hydrograph Output Report has been updated to include the Clarifying Pond Discharge as a constant flow (0.238 MGD) hydrograph, consistent with the Outfall 004 information listed in the updated Application for Individual NPDES Permit Associated with Mining Activities.

b. *Module 6.2: Environmental Resources Map Title 25 Pa. Code §77.454(a)(6,10).*

Response: Exhibit 6.2: Environmental Resources Map has been updated to reflect the revisions in the proposed outfalls and upstream sampling location.

c. *Module 8: Hydrology*
   i. *Please update Module 8.2 Background Sampling and Monitoring to reflect the added NPDES Outfalls. Title 25 Pa. Code §77.405*
   ii. *Please update Module 8.3 Groundwater Information to reflect the revised GPE and NDPES. Title 25 Pa. Code §77.405*
   iii. *Please update the information in 8.4 Surface Water Information. Title 25 Pa. Code §77.406.*

Response: Module 8 has been updated to reflect the revised NPDES Outfalls and to be reflect the revised GPE Addendum and NPDES modification. Additionally, information in 8.4 Surface Water Information has been updated.

d. *Module 9: Operations Map. Title 25 Pa. Code §77.454(a)(6,10).*

Response: Exhibit 9: Operations Map has been updated to reflect the revisions in the proposed outfalls and upstream sampling location.

e. *Module 12: Erosion and Sedimentation Controls*
   i. *Update the Module 12.2.4 narrative to reflect the limited scope of operations expressed in January 15, 2021 response to deficiencies.*
   ii. *Update the E&S Site Plan Map to reflect four Outfalls. Title 25 Pa. Code §77.454(a)(6,10).*
   iii. *Update the Hydraflow Drainage Area Map – Please label the features detailed in the Hydrograph Output Report. Title 25 Pa. Code §77.454(a)(6,10).*

Response: Module 12: E&S Controls, and associated Site Plan and Hydraflow Drainage Area Map have been updated to reflect the revisions in the proposed outfalls and upstream sampling location. In addition, Module 12 language has been updated to remove the previously proposed Asphalt Plant, RAP storage area and scope of future noncoal mining activities at the quarry (Module 12.2.4).

6. *Please conduct and provide the results of survey necessary for PA Fish and Boat Commission clearance for threatened sensitive species required in the PNDI. Title 25 Pa. Code §77.454(a)(6,10).*

Response: EARTHRES is currently working with the PA Fish and Boat Commission to address their comments. EARTHRES will supplement this response, if necessary.

Should you have any questions or need any additional information to complete your review, please contact me at (215) 766-1211.

Sincerely,
EARTHRES, a Division of RESPEC

Joseph JungTaek Kim, P.E.
Project Manager

Matthew S. Weikel, P.G.
Senior Hydrogeologist/Technical Manager

Enclosures: As stated

Cc: Andrew Gutshall (Heidelberg Materials)

WATER QUALITY ASSESSMENT REPORT

WATER QUALITY ASSESSMENT

Contents

- Water Quality Assessment Narrative
- Attachment A – Figure 1 – Map View of Area with Sample Locations
- Attachment B – Summarized Outfall 001 Anti-Degradation Sampling Data
- Attachment C – StreamStats Report
- Appendix A – Laboratory Analytical Data & Summary Table

WATER QUALITY ASSESSMENT

Introduction

This Water Quality Assessment (Assessment) is provided as part of the response to Pennsylvania Department of Environmental Protection (PA DEP) comments received on May 31, 2023 and follow-up comments on April 1, 2025 regarding the National Pollutant Discharge Elimination (NPDES) Permit Modification Application for the Rock Hill Quarry (Site). The Assessment is provided in support of the Anti-degradation Supplement, Section 2A, test for non-degradation of water quality and evaluates the NPDES discharge at the current permitted limit of 0.238 million gallons per day (MGD), as well as at a potential future temporary discharge rate of 2.88 MGD (planned for future dewatering). Note, it is anticipated that any additional discharge above the current permitted limit of 0.238 MGD will require prior PA DEP authorization, and the evaluation in this report under the 2.88 MGD rate is for planning purposes only. At this time, Heidelberg Materials is not proposing any discharge beyond that which is already currently permitted.

With this permit modification, Heidelberg Materials Northeast, LLC (Heidelberg Materials) is proposing to reclassify the existing NPDES discharge point 001 at Rock Hill Quarry to a stormwater outfall and add three (3) upstream discharge points 002, 003 and 004. This proposed reclassification of the NPDES discharge points will not result in any discharge beyond that which is currently permitted. No new construction is required to support this modification as all infrastructure has been constructed, certified and in operation since 2018. Discharge Points 002 and 003 convey stormwater runoff from quarry support areas via Sediment Ponds No. 1 and No. 2, and Discharge Point 004 manages quarry pit water discharge through the Clarifying Pond. With these modifications, outfall 004 will be permitted with a discharge rate of 0.238 MGD consistent with the rate included in the existing permit. This rate is sufficient to support mining operations to be conducted above the water table that will not require dewatering of the existing water-filled quarry pit.

Future mining below the water table will likely require dewatering of the water-filled quarry pit. As noted above, this future potential dewatering operation will likely require prior DEP approval. In anticipation of future dewatering operations, this NPDES Discharge Modification report determined that future dewatering of the pit can be facilitated by discharging at a rate of 4.46 cubic feet per second (cfs) or 2.88 MGD. After dewatering of the surface water storage contained in the pit, the discharge rate required to keep the pit dry will reduce to the steady state average of 0.074 MGD subject to seasonal and climatic variation (see Groundwater Pumping Evaluation Addendum) and will be sufficiently covered by the existing 0.238 MGD discharge rate. No modifications and/or upgrades to existing Site and downstream features are expected to be needed as a result of the potential future discharge of 2.88 MGD, as that planned discharge rate was determined based on the calculated limits of the existing conveyance system. Furthermore, all the impoundments were previously certified and approved by the Department and currently meet or exceed the requirements for EV watershed standards.

Discharge from the quarry is to a small tributary that flows into an Unnamed Tributary of Tohickon Creek designated locally as Bog Run. Bog Run currently has a designated use as Trout

Stocked Fishes, Migratory Fishes (TSF, MF) and has an existing use as Exceptional Value Migratory Fishes (EV, MF). Based on a Water Quality Standards Review Stream Evaluation Report prepared in 2024, Heidelberg understands that DEP is recommending redesignating the unnamed tributary to Bog Run from TSF, MF to EV, MF. Per the Report, the stream is recommended for upgrade based on the presence of exceptional value wetlands located within the watershed and not on the basis of the existing water quality.

This Assessment was completed to develop instream goals protective of the existing use water quality classification (EV, MF) of the receiving stream of the Site, identified herein as The Unnamed Tributary. This Assessment will also satisfy the anticipated redesignation of the Unnamed Tributary, which will be the same classification as the currently designated existing use (EV, MF). The Department's Water Quality Anti-Degradation Implementation Guidance Document No. 391-0300-002 ('Guidance' or 'the Guidance') was consulted for completion of the assessment. The Assessment was completed using a steady state mass balance model and site-specific stream water quality data. The analysis and results are presented in the following sections.

Existing Water Quality

A total of 25 sampling events were conducted between July 20, 2023 and July 30, 2024 to evaluate existing water quality. The sampling locations are summarized in Table 1 – Sampling Location Summary below. The samples were analyzed for parameters utilized in the Water Quality Standards Review Stream Evaluation Report prepared by DEP in 2021. The summarized results and laboratory analytical data are included in Appendix A. The locations of the sampling points described within Table 1 are shown on Figure 1 – Map View of Area included in Attachment A.

Table 1 – Sampling Location Summary

Sampling Location	Number of Samples Collected	Description
Upgradient	22	The Upgradient sampling location is a small drainage feature located ~550 feet east of the junction of North Rockhill Road and the Site Entrance. This feature primarily conveys stormwater runoff but was observed to have little to no flow during each sampling event.
Existing NPDES 001 (Downgradient)	25	NPDES Outfall 001 is located near the western portion of the Site and encompasses the total flow from the Site, groundwater, and runoff contribution from offsite areas.
Clarifying Pond (Proposed NPDES 004)	25	The Clarifying Pond is located approximately 100 feet east of the Upgradient Sampling location. The Clarifying Pond receives water from the Quarry sump, and discharges through a V-notch weir to the tributary. Samples were collected after weir.
Basin 1 (Proposed NPDES 002)	11	Basin #1 is located ~125 feet north of the Upgradient sampling location and receives surface runoff from bonded support areas. The basin is oversized and seldom discharges.
Basin 2 (Proposed NPDES 003)	6	Basin #2 is located ~150 feet north of Basin #1 and receives surface runoff from bonded support areas. The basin is oversized and seldom discharges.

Table 1 (above) summarizes the sampling locations included in the anti-degradation sampling plan. Note that samples were not collected if the sample location was not observed to have measurable flow.

Sampling of the various locations was completed to provide a comprehensive evaluation of existing quality and select a point representative of existing quality with which to develop instream goals. Given the headwater location of the Site, flow is intermittent within the Tributary until it gains water from the quarry pit gravity drain that discharges to the Tributary via the Clarifying Pond. The Tributary gains flow gradually downstream of the Clarifying Pond as it descends in elevation and encounters the local water table resulting in groundwater seepage to the Tributary. Other intermittent contributions of flow to the Tributary include discharge from the onsite sedimentation ponds and stormwater runoff from the western portion of the watershed including overland flow and intermittent subsurface flow following rain events. Based on review of the data and the lack of flow at the Upgradient Sampling location, the Downgradient location (Existing NPDES Outfall 001) was selected as the point of analysis for existing and future water quality.

Data Evaluation

Attachment B of this report contains the Summarized Outfall 001 Anti-Degradation Sampling Data, which contains the summarized results for Outfall 001 and statistical calculations completed on the data. The Assessment focused on the twelve (12) parameters listed within Table 3 – Default Water Quality Objectives for HQ and EV contained within the Guidance. A value of one-half the detection limit was used for statistical analysis of non-detect results.

The Department's test for a measurable change in surface water quality is defined as a concentration exceeding the upper 95 percent confidence limit of the median value of the existing surface water quality data set. This upper boundary of the median represents the water quality objective for defining the total allowable instream concentration of a pollutant after adding the discharge. This calculated 95% upper confidence limit (C_{total}) was calculated for six (6) of the twelve (12) parameters. An upper 95% confidence limit could not be constructed for Copper, Lead, Zinc, TSS, Ammonia, and Carbonaceous Biochemical Oxygen Demand due to greater than 50% non-detect results for each of these parameters. The high number of non-detect results yielded little variation in the data and did not allow the construction of 95% upper confidence limits using the bootstrapping method for non-normally distributed data. Due to the large (greater than 50%) number of non-detect results for these parameters, the application of discharge limits for these parameters is unnecessary as they are not present at detectable levels within the discharge.

Mass Balance Methodology

Using the site-specific water quality data, the discharge limit goals were assessed using a mass balance approach as outlined in the Guidance. Three (3) sets of discharge limit goals were evaluated; one (1) for the existing discharge rate of 0.238 MGD and one for each phase of the planned future Quarry Pit dewatering. The first planned dewatering phase (Phase I) involves the dewatering of the existing pit at a flow rate of up to 2.88 MGD. The second planned phase (Phase II) involves a steady state discharge of 0.074 MGD following the successful dewatering of the pit. The following mass-balance equations were used to calculate appropriate discharge limit goals for each phase of the project.

$$Q_{discharge} \times C_{discharge} + Q_{upstream} \times C_{upstream} = Q_{total} \times C_{total} \qquad \text{eq. 1}$$

where:

C_{total}	is the concentration represented by the upper bound of the 95% confidence of the data set
$C_{discharge}$	is the allowable discharge concentration of the quarry
$C_{upstream}$	is the mean upstream concentration of the surface water (As no upgradient discharge exists, Outfall 001 was used to represent existing quality)
$Q_{discharge}$	is the pumping rate of the quarry
$Q_{upstream}$	is the Q_{HM} discharge rate of the Unnamed Tributary at Outfall 001.
Q_{total}	is the sum of $Q_{discharge}$ and $Q_{upstream}$

Solving for the concentration limit of the quarry, $C_{discharge}$, we have:

$$C_{discharge} = \frac{(Q_{total} \times C_{total}) - (Q_{upstream} \times C_{upstream})}{Q_{discharge}} \qquad \text{eq. 2}$$

This equation solves for the long-term concentration goal needed to maintain the instream water quality objectives.

A multiplier is used to translate the long-term average value to an average monthly value based on the coefficient of variation of the sample data. The multiplier is determined using a table included in the Guidance. Table 2 (below) summarizes the applicable multipliers based on the coefficient of variation (CV) for each parameter.

Table 2 – Summary of Coefficients of Variation and Associated Multipliers

Parameter	CV	Multiplier
Nitrate Nitrite as N	0.5	1.720
Sulfate	0.2	1.255
Aluminum, Total	1.3	3.335
Iron, Total	1.1	2.897
TDS	0.4	1.554
Phosphorous as P	2.3	4.903

Table 2 (above) summarizes the coefficients of variation (CV) and associated multipliers for each parameter. The CV is calculated as the standard deviation of each parameter divided by that parameter's mean. Note that the listed multipliers used to convert the long-term limits into the monthly discharge limits were obtained from the provided table in the Guidance. Also note that the CV for Phosphorous as P (2.3) exceeds the largest value on the table of multipliers provided in the Guidance. As a result, the multiplier associated with a CV of 2.0 (4.903) was used conservatively.

Parameters

The concentration of up-gradient surface water $C_{upstream}$ was calculated as the mean of the Outfall 001 surface water concentration for each parameter. The harmonic mean flow (Q_{HM}) was calculated using the USGS Streamstats program (water.usgs.gov/osw/streamstats/index.html) at Outfall 001, resulting in a flow of 0.119 cfs or 0.077 MGD (see Attachment C) for the $Q_{upstream}$.

Three (3) distinct quarry discharge values were evaluated, one for the existing discharge rate of 0.238 MGD and one for each Phase of the future planned Pit dewatering. The planned Phase I (dewatering) discharge value was 2.88 MGD, which is compatible with the downstream culvert design capacity. Discharge at this rate will be a temporary action and will cease upon dewatering of the water currently impounded in the Quarry pit. The planned Phase II (steady state) discharge value is 0.074 MGD and was calculated as the sum of the indicated quarry pumping rate (0.039 MGD) and direct precipitation (0.035 MGD).

Mass Balance Calculation

Using equation 2, the long-term concentration limit of the quarry discharge ($C_{discharge}$) was calculated for nitrate nitrite as N, sulfate, total aluminum, total iron, TDS, and phosphorous as P. The multipliers referenced in the methodology section were applied to calculate the monthly average. Table 3 summarizes the mass balance calculations for the existing discharge rate. Table 4 summarizes the mass balance calculations for the planned Phase I dewatering and Table 5 (following page) summarizes the calculations for the planned Phase II dewatering.

Table 3 – Summarized Mass Balance Calculations for Existing Discharge (0.238 MGD)

Parameters	**(Monthly) $C_{discharge}$ (mg/L)**	**(Long-term) $C_{discharge}$ (mg/L)**	**$C_{upstream}$ (mg/L)**	**C_{total} 95% UCL (mg/L)**	**$Q_{upstream}$ (MGD)**	**$Q_{discharge}$ (MGD)**	**Q_{total} (MGD)**
Nitrate Nitrite as N (mg/L)	0.22	0.13	0.10	0.12	0.077	0.238	0.315
Sulfate (mg/L)	10.9	8.7	7.6	8.4			
Aluminum, Total (mg/L)	0.46	0.14	0.12	0.13			
Iron, Total (mg/L)	1.22	0.44	0.37	0.42			
TDS (mg/L)	227	146	145	146			
Phosphorous as P (mg/L)	0.39	0.08	0.20	0.08			

Table 3 (above) summarizes the mass-balance calculations performed to obtain the average monthly discharge goals during for existing conditions. Note that due to the proposed flow rates and existing stream quality, the mass-balance calculations for 'Phosphorous as P' yield a discharge goal that is more stringent than the existing 95% UCL of the median. As a result, the calculated 95% UCL for 'Phosphorous as P' (0.08 mg/L) was used instead.

Table 4 – Summarized Mass Balance Calculations for Planned Phase I Dewatering (2.88 MGD)

Parameters	(Monthly) $C_{discharge}$ (mg/L)	(Long-term) $C_{discharge}$ (mg/L)	$C_{upstream}$ (mg/L)	C_{total} 95% UCL (mg/L)	$Q_{upstream}$ (MGD)	$Q_{discharge}$ (MGD)	Q_{total} (MGD)
Nitrate Nitrite as N (mg/L)	0.21	0.12	0.10	0.12	0.077	2.88	2.957
Sulfate (mg/L)	10.6	8.4	7.6	8.4			
Aluminum, Total (mg/L)	0.45	0.13	0.12	0.13			
Iron, Total (mg/L)	1.23	0.42	0.37	0.42			
TDS (mg/L)	227	146	145	146			
Phosphorous as P (mg/L)	0.38	0.08	0.20	0.08			

Table 4 (above) summarizes the mass-balance calculations performed to obtain the average monthly discharge goals during the planned Phase I Dewatering of the Quarry Pit.

Table 5 – Summarized Mass Balance Calculations for Planned Phase II Dewatering (0.074 MGD)

Parameters	(Monthly) $C_{discharge}$ (mg/L)	(Long-term) $C_{discharge}$ (mg/L)	$C_{upstream}$ (mg/L)	C_{total} 95% UCL (mg/L)	$Q_{upstream}$ (MGD)	$Q_{discharge}$ (MGD)	Q_{total} (MGD)
Nitrate Nitrite as N (mg/L)	0.24	0.14	0.10	0.12	0.077	0.074	0.151
Sulfate (mg/L)	11.6	9.2	7.6	8.4			
Aluminum, Total (mg/L)	0.50	0.15	0.12	0.13			
Iron, Total (mg/L)	1.38	0.48	0.37	0.42			
TDS (mg/L)	229	147	145	146			
Phosphorous as P (mg/L)	0.37	0.08	0.22	0.08			

Table 5 (above) summarizes the mass-balance calculations performed to obtain the average monthly discharge limits for planned Phase II dewatering of the Quarry Pit. Note that due to the planned flow rates and existing upgradient stream quality, the mass-balance calculations for 'Phosphorous as P' yield a negative long-term discharge goal (-0.05 mg/L). As a result, the calculated 95% UCL for 'Phosphorous as P' (0.08 mg/L) was used instead.

During the anti-degradation sampling the average monthly values for nitrate nitrite as N, sulfate, total aluminum, and total iron never exceeded the calculated average monthly discharge limits at the 001 location. This indicates that the quarry discharge currently meets these water quality requirements and should continue to meet them in the future under the planned dewatering discharge rate.

Monthly average Total Dissolved Solids (TDS) sampling results exceeded the calculated monthly discharge goals during one (1) month of the sampling period. Phosphorous as P exceeded its respective monthly discharge limits during two (2) of the sampling months. Each of these exceedance events occurred during or within one (1) week following a significant (>0.1 inches)

precipitation event. This suggests that these exceedances may be related to heavy precipitation events and run-on from neighboring properties.

While these temporary excursions may be unavoidable due to offsite influence including stormwater run-on from offsite areas, Heidelberg will utilize best practices to maintain onsite treatment facilities (Sedimentation Basin No. 1, No. 2, and the Clarifying Pond) during operation of the quarry to maintain existing water quality to the extent possible. The facilities will be regularly cleared of vegetation and dredged as necessary to maximize settling capacity. Additionally, the quarry will employ additional best management practices as described within Module 12 and 10 including water reuse, manual dewatering devices (during pit dewatering), sediment basins with ratios of greater than 4:1 length to width, sediment basins with 4-7 day detention, channels, collectors and diversions lined with permanent non-erosive materials, and sediment traps equipped with infiltration trenches.

Conclusion & Recommendations

Based on the water quality analysis presented herein, no measurable change to the existing surface water quality as evaluated at 001 is expected from quarry operations. This conclusion pertains to both the existing discharge limit of 0.238 MGD and future planned dewatering scenarios as evaluated herein. Temporary exceedances of the instream goals for TDS and phosphorous as P during heavy precipitation events may be expected due to stormwater run-on from neighboring properties. However, these are anticipated to be transitory in nature and to result in no long-term degradation.

The limits presented herein are calculated for a worst-case scenario considering the low harmonic mean flow stream condition (Q_{HM}) along with maximum quarry discharge rates for the various discharge scenarios. For example, the existing condition was evaluated at the existing permit limit of 0.238 MGD when actual site flow measurements indicate the discharge from the quarry pit at 004 is significantly lower, 0.059 MGD on average, lower by a factor of 4. In addition, the harmonic mean flow for the Tributary based on Streamstats which was used in this assessment is indicated to be lower and more conservative than averages derived from the site flow data (compare 0.077 MGD at 001 (streamstats) to the mean flow at 001 of 0.33 MGD (based on site data), greater by a factor of 4) and the harmonic mean at 001 of 0.136 MGD (based on site data), greater by a factor of 1.76. These factors indicate that greater assimilative capacity is available across a range of flow conditions than what is considered in the steady state model.

Based on the conservative nature of the analysis and the use of BMPs, no changes to the existing water quality are anticipated from the quarry discharge. The stormwater and treatment facilities will be regularly cleared of vegetation and dredged as necessary to maximize settling capacity. BMPs will include water reuse, manual dewatering devices (during pit dewatering), sediment basins with ratios of greater than 4:1 length to width, sediment basins with 4-7 day detention, channels, collectors and diversions lined with permanent non-erosive materials, and sediment traps equipped with infiltration trenches. These BMPs are already in place at the site and will be monitored and maintained as needed.

This modification is not proposing new site conveyance structures or other discharge infrastructure. All existing site infrastructure was constructed, certified by PA DEP, and functional in 2018 prior to the Unnamed Tributary's existing use classification as EV, MF. In addition, the permitted NPDES discharge limit of 0.238 MGD for the Site will not be increased with this modification. Therefore, there are no new, additional or increased discharges to be approved and authorized with this modification.

Based upon the above, and consistent with the Guidance, the current site discharge is "grandfathered" and should be considered to be part of the existing quality of the Tributary. As such, the calculated limits and data provided within this report are not applicable at this time and should only be used for planning purposes in anticipation of future planned dewatering.

ATTACHMENT A

Figure 1 – Map View of Area



NORTH

LEGEND

SMP BOUNDARY

001 NPDES DISCHARGE POINT

NOTES:

1. AERIAL IMAGE REFERENCED FROM GOOGLE EARTH PRO, DATED SEPTEMBER 21, 2020.

GRAPHIC SCALE

200 0 100 200 400 800

(IN FEET)
1 inch = 200 ft.

NO.	DATE	BY	REVISIONS
1	4/29/25	JTK	REVISED PER DEP COMMENTS

COMMONWEALTH OF PENNSYLVANIA — REGISTERED PROFESSIONAL — TERRY W. SCHMIDT — No. PE048535 — ENGINEER

TERRY W. SCHMIDT, P.E.
LICENSE NO. PE048535

PREPARED FOR:

Heidelberg Materials

PREPARED BY:

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APPALACHIAN
REGIONAL OFFICE
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8006 Cranberry Drive
Morgantown, WV 26505

ATTACHMENT C-21.5
SITE PLAN/MAP VIEW OF AREA

HEIDELBERG MATERIALS NORTHEAST LLC
ROCK HILL QUARRY OPERATION

DRAWN BY: JTK	CHECKED BY: MSW		
DATE: 9/11/2023	PROJECT NO: 061003.052		
DRAWING NUMBER: D-001			SHEET 1 OF 1

F:\PROJECTS\Hanson\061003.052 Rock Hill Permit Update\CAD\Drawings\Rev 12 (NPDES Permit Modification RTC 2025)\Site Location Map.dwg Layout: D SIZE User: jungtaek.kim 05/08/2025 15:43

ATTACHMENT B

Summarized Outfall 001 Anti-Degradation Sampling Data

Summarized Outfall 001 Anti-Degradation Sampling Data

Date	Nitrate Nitrite as N (mg/L)	Sulfate (mg/L	Copper** (µg/L)	Lead** (µg/L)	Zinc** (µg/L)	Aluminum (T) (µg/L)	Iron (T) (µg/L)	TDS (mg/L)	TSS** (mg/L)	Ammonia** (mg/L)	Carbonaceous Biochemical Oxygen Demand** (mg/L)	Phosphorus as P (mg/L)
07/20/23	*	7.77	*1.25*	*0.42*	*3.25*	48.3	274.0	136.0	4.1	*0.025*	*0.5*	*0.0115*
07/26/23	0.09	7.57	3.2	*0.42*	*3.25*	152.0	467.0	143.0	*1.25*	*0.025*	*0.5*	1.4
08/10/23	0.10	7.06	*1.25*	*0.42*	*3.25*	*17.5*	139.0	129.0	*1.25*	*0.025*	*0.5*	2.0
08/24/23	0.085	6.65	*1.25*	*0.42*	*3.25*	*17.5*	213.0	122.0	*1.25*	*0.025*	*0.5*	0.051
09/07/23	*0.035*	5.34	*1.25*	*0.42*	*3.25*	*17.5*	141.0	133.0	*1.25*	*0.025*	*0.5*	0.320
09/20/23	*0.035*	8.57	*1.25*	*0.42*	*3.25*	*17.5*	176.0	146.0	*1.25*	*0.025*	*0.5*	0.076
10/04/23	*0.035*	8.6	*1.25*	*0.42*	*3.25*	*17.5*	140.0	155.0	*1.25*	*0.025*	*0.5*	*0.0115*
10/19/23	0.13	8.85	*1.25*	*0.42*	*3.25*	*17.5*	119.0	143.0	*1.25*	*0.025*	*0.5*	0.060
10/31/23	0.076	9.41	*1.25*	*0.42*	*3.25*	*17.5*	111.0	156.0	*1.25*	*0.025*	*0.5*	*0.0115*
11/16/23	0.08	9.75	*1.25*	*0.42*	*3.25*	*17.5*	85.7	132.0	*1.25*	*0.025*	*0.5*	0.025
11/30/23	0.15	9.77	*1.25*	*0.42*	*3.25*	46	152.0	155.0	*1.25*	*0.025*	*0.5*	0.026
12/14/23	0.15	9.25	*1.25*	*0.42*	*3.25*	134	208.0	352.0	*1.25*	*0.025*	*0.5*	0.160
12/29/23	0.11	6.02	3.7	*0.42*	7	397	469.0	159.0	*1.25*	*0.025*	*0.5*	*0.0115*
01/11/24	0.11	5.29	3.7	*0.42*	*3.25*	426	470.0	232.0	*1.25*	*0.025*	*0.5*	0.026
01/25/24	0.19	6.63	2.7	*0.42*	*3.25*	195	423.0	10.0	*1.25*	*0.025*	*0.5*	0.032
02/08/24	0.11	8.99	*1.25*	*0.42*	10	162	726.0	53.0	*1.25*	*0.025*	*0.5*	*0.0115*
02/22/24	0.1	9.98	*1.25*	*0.42*	*3.25*	*17.5*	160.0	108.0	*1.25*	*0.025*	*0.5*	0.095
03/07/24	0.11	*	3.1	*0.42*	8	269	521.0	124.0	2.6	*0.025*	1.1	*
03/21/24	*0.035*	9.81	*1.25*	*0.42*	*3.25*	*17.5*	304.0	162.0	2.9	*0.025*	*0.5*	0.063
04/04/24	0.12	5.02	3.40	*0.42*	*3.25*	583.0	2,100	93.0	2.6	*0.025*	1.4	0.024
04/18/24	*0.035*	9.84	*1.25*	*0.42*	*3.25*	*17.5*	343.0	253.0	*1.25*	*0.025*	*0.5*	0.087
05/15/24	0.13	6.7	*1.25*	*0.42*	7	43	553.0	129.0	9.8	*0.025*	*0.5*	0.053
05/29/24	0.083	5.47	*1.25*	*0.42*	*3.25*	*17.5*	326.0	146.0	*1.25*	*0.025*	*0.5*	0.11
06/12/24	0.073	5.89	3.90	1.2	12	230	158.0	130.0	6.3	*0.025*	*0.5*	0.024
07/30/24	0.15	5.03	*1.25*	*0.42*	*3.25*	67	485.0	119.0	12.4	*0.025*	*0.5*	0.17
MEAN (C_{up})	**0.10**	**7.64**	**1.85**	**0.45**	**4.35**	**119**	**371**	**145**	**2.5**	**0.025**	**0.56**	**0.20**
MEDIAN	**0.10**	**7.67**	**1.25**	**0.42**	**3.25**	**43**	**274**	**136**	**1.25**	**0.025**	**0.50**	**0.05**
Std. Dev.	**0.042**	**1.78**	**1.00**	**0.16**	**2.44**	**155**	**400**	**63**	**2.86**	**0.00**	**0.21**	**0.47**
CV	**0.44**	**0.23**	**0.54**	**0.35**	**0.56**	**1.30**	**1.08**	**0.44**	**1.13**	**0.00**	**0.38**	**2.34**
% Non-Detect	**21%**	**0%**	**68%**	**88%**	**72%**	**44%**	**0%**	**0%**	**68%**	**92%**	**88%**	**21%**
95% UCL (C_{total})	**0.12**	**8.42**	**1.25**	**0.42**	**3.25**	**134.0**	**423.0**	**146.0**	**1.25**	**0.025**	**0.50**	**0.08**

Notes:
*Lab results for this sample are not available.
**Copper, Lead, Zinc, TSS, Ammonia, and CBOD all had greater than 50% non-detect values. The high number of non-detect results yielded little variation in the data and did not allow the construction of 95% upper confidence limits using the appropriate bootstrapping method for non-normally distributed data. Lead had one recorded sample above its detection limit. Ammonia did not have any samples above its detection limit. CBOD had two (2) samples above its detection limit. Due to the large (greater than 50%) number of non-detect results the application of discharge limits for these parameters is not necessary at this time.
***Non-detect sample results are reported at half of the Method Detection Limit (MDL) and are shown in *italics* .

ATTACHMENT C

StreamStats Report

Downgradient - 2018 NPDES Outfall 001

Region ID: PA
Workspace ID: PA20240921010447716000
Clicked Point (Latitude, Longitude): 40.40620, -75.30605
Time: 2024-09-20 21:05:09 -0400



Calculated Using PA Statistics

Collapse All

Basin Characteristics

Parameter Code	Parameter Description	Value	Unit
BSLOPD	Mean basin slope measured in degrees	5.1676	degrees
CARBON	Percentage of area of carbonate rock	0	percent
DRNAREA	Area that drains to a point on a stream	0.35	square miles
ELEV	Mean Basin Elevation	608	feet
FOREST	Percentage of area covered by forest	70.072	percent
PRECIP	Mean Annual Precipitation	45	inches
ROCKDEP	Depth to rock	4	feet
URBAN	Percentage of basin with urban development	4.9086	percent

Low-Flow Statistics

Low-Flow Statistics Parameters [Low Flow Region 1]

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
DRNAREA	Drainage Area	0.35	square miles	4.78	1150
BSLOPD	Mean Basin Slope degrees	5.1676	degrees	1.7	6.4
ROCKDEP	Depth to Rock	4	feet	4.13	5.21
URBAN	Percent Urban	4.9086	percent	0	89

Low-Flow Statistics Disclaimers [Low Flow Region 1]

One or more of the parameters is outside the suggested range. Estimates were extrapolated with unknown errors.

Low-Flow Statistics Flow Report [Low Flow Region 1]

Statistic	Value	Unit
7 Day 2 Year Low Flow	0.0409	ft^3/s
30 Day 2 Year Low Flow	0.0586	ft^3/s
7 Day 10 Year Low Flow	0.0147	ft^3/s
30 Day 10 Year Low Flow	0.0228	ft^3/s
90 Day 10 Year Low Flow	0.04	ft^3/s

Low-Flow Statistics Citations

Stuckey, M.H.,2006, Low-flow, base-flow, and mean-flow regression equations for Pennsylvania streams: U.S. Geological Survey Scientific Investigations Report 2006-5130, 84 p. (http://pubs.usgs.gov/sir/2006/5130/)

Annual Flow Statistics

Annual Flow Statistics Parameters [Statewide Mean and Base Flow]

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
DRNAREA	Drainage Area	0.35	square miles	2.26	1720
ELEV	Mean Basin Elevation	608	feet	130	2700
PRECIP	Mean Annual Precipitation	45	inches	33.1	50.4
FOREST	Percent Forest	70.072	percent	5.1	100

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
URBAN	Percent Urban	4.9086	percent	0	89

Annual Flow Statistics Disclaimers [Statewide Mean and Base Flow]

One or more of the parameters is outside the suggested range. Estimates were extrapolated with unknown errors.

Annual Flow Statistics Flow Report [Statewide Mean and Base Flow]

Statistic	Value	Unit
Mean Annual Flow	0.54	ft^3/s

Annual Flow Statistics Citations

Stuckey, M.H.,2006, Low-flow, base-flow, and mean-flow regression equations for Pennsylvania streams: U.S. Geological Survey Scientific Investigations Report 2006-5130, 84 p. (http://pubs.usgs.gov/sir/2006/5130/)

Peak-Flow Statistics

Peak-Flow Statistics Parameters [Peak Flow Region 4 SIR 2019 5094]

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
DRNAREA	Drainage Area	0.35	square miles	1.2	512
CARBON	Percent Carbonate	0	percent	0	68.5

Peak-Flow Statistics Disclaimers [Peak Flow Region 4 SIR 2019 5094]

One or more of the parameters is outside the suggested range. Estimates were extrapolated with unknown errors.

Peak-Flow Statistics Flow Report [Peak Flow Region 4 SIR 2019 5094]

Statistic	Value	Unit
50-percent AEP flood	110	ft^3/s
20-percent AEP flood	201	ft^3/s
10-percent AEP flood	279	ft^3/s
4-percent AEP flood	396	ft^3/s
2-percent AEP flood	495	ft^3/s
1-percent AEP flood	604	ft^3/s
0.5-percent AEP flood	723	ft^3/s
0.2-percent AEP flood	902	ft^3/s

Peak-Flow Statistics Citations

Roland, M.A., and Stuckey, M.H.,2019, Development of regression equations for the estimation of flood flows at ungaged streams in Pennsylvania: U.S. Geological Survey Scientific Investigations Report 2019–5094, 36 p. (https://doi.org/10.3133/sir20195094)

General Flow Statistics

General Flow Statistics Parameters [Statewide Mean and Base Flow]

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
DRNAREA	Drainage Area	0.35	square miles	2.26	1720
PRECIP	Mean Annual Precipitation	45	inches	33.1	50.4
CARBON	Percent Carbonate	0	percent	0	99
FOREST	Percent Forest	70.072	percent	5.1	100

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
URBAN	Percent Urban	4.9086	percent	0	89

General Flow Statistics Disclaimers [Statewide Mean and Base Flow]

One or more of the parameters is outside the suggested range. Estimates were extrapolated with unknown errors.

General Flow Statistics Flow Report [Statewide Mean and Base Flow]

Statistic	Value	Unit
Harmonic Mean Streamflow	0.119	ft^3/s

General Flow Statistics Citations

Stuckey, M.H.,2006, Low-flow, base-flow, and mean-flow regression equations for Pennsylvania streams: U.S. Geological Survey Scientific Investigations Report 2006-5130, 84 p. (http://pubs.usgs.gov/sir/2006/5130/)

Base Flow Statistics

Base Flow Statistics Parameters [Statewide Mean and Base Flow]

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
DRNAREA	Drainage Area	0.35	square miles	2.26	1720
PRECIP	Mean Annual Precipitation	45	inches	33.1	50.4
CARBON	Percent Carbonate	0	percent	0	99
FOREST	Percent Forest	70.072	percent	5.1	100
URBAN	Percent Urban	4.9086	percent	0	89

Base Flow Statistics Disclaimers [Statewide Mean and Base Flow]

One or more of the parameters is outside the suggested range. Estimates were extrapolated with unknown errors.

Base Flow Statistics Flow Report [Statewide Mean and Base Flow]

Statistic	Value	Unit
Base Flow 10 Year Recurrence Interval	0.241	ft^3/s
Base Flow 25 Year Recurrence Interval	0.214	ft^3/s
Base Flow 50 Year Recurrence Interval	0.199	ft^3/s

Base Flow Statistics Citations

Stuckey, M.H.,2006, Low-flow, base-flow, and mean-flow regression equations for Pennsylvania streams: U.S. Geological Survey Scientific Investigations Report 2006-5130, 84 p. (http://pubs.usgs.gov/sir/2006/5130/)

Bankfull Statistics

Bankfull Statistics Parameters [Statewide Bankfull Noncarbonate 2018 5066]

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
DRNAREA	Drainage Area	0.35	square miles	2.62	207
CARBON	Percent Carbonate	0	percent		

Bankfull Statistics Parameters [Appalachian Highlands D Bieger 2015]

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
DRNAREA	Drainage Area	0.35	square miles	0.07722	940.1535

Bankfull Statistics Parameters [Piedmont P Bieger 2015]

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
DRNAREA	Drainage Area	0.35	square miles	0.289575	939.99906

Bankfull Statistics Parameters [USA Bieger 2015]

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
DRNAREA	Drainage Area	0.35	square miles	0.07722	59927.7393

Bankfull Statistics Disclaimers [Statewide Bankfull Noncarbonate 2018 5066]

One or more of the parameters is outside the suggested range. Estimates were extrapolated with unknown errors.

Bankfull Statistics Flow Report [Statewide Bankfull Noncarbonate 2018 5066]

Statistic	Value	Unit
Bankfull Area	5.37	ft^2
Bankfull Streamflow	19.2	ft^3/s
Bankfull Width	8.83	ft
Bankfull Depth	0.65	ft

Bankfull Statistics Flow Report [Appalachian Highlands D Bieger 2015]

Statistic	Value	Unit
Bieger_D_channel_width	9.83	ft
Bieger_D_channel_depth	0.829	ft
Bieger_D_channel_cross_sectional_area	8.23	ft^2

Bankfull Statistics Flow Report [Piedmont P Bieger 2015]

Statistic	Value	Unit
Bieger_P_channel_width	8.95	ft
Bieger_P_channel_depth	0.827	ft
Bieger_P_channel_cross_sectional_area	7.1	ft^2

Bankfull Statistics Flow Report [USA Bieger 2015]

Statistic	Value	Unit
Bieger_USA_channel_width	8.56	ft
Bieger_USA_channel_depth	0.964	ft
Bieger_USA_channel_cross_sectional_area	9.69	ft^2

Bankfull Statistics Flow Report [Area-Averaged]

Statistic	Value	Unit
Bankfull Area	5.37	ft^2
Bankfull Streamflow	19.2	ft^3/s
Bankfull Width	8.83	ft
Bankfull Depth	0.65	ft
Bieger_D_channel_width	9.83	ft
Bieger_D_channel_depth	0.829	ft
Bieger_D_channel_cross_sectional_area	8.23	ft^2
Bieger_P_channel_width	8.95	ft
Bieger_P_channel_depth	0.827	ft

Statistic	Value	Unit
Bieger_P_channel_cross_sectional_area	7.1	ft^2
Bieger_USA_channel_width	8.56	ft
Bieger_USA_channel_depth	0.964	ft
Bieger_USA_channel_cross_sectional_area	9.69	ft^2

Bankfull Statistics Citations

Clune, J.W., Chaplin, J.J., and White, K.E.,2018, Comparison of regression relations of bankfull discharge and channel geometry for the glaciated and nonglaciated settings of Pennsylvania and southern New York: U.S. Geological Survey Scientific Investigations Report 2018–5066, 20 p. (https://doi.org/10.3133/sir20185066)

Bieger, Katrin; Rathjens, Hendrik; Allen, Peter M.; and Arnold, Jeffrey G.,2015, Development and Evaluation of Bankfull Hydraulic Geometry Relationships for the Physiographic Regions of the United States, Publications from USDA-ARS / UNL Faculty, 17p. (https://digitalcommons.unl.edu/usdaarsfacpub/1515?utm_source=digitalcommons.unl.edu%2Fusdaarsfacpub%2F1515&utm_medium=PDF&utm_campaign=PDFCoverPages)

Maximum Probable Flood Statistics

Maximum Probable Flood Statistics Parameters [Crippen Bue Region 4]

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
DRNAREA	Drainage Area	0.35	square miles	0.1	10000

Maximum Probable Flood Statistics Flow Report [Crippen Bue Region 4]

Statistic	Value	Unit
Maximum Flood Crippen Bue Regional	1620	ft^3/s

Maximum Probable Flood Statistics Citations

Crippen, J.R. and Bue, Conrad D.1977, Maximum Floodflows in the Conterminous United States, Geological Survey Water-Supply Paper 1887, 52p. (https://pubs.usgs.gov/wsp/1887/report.pdf)

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Application Version: 4.24.0
StreamStats Services Version: 1.2.22
NSS Services Version: 2.2.1

APPENDIX A

Laboratory Analytical Data & Summarized Results

Rock Hill Quarry- Anti-Degradation Sampling

Monitoring Point (Flow - MGD)	Date	Bromide	Nitrate as N	Chloride	Nitrate Nitrite as N	Nitrite as N	Sulfate	Hardness as calcium carbonate	Mercury	Barium	Boron	Calcium	Copper	Lead	Magnesium	Manganese	Nickel	Potassium	Selenium	Sodium	Strontium	Zinc	Aluminum (T)	Iron (T)	Lithium (T)	Aluminum (D)	Cadmium (D)	Lithium (D)	Arsenic (D)	Iron (D)	Calcium (D)	Zinc (D)	Copper (D)	Lead (D)	Magnesium (D)	Manganese (D)	Nickel (D)
	Sampled	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
Upgradient																																					
No Flow	07/20/23	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Flow Not Measureable	07/26/23	< 0.054	< 0.070	1.53	< 0.070	< 0.023	15.7	128	< 0.000043	16.6	84	33900	5.2	< 0.84	10500	279.00	< 0.91	2010	< 0.59	4160	132.0	< 6.5	274	651.0	2.3	< 19.5	< 0.15	< 1.3	< 0.89	25.2	32400	<4.0	3.5	< 0.84	10100	126.0	1.0
No Flow	08/10/23	< 0.054	0.072	2.22	0.072	< 0.023	33.7	168	< 0.000043	20.5	95.8	43800	<2.5	< 0.84	14200	480	2.5	1630	< 0.59	4510	178.0	< 6.5	<35.0	702.0	2.6	< 19.5	< 0.15	3.4	< 0.89	28.4	24300	4.4	< 2.5	< 0.84	10100	1.7	< 0.91
Flow Not Measureable	08/24/23	< 0.054	0.08	1.86	0.08	< 0.023	23.2	169	< 0.000043	16.7	76.9	44200	<2.5	< 0.84	14200	309	1.9	1440	< 0.59	4190	179	< 6.5	52.6	577	2.1	< 19.5	< 0.15	2.3	< 0.89	< 20	42300	<4.0	< 2.5	< 0.84	14300	34.6	1.4
Flow Not Measureable	09/07/23	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
No Flow	09/20/23	< 0.054	< 0.070	3.18	< 0.070	< 0.023	23.2	159	< 0.000043	21.1	68.6	41400	<2.5	< 0.84	13500	428	1.8	1650	< 0.59	4530	164	< 6.5	<35.0	627	2.9	< 19.5	< 0.15	1.9	< 0.89	46.3	42200	4.2	< 2.5	< 0.84	13700	373	1.2
No Flow	10/04/23	0.073	< 0.070	2.21	< 0.070	< 0.023	15.5	168	< 0.000043	20.5	66.5	43800	<2.5	< 0.84	14300	648	2.5	1570	< 0.59	4590	168	< 6.5	<35.0	333	2.1	< 19.5	< 0.15	4.2	< 0.89	52.5	43400	4	< 2.5	< 0.84	14500	587	1.3
No Flow	10/19/23	0.072	< 0.070	3.32	< 0.070	< 0.023	21.9	153	< 0.000043	16.8	68.9	38700	<2.5	< 0.84	13600	341	1.6	1250	< 0.59	4020	151	< 6.5	82.5	351	< 4.9	< 19.5	< 0.15	< 4.9	< 0.89	60.7	39800	4.1	< 2.5	< 0.84	14500	332	1.9
No Flow	10/31/23	0.11	< 0.070	4.14	< 0.070	< 0.023	22.3	161	0.00015	16.6	65.8	40000	<2.5	< 0.84	14700	415	2	1320	< 0.59	3720	147	< 6.5	<35.0	499	< 4.9	< 19.5	< 0.15	< 4.9	< 0.89	48.2	39500	4.5	< 2.5	< 0.84	14400	380	1.3
No Flow	11/16/23	0.13	0.071	7.52	0.071	< 0.023	28.3	153	< 0.000043	13.4	56.5	37000	<2.5	< 0.84	14600	129	2.7	982	< 0.59	3720	129	< 6.5	<35.0	459	< 4.9	< 19.5	< 0.15	< 4.9	< 0.89	< 20	34100	< 4.0	< 2.5	< 0.84	13300	97.7	< 0.91
No Flow	11/30/23	< 0.054	0.12	4.45	0.15	0.036	13.5	130	< 0.000043	14.0	54.7	31700	3.2	0.9	12400	127	1.1	1290	< 0.59	3910	109	< 6.5	<35.0	143	< 4.9	< 19.5	< 0.15	< 4.9	< 0.89	23.2	31000	< 4.0	< 2.5	< 0.84	12300	27.3	< 0.91
No Flow	12/14/23	< 0.054	0.11	2.55	0.15	0.036	7.9	119	< 0.000043	11.7	48.6	29800	3.5	< 0.84	10800	54.8	1	1180	< 0.59	2800	107	< 6.5	38.8	125	< 4.9	< 19.5	< 0.15	6.3	< 0.89	50.3	29000	< 4.0	2.7	< 0.84	10600	40.8	1.3
No Flow	12/29/23	< 0.054	0.096	1.82	0.096	< 0.023	4.67	78.8	< 0.000043	10.5	41.8	20500	12.1	< 0.84	6710	45.2	4.2	1500	< 0.59	2220	77.7	< 6.5	419	537	< 4.9	30.6	< 0.15	< 4.9	< 0.89	140	22500	4.5	3.4	< 0.84	7300	43.8	< 0.91
No Flow	01/11/24	< 0.054	0.078	15.9	0.078	< 0.023	4.06	NA	< 0.000043	9.6	43.1	21400	4.9	< 0.84	6950	29.3	0.97	1880	< 0.59	8980	77.5	< 6.5	231	379	1.3	70.4	< 0.15	<1.3	< 0.89	68.6	22500	4.1	2.5	< 0.84	7270	16.7	< 0.91
No Flow	01/25/24	0.079	0.11	60.6	0.11	< 0.023	4.65	NA	< 0.000043	10.8	42.4	25000	3.5	< 0.84	7930	76.2	1	1710	< 0.59	10400	85.6	< 6.5	263	430	<1.3	69.8	< 0.15	<1.3	< 0.89	160	24900	6.3	< 2.5	< 0.84	8100	73.4	< 0.91
No Flow	02/08/24	0.14	< 0.070	7.95	< 0.070	< 0.023	6.18	NA	< 0.000043	10.3	45	29600	2.5	< 0.84	10600	15.3	<0.91	1220	< 0.59	4360	100	< 6.5	<35.0	495	NA	< 19.5	< 0.15	NA	< 0.89	< 20	19400	< 4.0	< 2.5	< 0.84	6320	3.4	< 0.91
No Flow	02/22/24	0.13	0.076	31.3	0.076	< 0.023	6.41	NA	< 0.000043	12.4	37.6	34500	4.30	< 0.84	11900	28.3	<0.91	1460	< 0.59	8790	119	< 6.5	150	3020	NA	< 19.5	< 0.15	NA	< 0.89	29.8	34100	< 4.0	< 2.5	< 0.84	11800	24.3	< 0.91
No Flow	03/07/24	NA	0.079	NA	0.079	< 0.023	NA	NA	< 0.000043	11.7	47.3	24600	5.60	< 0.84	7610	90.5	1.8	1740	< 0.59	10300	96.3	7.2	331	475	4.0	89.7	< 0.15	2.8	< 0.89	90.4	25800	4.7	3.3	< 0.84	7810	67.4	< 0.91
No Flow	03/21/24	< 0.054	< 0.070	12.3	< 0.070	< 0.023	5.24	NA	< 0.000043	11.5	40.2	30100	2.70	< 0.84	10600	17.2	1.7	1250	< 0.59	4470	113	< 6.5	<35.0	88.4	18.9	< 19.5	< 0.15	7	< 0.89	20.6	30600	< 4.0	< 2.5	< 0.84	10900	12.1	< 0.91
No Flow	04/04/24	< 0.054	0.15	4.15	0.22	0.065	2.96	NA	*NA	11.1	50.1	16800	8.40	1.5	5470	58.7	2.0	1440	< 0.59	3640	64.9	7.7	539	1050	8.5	142	< 0.15	< 1.3	NA	180	17100	< 4.0	4.3	< 0.84	5340	46.9	< 0.91
No Flow	04/18/24	< 0.054	< 0.070	7.76	< 0.070	< 0.023	4.04	NA	*NA	13.0	47.7	32300	3.90	< 0.84	11000	62.5	1.4	1530	< 0.59	4520	126	< 6.5	<35.0	95.9	1.9	< 19.5	< 0.15	2.1	< 0.89	< 20	30900	< 4.0	2.8	< 0.84	10300	< 1.5	< 0.91
No Flow	05/15/24	< 0.054	0.18	10.2	0.18	< 0.023	4.33	NA	*NA	12.3	63.8	29200	4.70	< 0.84	9140	200	2.2	1910	0.59 J	6370	110	< 6.5	126	1140	2.3	< 19.5	< 0.15	3	< 0.89	22.7	31200	< 4.0	3.1	< 0.84	9880	200	< 0.91
No Flow	05/29/24	< 0.054	< 0.070	7.82	< 0.070	<0.047	11.9	NA	* < 0.000042	17.3	65	43100	2.50	< 0.84	14600	900	3.1	1490	< 0.59	5210	173	< 6.5	<35.0	807	3.0	< 19.5	< 0.15	3.3	< 0.89	67.1	42000	4.9	< 2.5	< 0.84	14400	754	1.9
No Flow	06/12/24	< 0.054	< 0.070	4.15	< 0.070	<0.047	8.68	NA	< 0.000042	18.2	62.4	36500	3.60	1.2	12900	1050	3.3	1280	< 0.59	4400	148	7	67.7	1610	2.7	< 19.5	< 0.15	3	< 0.89	106	38000	4.1	< 2.5	< 0.84	12900	925	2.9
No Flow	07/30/24	< 0.054	0.11	1.75	0.16	0.056	28.4	65.7	< 0.000042	3.3	69.7	17200	< 2.5	< 0.84	5540	49	< 0.91	994	<0.59	3360	29.2	<6.5	110	2080	3.3	NA	<0.15	7.4	NA	<20.0	NA	<4.0	NA	NA	NA	NA	NA
MAX		**0.14**	**0.18**	**60.6**	**0.22**	**0.065**	**33.7**	**169**	**0.00015**	**21.1**	**95.8**	**44200**	**12.1**	**1.5**	**14700**	**1050**	**4.2**	**2010**		**10400**	**179**	**7.7**	**539**	**3020**	**18.9**	**142**		**7.4**		**180**	**43400**	**6.3**	**4.3**		**14500**	**925**	**2.9**
MIN		**0.072**	**0.071**	**1.53**	**0.071**	**0.036**	**2.96**	**65.7**	**0.00015**	**3.3**	**37.6**	**16800**	**2.5**	**0.9**	**5470**	**15.3**	**0.97**	**982**		**2220**	**29.2**	**7**	**38.8**	**88.4**	**1.3**	**30.6**		**1.9**		**20.6**	**17100**	**4**	**2.5**		**5340**	**1.7**	**1**
AVG		**0.10**	**0.10**	**9.03**	**0.12**	**0.048**	**13.5**	**138**	**0.00015**	**13.9**	**58.37**	**32396**	**4.71**	**1.20**	**11033**	**253.61**	**2.04**	**1466.35**		**5094.35**	**121.05**	**7.30**	**206.51**	**724.97**	**4.14**	**80.50**		**3.89**		**67.78**	**31681.82**	**4.53**	**3.20**		**10914.55**	**198.43**	**1.58**
NPDES 001 (Downgradient)																																					
0.062	07/20/23	< 0.054	< 0.070	3.47	NA	<0.023	7.77	97.6	<0.000043	4.5	63.8	23600	< 2.5	< 0.84	9420	31.9	<0.91	1130	<0.59	4430	65.7	< 6.5	48.3	274.0	< 1.3	< 19.5	< 0.15	<1.3	< 0.89	72.2	22800	< 4.0	< 2.5	< 0.84	9160	4.3	< 0.91
0.321	07/26/23	0.12	0.09	3.01	0.09	<0.023	7.57	92.7	<0.000043	7.2	70.9	22500	3.2	<0.84	8880	31.3	<0.91	1730	<0.59	4500	75.7	< 6.5	152.0	467.0	< 1.3	< 19.5	< 0.15	<1.3	< 0.89	124.0	21700	< 4.0	< 2.5	< 0.84	8650	< 1.5	< 0.91
0.08	08/10/23	< 0.054	0.10	3.74	0.10	<0.023	7.06	103.0	<0.000043	5.6	86.8	24600	< 2.5	<0.84	10000	21.3	<0.91	1200	<0.59	4630	69.1	< 6.5	< 35.0	139.0	< 1.3	1390	< 0.15	<1.3	1.4	57.1	34100	< 4.0	4.5	< 0.84	50.4	3.1	6.2
0.033	08/24/23	< 0.054	0.085	3.53	0.085	< 0.023	6.65	96.8	<0.000043	3.8	60.1	23200	< 2.5	< 0.84	9440	21.3	< 0.91	2170	<0.59	4210	63.0	< 6.5	< 35.0	213	< 1.3	< 19.5	< 0.15	<1.3	< 0.89	28.6	23500	< 4.0	< 2.5	<0.84	9560	3.0	< 0.91
0.16	09/07/23	< 0.054	< 0.070	4.51	< 0.070	<0.023	5.34	100.0	<0.000043	5.0	73.3	24100	< 2.5	<0.84	9800	14.4	<0.91	978	<0.59	4530	58.8	< 6.5	< 35.0	141.0	< 1.3	< 19.5	< 0.15	2	< 0.89	20.2	23000	< 4.0	< 2.5	< 0.84	9860	3.3	< 0.91
0.109	09/20/23	< 0.054	< 0.070	3.84	< 0.070	<0.023	8.57	97.1	<0.000043	4.9	46.6	23600	< 2.5	<0.84	9270	20.0	<0.91	1460	<0.59	4330	73.6	< 6.5	< 35.0	176.0	< 1.3	< 19.5	< 0.15	<1.3	< 0.89	47.2	24700	< 4.0	< 2.5	< 0.84	9840	2	< 0.91
0.116	10/04/23	0.062	< 0.070	2.93	< 0.070	<0.023	8.6	102.0	<0.000043	6.0	84.9	25300	< 2.5	<0.84	9430	20.1	<0.91	1510	<0.59	4130	76.4	< 6.5	< 35.0	140.0	< 1.3	< 19.5	< 0.15	1.9	< 0.89	41	25300	< 4.0	< 2.5	< 0.84	9780	3.8	< 0.91
0.063	10/19/23	< 0.054	0.08	2.97	0.13	0.048	8.85	94.2	<0.000043	4.4	65	22200	< 2.5	<0.84	9370	14.5	<0.91	1340	<0.59	4180	58.3	< 6.5	< 35.0	119.0	< 4.9	< 19.5	< 0.15	< 4.9	< 0.89	30.3	30000	< 4.0	< 2.5	< 0.84	11200	103	< 0.91
0.436	10/31/23	< 0.054	0.076	4.06	0.076	<0.023	9.41	92.8	0.0014	4.7	61.1	22500	< 2.5	<0.84	8920	18.9	<0.91	1970	<0.59	3880	54.1	< 6.5	< 35.0	111.0	< 4.9	< 19.5	< 0.15	< 4.9	< 0.89	30	21800	< 4.0	< 2.5	< 0.84	8720	< 1.5	< 0.91
0.103	11/16/23	0.17	0.08	3.99	0.08	<0.023	9.75	96.1	<0.000043	4.0	66.9	23000	< 2.5	<0.84	9370	10.8	<0.91	1440	<0.59	4280	49.3	< 6.5	< 35.0	85.7	< 4.9	< 19.5	< 0.15	< 4.9	< 0.89	33.3	21200	< 4.0	< 2.5	< 0.84	8840	1.8	< 0.91
0.09	11/30/23	< 0.054	0.11	3.49	0.15	0.048	9.77	91.6	<0.000043	4.5	49.2	22200	< 2.5	<0.84	8790	11.4	<0.91	1580	<0.59	3800	69.8	< 6.5	46	152.0	< 4.9	< 19.5	< 0.15	5.1	< 0.89	48.2	22300	< 4.0	< 2.5	< 0.84	9170	3.2	< 0.91
0.13	12/14/23	< 0.054	0.11	2.83	0.15	0.043	9.25	82.9	<0.000043	4.2	52.1	20300	< 2.5	<0.84	7800	12.8	<0.91	1410	<0.59	3250	61.7	< 6.5	134	208.0	< 4.9	33.2	< 0.15	< 4.9	< 0.89	71.9	20900	< 4.0	< 2.5	< 0.84	8180	4.8	< 0.91
1.225	12/29/23	< 0.054	0.11	1.93	0.11	<0.023	6.02	60.5	<0.000043	5.1	37.5	15000	3.7	<0.84	5610	17.2	<0.91	1430	<0.59	2700	51.7	6.8	397	469.0	< 4.9	32.7	< 0.15	< 4.9	< 0.89	142	17400	5	< 2.5	< 0.84	6180	5.9	< 0.91
0.905	01/11/24	< 0.054	0.11	5.25	0.11	<0.023	5.29	NA	<0.000043	5.5	45.2	15700	3.7	<0.84	6100	23.7	0.96	1390	<0.59	3940	53.2	< 6.5	426	470.0	< 1.3	70.7	< 0.15	< 1.3	< 0.89	117	15300	5	< 2.5	< 0.84	5760	5.6	< 0.91
0.774	01/25/24	0.065	0.19	17.3	0.19	<0.023	6.63	NA	<0.000043	5.1	42.5	20000	2.7	<0.84	7610	34.2	<0.91	1410	<0.59	5960	66.2	< 6.5	195	423.0	< 1.3	36.2	< 0.15	< 1.3	< 0.89	126	20100	5.9	< 2.5	< 0.84	7540	10.8	< 0.91
0.21	02/08/24	0.18	0.11	7.85	0.11	<0.023	8.99	NA	<0.000043	6.7	55.8	24600	< 2.5	<0.84	9970	107.0	<0.91	1420	<0.59	5510	75.7	10	162	726.0	NA	< 19.5	< 0.15	NA	< 0.89	47.2	24100	9.7	< 2.5	< 0.84	9940	2.5	< 0.91
0.228	02/22/24	0.16	0.1	13.1	0.1	< 0.023	9.98	NA	< 0.000043	5.1	48.2	26100	< 2.5	<0.84	10700	22.9	<0.91	1280	<0.59	6690	77.9	< 6.5	< 35.0	160.0	NA	< 19.5	< 0.15	NA	< 0.89	37.4	26300	< 4.0	< 2.5	<0.84	10600	4.4	< 0.91
0.554	03/07/24	NA	0.11	NA	0.11	< 0.023	NA	NA	< 0.000043	5.1	43.8	18400	3.1	<0.84	6330	27.3	<0.91	1460	<0.59	9110	72.9	8.2	269	521.0	< 1.3	121	< 0.15	< 1.3	< 0.89	185	18500	6.2	< 2.5	<0.84	6250	7.2	< 0.91
0.204	03/21/24	< 0.054	< 0.070	7.61	< 0.070	< 0.023	9.81	NA	< 0.000043	4.4	51.3	24400	< 2.5	<0.84	10300	34.4	<0.91	1300	<0.59	5170	81.1	< 6.5	< 35.0	304.0	< 1.3	< 19.5	< 0.15	< 1.3	< 0.89	65.8	24700	< 4.0	< 2.5	<0.84	10400	3.3	< 0.91
1.54	04/04/24	< 0.054	0.12	3.09	0.19	0.065	5.02	NA	*NA	4.2	<30.4	11300	3.4	<0.84	4150	19.7	<0.91	1140	<0.59	3360	43.2	< 6.5	583	2100.0	< 1.3	89.2	< 0.15	< 1.3	< 0.89	160	11800	5.0	< 2.5	<0.84	4260	2.0	< 0.91
0.173	04/18/24	< 0.054	< 0.070	4.59	< 0.070	< 0.023	9.84	NA	*NA	4.9	55.4	24700	< 2.5	<0.84	9910	28.4	<0.91	1570	<0.59	5210	78.7	< 6.5	< 35.0	343.0	< 1.3	31.7	< 0.15	< 1.3	22.5	59	26800	< 4.0	< 2.5	<0.84	9990	11	< 0.91
0.306	05/15/24	< 0.054	0.13	3.89	0.13	< 0.023	6.7	NA	*NA	5.7	65.7	22100	< 2.5	<0.84	9170	73.6	0.99	1310	0.62	4850	62.5	6.5	43	553.0	<1.7	<19.5	< 0.15	<1.7	<0.89	<20	22500	4.1	< 2.5	<0.84	9290	2.8	< 0.91
0.114	05/29/24	< 0.054	0.083	4.08	0.083	<0.047	5.47	NA	* < 0.000043	5.7	68.2	27100	< 2.5	<0.84	11600	25.3	<0.91	1000	<0.59	5130	74.1	< 6.5	< 35.0	326.0	<1.7	<19.5	< 0.15	<1.7	<0.89	103	26000	< 4.0	< 2.5	<0.84	11100	2.6	< 0.91
0.193	06/12/24	< 0.054	0.073	2.89	0.073	<0.047	5.89	NA	<0.000042	8.3	66.6	25400	3.90	1.2	11100	167.0	1.40	871	<0.59	4830	72.5	12	230	158.0	<1.7	<19.5	< 0.15	<1.7	<0.89	55.7	24800	< 4.0	< 2.5	<0.84	10500	1.8	< 0.91
0.114	07/30/24	0.056	0.088	2.96	0.15	0.065	5.03	97.2	<0.000042	5.4	76.1	22700	2.50	<0.84	9810	71.4	<0.91	519	<0.59	4660	57	< 6.5	67	485.0	<1.7	NA	< 0.15	<1.7	NA	42.8	NA	< 4.0	NA	NA	NA	NA	NA
MAX		**0.18**	**0.19**	**17.3**	**0.19**	**0.065**	**9.98**	**103**	**0.0014**	**8.3**	**86.8**	**27100**	**3.9**	**1.2**	**11600**	**167**	**1.4**	**2170**	**0.62**	**9110**	**81.1**	**12.2**	**583**	**2100**		**1390**		**5.1**	**22.5**	**185**	**34100**	**9.7**	**4.5**		**11200**	**103**	**6.2**
MIN		**0.056**	**0.073**	**1.93**	**0.073**	**0.043**	**5.02**	**60.5**	**0.0014**	**3.8**	**37.5**	**11300**	**2.5**	**1.2**	**4150**	**10.8**	**0.96**	**519**	**0.62**	**2700**	**43.2**	**6.5**	**43**	**85.7**		**31.7**		**1.9**	**1.4**	**20.2**	**11800**	**4.1**	**4.5**		**50**	**1.8**	**6.2**
AVG		**0.12**	**0.10**	**4.87**	**0.12**	**0.05**	**7.64**	**93.18**	**0.0014**	**5.20**	**59.9**	**22184**	**3.28**	**1.20**	**8914**	**35.23**	**1.12**	**1361**	**0.62**	**4691**	**65.7**	**8.7**	**212**	**371**		**226**		**3.0**	**12.0**	**72.7**	**22900**	**5.8**	**4.5**		**8534**	**8.7**	**6.20**
Clarifying Pond																																					
0.051	07/20/23	< 0.054	0.13	1.04	-	< 0.023	5.86	59.7	< 0.000043	4.1	58.8	15700	< 2.5	< 0.84	4960	78.90	<0.91	1080.0	< 0.59	2970	26.0	< 6.5	181.0	581.0	< 1.3	< 19.5	< 0.15	< 1.3	< 0.89	55.7	15500	< 4.0	< 2.5	< 0.84	4970.0	24.3	< 0.91
0.08	07/26/23	< 0.054	0.14	0.85	0.19	0.045	3.32	51.3	< 0.000043	5.0	52	13400	6.500	< 0.84	4310	39.20	1.2	1450.0	< 0.59	2440	25.7	< 6.5	616.0	886.0	< 1.3	62.2	< 0.15	33.8	< 0.89	89.4	14400	< 4.0	< 2.5	< 0.84	4410.0	10	< 0.91
0.051	08/10/23	< 0.054	0.13	1.34	0.13	< 0.023	5.77	71	0.000098	10.7	69.8	18200	9.4	2.4	6200	156	4.5	1480	< 0.59	3540	35.5	8.2	569	752	1.5	< 19.5	< 0.15	< 1.3	< 0.89	37.2	28400	< 4.0	< 2.5	< 0.84	13400	5	< 0.91
0.014	08/24/23	< 0.054	0.12	1.39	0.12	< 0.023	6.03	66.5	< 0.000043	5.0	54.7	17600	< 2.5	< 0.84	5490	71.5	< 0.91	1150	< 0.59	3260	31.0	< 6.5	96.5	428	<1.3	< 19.5	< 0.15	< 1.3	< 0.89	35.4	17800	< 4.0	< 2.5	< 0.84	5520	2.9	< 0.91
0.005	09/07/23	< 0.054	0.12	1.47	0.12	< 0.023	6.07	64.4	0.00007	3.4	63.6	17100	< 2.5	< 0.84	5260	32.8	<0.91	1210	< 0.59	3250	27.4	< 6.5	177	203	< 1.3	< 19.5	< 0.15	1.3	< 0.89	29.7	17400	< 4.0	< 2.5	< 0.84	5720	16.1	< 0.91
0.018	09/20/23	< 0.054	0.13	1.2	0.23	0.11	5.9	64.7	< 0.000043	7.7	46.4	16800	5.60	1.500	5510	90.3	2.1	1350	< 0.59	3200	34.4	< 6.5	979	1280	< 1.3	< 19.5	< 0.15	< 1.3	< 0.89	21.5	19900	< 4.0	< 2.5	< 0.84	6510	5.2	< 0.91
0.051	10/04/23	< 0.054	0.15	1.23	0.22	0.065	7.38	76.9	< 0.000043	4.7	77.1	20200	2.70	< 0.84	6420	32.2	1.3	1480	< 0.59	3310	42.5	< 6.5	486	691	< 1.3	< 19.5	< 0.15	< 1.3	< 0.89	20.4	21300	< 4.0	< 2.5	< 0.84	6680	37.9	< 0.91
0.08	10/19/23	< 0.054	0.2	1.28	0.25	0.047	6.92	62.7	< 0.000043	2.9	63.1	16400	< 2.5	< 0.84	5250	14.9	<0.91	1270	< 0.59	3260	27.3	< 6.5	180	292	< 4.9	< 19.5	< 0.15	< 4.9	< 0.89	< 20	17700	< 4.0	< 2.5	< 0.84	5550	11.9	< 0.91
0.051	10/31/23	< 0.054	0.18	1.3	0.22	0.033	6.17	62.5	0.00023	2.6	58.9	16500	< 2.5	< 0.84	5190	7.7	<0.91	1260	< 0.59	3040	25.1	< 6.5	84	215	< 4.9	58.2	< 0.15	< 4.9	< 0.89	< 20	16900	< 4.0	< 2.5	< 0.84	5200	3.5	< 0.91
0.08	11/16/23	0.11	0.27	1.37	0.3	0.035	6.3	63.9	< 0.000043	2.7	57.7	16900	< 2.5	< 0.84	5270	11.1	1.1	1230	< 0.59	3220	24.3	< 6.5	279	230	< 4.9	< 19.5	< 0.15	< 4.9	< 0.89	< 20	16800	< 4.0	< 2.5	< 0.84	5010	6.3	< 0.91
0.029	11/30/23	0.18	0.26	1.33	0.29	0.035	5.63	63.8	< 0.000043	4.0	54.5	17000	3.20	< 0.84	5210	40.8	1.2	1330	< 0.59	2870	29.3	< 6.5	695	716	< 4.9	22.8	< 0.15	< 4.9	< 0.89	25.3	16800	< 4.0	< 2.5	< 0.84	5160	2.7	< 0.91
0.073	12/14/23	< 0.054	0.3	1.17	0.34	0.045	5.8	68.1	< 0.000043	3.0	61.1	18300	<2.5	< 0.84	5440	17.3	< 0.91	1310	< 0.59	2820	34.6	< 6.5	417	430	< 4.9	< 19.5	< 0.15	< 4.9	< 0.89	33.9	19200	< 4.0	< 2.5	< 0.84	5780	9.5	< 0.91
0.08	12/29/23	< 0.054	0.22	0.82	0.22	< 0.023	3.71	50.7	< 0.000043	3.6	45.7	12700	4.80	< 0.84	4630	22.1	< 0.91	1350	< 0.59	2330	29.3	< 6.5	1070	821	< 4.9	51.6	< 0.15	< 4.9	< 0.89	103	14200	< 4.0	< 2.5	< 0.84	4470	9.6	< 0.91
0.117	01/11/24	< 0.054	0.2	0.74	0.2	< 0.023	2.79	NA	< 0.000043	4.8	48.3	13100	7.10	0.870	4390	30.9	2.5	1290	< 0.59	2030	29.4	6.9	977	1230	< 1.3	181	< 0.15	< 1.3	< 0.89	168	13300	< 4.0	< 2.5	< 0.84	4180	9.2	< 0.91
0.094	01/25/24	< 0.054	0.32	1.25	0.32	< 0.023	5.49	NA	< 0.000043	2.9	57.9	18000	2.50	< 0.84	6140	25	< 0.91	1250	< 0.59	3120	33.2	< 6.5	223	325	< 1.3	26.2	< 0.15	< 1.3	< 0.89	25.6	18500	< 4.0	< 2.5	< 0.84	6210	9.1	< 0.91
0.037	02/08/24	< 0.054	0.29	1.23	0.29	< 0.023	5.55	NA	< 0.000043	4.4	62.9	19200	<2.5	< 0.84	6200	40.8	1.1	1250	< 0.59	3100	38	< 6.5	361	748	NA	< 19.5	< 0.15	NA	< 0.89	29.5	29100	< 4.0	< 2.5	< 0.84	10800	9.3	< 0.91
0.029	02/22/24	0.15	0.26	1.24	0.3	0.038	5.42	NA	< 0.000043	3.5	52.5	17900	<2.5	< 0.84	5990	29.8	< 0.91	1130	< 0.59	3040	33.3	< 6.5	292	520	NA	< 19.5	< 0.15	NA	< 0.89	31.4	19400	< 4.0	< 2.5	< 0.84	6130	3.4	< 0.91
0.067	03/07/24	NA	0.27	NA	0.27	< 0.023	NA	NA	< 0.000043	2.2	54.2	16900	<2.5	< 0.84	6010	12.8	< 0.91	1120	< 0.59	3020	36.6	< 6.5	236	279	< 1.3	< 19.5	< 0.15	< 1.3	< 0.89	53	17100	< 4.0	< 2.5	< 0.84	5980	< 1.5	< 0.91
0.051	03/21/24	< 0.054	0.16	1.22	0.16	< 0.023	5.51	NA	< 0.000043	5.6	53.6	19800	5.300	1.000	7170	93.1	2.6	1150	< 0.59	3310	47	< 6.5	810	2530	2.7	< 19.5	< 0.15	< 1.3	< 0.89	36.7	18800	< 4.0	< 2.5	< 0.84	6620	17.3	< 0.91
0.109	04/04/24	< 0.054	0.17	0.7	0.24	0.063	3.70	NA	*NA	2.9	< 30.4	12300	3.700	< 0.84	4330	17.8	< 0.91	914	< 0.59	1930	30.7	< 6.5	746	710	< 1.3	55.0	< 0.15	< 1.3	< 0.89	<20.0	12400	< 4.0	< 2.5	< 0.84	4290	4.3	< 0.91
0.067	04/18/24	< 0.054	0.11	1.2	0.16	0.043	6.44	NA	*NA	3.1	56.3	18200	<2.5	< 0.84	6680	33.5	< 0.91	1230	< 0.59	3400	40.6	< 6.5	209	532	< 1.3	< 19.5	< 0.15	< 1.3	< 0.89	34.3	18600	< 4.0	< 2.5	< 0.84	6380	< 1.5	< 0.91
0.086	05/15/24	< 0.054	0.26	1.19	0.26	< 0.023	5.7	NA	*NA	3.9	62	15400	3.400	< 0.84	5350	75.7	1.7	1140	< 0.59	3220	27.3	< 6.5	284	1000	< 1.7	< 19.5	< 0.15	< 1.7	< 0.89	60.2	15700	< 4.0	< 2.5	< 0.84	5430	12.7	< 0.91
0.051	05/29/24	< 0.054	0.15	1.04	0.15	<0.047	5.18	NA	* < 0.000042	3.3	62.4	17400	<2.5	< 0.84	6050	54.9	< 0.91	1000	< 0.59	3510	33.5	< 6.5	130	462	< 1.7	< 19.5	< 0.15	< 1.7	< 0.89	90.2	17800	< 4.0	< 2.5	< 0.84	6140	50.4	< 0.91
0.037	06/12/24	< 0.054	0.091	0.9	0.091	<0.047	5.44	NA	< 0.000042	5.7	59.3	16500	4.800	1.400	6180	156	1.8	998	< 0.59	3270	34.4	< 6.5	545	2030	< 1.7	< 19.5	< 0.15	< 1.7	< 0.89	62.8	18000	< 4.0	< 2.5	< 0.84	6290	82.5	< 0.91
0.08	7/30/204	< 0.054	0.1	1.11	0.16	0.052	6.37	199	< 0.000042	17.2	109	49100	6.200	3.700	18600	508	2.7	2190	< 0.59	6050	187	< 6.5	150	2610	3	NA	<0.15	<1.7	NA	41.8	NA	<4.0	NA	NA	NA	NA	NA
MAX		**0.18**	**0.32**	**1.47**	**0.34**	**0.11**	**7.38**	**199.00**	**0.00023**	**17.20**	**109.00**	**49100.00**	**9.40**	**3.70**	**18600.00**	**508.00**	**4.50**	**2190.00**		**6050.00**	**187.00**	**8.20**	**1070.00**	**2610.00**	**3.00**	**181.00**		**33.80**		**168.00**	**29100.00**				**13400.00**	**82.50**	
MIN		**0.11**	**0.09**	**0.70**	**0.09**	**0.03**	**2.79**	**50.70**	**0.00007**	**2.20**	**45.70**	**12300.00**	**2.50**	**0.87**	**4310.00**	**7.70**	**1.10**	**914.00**		**1930.00**	**24.30**	**6.90**	**83.80**	**203.00**	**1.50**	**22.80**		**1.30**		**20.40**	**12400.00**				**4180.00**	**2.70**	
AVG		**0.15**	**0.19**	**1.15**	**0.22**	**0.05**	**5.52**	**73.23**	**0.00013**	**4.76**	**60.08**	**18024.00**	**5.02**	**1.81**	**6089.20**	**67.72**	**1.98**	**1264.48**		**3140.40**	**38.54**	**7.55**	**431.69**	**820.04**	**2.40**	**65.29**		**17.55**		**51.67**	**18125.00**				**6117.92**	**15.60**	

NA denotes not analyzed by lab
---- denotes not sampled
J denotes estimated value
*Eurofins indicated an administrative lapse that briefly affected certification for Mercury. Eurofins reported that the brief lapse did not affect the accuracy of the reported results. Additional information provided upon request.

Rock Hill Quarry- Anti-Degradation Sampling

Monitoring Point (Flow - MGD)	Date	Resistivity	Specific Conductance	Acidity	Bicarbonate Alkalinity as CaCO3	TDS	TSS	Ammonia	Total Kjeldahl Nitrogen	Chemical Oxygen Demand	Oxygen, Dissolved	Orthophosphate as P	Carbonaceous Biochemical Oxygen Demand	pH	Temperature	Total Organic Carbon	Phosphorus as PO4	Phosphorus as P	Nitrogen, Total (EPA Total Nitrogen)	Ammonia (D)	Orthophosphate as P (D)	Phosphorus as PO4 (D)	Phosphorus as P (D)	Osmotic Pressure
	Sampled	Mohm-cm	umhos/cm	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	SU	Degrees C	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mOsm/kg
Upgradient																								
No Flow	07/20/23	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Flow Not Measureable	07/26/23	0.00376	266	< 20	109	182	10.2	< 0.050	0.68	7.7	5.9	< 0.0050	< 1.0	7.5	22.5	4.5	< 0.071	< 0.023	0.68	< 0.050	< 0.0050	< 0.071	< 0.023	NA
No Flow	08/10/23	0.00294	340	-	135	274	15.1	< 0.050	0.59	13.9	5.7	0.0071	< 1.0	7.8	23	4.3	1.5	0.49	0.66	< 0.050	< 0.0050	1.5	0.48	12
Flow Not Measureable	08/24/23	0.00281	356	NA	152	216	9.0	< 0.050	0.61	14.1	6.3	0.0057	< 1.0	8	23.7	4.8	< 0.071	< 0.023	0.69	< 0.050	< 0.0050	< 0.071	< 0.023	8
Flow Not Measureable	09/07/23	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
No Flow	09/20/23	0.00298	336		167	255	25	< 0.050	1.9	14.8	6	< 0.0050	1.7	7.6	19.9	4	0.42	0.14	1.9	< 0.050	< 0.0050	< 0.071	< 0.023	10
No Flow	10/04/23	0.00295	339	< 20	172	213	3.3	< 0.050	< 0.50	17.8	5.9	0.0098	< 1.0	7.6	22	4.3	0.12	0.039	<0.50	< 0.050	0.0071	0.14	0.044	12
No Flow	10/19/23	0.00329	304	< 20	132	292	8.5	< 0.050	2.1	13.2	6.9	< 0.0050	< 1.0	7.9	21	4.8	0.9	0.29	2.1	< 0.050	< 0.0050	< 0.071	< 0.023	9
No Flow	10/31/23	0.00318	315	< 20	134	219	8.5	< 0.050	0.65	10.2	6.9	< 0.0050	< 1.0	7.3	18.8	4.1	0.32	0.1	0.65	< 0.050	< 0.0050	0.087	0.029	11
No Flow	11/16/23	0.00324	308	< 20	112	198	3.2	< 0.050	< 0.50	12.1	8	< 0.0050	3.6	8	17.8	2.8	< 0.071	< 0.023		< 0.050	< 0.0050	< 0.071	< 0.023	11
No Flow	11/30/23	0.00383	261	< 20	109	140	19.5	< 0.050	2	7.8	7.5	< 0.0050	< 1.0	7.6	20.2	3.6	< 0.071	< 0.023	2.2	< 0.050	< 0.0050	0.14	0.044	8
No Flow	12/14/23	0.00417	240	< 20	105	442	< 2.5	< 0.050	0.91	13.1	7.1	< 0.0050	< 1.0	7.4	24.1	4.4	0.25	0.083		< 0.050	< 0.0050	0.24	0.078	10
No Flow	12/29/23	0.00561	178	< 20	77.9	128	< 2.5	< 0.050	0.78	<3.3	7.3	< 0.0050	< 1.0	7.8	21.9	3.8	0.19	0.06	0.88	< 0.050	< 0.0050	< 0.071	< 0.023	<6
No Flow	01/11/24	0.00472	212	< 20	74.4	181	< 2.5	< 0.050	1.3	<3.3	8.3	< 0.0050	< 1.0	7.4	22.1	3.2	0.45	0.15	1.4	< 0.050	< 0.0050	< 0.071	< 0.023	10
No Flow	01/25/24	0.00389	257	< 20	61.3	65	< 2.5	< 0.050	0.59	<3.3	9.4	0.0057	< 1.0	7.4	23.8	2.4	< 0.071	< 0.023	0.7	< 0.050	< 0.0050	< 0.071	< 0.023	10
No Flow	02/08/24	0.00403	248	< 20	106	86	6.2	< 0.050	0.66	25.1	7.2	0.0057	< 1.0	7.5	22.2	2.7	0.097	0.032		< 0.050	< 0.0050	< 0.071	< 0.023	10
No Flow	02/22/24	0.00322	310	< 20	98.8	152	7.4	< 0.050	0.92	8.7	7.8	NA	< 1.0	7.4	24.9	3.4	0.65	0.21	1.0	< 0.050	NA	0.80	0.26	NA
No Flow	03/07/24	0.0039	257	< 20	77.4	158	< 2.5	< 0.050	0.62	12.6	8	< 0.0050	1.0	7.6	26.3	3.6	NA	NA	0.86	< 0.050	< 0.0050	NA	NA	9
No Flow	03/21/24	0.00373	268	< 20	108	183	< 2.5	< 0.050	0.55	9	6.4	NA	< 1.0	7.7	24.7	3	0.089	0.029	0.55	< 0.050	NA	0.081	0.026	11
No Flow	04/04/24	0.0066	152	< 20	61.2	104	< 2.5	< 0.050	0.60	4.3	8.6	NA	< 1.0	7.7	25.00	3.2	< 0.071	< 0.023	0.82	< 0.050	NA	< 0.071	< 0.023	<6
No Flow	04/18/24	0.00393	255	< 20	110	157	< 2.5	< 0.050	< 0.50	11.5	5	< 0.0050	< 1.0	7.6	25.4	3.3	0.63	0.2	<0.50	< 0.050	< 0.0050	0.43	0.14	8
No Flow	05/15/24	0.00359	279	< 20	112	166	9.4	< 0.050	0.50 J	8.5	5.3	< 0.0050	< 1.0	7.4	24.3	4.9	< 0.071	0.023	0.68	< 0.050	< 0.0050	< 0.071	< 0.023	<6
No Flow	05/29/24	0.00287	349	< 20	151	206	29.4	< 0.050	< 0.50	13.1	4.5	< 0.0050	< 1.0	NA	NA	4.1	0.17	0.057	<0.50	< 0.050	< 0.0050	< 0.071	< 0.023	10
No Flow	06/12/24	0.00327	306	< 20	137	191	4.4	< 0.050	0.52	6.1	4.9	< 0.0050	< 1.0	NA	NA	4.5	< 0.071	< 0.023	0.52	< 0.050	< 0.0050	0.13	0.042	10
No Flow	07/30/24	0.00258	388	< 20	170	241	45.2	<0.050	<0.50	8.7	7	<0.0050	<1.0	8.1	24.3	<0.71	0.29	0.096	NA	<0.050	<0.0050	0.27	0.087	10
MAX		**0.0066**	**388**		**172**	**442**	**45.2**		**2.1**	**25.1**	**9.4**	**0.0098**	**3.6**	**8.1**	**26.3**	**4.9**	**1.5**	**0.49**	**2.2**		**0.0071**	**1.5**	**0.48**	**12**
MIN		**0.00258**	**152**		**61.2**	**65**	**3.2**		**0.52**	**4.3**	**4.5**	**0.0057**	**1**	**7.3**	**17.8**	**2.4**	**0.089**	**0.023**	**0.52**		**0.0071**	**0.081**	**0.026**	**8**
AVG		**0.00**	**283.65**		**116.17**	**193.43**	**13.62**		**0.94**	**11.62**	**6.78**	**0.01**	**2.10**	**7.63**	**22.76**	**3.80**	**0.43**	**0.13**	**1.02**		**0.01**	**0.38**	**0.12**	**9.94**
NPDES 001 (Downgradient)																								
0.062	07/20/23	0.00454	220	-	95.9	136.0	4.1	<0.050	0.5	12.1	-	< 0.0050	< 1.0	8.1	24.0	1.8	< 0.071	< 0.023	< 0.50	< 0.050	< 0.0050	< 0.071	< 0.023	NA
0.321	07/26/23	0.00485	206	< 20	88.1	143.0	< 2.5	<0.050	< 0.50	4.8	5.2	< 0.0050	< 1.0	7.7	22.6	3.3	4.2	1.4	< 0.50	< 0.050	< 0.0050	4	1.3	NA
0.08	08/10/23	0.00466	214	< 20	94.3	129.0	< 2.5	<0.050	< 0.50	7.4	4.3	0.0057	< 1.0	8.0	22.2	1.9	6.2	2.0	< 0.50	< 0.050	< 0.0050	6.1	2	9
0.033	08/24/23	0.00462	217	NA	93.6	122.0	< 2.5	<0.050	< 0.50	3.4	4.7	NA	< 1.0	7.9	23.5	1.7	0.16	0.051	< 0.50	< 0.050	0.0057	< 0.071	< 0.023	<6
0.16	09/07/23	0.00454	220	< 20	130.0	133.0	< 2.5	<0.050	< 0.50	< 3.3	5.0	0.0057	< 1.0	7.7	23.8	1.5	0.99	0.32	< 0.50	< 0.050	< 0.0050	0.29	0.094	10
0.109	09/20/23	0.00458	218	< 20	118.0	146.0	< 2.5	<0.050	< 0.50	7.6	7.3	< 0.0050	< 1.0	8.1	20.9	2.0	0.23	0.076	< 0.50	< 0.050	< 0.0050	0.51	0.17	7
0.116	10/04/23	0.00453	221	< 20	128.0	155.0	< 2.5	<0.050	< 0.50	10.9	6.1	0.0071	< 1.0	7.5	21.4	1.9	< 0.071	< 0.023	< 0.50	< 0.050	0.0057	< 0.071	< 0.023	10
0.063	10/19/23	0.00497	201	< 20	87.5	143.0	< 2.5	<0.050	0.5	7.6	8.1	< 0.0050	< 1.0	7.9	21.1	2.0	0.19	0.06	0.63	< 0.050	< 0.0050	0.2	0.066	7
0.436	10/31/23	0.00525	190	< 20	84.2	156.0	< 2.5	<0.050	< 0.50	107	6.7	< 0.0050	< 1.0	7.7	18.9	2.1	< 0.071	< 0.023	< 0.50	< 0.050	< 0.0050	0.12	0.038	10
0.103	11/16/23	0.00487	206	< 20	83.6	132.0	< 2.5	<0.050	< 0.50	6.1	8.9	< 0.0050	< 1.0	7.8	18.3	0.81	0.075	0.025	NA	< 0.050	< 0.0050	< 0.071	< 0.023	9
0.09	11/30/23	0.00502	199	< 20	81.4	155.0	< 2.5	<0.050	0.93	< 3.3	9.9	< 0.0050	< 1.0	7.7	19.6	2.6	0.079	0.026	1.1	0.15	< 0.0050	0.25	0.08	9
0.13	12/14/23	0.00526	190	< 20	75.1	352.0	< 2.5	<0.050	0.66	9.1	11.0	< 0.0050	< 1.0	7.7	23.7	2.5	0.49	0.16	NA	< 0.050	< 0.0050	0.49	0.16	8
1.225	12/29/23	0.00729	137	< 20	52.7	159.0	< 2.5	<0.050	0.7	7.1	11.3	< 0.0050	< 1.0	7.9	21.9	3.0	< 0.071	< 0.023	0.81	< 0.050	< 0.0050	< 0.071	< 0.023	8
0.905	01/11/24	0.00673	149	< 20	54.1	232.0	< 2.5	<0.050	2.2	4.1	10.2	< 0.0050	< 1.0	7.7	21.9	2.4	0.079	0.026	2.3	< 0.050	< 0.0050	< 0.071	< 0.023	8
0.774	01/25/24	0.00517	194	< 20	61.6	10.0	< 2.5	<0.050	0.69	< 3.3	11.3	< 0.0050	< 1.0	7.6	23.5	1.8	0.097	0.032	0.88	< 0.050	< 0.0050	0.12	0.04	9
0.21	02/08/24	0.00441	227	< 20	88.5	53.0	< 2.5	<0.050	1.1	25.1	10.6	< 0.0050	< 1.0	7.7	22.2	1.6	< 0.071	< 0.023	NA	< 0.050	< 0.0050	< 0.071	< 0.023	9
0.228	02/22/24	0.00393	254	< 20	91.2	108.0	< 2.5	<0.050	0.61	< 3.3	11.3	NA	< 1.0	7.7	24.5	1.6	0.29	0.095	0.71	< 0.050	NA	0.35	0.12	NA
0.554	03/07/24	0.00503	199	< 20	62.3	124.0	2.6	<0.050	0.65	18.5	9.4	< 0.0050	1.1	8.1	26.3	4.2	NA	NA	0.76	< 0.050	< 0.0050	NA	NA	8
0.204	03/21/24	0.00421	238	< 20	95.7	162.0	2.9	<0.050	0.59	6.8	9.0	NA	< 1.0	7.9	24.7	1.9	0.19	0.063	0.59	< 0.050	NA	0.15	0.049	8
1.54	04/04/24	0.00852	117	< 20	42.8	93.0	2.6	<0.050	0.54	10.7	10.7	NA	1.4	7.7	25.8	3.0	0.073	0.024	0.73	< 0.050	NA	0.085	0.028	<6
0.173	04/18/24	0.00449	223	< 20	91.2	253.0	< 2.5	<0.050	< 0.50	3.3	6.6	0.0093	< 1.0	7.7	25.8	2.0	0.27	0.087	< 0.50	< 0.050	< 0.0050	0.22	0.072	<6
0.306	05/15/24	0.00462	217	< 20	90.9	129.0	9.8	<0.050	< 0.50	3.7	6.8	< 0.0050	< 1.0	7.5	23.9	2.7	0.16	0.053	< 0.50	< 0.050	< 0.0050	0.12	0.039	<6
0.114	05/29/24	0.00405	247	< 20	106.0	146.0	< 2.5	<0.050	< 0.50	8	5.4	< 0.0050	< 1.0	NA	NA	1.6	0.33	0.11	< 0.50	< 0.050	< 0.0050	0.21	0.067	8
0.193	06/12/24	0.00466	215	< 20	99.5	130.0	6.3	<0.050	< 0.50	7.7	6.1	< 0.0050	< 1.0	NA	NA	2.0	0.073	0.024	< 0.50	< 0.050	< 0.0050	0.22	0.071	7
0.114	07/30/24	0.0048	208	<20	92.3	119.0	12.4	<0.050	<0.50	<3.3	5.7	<0.0050	<1.0	7.8	24.1	0.86	0.51	0.17	NA	<0.050	<0.0050	0.22	0.07	8
MAX		**0.00852**	**254**		**130**	**352**	**12.4**		**2.2**	**107**	**11.3**	**0.0093**	**1.4**	**8.1**	**26.3**	**4.2**	**6.2**	**2**	**2.3**	**0.15**	**0.0057**	**6.10**	**2.00**	**10**
MIN		**0.00393**	**117**		**42.8**	**10**	**2.6**		**0.5**	**3.3**	**4.3**	**0.0057**	**1.1**	**7.5**	**18.3**	**0.81**	**0.073**	**0.024**	**0.59**	**0.15**	**0.0057**	**0.085**	**0.028**	**7**
AVG		**0.00502**	**205**		**88**	**145**	**6**		**0.8**	**13.6**	**8.0**	**0.0070**	**1.3**	**7.8**	**22.81**	**2.11**	**0.77**	**0.25**	**0.95**	**0.15**	**0.0057**	**0.80**	**0.26**	**8.4**
Clarifying Pond																								
0.051	07/20/23	0.00698	143	-	63.1	84.0	6.0	< 0.050	0.51	5.1	-	< 0.0050	< 1.0	8.0	24.0	1.0	3.5	1.1	0.64	< 0.050	< 0.0050	3.2	1.1	NA
0.08	07/26/23	0.00871	115	< 20	49.8	91	12.8	< 0.050	< 0.50	4.2	5.3	0.011	< 1.0	7.5	22.5	2	0.31	0.1	< 0.50	< 0.050	< 0.0050	< 0.071	< 0.023	NA
0.051	08/10/23	0.00716	140	-	65.5	86	16.1	< 0.050	0.54	18.8	4.2	0.017	< 1.0	7.9	23.4	1.3	0.093	0.03	0.67	< 0.050	0.0084	< 0.071	< 0.023	9
0.014	08/24/23	0.00667	150	< 20	67.4	73	4.6	<0.050	0.55	8.2	5.1	0.0071	< 1.0	7.9	24.0	1.2	0.57	0.19	0.67	< 0.050	< 0.0050	0.5	0.16	<6
0.005	09/07/23	0.00678	148	< 20	96.9	116	38.6	< 0.050	1.1	< 3.3	3.8	< 0.0050	< 1.0	7.6	23.4	1.1	0.093	0.03	1.1	< 0.050	< 0.0050	0.071	< 0.023	8
0.018	09/20/23	0.00704	142		91.1	< 2.5	35.8	< 0.050	0.67	10.9	5.6	< 0.0050	< 1.0	7.8	19.8	1.3	0.11	0.034	0.9	< 0.050	< 0.0050	0.08	0.026	< 6.0
0.051	10/04/23	0.0059	169	< 20	97.5	70	17.4	< 0.050	< 0.50	12.8	6.3	< 0.0050	< 1.0	7.7	22.5	1.4	0.14	0.044	< 0.50	< 0.050	< 0.0050	< 0.071	< 0.023	10
0.08	10/19/23	0.00719	139	< 20	59.4	119	3.3	< 0.050	1.1	5.6	7.1	< 0.0050	< 1.0	7.7	20.7	1.4	0.82	0.27	1.1	< 0.050	< 0.0050	0.12	0.038	< 6.0
0.051	10/31/23	0.00711	141	< 20	60.5	54	4.7	< 0.050	0.52	5.3	6.5	< 0.0050	< 1.0	7.5	18.8	1.4	< 0.071	< 0.023	0.55	< 0.050	< 0.0050	< 0.071	< 0.023	9
0.08	11/16/23	0.00707	141	< 20	57	136	3.7	< 0.050	< 0.50	4.5	8.5	0.0057	< 1.0	8.2	17.9	0.64	0.41	0.13		< 0.050	< 0.0050	< 0.071	< 0.023	9
0.029	11/30/23	0.0071	141	< 20	57.2	72	20.1	< 0.050	2.3	< 3.3	9.9	< 0.0050	< 1.0	8.0	20.0	1.4	0.44	0.14	2.6	< 0.050	< 0.0050	< 0.071	< 0.023	8
0.073	12/14/23	0.00648	154	< 20	63.6	158	<2.5	< 0.050	0.69	5.1	10.2	< 0.0050	< 1.0	7.7	23.8	1.7	0.19	0.063		< 0.050	< 0.0050	0.16	0.054	<6
0.08	12/29/23	0.00838	119	< 20	48.2	151	3.1	< 0.050	< 0.50	< 3.3	10	< 0.0050	< 1.0	7.9	22.5	1.2	0.13	0.042	< 0.50	< 0.050	< 0.0050	< 0.071	< 0.023	<6
0.117	01/11/24	0.00898	111	< 20	46.1	235	6.5	< 0.050	0.56	< 3.3	9.5	0.012	< 1.0	7.7	22.1	1.7	0.58	0.19	0.76	< 0.050	0.0071	0.37	0.12	<6
0.094	01/25/24	0.00649	154	< 20	62.9	87	5	< 0.050	0.58	< 3.3	10.9	< 0.0050	< 1.0	7.7	24.1	0.96	< 0.071	< 0.023	0.9	< 0.050	< 0.0050	< 0.071	< 0.023	9
0.037	02/08/24	0.00623	161	< 20	68.5	37	6.6	< 0.050	0.93	22.8	10.4	< 0.0050	< 1.0	7.7	22.2	1.2	0.41	0.13	NA	0.1	< 0.0050	< 0.071	< 0.023	9
0.029	02/22/24	0.00652	153	< 20	62.0	47	16.1	< 0.050	< 0.50	< 3.3	11.5	NA	< 1.0	7.8	25.1	1.4	< 0.071	0.023	< 0.50	< 0.050	NA	0.15	0.048	NA
0.067	03/07/24	0.00658	152	< 20	63.5	88	2.6	< 0.050	1.3	5.1	10.7	< 0.0050	< 1.0	7.9	26.5	1.3	NA	NA	1.6	< 0.050	< 0.0050	NA	NA	7
0.051	03/21/24	0.006	167	< 20	71.7	106	45.4	< 0.050	< 0.50	13.5	9.5	NA	< 1.0	7.8	25.2	1.5	0.1	0.033	< 0.50	< 0.050	NA	< 0.071	< 0.023	10
0.109	04/04/24	0.00878	114	< 20	48.2	71	4.9	< 0.050	< 0.50	6.3	10.6	NA	< 1.0	7.8	25.2	1.2	< 0.071	< 0.023	< 0.50	< 0.050	NA	< 0.074	< 0.023	< 6.0
0.067	04/18/24	0.00631	158	< 20	66	115	11.8	< 0.050	< 0.50	6	7.9	< 0.0050	1	7.7	25.6	1.3	0.28	0.093	< 0.50	< 0.050	< 0.0050	0.14	0.047	< 6.0
0.086	05/15/24	0.00715	140	< 20	58.2	82	7.5	< 0.050	1.1	< 3.3	7.7	< 0.0050	< 1.0	7.6	24.4	1.6	< 0.071	< 0.023	1.4	< 0.050	< 0.0050	< 0.071	< 0.023	< 6.0
0.051	05/29/24	0.00668	150	< 20	62.7	78	7.8	< 0.050	< 0.50	6.7	4.4	< 0.0050	< 1.0	NA	NA	1.1	< 0.071	< 0.023	< 0.50	< 0.050	< 0.0050	< 0.071	< 0.023	7
0.037	06/12/24	0.00692	145	< 20	61.5	76	46.5	< 0.050	< 0.50	< 3.3	5.1	< 0.0050	< 1.0	NA	NA	1.5	0.17	0.054	< 0.50	< 0.050	< 0.0050	0.17	0.056	<6.00
0.08	7/30/204	0.00691	145	< 20	61	49	19.2	<0.050	<12.5	< 3.3	<1.0	<0.0050	<1.0	7.6	24.2	2.9	0.17	0.056	NA	<0.050	< 0.0050	0.23	0.076	7
MAX		**0.01**	**169.00**		**97.50**	**235.00**	**46.50**		**2.30**	**22.80**	**11.50**	**0.017**	**1.00**	**8.20**	**26.50**	**2.90**	**3.50**	**1.10**	**2.60**	**0.10**	**0.01**	**3.20**	**1.10**	**10.00**
MIN		**0.01**	**111.00**		**46.10**	**37.00**	**2.60**		**0.51**	**4.20**	**3.80**	**0.006**	**1.00**	**7.50**	**17.90**	**0.64**	**0.09**	**0.02**	**0.55**	**0.10**	**0.01**	**0.07**	**0.03**	**7.00**
AVG		**0.01**	**143.68**		**64.38**	**95.04**	**14.42**		**0.89**	**8.81**	**7.86**	**0.011**	**1.00**	**7.77**	**22.95**	**1.39**	**0.47**	**0.14**	**1.07**	**0.10**	**0.01**	**0.47**	**0.17**	**8.50**

NA denotes not analyzed by lab
---- denotes not sampled
J denotes estimated value
*Eurofins indicated an administrative lapse that briefly affected certification for Mercury. Eurofins reported that the brief lapse did not affect the accuracy of the reported results. Additional information provided upon request.

Rock Hill Quarry- Anti-Degradation Sampling

Monitoring Point (Flow - MGD)	Date Sampled	Bromide mg/L	Nitrate as N mg/L	Chloride mg/L	Nitrate Nitrite as N mg/L	Nitrite as N mg/L	Sulfate mg/L	Hardness as calcium carbonate mg/L	Mercury mg/L	Barium µg/L	Boron µg/L	Calcium µg/L	Copper µg/L	Lead µg/L	Magnesium µg/L	Manganese µg/L	Nickel µg/L	Potassium µg/L	Selenium µg/L	Sodium µg/L	Strontium µg/L	Zinc µg/L	Aluminum (T) µg/L	Iron (T) µg/L	Lithium (T) µg/L	Aluminum (D) µg/L	Cadmium (D) µg/L	Lithium (D) µg/L	Arsenic (D) µg/L	Iron (D) µg/L	Calcium (D) µg/L	Zinc (D) µg/L	Copper (D) µg/L	Lead (D) µg/L	Magnesium (D) µg/L	Manganese (D) µg/L	Nickel (D) µg/L
Basin 1																																					
Discharge Too Low, No Sample	07/20/23	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Discharge Too Low, Sample from Basin	07/26/23	0.11	< 0.070	6.14	< 0.070	< 0.023	2.33	117	< 0.000043	6.6	84.80	26400	2.50	<0.84	12400	136	< 0.91	1380.0	< 0.59	5340.0	71.8	< 6.5	232.0	1340.0	< 1.3	< 19.5	< 0.15	1.9	< 0.89	171.0	24500.0	< 4.0	<2.5	< 0.84	11700.0	< 1.5	< 0.91
0.032	08/10/23	< 0.054	< 0.070	6.31	< 0.070	< 0.023	2.98	126	<0.000043	6.6	104	28300	<2.5	<0.84	13300	77	< 0.91	1240	< 0.59	5890	75.9	14.1	<35.0	822	< 1.3	290	< 0.15	<1.3	< 0.89	49.9	6960	8.6	<2.5	< 0.84	<46.9	1.5	1.2
0.032	08/24/23	< 0.054	0.071	6.33	0.071	< 0.023	3.11	125	<0.000043	10.3	83.7	28100	< 2.5	<0.84	13300	53.8	< 0.91	1280.00	< 0.59	5900	79.9	32.4	<35.0	299	< 1.3	< 19.5	< 0.15	<1.3	< 0.89	89.6	28200	23.1	< 2.5	< 0.84	12900	21.1	< 0.91
0.021	09/07/23	< 0.054	< 0.070	7.04	< 0.070	< 0.023	2.99	132	0.000067	5.0	94.60	29200	<2.5	<0.84	14300	39.1	< 0.91	1160.00	< 0.59	6240	78.0	23.7	<35.0	230	< 1.3	< 19.5	< 0.15	<1.3	< 0.89	69.2	29600	17.3	<2.5	< 0.84	14500	18.9	< 0.91
0.021	09/20/23	< 0.054	< 0.070	4.3	< 0.070	< 0.023	4.85	100	< 0.000043	8.0	60.90	23700	<2.5	<0.84	9990	71.3	< 0.91	1350.00	< 0.59	4740	63.0	20.3	59.8	311	< 1.3	< 19.5	< 0.15	<1.3	< 0.89	88.5	24700	14.6	<2.5	< 0.84	9970	60.6	< 0.91
0.007	10/04/23	0.062	< 0.070	4.54	< 0.070	< 0.023	5.74	105	< 0.000043	6.1	79.50	24700	<2.5	<0.84	10500	35.7	< 0.91	1450.00	< 0.59	4750	70.1	26.4	<35.0	227	< 1.3	< 19.5	< 0.15	1.7	< 0.89	47.5	26300	18.8	<2.5	< 0.84	11400	21.5	< 0.91
0.007	10/19/23	< 0.054	0.077	4.31	0.077	< 0.023	6.86	119	< 0.000043	5.4	84.40	26800	<2.5	<0.84	12700	28.4	< 0.91	1280.00	< 0.59	5670	74.9	37.8	65.1	181	< 4.9	< 19.5	< 0.15	< 4.9	< 0.89	51.0	27500	29.6	<2.5	< 0.84	13200	19.4	< 0.91
No Discharge No Sample	10/31/23	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
No Discharge No Sample	11/16/23	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
No Discharge No Sample	11/30/23	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
No Discharge No Sample	12/14/23	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
No Discharge No Sample	12/29/23	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
No Discharge No Sample	01/11/24	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
No Discharge No Sample	01/25/24	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
No Discharge No Sample	02/08/24	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
No Discharge No Sample	02/22/24	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
No Discharge No Sample	03/07/24	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
No Discharge No Sample	03/21/24	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
No Discharge, Sample from Basin	04/04/24	< 0.054	< 0.070	4.28	0.13	0.061	6.64	NA	*NA	2.8	42.6	20500	2.8	<0.84	9780	34.9	< 0.91	938	< 0.59	4290	56.9	9.9	189	1330	< 1.3	< 19.5	< 0.15	< 0.15	< 0.89	39.7	19800	6.3	<2.5	<0.84	9370	7.0	< 0.91
No Discharge No Sample	04/18/24	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
No Discharge No Sample	05/15/24	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
No Discharge Sample from Basin	05/29/24	< 0.054	< 0.070	6.14	<0.070	<0.047	5	NA	* <0.000042	4.2	87.90	29500	<2.5	<0.84	13700	234	<0.91	770.00	<0.59	6430	80.1	10.3	<35.0	492	2	<19.5	<0.15	<1.7	<0.89	37.5	28700	<4.0	<2.5	<0.84	13100	<1.5	<0.91
0.012	06/12/24	< 0.054	< 0.070	3.91	<0.070	<0.047	3.63	NA	<0.000042	5.0	83.90	26100	<2.5	<0.84	12300	211	<0.91	924.00	<0.59	5740	71.7	31.7	<35.0	681	<1.7	<19.5	<0.15	<1.7	<0.89	76.3	25900	14.2	<2.5	<0.84	11600	85.5	<0.91
0.025	07/30/24	0.066	0.14	5.89	0.14	0.066	2.94	155	<0.000042	7.6	109.00	34300	<2.5	<0.84	16800	95	<0.91	683.00	<0.59	8000	91.1	29.5	<35.0	3240	<1.7	NA	<0.15	<1.7	NA	61.2	NA	17.8	NA	NA	NA	NA	NA
MAX		**0.110**	**0.140**	**7.04**	**0.140**	**0.066**	**6.86**	**155.00**	**0.000067**	**10.30**	**109.00**	**34300**	**2.80**		**16800.00**	**234**		**1450**		**8000**	**91.1**	**37.8**	**232**	**3240**	**2**	**290**		**1.90**		**171**	**29600**	**29.6**			**14500**	**85.5**	**1.20**
MIN		**0.062**	**0.071**	**3.91**	**0.071**	**0.061**	**2.33**	**100.00**	**0.000067**	**2.80**	**42.60**	**20500**	**2.50**		**9780.00**	**28.4**		**683**		**4290**	**56.9**	**9.9**	**60**	**181**	**2**	**290**		**1.70**		**37.5**	**6960**	**6.30**			**9370**	**1.50**	**1.20**
AVG		**0.079**	**0.096**	**5.38**	**0.105**	**0.064**	**4.28**	**122.38**	**0.000067**	**6.15**	**83.21**	**27055**	**2.65**		**12643**	**92.4**		**1132**		**5726**	**73.9**	**23.6**	**136**	**832**	**2**	**290**		**1.80**		**71.0**	**24216**	**16.7**			**11971**	**29.4**	**1.20**
Basin 2																																					
No Discharge No Sample	07/20/23	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
No Discharge Sample from Basin	07/26/23	0.13	0.08	1.88	0.08	< 0.023	5.32	78.8	< 0.000043	5.8	55.60	16600.00	3.800	< 0.84	9060	83.3	< 0.91	1200.00	< 0.59	2970	43.5	< 6.5	268.0	665.0	< 1.3	< 19.5	< 0.15	< 1.3	< 0.89	37.5	16700	< 4.0	< 2.5	< 0.84	8780	<1.5	< 0.91
No Discharge No Sample	08/10/23	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
No Flow Sample from Basin	08/24/23	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
No Discharge No Sample	09/07/23	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
No Discharge Sample from Basin	09/20/23	< 0.054	< 0.070	2.13	< 0.070	< 0.023	6.64	94.8	< 0.000043	4.4	45.4	20700	<2.5	<0.84	10500	51.1	< 0.91	1470	< 0.59	3360	52	10.6	54.4	342	< 1.3	< 19.5	< 0.15	< 1.3	< 0.89	71.2	21100	6.9	< 2.5	< 0.84	10600	25	< 0.91
No Discharge Sample from Basin	10/04/23	0.07	< 0.070	1.63	< 0.070	< 0.023	7.19	92.4	< 0.000043	3.6	66.1	21100	2.500	<0.84	9660	52.6	< 0.91	1720	< 0.59	3060	54	13.4	68.6	469	< 1.3	< 19.5	< 0.15	1.6	< 0.89	29.3	22400	< 4.0	< 2.5	< 0.84	10400	5.8	< 0.91
No Discharge No Sample	10/19/23	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
No Discharge No Sample	10/31/23	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
No Discharge No Sample	11/16/23	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
No Discharge No Sample	11/30/23	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
No Discharge No Sample	12/14/23	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
No Discharge No Sample	12/29/23	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
No Discharge No Sample	01/11/24	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
No Discharge No Sample	01/25/24	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
No Discharge No Sample	02/08/24	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
No Discharge No Sample	02/22/24	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
No Discharge No Sample	03/07/24	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
No Discharge No Sample	03/21/24	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
No Discharge Sample from Basin	04/04/24	<0.054	0.14	1.47	0.2	0.06	7.84	NA	*NA	2.0	<30.4	17100	3.4	<0.84	8040	37.1	<0.91	1270	<0.59	2600	44.1	<6.5	320	1420	<1.3	23.8	<0.15	<1.3	<0.89	38.7	16200	<4.0	16200	<0.84	7540	3.8	0.91
No Discharge No Sample	04/18/24	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
No Discharge No Sample	05/15/24	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
No Discharge Sample from Basin	05/29/24	<0.054	<0.070	3.20	<0.070	< 0.023	8.50	NA	* <0.000042	8.9	68.6	33000	<2.5	<0.84	16000	143	<0.91	1070	<0.59	5630	85.2	<6.5	122	876	<1.7	<19.5	<0.15	<1.7	<0.89	145	31700	<4.0	<2.5	<0.84	15100	1.5	<0.91
No Flow No Sample	06/12/24	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
No Discharge Sample from Basin	07/30/24	0.11	<0.070	4.15	0.11	0.053	9.11	141	<0.000042	8.1	73.5	28600	<2.5	<0.84	17000	75.7	<0.91	553	<0.59	5760	71.2	<6.5	53.5	434	<1.7	NA	<0.15	<1.7	NA	75.9	NA	<4.0	NA	NA	NA	NA	NA
MAX		**0.13**	**0.14**	**4.15**	**0.2**	**0.06**	**9.11**	**141**		**8.9**	**73.5**	**33000**	**3.8**		**17000**	**143**		**1720**		**5760**	**85.2**	**13.4**	**320**	**1420**		**23.8**		**1.6**		**145**	**31700**	**6.9**	**16200**		**15100**	**25**	**0.91**
MIN		**0.07**	**0.08**	**1.47**	**0.08**	**0.053**	**5.32**	**78.8**		**2.0**	**45.4**	**16600**	**2.5**		**8040**	**37.1**		**553**		**2600**	**43.5**	**10.6**	**54**	**342**		**23.8**		**1.6**		**29.3**	**16200**	**6.9**	**16200**		**7540**	**1.5**	**0.91**
AVG		**0.10**	**0.11**	**2.41**	**0.13**	**0.06**	**7.43**	**101.75**		**5.5**	**61.8**	**22850.0**	**3.2**		**11710**	**73.8**		**1214**		**3897**	**58.3**	**12.0**	**148**	**701**		**23.8**		**1.60**		**66.3**	**21620**	**6.9**	**16200**		**10484**	**9.0**	**0.91**

NA denotes not analyzed by lab
---- denotes not sampled
J denotes estimated value
*Eurofins indicated an administrative lapse that briefly affected certification for Mercury. Eurofins reported that the brief lapse did not affect the accuracy of the reported results. Additional information provided upon request.

Rock Hill Quarry- Anti-Degradation Sampling

Monitoring Point (Flow - MGD)	Date Sampled	Resistivity Mohm-cm	Specific Conductance umhos/cm	Acidity mg/L	Bicarbonate Alkalinity as CaCO3 mg/L	TDS mg/L	TSS mg/L	Ammonia mg/L	Total Kjeldahl Nitrogen mg/L	Chemical Oxygen Demand mg/L	Oxygen, Dissolved mg/L	Orthophosphate as P mg/L	Carbonaceous Biochemical Oxygen Demand mg/L	pH SU	Temperature Degrees C	Total Organic Carbon mg/L	Phosphorus as PO4 mg/L	Phosphorus as P mg/L	Nitrogen, Total (EPA Total Nitrogen) mg/L	Ammonia (D) mg/L	Orthophosphate as P (D) mg/L	Phosphorus as PO4 (D) mg/L	Phosphorus as P (D) mg/L	Osmotic Pressure mOsm/kg
Basin 1																								
Discharge Too Low, No Sample	07/20/23	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Discharge Too Low, Sample from Basin	07/26/23	0.00411	243	< 20	110	159	4.5	< 0.050	<0.50	7.3	6.1	0.0052	< 1.0	7.8	22.8	3	9.3	3	< 0.50	< 0.050	< 0.0050	0.78	0.25	NA
0.032	08/10/23	0.00386	259	-	127	172	2.5	< 0.050	0.55	10	6.7	0.0084	1.2	8.1	22.3	2.9	3.5	1.1	0.55	< 0.050	< 0.0050	3.4	1.1	11
0.032	08/24/23	0.00367	272	NA	129	163	<2.5	< 0.050	0.58	8.9	6.7	<0.0050	< 1.0	8.1	24.3	2.9	0.11	0.036	0.65	< 0.050	< 0.0050	<0.071	< 0.023	8
0.021	09/07/23	0.00348	287	< 20	158	194	<2.5	< 0.050	0.53	3.8	6.3	<0.0050	< 1.0	8.1	23.8	2.6	0.67	0.22	0.53	< 0.050	< 0.0050	0.076	0.025	12
0.021	09/20/23	0.00485	206		119	142	103	< 0.050	<0.50	12.5	7.4	<0.0050	1.2	8.2	21	2	0.2	0.065	< 0.50	< 0.050	< 0.0050	0.46	0.15	7
0.007	10/04/23	0.00416	240	< 20	133	187	<2.5	< 0.050	<0.50	11.2	8.1	0.0084	< 1.0	7.9	21.9	2	<0.071	<0.023	< 0.50	< 0.050	0.0057	< 0.071	<0.023	11
0.007	10/19/23	0.00398	251	< 20	107	162	<2.5	< 0.050	4	11.5	9.6	<0.0050	< 1.0	8	20.5	2.2	0.096	0.031	4.1	< 0.050	< 0.0050	< 0.071	<0.023	9
No Discharge No Sample	10/31/23	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
No Discharge No Sample	11/16/23	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
No Discharge No Sample	11/30/23	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
No Discharge No Sample	12/14/23	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
No Discharge No Sample	12/29/23	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
No Discharge No Sample	01/11/24	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
No Discharge No Sample	01/25/24	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
No Discharge No Sample	02/08/24	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
No Discharge No Sample	02/22/24	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
No Discharge No Sample	03/07/24	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
No Discharge No Sample	03/21/24	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
No Discharge, Sample from Basin	04/04/24	0.00495	202	<20.0	83.9	135	3.3	< 0.050	0.51	6.6	10.5	NA	1.2	8.0	25.5	1.7	<0.071	<0.023	0.64	< 0.050	NA	0.073	0.024	8
No Discharge No Sample	04/18/24	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
No Discharge No Sample	05/15/24	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
No Discharge Sample from Basin	05/29/24	0.00355	281	<20.0	125	145	7.8	<0.050	<0.50	14.4	7.7	<0.0050	1.1	NA	NA	3.2	0.17	0.057	<0.50	<0.050	<0.0050	<0.071	<0.023	10
0.012	06/12/24	0.00429	233	<20.0	109	138	3.7	<0.050	<0.50	<3.3	6.5	<0.0050	<1.0	NA	NA	2.6	<0.071	<0.023	<0.50	<0.050	<0.0050	0.59	0.19	7
0.025	07/30/24	0.00368	272	<20.0	134	182	10	<0.050	1.3	7.7	6.4	<0.0050	<1.0	8	24.3	1.9	0.66	0.21	NA	<0.050	<0.0050	0.66	0.037	8
MAX		**0.0050**	**287**		**158**	**194**	**103**		**4**	**14.4**	**10.5**	**0.0084**	**1.20**	**8.20**	**25.5**	**3.20**	**9.30**	**3.00**	**4.10**		**0.0057**	**3.40**	**1.10**	**12.00**
MIN		**0.0036**	**202**		**83.9**	**135**	**2.50**		**0.51**	**3.8**	**6.1**	**0.0052**	**1.10**	**7.80**	**20.5**	**1.70**	**0.10**	**0.03**	**0.53**		**0.0057**	**0.073**	**0.024**	**7.00**
AVG		**0.0041**	**250**		**121.4**	**162**	**19.3**		**1.2**	**9.4**	**7.5**	**0.0073**	**1.18**	**8.02**	**22.9**	**2.45**	**1.84**	**0.59**	**1.29**		**0.0057**	**0.86**	**0.25**	**9.10**
Basin 2																								
No Discharge No Sample	07/20/23	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
No Discharge Sample from Basin	07/26/23	0.0057	175	< 20.0	83.1	118	7.3	< 0.050	< 0.50	10.5	6.6	0.0079	1.1	7.8	22.5	3.5	2.3	0.76	< 0.50	< 0.050	< 0.0050	2.3	0.74	NA
No Discharge No Sample	08/10/23	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
No Flow Sample from Basin	08/24/23	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
No Discharge No Sample	09/07/23	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
No Discharge Sample from Basin	09/20/23	0.00496	202		117	140	2.7	< 0.050	0.64	14.8	8.9	<0.0050	1	7.7	20.5	2.8	0.13	0.041	0.64	< 0.050	< 0.0050	0.89	0.29	9
No Discharge Sample from Basin	10/04/23	0.0049	204	< 20.0	116	133	4.4	< 0.050	0.56	13.8	10.2	0.0071	1	8.0	21.6	2.6	0.5	0.16	0.56	< 0.050	0.0057	0.084	0.028	9
No Discharge No Sample	10/19/23	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
No Discharge No Sample	10/31/23	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
No Discharge No Sample	11/16/23	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
No Discharge No Sample	11/30/23	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
No Discharge No Sample	12/14/23	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
No Discharge No Sample	12/29/23	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
No Discharge No Sample	01/11/24	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
No Discharge No Sample	01/25/24	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
No Discharge No Sample	02/08/24	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
No Discharge No Sample	02/22/24	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
No Discharge No Sample	03/07/24	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
No Discharge No Sample	03/21/24	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
No Discharge Sample from Basin	04/04/24	0.00607	165	<20.0	67.9	108	2.8	<0.050	0.54	6	11.1	NA	1.1	8.0	25.1	1.9	0.6	0.2	0.74	<0.050	NA	<0.071	<0.023	7
No Discharge No Sample	04/18/24	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
No Discharge No Sample	05/15/24	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
No Discharge Sample from Basin	05/29/24	0.00335	299	<20.0	136	188	18.4	< 0.050	1.1	17.9	7.1	<0.0050	1.3	NA	NA	3.5	<0.071	<0.023	<0.50	<0.050	<0.0050	<0.14	<0.046	10
No Flow No Sample	06/12/24	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
No Discharge Sample from Basin	07/30/24	0.00351	285	20	130	173	8.8	<0.050	1.3	11	8.2	<0.0050	<1.0	8.1	24.2	2.8	0.31	0.1	NA	<0.050	<0.0050	0.074	0.024	13
MAX		**0.00607**	**299**	**20**	**136**	**188**	**18.4**		**1.3**	**17.9**	**11.1**	**0.0079**	**1.3**	**8.1**	**25.1**	**3.5**	**2.3**	**0.76**	**0.74**		**0.0057**	**2.3**	**0.74**	**13**
MIN		**0.00335**	**165**	**20**	**67.9**	**108**	**2.7**		**0.54**	**6**	**6.6**	**0.0071**	**1**	**7.7**	**20.5**	**1.9**	**0.13**	**0.041**	**0.56**		**0.0057**	**0.074**	**0.024**	**7**
AVG		**0.00475**	**222**	**20**	**108.3**	**143**	**7.4**		**0.83**	**12.33**	**8.68**	**0.008**	**1.10**	**7.92**	**22.78**	**2.85**	**0.77**	**0.25**	**0.65**		**0.01**	**0.84**	**0.27**	**9.60**

NA denotes not analyzed by lab
---- denotes not sampled
J denotes estimated value
*Eurofins indicated an administrative lapse that briefly affected certification for Mercury. Eurofins reported that the brief lapse did not affect the accuracy of the reported results. Additional information provided upon request.

Lab Results

July 20, 2023

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Andrew Gutshall
Heidelberg Materials Northeast LLC
7660 Imperial Way
Allentown, Pennsylvania 18195

Generated 8/15/2023 11:08:42 AM

JOB DESCRIPTION

Rock Hill - Anti-Degradation

JOB NUMBER

460-284669-1

Eurofins Edison
777 New Durham Road
Edison NJ 08817

See page two for job notes and contact information.

my EOL

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing Northeast, LLC Project Manager.

Authorization



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Definitions/Glossary

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill - Anti-Degradation

Job ID: 460-284669-1

Qualifiers

HPLC/IC

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

General Chemistry

Qualifier	Qualifier Description
HF	Field parameter with a holding time of 15 minutes. Test performed by laboratory at client's request.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 460-284669-1

Laboratory: Eurofins Edison

Narrative

Job Narrative
460-284669-1

Comments
No additional comments.

Receipt
The samples were received on 7/20/2023 7:00 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 2.6º C and 2.9º C.

Receipt Exceptions
The method detection limit (MDL) is the lowest value detectable by the laboratory for a given analyte as determined by the MDL procedure detailed in EPA 40 CFR 136. Reported MDL values are adjusted for any dilutions and percent moisture (as applicable). The lab is unable to report values below the MDL.

GC Semi VOA
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Metals
Method Filtration: The following samples were not filtered within 15 minutes of sample collection as required by the method: Clarifying Pond (460-284669-1) and NPDES 001 (460-284669-2). The samples were filtered prior to analysis at the laboratory, and the results have been reported.

Method Filtration: The following samples were not filtered within 15 minutes of sample collection as required by the method: Clarifying Pond (460-284669-1) and NPDES 001 (460-284669-2). The sample(s) was filtered prior to analysis at the laboratory, and the results have been reported. This does not meet regulatory requirements.

Method FILTRATION: The following samples were not filtered and preserved within 15 minutes of sample collection in accordance with 40 CFR Part 136 Table II, Footnote 7, method 6020B: Clarifying Pond (460-284669-1) and NPDES 001 (460-284669-2). The samples were filtered prior to analysis at the laboratory.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

General Chemistry
Methods 9040C, SM 4500 H+ B: This analysis is normally performed in the field and has a method-defined holding time of 15 minutes. The following samples has been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe: Clarifying Pond (460-284669-1) and NPDES 001 (460-284669-2).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Client Sample ID: Clarifying Pond

Date Collected: 07/20/23 08:30
Date Received: 07/20/23 19:00

Lab Sample ID: 460-284669-1

Matrix: Water

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide	0.054	U	0.32	0.054	mg/L			07/21/23 15:36	1
Nitrate as N	**0.13**	**J**	0.16	0.070	mg/L			07/21/23 15:36	1
Chloride	**1.04**		0.32	0.039	mg/L			07/22/23 15:04	1
Nitrite as N	0.023	U	0.16	0.023	mg/L			07/21/23 15:36	1
Sulfate	**5.86**		0.48	0.095	mg/L			07/21/23 15:36	1

Method: SM-Online 2340B-2011 - Total Hardness (as CaCO3) by calculation - SM Online, 2011

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**59.7**		33.1	33.1	mg/L			08/01/23 12:05	1

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000043	U	0.00020	0.000043	mg/L		07/25/23 12:00	07/25/23 15:07	1

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**4.1**		4.0	0.91	ug/L		07/24/23 08:53	07/25/23 13:59	1
Boron	**58.8**	**J**	80.0	30.4	ug/L		07/24/23 08:53	07/25/23 13:59	1
Calcium	**15700**		500	53.6	ug/L		07/24/23 08:53	07/25/23 13:59	1
Copper	2.5	U	4.0	2.5	ug/L		07/24/23 08:53	07/25/23 13:59	1
Lead	0.84	U	1.2	0.84	ug/L		07/24/23 08:53	07/25/23 13:59	1
Magnesium	**4960**		200	46.9	ug/L		07/24/23 08:53	07/25/23 13:59	1
Manganese	**78.9**		8.0	1.5	ug/L		07/24/23 08:53	07/25/23 13:59	1
Nickel	0.91	U	4.0	0.91	ug/L		07/24/23 08:53	07/25/23 13:59	1
Potassium	**1080**		200	112	ug/L		07/24/23 08:53	07/25/23 13:59	1
Selenium	0.59	U	2.5	0.59	ug/L		07/24/23 08:53	07/25/23 13:59	1
Sodium	**2970**		500	219	ug/L		07/24/23 08:53	07/25/23 13:59	1
Strontium	**26.0**		4.0	0.50	ug/L		07/24/23 08:53	07/25/23 13:59	1
Zinc	6.5	U	16.0	6.5	ug/L		07/24/23 08:53	07/25/23 13:59	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**181**		100	35.0	ug/L		07/24/23 06:12	07/25/23 04:31	1
Iron	**581**		50.0	20.0	ug/L		07/26/23 05:46	08/01/23 17:46	1

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	19.5	U	40.0	19.5	ug/L		07/21/23 22:33	07/21/23 23:50	1
Cadmium	0.15	U	0.50	0.15	ug/L		07/25/23 20:23	07/31/23 20:28	1
Arsenic	0.89	U	2.0	0.89	ug/L		07/21/23 22:33	07/21/23 23:50	1
Iron	**55.7**		50.0	20.0	ug/L		07/25/23 20:23	07/31/23 20:28	1
Calcium	**15500**		500	53.6	ug/L		07/21/23 22:33	07/21/23 23:50	1
Zinc	4.0	U	10.0	4.0	ug/L		07/25/23 20:23	07/31/23 20:28	1
Copper	2.5	U	4.0	2.5	ug/L		07/21/23 22:33	07/21/23 23:50	1
Iron	58.2	U	120	58.2	ug/L		07/21/23 22:33	07/21/23 23:50	1
Lead	0.84	U	1.2	0.84	ug/L		07/21/23 22:33	07/21/23 23:50	1
Magnesium	**4970**		200	46.9	ug/L		07/21/23 22:33	07/21/23 23:50	1
Manganese	**24.3**		8.0	1.5	ug/L		07/21/23 22:33	07/21/23 23:50	1
Nickel	0.91	U	4.0	0.91	ug/L		07/21/23 22:33	07/21/23 23:50	1

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill - Anti-Degradation

Job ID: 460-284669-1

Client Sample ID: Clarifying Pond

Date Collected: 07/20/23 08:30
Date Received: 07/20/23 19:00

Lab Sample ID: 460-284669-1
Matrix: Water

Method: SW846 EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	1.3	U	5.0	1.3	ug/L		07/27/23 12:03	08/02/23 20:44	1

Method: SW846 EPA 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	1.3	U	5.0	1.3	ug/L		08/03/23 10:55	08/11/23 19:04	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Resistivity (EPA 120.1)	0.00698		0.000100	0.000100	Mohm-cm			07/31/23 13:28	1
Specific Conductance (EPA 120.1)	143		1.00	1.00	umhos/cm			07/31/23 13:28	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-2011)	63.1		5.0	5.0	mg/L			07/27/23 12:45	1
Carbonate Alkalinity as CaCO3 (SM 2320B-2011)	5.0	U	5.0	5.0	mg/L			07/27/23 12:45	1
Alkalinity as CaCO3 to pH 4.5 (SM 2320B-2011)	63.1		5.0	5.0	mg/L			07/27/23 12:45	1
Total Dissolved Solids (SM 2540C-2015)	84.0		2.5	2.5	mg/L			07/26/23 09:03	1
Total Suspended Solids (SM 2540D-2015)	6.0		2.5	2.5	mg/L			07/26/23 07:25	1
Ammonia (EPA 350.1)	0.050	U	0.10	0.050	mg/L			08/01/23 14:56	1
Total Kjeldahl Nitrogen (EPA 351.2	0.51	J	1.0	0.50	mg/L		08/01/23 10:45	08/02/23 15:00	1
Chemical Oxygen Demand (EPA 410.4)	5.1	J	10.0	3.3	mg/L			07/24/23 17:30	1
Orthophosphate as P (SM 4500 P E-2011)	0.0050	U	0.030	0.0050	mg/L			07/22/23 00:30	1
Carbonaceous Biochemical Oxygen Demand 5 (SM 5210 B-2016)	1.0	U	1.0	1.0	mg/L			07/21/23 14:35	1
pH (SW846 9040C)	8.0	HF	0.1	0.1	SU			07/27/23 12:42	1
Temperature (SW846 9040C)	24.0	HF	0.1	0.1	Degrees C			07/27/23 12:42	1
Total Organic Carbon (SW846 9060A)	1.0		1.0	0.53	mg/L			08/04/23 05:02	1
Phosphorus as PO4 (SM4500 P E-2011)	3.5		0.45	0.36	mg/L		08/07/23 12:43	08/07/23 13:11	5
Phosphorus as P (SM4500 P E-2011)	1.1		0.15	0.12	mg/L		08/07/23 12:43	08/07/23 13:11	5
Nitrogen, Total (EPA Total Nitrogen)	0.64		0.50	0.50	mg/L			08/04/23 07:11	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (EPA 350.1)	0.050	U	0.10	0.050	mg/L			08/01/23 15:25	1
Orthophosphate as P (SM 4500 P E-2011)	0.0050	U	0.030	0.0050	mg/L			07/22/23 00:30	1
Phosphorus as PO4 (SM4500 P E-2011)	3.2		0.45	0.36	mg/L		08/07/23 12:43	08/07/23 13:11	5
Phosphorus as P (SM4500 P E-2011)	1.1		0.15	0.12	mg/L		08/07/23 12:43	08/07/23 13:11	5

Client Sample ID: NPDES 001

Date Collected: 07/20/23 10:30
Date Received: 07/20/23 19:00

Lab Sample ID: 460-284669-2

Matrix: Water

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide	0.054	U	0.32	0.054	mg/L			07/21/23 16:21	1
Nitrate as N	0.070	U	0.16	0.070	mg/L			07/21/23 16:21	1
Chloride	**3.47**		0.32	0.039	mg/L			07/22/23 15:19	1
Nitrite as N	0.023	U	0.16	0.023	mg/L			07/21/23 16:21	1
Sulfate	**7.77**		0.48	0.095	mg/L			07/21/23 16:21	1

Method: SM-Online 2340B-2011 - Total Hardness (as CaCO3) by calculation - SM Online, 2011

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**97.6**		33.1	33.1	mg/L			08/01/23 12:05	1

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000043	U	0.00020	0.000043	mg/L		07/25/23 12:00	07/25/23 15:09	1

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**4.5**		4.0	0.91	ug/L		07/24/23 08:53	07/25/23 14:01	1
Boron	**63.8**	**J**	80.0	30.4	ug/L		07/24/23 08:53	07/25/23 14:01	1
Calcium	**23600**		500	53.6	ug/L		07/24/23 08:53	07/25/23 14:01	1
Copper	2.5	U	4.0	2.5	ug/L		07/24/23 08:53	07/25/23 14:01	1
Lead	0.84	U	1.2	0.84	ug/L		07/24/23 08:53	07/25/23 14:01	1
Magnesium	**9420**		200	46.9	ug/L		07/24/23 08:53	07/25/23 14:01	1
Manganese	**31.9**		8.0	1.5	ug/L		07/24/23 08:53	07/25/23 14:01	1
Nickel	0.91	U	4.0	0.91	ug/L		07/24/23 08:53	07/25/23 14:01	1
Potassium	**1130**		200	112	ug/L		07/24/23 08:53	07/25/23 14:01	1
Selenium	0.59	U	2.5	0.59	ug/L		07/24/23 08:53	07/25/23 14:01	1
Sodium	**4430**		500	219	ug/L		07/24/23 08:53	07/25/23 14:01	1
Strontium	**65.7**		4.0	0.50	ug/L		07/24/23 08:53	07/25/23 14:01	1
Zinc	6.5	U	16.0	6.5	ug/L		07/24/23 08:53	07/25/23 14:01	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**48.3**	**J**	100	35.0	ug/L		07/24/23 06:12	07/26/23 08:09	1
Iron	**274**		50.0	20.0	ug/L		07/26/23 05:46	08/01/23 17:44	1

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	19.5	U	40.0	19.5	ug/L		07/21/23 22:33	07/21/23 23:55	1
Cadmium	0.15	U	0.50	0.15	ug/L		07/25/23 20:23	07/31/23 20:36	1
Arsenic	0.89	U	2.0	0.89	ug/L		07/21/23 22:33	07/21/23 23:55	1
Iron	**72.2**		50.0	20.0	ug/L		07/25/23 20:23	07/31/23 20:36	1
Calcium	**22800**		500	53.6	ug/L		07/21/23 22:33	07/21/23 23:55	1
Zinc	4.0	U	10.0	4.0	ug/L		07/25/23 20:23	07/31/23 20:36	1
Copper	2.5	U	4.0	2.5	ug/L		07/21/23 22:33	07/21/23 23:55	1
Iron	58.2	U	120	58.2	ug/L		07/21/23 22:33	07/21/23 23:55	1
Lead	0.84	U	1.2	0.84	ug/L		07/21/23 22:33	07/21/23 23:55	1
Magnesium	**9160**		200	46.9	ug/L		07/21/23 22:33	07/21/23 23:55	1
Manganese	**4.3**	**J**	8.0	1.5	ug/L		07/21/23 22:33	07/21/23 23:55	1
Nickel	0.91	U	4.0	0.91	ug/L		07/21/23 22:33	07/21/23 23:55	1

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill - Anti-Degradation

Job ID: 460-284669-1

Client Sample ID: NPDES 001

Date Collected: 07/20/23 10:30
Date Received: 07/20/23 19:00

Lab Sample ID: 460-284669-2

Matrix: Water

Method: SW846 EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	1.3	U	5.0	1.3	ug/L		07/27/23 12:03	08/02/23 21:02	1

Method: SW846 EPA 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	1.3	U	5.0	1.3	ug/L		08/03/23 10:55	08/11/23 19:07	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Resistivity (EPA 120.1)	**0.00454**		0.000100	0.000100	Mohm-cm			07/31/23 13:28	1
Specific Conductance (EPA 120.1)	**220**		1.00	1.00	umhos/cm			07/31/23 13:28	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-2011)	**95.9**		5.0	5.0	mg/L			07/27/23 12:52	1
Carbonate Alkalinity as CaCO3 (SM 2320B-2011)	5.0	U	5.0	5.0	mg/L			07/27/23 12:52	1
Alkalinity as CaCO3 to pH 4.5 (SM 2320B-2011)	**95.9**		5.0	5.0	mg/L			07/27/23 12:52	1
Total Dissolved Solids (SM 2540C-2015)	**136**		2.5	2.5	mg/L			07/26/23 09:03	1
Total Suspended Solids (SM 2540D-2015)	**4.1**		2.5	2.5	mg/L			07/26/23 07:25	1
Ammonia (EPA 350.1)	0.050	U	0.10	0.050	mg/L			08/01/23 14:57	1
Total Kjeldahl Nitrogen (EPA 351.2	**0.50**	**J**	1.0	0.50	mg/L		08/01/23 10:45	08/02/23 15:02	1
Chemical Oxygen Demand (EPA 410.4)	**12.1**		10.0	3.3	mg/L			07/24/23 17:30	1
Orthophosphate as P (SM 4500 P E-2011)	0.0050	U	0.030	0.0050	mg/L			07/22/23 00:30	1
Carbonaceous Biochemical Oxygen Demand 5 (SM 5210 B-2016)	1.0	U	1.0	1.0	mg/L			07/21/23 14:40	1
pH (SW846 9040C)	**8.1**	**HF**	0.1	0.1	SU			07/27/23 12:44	1
Temperature (SW846 9040C)	**24.0**	**HF**	0.1	0.1	Degrees C			07/27/23 12:44	1
Total Organic Carbon (SW846 9060A)	**1.8**		1.0	0.53	mg/L			08/04/23 05:26	1
Phosphorus as PO4 (SM4500 P E-2011)	0.071	U	0.090	0.071	mg/L		08/07/23 12:43	08/07/23 13:11	1
Phosphorus as P (SM4500 P E-2011)	0.023	U	0.030	0.023	mg/L		08/07/23 12:43	08/07/23 13:11	1
Nitrogen, Total (EPA Total Nitrogen)	**0.50**		0.50	0.50	mg/L			08/04/23 07:11	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (EPA 350.1)	0.050	U	0.10	0.050	mg/L			08/01/23 15:27	1
Orthophosphate as P (SM 4500 P E-2011)	0.0050	U	0.030	0.0050	mg/L			07/22/23 00:30	1
Phosphorus as PO4 (SM4500 P E-2011)	0.071	U	0.090	0.071	mg/L		08/07/23 12:43	08/07/23 13:11	1
Phosphorus as P (SM4500 P E-2011)	0.023	U	0.030	0.023	mg/L		08/07/23 12:43	08/07/23 13:11	1

Lab Chronicle

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill - Anti-Degradation

Job ID: 460-284669-1

Client Sample ID: Clarifying Pond

Date Collected: 07/20/23 08:30
Date Received: 07/20/23 19:00

Lab Sample ID: 460-284669-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		1	922294	OXG	EET EDI	07/21/23 15:36
Total/NA	Analysis	300.0		1	922297	OXG	EET EDI	07/21/23 15:36
Total/NA	Analysis	300.0		1	922317	OXG	EET EDI	07/22/23 15:04
Total/NA	Analysis	2340B-2011		1	924302	LBD	EET EDI	08/01/23 12:05
Total/NA	Prep	245.1			677628	NVK	EET BUF	07/25/23 12:00
Total/NA	Analysis	245.1		1	677726	NVK	EET BUF	07/25/23 15:07
Dissolved	Filtration	Filtration			400369	UDL9	ELLE	07/25/23 07:16
Dissolved	Prep	3005A			400713	UAMX	ELLE	07/25/23 20:23
Dissolved	Analysis	6020B		1	402830	UCIG	ELLE	07/31/23 20:28
Dissolved	Filtration	FILTRATION			922381	VAD	EET EDI	07/21/23 22:28
Dissolved	Prep	3010A			922382	VAD	EET EDI	07/21/23 22:33
Dissolved	Analysis	6020B		1	922308	CDC	EET EDI	07/21/23 23:50
Total Recoverable	Prep	3005A			400784	UAMX	ELLE	07/26/23 05:46
Total Recoverable	Analysis	6020B		1	403302	UCIG	ELLE	08/01/23 17:46
Total Recoverable	Prep	3005A			789660	RR	EET SAV	07/24/23 06:12
Total Recoverable	Analysis	6020B		1	789892	BWR	EET SAV	07/25/23 04:31
Total/NA	Prep	3010A			922655	JKF	EET EDI	07/24/23 08:53
Total/NA	Analysis	6020B		1	922948	LBD	EET EDI	07/25/23 13:59
Dissolved	Filtration	Filtration			442164	S1Z	EET PIT	08/02/23 07:00
Dissolved	Prep	3005A			442335	S1Z	EET PIT	08/03/23 10:55
Dissolved	Analysis	EPA 6020B		1	443343	MRG	EET PIT	08/11/23 19:04
Total Recoverable	Prep	3005A			441665	SJM	EET PIT	07/27/23 12:03
Total Recoverable	Analysis	EPA 6020B		1	442323	KED	EET PIT	08/02/23 20:44
Total/NA	Analysis	120.1		1	924088	MMC	EET EDI	07/31/23 13:28
Total/NA	Analysis	2320B-2011		1	923473	AXP	EET EDI	07/27/23 12:45
Total/NA	Analysis	2540C-2015		1	923124	PLS	EET EDI	07/26/23 09:03
Total/NA	Analysis	2540D-2015		1	923093	PLS	EET EDI	07/26/23 07:25
Dissolved	Filtration	FILTRATION			924347	AXP	EET EDI	08/01/23 15:04
Dissolved	Analysis	350.1		1	924373	AXP	EET EDI	08/01/23 15:25
Total/NA	Analysis	350.1		1	924373	AXP	EET EDI	08/01/23 14:56
Total/NA	Prep	351.2			403044	NLE3	ELLE	08/01/23 10:45 - 08/01/23 13:45 [1]
Total/NA	Analysis	351.2		1	404112	JCG7	ELLE	08/02/23 15:00
Total/NA	Analysis	410.4		1	922768	HTV	EET EDI	07/24/23 17:30
Dissolved	Filtration	FILTRATION			922394	VBG	EET EDI	07/22/23 00:05
Dissolved	Analysis	4500 P E-2011		1	922393	VBG	EET EDI	07/22/23 00:30
Total/NA	Analysis	4500 P E-2011		1	922393	VBG	EET EDI	07/22/23 00:30
Total/NA	Analysis	5210 B-2016		1	922309	RXA	EET EDI	07/21/23 14:35
Total/NA	Analysis	9040C		1	923445	GSM	EET EDI	07/27/23 12:42
Total/NA	Analysis	9060A		1	924955	MMC	EET EDI	08/04/23 05:02
Dissolved	Filtration	FILTRATION			925237	IAA	EET EDI	08/07/23 08:18
Dissolved	Prep	SM 4500 P B			925298	IAA	EET EDI	08/07/23 12:43
Dissolved	Analysis	SM4500 P E-2011		5	925302	IAA	EET EDI	08/07/23 13:11

Lab Chronicle

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill - Anti-Degradation

Job ID: 460-284669-1

Client Sample ID: Clarifying Pond

Lab Sample ID: 460-284669-1

Date Collected: 07/20/23 08:30

Matrix: Water

Date Received: 07/20/23 19:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	SM 4500 P B			925298	IAA	EET EDI	08/07/23 12:43
Total/NA	Analysis	SM4500 P E-2011		5	925302	IAA	EET EDI	08/07/23 13:11
Total/NA	Analysis	Total Nitrogen		1	921978	TJW	EET EDI	08/04/23 07:11

Client Sample ID: NPDES 001

Lab Sample ID: 460-284669-2

Date Collected: 07/20/23 10:30

Matrix: Water

Date Received: 07/20/23 19:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		1	922294	OXG	EET EDI	07/21/23 16:21
Total/NA	Analysis	300.0		1	922297	OXG	EET EDI	07/21/23 16:21
Total/NA	Analysis	300.0		1	922317	OXG	EET EDI	07/22/23 15:19
Total/NA	Analysis	2340B-2011		1	924302	LBD	EET EDI	08/01/23 12:05
Total/NA	Prep	245.1			677628	NVK	EET BUF	07/25/23 12:00
Total/NA	Analysis	245.1		1	677726	NVK	EET BUF	07/25/23 15:09
Dissolved	Filtration	Filtration			400369	UDL9	ELLE	07/25/23 07:16
Dissolved	Prep	3005A			400713	UAMX	ELLE	07/25/23 20:23
Dissolved	Analysis	6020B		1	402830	UCIG	ELLE	07/31/23 20:36
Dissolved	Filtration	FILTRATION			922381	VAD	EET EDI	07/21/23 22:28
Dissolved	Prep	3010A			922382	VAD	EET EDI	07/21/23 22:33
Dissolved	Analysis	6020B		1	922308	CDC	EET EDI	07/21/23 23:55
Total Recoverable	Prep	3005A			400784	UAMX	ELLE	07/26/23 05:46
Total Recoverable	Analysis	6020B		1	403302	UCIG	ELLE	08/01/23 17:44
Total Recoverable	Prep	3005A			789660	RR	EET SAV	07/24/23 06:12
Total Recoverable	Analysis	6020B		1	790102	BWR	EET SAV	07/26/23 08:09
Total/NA	Prep	3010A			922655	JKF	EET EDI	07/24/23 08:53
Total/NA	Analysis	6020B		1	922948	LBD	EET EDI	07/25/23 14:01
Dissolved	Filtration	Filtration			442164	S1Z	EET PIT	08/02/23 07:00
Dissolved	Prep	3005A			442335	S1Z	EET PIT	08/03/23 10:55
Dissolved	Analysis	EPA 6020B		1	443343	MRG	EET PIT	08/11/23 19:07
Total Recoverable	Prep	3005A			441665	SJM	EET PIT	07/27/23 12:03
Total Recoverable	Analysis	EPA 6020B		1	442323	KED	EET PIT	08/02/23 21:02
Total/NA	Analysis	120.1		1	924088	MMC	EET EDI	07/31/23 13:28
Total/NA	Analysis	2320B-2011		1	923473	AXP	EET EDI	07/27/23 12:52
Total/NA	Analysis	2540C-2015		1	923124	PLS	EET EDI	07/26/23 09:03
Total/NA	Analysis	2540D-2015		1	923093	PLS	EET EDI	07/26/23 07:25
Dissolved	Filtration	FILTRATION			924347	AXP	EET EDI	08/01/23 15:04
Dissolved	Analysis	350.1		1	924373	AXP	EET EDI	08/01/23 15:27
Total/NA	Analysis	350.1		1	924373	AXP	EET EDI	08/01/23 14:57
Total/NA	Prep	351.2			403044	NLE3	ELLE	08/01/23 10:45 - 08/01/23 13:45 [1]
Total/NA	Analysis	351.2		1	404112	JCG7	ELLE	08/02/23 15:02
Total/NA	Analysis	410.4		1	922768	HTV	EET EDI	07/24/23 17:30
Dissolved	Filtration	FILTRATION			922394	VBG	EET EDI	07/22/23 00:05
Dissolved	Analysis	4500 P E-2011		1	922393	VBG	EET EDI	07/22/23 00:30

Eurofins Edison

Lab Chronicle

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill - Anti-Degradation

Job ID: 460-284669-1

Client Sample ID: NPDES 001

Date Collected: 07/20/23 10:30
Date Received: 07/20/23 19:00

Lab Sample ID: 460-284669-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	4500 P E-2011		1	922393	VBG	EET EDI	07/22/23 00:30
Total/NA	Analysis	5210 B-2016		1	922309	RXA	EET EDI	07/21/23 14:40
Total/NA	Analysis	9040C		1	923445	GSM	EET EDI	07/27/23 12:44
Total/NA	Analysis	9060A		1	924955	MMC	EET EDI	08/04/23 05:26
Dissolved	Filtration	FILTRATION			925237	IAA	EET EDI	08/07/23 08:18
Dissolved	Prep	SM 4500 P B			925298	IAA	EET EDI	08/07/23 12:43
Dissolved	Analysis	SM4500 P E-2011		1	925302	IAA	EET EDI	08/07/23 13:11
Total/NA	Prep	SM 4500 P B			925298	IAA	EET EDI	08/07/23 12:43
Total/NA	Analysis	SM4500 P E-2011		1	925302	IAA	EET EDI	08/07/23 13:11
Total/NA	Analysis	Total Nitrogen		1	921978	TJW	EET EDI	08/04/23 07:11

[1] This procedure uses a method stipulated length of time for the process. Both start and end times are displayed.

Laboratory References:

EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600
EET EDI = Eurofins Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900
EET PIT = Eurofins Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058
EET SAV = Eurofins Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858
ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300
Microbac = Marietta, OH, 158 Starlite Drive, Marietta, OH 45750

Accreditation/Certification Summary

Client: Heidelberg Materials Northeast LLC
Job ID: 460-284669-1
Project/Site: Rock Hill - Anti-Degradation

Laboratory: Eurofins Edison

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Connecticut	State	PH-0818	01-30-24
DE Haz. Subst. Cleanup Act (HSCA)	State	N/A	01-01-24
Georgia	State	12028 (NJ)	06-30-24
Massachusetts	State	M-NJ312	06-30-24
New Jersey	NELAP	12028	06-30-24
New York	NELAP	11452	08-13-23
Pennsylvania	NELAP	68-00522	03-01-24
Rhode Island	State	LAO00376	12-30-23
USDA	US Federal Programs	P330-20-00244	11-03-23

Laboratory: Eurofins Buffalo

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Arkansas DEQ	State	88-0686	07-06-23 *
Connecticut	State	PH-0568	03-31-24
Florida	NELAP	E87672	06-30-23 *
Georgia	State	10026 (NY)	03-31-24
Georgia	State Program	N/A	03-31-09 *
Illinois	NELAP	200003	09-30-23
Iowa	State	374	03-01-25
Iowa	State Program	374	03-01-09 *
Kansas	NELAP	E-10187	02-01-24
Kentucky (DW)	State	90029	01-01-24
Kentucky (UST)	State	108092	04-01-24
Kentucky (WW)	State	KY90029	12-31-23
Louisiana	NELAP	02031	06-30-23 *
Louisiana (All)	NELAP	02031	06-30-23 *
Maine	State	NY00044	12-04-24
Maryland	State	294	06-30-24
Massachusetts	State	M-NY044	07-01-24
Michigan	State	9937	04-01-24
Michigan	State Program	9937	04-01-09 *
New Hampshire	NELAP	2973	09-11-19 *
New Hampshire	NELAP	2337	11-17-23
New Jersey	NELAP	NY455	06-30-24
New York	NELAP	10026	03-31-24
Pennsylvania	NELAP	68-00281	07-31-23
Rhode Island	State	LAO00328	12-30-23
Texas	NELAP	T104704412-18-10	07-31-23
USDA	US Federal Programs	P330-18-00039	03-25-24
Virginia	NELAP	460185	09-14-23
Washington	State	C784	02-10-24
Wisconsin	State	998310390	08-31-23

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
A2LA	Dept. of Defense ELAP	0001.01	11-30-24
A2LA	ISO/IEC 17025	0001.01	11-30-24

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Accreditation/Certification Summary

Client: Heidelberg Materials Northeast LLC
Job ID: 460-284669-1
Project/Site: Rock Hill - Anti-Degradation

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC (Continued)

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alabama	State	43200	01-31-24
Alaska	State	PA00009	06-30-24
Alaska (UST)	State	17-027	02-28-24
Arizona	State	AZ0780	03-12-24
Arkansas DEQ	State	88-00660	08-08-23
California	State	2792	11-30-23
Colorado	State	PA00009	06-30-24
Connecticut	State	PH-0746	06-30-25
DE Haz. Subst. Cleanup Act (HSCA)	State	019-006 (PA cert)	01-31-24
Delaware (DW)	State	N/A	01-31-24
Florida	NELAP	E87997	06-30-24
Georgia (DW)	State	C048	01-31-24
Hawaii	State	N/A	01-31-24
Illinois	NELAP	200027	01-31-24
Iowa	State	361	03-01-24
Kansas	NELAP	E-10151	10-31-23
Kentucky (DW)	State	KY90088	12-31-23
Kentucky (UST)	State	0001.01	11-30-24
Kentucky (WW)	State	KY90088	12-31-23
Louisiana (All)	NELAP	02055	06-30-24
Maine	State	2019012	03-12-25
Maryland	State	100	06-30-24
Massachusetts	State	M-PA009	06-30-24
Michigan	State	9930	01-31-24
Minnesota	NELAP	042-999-487	12-31-23
Mississippi	State	023	01-31-24
Missouri	State	450	01-31-25
Montana (DW)	State	0098	01-01-24
Nebraska	State	NE-OS-32-17	01-31-24
New Hampshire	NELAP	2730	01-10-24
New Jersey	NELAP	PA011	06-30-24
New York	NELAP	10670	04-01-24
North Carolina (DW)	State	42705	07-31-24
North Carolina (WW/SW)	State	521	12-31-23
North Dakota	State	R-205	01-31-24
Oklahoma	NELAP	9804	08-31-23
Oregon	NELAP	PA200001	09-11-23
PALA	Canada	1978	09-16-24
Pennsylvania	NELAP	36-00037	01-31-24
Rhode Island	State	LAO00338	12-31-23
South Carolina	State	89002	01-31-24
Tennessee	State	02838	01-31-24
Texas	NELAP	T104704194-23-46	08-31-23
USDA	US Federal Programs	525-22-298-19481	10-25-25
Vermont	State	VT - 36037	10-28-23
Virginia	NELAP	460182	06-14-25
Washington	State	C457	04-11-24
West Virginia (DW)	State	9906 C	12-31-23
West Virginia DEP	State	055	07-31-24
Wyoming	State	8TMS-L	01-31-24

Client: Heidelberg Materials Northeast LLC
Job ID: 460-284669-1
Project/Site: Rock Hill - Anti-Degradation

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC (Continued)

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Wyoming (UST)	A2LA	0001.01	11-30-24

Laboratory: Eurofins Pittsburgh

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Arkansas DEQ	State	19-033-0	06-27-24
California	State	2891	04-30-24
Connecticut	State	PH-0688	09-30-24
Florida	NELAP	E871008	06-30-24
Georgia	State	PA 02-00416	04-30-24
Illinois	NELAP	004375	06-30-24
Kansas	NELAP	E-10350	01-31-24
Kentucky (UST)	State	162013	04-30-23 *
Kentucky (WW)	State	KY98043	12-31-23
Louisiana	NELAP	04041	06-30-22 *
Louisiana (All)	NELAP	04041	06-30-24
Maine	State	PA00164	03-06-24
Minnesota	NELAP	042-999-482	12-31-23
New Hampshire	NELAP	2030	04-04-24
New Jersey	NELAP	PA005	06-30-24
New York	NELAP	11182	04-01-24
North Carolina (WW/SW)	State	434	12-31-23
North Dakota	State	R-227	04-30-24
Oregon	NELAP	PA-2151	02-06-24
Pennsylvania	NELAP	02-00416	04-30-24
Rhode Island	State	LAO00362	12-31-22 *
South Carolina	State	89014	04-30-23 *
Texas	NELAP	T104704528	03-31-24
US Fish & Wildlife	US Federal Programs	058448	03-31-24
USDA	US Federal Programs	P330-16-00211	06-21-24
Utah	NELAP	PA001462019-8	05-31-24
Virginia	NELAP	10043	09-14-23
West Virginia DEP	State	142	01-31-24
Wisconsin	State	998027800	08-31-23

Laboratory: Eurofins Savannah

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
	AFCEE	SAVLAB	
Alabama	State	41450	06-30-24
ANAB	Dept. of Defense ELAP	L2463	09-22-24
Arkansas DEQ	State	19-015-0	02-01-24
California	State	2939	06-30-23 *
Florida	NELAP	E87052	06-30-24
Georgia	State	E87052	06-30-24
Georgia (DW)	State	803	06-30-24
Guam	State	19-007R	04-17-24
Illinois	NELAP	200022	11-30-23
Indiana	State	C-GA-02	06-30-24

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Accreditation/Certification Summary

Client: Heidelberg Materials Northeast LLC
Job ID: 460-284669-1
Project/Site: Rock Hill - Anti-Degradation

Laboratory: Eurofins Savannah (Continued)

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Iowa	State	353	07-01-25
Kentucky (UST)	State	NA	06-30-24
Louisiana	NELAP	30690	06-30-24
Louisiana (All)	NELAP	30690	06-30-24
Louisiana (DW)	State	LA009	12-31-23
Maine	State	GA00006	09-25-24
Maryland	State	250	12-31-23
Massachusetts	State	M-GA006	06-30-24
Michigan	State	9925	06-30-24
Mississippi	State	<cert No.>	06-30-24
Nebraska	State	NE-OS-7-04	06-30-24
New Jersey	NELAP	GA769	06-30-24
New Mexico	State	GA00006	06-30-24
North Carolina (DW)	State	13701	07-31-24
North Carolina (WW/SW)	State	269	08-01-23
Pennsylvania	NELAP	68-00474	06-30-24
Puerto Rico	State	GA00006	01-01-24
South Carolina	State	98001	06-30-23 *
Tennessee	State	TN02961	06-30-24
Texas	NELAP	T1047004185-19-14	11-30-23
Texas	TCEQ Water Supply	T104704185	06-30-24
USDA	US Federal Programs	P330-18-00313	09-03-24
Virginia	NELAP	460161	06-14-24
Wyoming	State	8TMS-L	06-30-23 *

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Method Summary

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill - Anti-Degradation

Job ID: 460-284669-1

Method	Method Description	Protocol	Laboratory
300.0	Anions, Ion Chromatography	EPA	EET EDI
2340B-2011	Total Hardness (as CaCO3) by calculation - SM Online, 2011	SM-Online	EET EDI
245.1	Mercury (CVAA)	EPA	EET BUF
6020B	Metals (ICP/MS)	SW846	EET EDI
6020B	Metals (ICP/MS)	SW846	EET SAV
6020B	Metals (ICP/MS)	SW846	ELLE
EPA 6020B	Metals (ICP/MS)	SW846	EET PIT
120.1	Conductivity, Specific Conductance	EPA	EET EDI
2320B-2011	Alkalinity, Total	SM	EET EDI
2540C-2015	Total Dissolved Solids (Dried at 180 °C)	SM	EET EDI
2540D-2015	Total Suspended Solids (Dried at 103-105°C)	SM	EET EDI
350.1	Nitrogen, Ammonia	EPA	EET EDI
351.2	Nitrogen, Total Kjeldahl	EPA	ELLE
410.4	COD	EPA	EET EDI
4500 P E-2011	Orthophosphate	SM	EET EDI
5210 B-2016	BOD, 5-Day	SM	EET EDI
9040C	pH	SW846	EET EDI
9060A	Organic Carbon, Total (TOC)	SW846	EET EDI
SM4500 P E-2011	Phosphorus	SM	EET EDI
Total Nitrogen	Nitrogen, Total	EPA	EET EDI
Subcontract	Osomotic Pressure	None	Microbac
245.1	Preparation, Mercury	EPA	EET BUF
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	EET PIT
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	EET SAV
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	ELLE
3010A	Preparation, Total Metals	SW846	EET EDI
351.2	Nitrogen, Total Kjeldahl	EPA	ELLE
FILTRATION	Sample Filtration	None	EET EDI
Filtration	Sample Filtration	None	EET PIT
Filtration	Sample Filtration	None	ELLE
SM 4500 P B	Phosphorous, Total and Ortho	SM	EET EDI

Protocol References:

EPA = US Environmental Protection Agency
None = None
SM = "Standard Methods For The Examination Of Water And Wastewater"
SM-Online = Standard Methods Online
SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600
EET EDI = Eurofins Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900
EET PIT = Eurofins Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058
EET SAV = Eurofins Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858
ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300
Microbac = Marietta, OH, 158 Starlite Drive, Marietta, OH 45750

Sample Summary

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill - Anti-Degradation

Job ID: 460-284669-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
460-284669-1	Clarifying Pond	Water	07/20/23 08:30	07/20/23 19:00
460-284669-2	NPDES 001	Water	07/20/23 10:30	07/20/23 19:00

Microbac Laboratories Inc., - Marietta, OH

Client Project ID:

46011424

For:

Julie Gilmore

Eurofins TestAmerica Edison

777 New Durham RD

Edison, NJ 08817

Project State of Origin: Pennsylvania

Project Requested Certification:

Microbac Laboratories Inc., - Marietta, OH	68-01670	PA Department of Environmental Protection

All test results meet the requirements of the QAPP and other applicable contract terms and conditions. Any exceptions are attached to this cover page or addressed in the method narratives presented in the report. All results for soil samples are reported on a 'dry-weight' basis unless specified otherwise. Analytical results for water and wastes are reported on a 'as received' basis unless specified otherwise. A statement of uncertainty for each analysis is available upon request. The reported results are related only to the samples analyzed as received. This laboratory report may be released as a hardcopy and in computer-readable form submitted electronically or on diskette. This laboratory report shall not be reproduced, except in full, without the written approval of Microbac Laboratories, Inc.

Laboratory Project Manager:

Michelle Taylor

Project Manager

Michelle.Taylor@microbac.com

Authorized By:

Michelle Taylor

Project Manager

Issued: 07/31/2023

MICROBAC®

Laboratory Report Number: M3G1427

Client Project ID: 46011424

Cooler Receipt Log

Cooler ID: Default Cooler Temp: 3.0°C

Cooler Inspection Checklist

Ice Present or not required?	Yes
Shipping containers sealed or not required?	Yes
Custody seals intact or not required?	Yes
Chain of Custody (COC) Present?	Yes
COC includes customer information?	Yes
Relinquished and received signature on COC?	Yes
Sample collector identified on COC?	Yes
Sample type identified on COC?	Yes
Correct type of Containers Received	No
Correct number of containers listed on COC?	Yes
Containers Intact?	Yes
COC includes requested analyses?	Yes
Enough sample volume for indicated tests received?	Yes
Sample labels match COC (Name, Date & Time?)	Yes
Samples arrived within hold time?	Yes
Correct preservatives on COC or not required?	Yes
Chemical preservations checked or not required?	Yes
Preservation checks meet method requirements?	Yes
VOA vials have zero headspace, or not recd.?	Yes

Laboratory Report Number: M3G1427

Client Project ID: 46011424

Sample Notes

PADEP 391-2000-008

A4 **Sample was received with head space.**

Osmotic Pressure

M3G1427-01	Clarifying Pond (460-284669-1)	M3G1427-02	NPDES 001 (460-284669-2)

MICROBAC®

Laboratory Report Number: M3G1427

Client Project ID: 46011424

Microbac Laboratories Inc., - Marietta, OH

CERTIFICATE OF ANALYSIS

Client ID:	Clarifying Pond (460-284669-1)			**Collection Date:**	07/20/2023 08:30
Laboratory ID:	M3G1427-01			**Prep Date:**	07/27/2023 15:38
Matrix:	Aqueous			**Analyzed:**	07/27/2023 15:38
Batch / Sequence:	B3G1271 /	**Analytical Method:**	PADEP 391-2000-008	**Calibration:**	NA
Instrument:	OSMOMETER 5004	**Units:**	mOsm/kg	**File ID:**	OsmoticPressure_B3G1271_230727034349.xls
Analyst:	APH	**Dilution:**	1		

Analyte	CAS Number	Result	MDL	RL	Flag	Qualifier
Osmotic Pressure		ND	6.00	10.0		A4

MICROBAC®

Laboratory Report Number: M3G1427

Client Project ID: 46011424

Microbac Laboratories Inc., - Marietta, OH

CERTIFICATE OF ANALYSIS

Client ID:	NPDES 001 (460-284669-2)			**Collection Date:**	07/20/2023 10:30
Laboratory ID:	M3G1427-02			**Prep Date:**	07/27/2023 15:38
Matrix:	Aqueous			**Analyzed:**	07/27/2023 15:38
Batch / Sequence:	B3G1271 /	**Analytical Method:**	PADEP 391-2000-008	**Calibration:**	NA
Instrument:	OSMOMETER 5004	**Units:**	mOsm/kg	**File ID:**	OsmoticPressure_B3G1271_230727034349.xls
Analyst:	APH	**Dilution:**	1		

Analyte	CAS Number	Result	MDL	RL	Flag	Qualifier
Osmotic Pressure		ND	6.00	10.0		A4

Laboratory Report Number: M3G1427

Client Project ID: 46011424

Notes and Definitions

A4: Sample was received with head space.
MDL: Method Detection Limit
RL: Reporting Limit

MICROBAC®

Laboratory Report Number: M3G1427

Client Project ID: 46011424

METHOD BLANKS

Sample ID:	B3G1271-BLK1	**Prep Date:**	07/27/23 15:38	**Matrix:**	Aqueous
Instrument:	OSMOMETER 5004	**Analyzed:**	07/27/23 15:38	**Method:**	PADEP 391-2000-008
File ID:	OsmoticPressure_B3G	**Sequence:**		**Analyst:**	APH
Batch:	B3G1271	**Units:**	mOsm/kg	**Calibration:**	

Analyte	Result	MDL	RL	Dilution	Flag	Q
Osmotic Pressure	6.00	6.00	10.0	1	U	

* - Detected in the associated method Blank at a concentration >= RL

MICROBAC®

Laboratory Report Number: M3G1427

Client Project ID: 46011424

BLANK SPIKE / DUPLICATE (BS/BSD)

Method:	PADEP 391-2000-008		**Blank Spike**	**Duplicate**
Batch:	B3G1271	**Spike ID:**	B3G1271-BS1	B3G1271-BSD1
Analyst:	APH	**Prepared:**	07/27/23 15:38	07/27/23 15:38
Matrix:	Aqueous	**Analyzed:**	07/27/23 15:38	07/27/23 15:38
Units:	mOsm/kg	**File ID:**	OsmoticPressure_B3G1271_2307	OsmoticPressure_B3G1271_2307
Instrument:	OSMOMETER 5004	**Initial/Final:**	1mL/1mL	1mL/1mL
Calibration:				

Analyte	BS Spiked	BS Found	BS %Rec	BSD Spiked	BSD Found	BSD %Rec	%RPD	%Rec Limts	RPD Limit	Q
Osmotic Pressure	290	290	100	290	287	99.0	1.04	90 - 110	20	

* - Does not meet %Rec acceptance criteria.
- Does not meet RPD acceptance criteria.

Laboratory Report Number: M3G1427

Client Project ID: 46011424

DUPLICATE

Parent ID:	M3G1427-02	**Calibration:**				**Method:**	PADEP 391-2000-008
Instrument:	OSMOMETER 500	**File ID:**	OsmoticPressure_B	**Dil:**	1	**Matrix:**	Aqueous
Sample ID:	B3G1271-DUP1	**Batch:**	B3G1271			**Units:**	mOsm/kg

Analyte	Parent	Duplicate	RPD	RPD Limit	Q
Osmotic Pressure	ND	ND		20	

Laboratory Report Number: M3G1427

Client Project ID: 46011424

* - Exceeds RPD Limit
- Based on the low concentration of this analyte, Relative Percent Difference is not an appropriate evaluator of precision. The precision of the duplicate analysis is considered acceptable

Eurofins Edison
777 New Durham Road
Edison, NJ 08817
Phone: 732-549-3900 Fax: 732-549-3679

Chain of Custody Record

eurofins | Environment Testing

8/15/2023

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Gilmore, Julie L	Carrier Tracking No(s):	COC No: 460-68777.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Julie.Gilmore@et.eurofinsus.com	State of Origin: Pennsylvania	Page: Page 1 of 1
Company: Microbac Laboratories, Inc.		Accreditations Required (See note):		Job #: 460-284669-1
Address: 158 Starlite Drive, ,	Due Date Requested: 8/1/2023			
City: Marietta	TAT Requested (days):			
State, Zip: OH, 45750				
Phone: 800-373-4071(Tel)	PO #:			
Email:	WO #:			
Project Name: Rock Hill - Anti-Degradation	Project #: 46011424			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)
Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	SUB (Osomotic Pressure)/ Osomotic Pressure	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
Clarifying Pond (460-284669-1)	7/20/23	08:30 Eastern		Water			X	1	
NPDES 001 (460-284669-2)	7/20/23	10:30 Eastern		Water			X	1	

M 3 G 1 4 2 7
Eurofins TestAmerica Edison
Rec'd: 07/27/2023 10:10
By: Stephanie Murphy Temp. 3 (Signature)

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Northeast, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Northeast, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Northeast, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Northeast, LLC.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 1	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
		7/26/23 1900	ET EL			
	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	Relinquished by:	Date/Time:	Company	Received by: Stephanie Murphy	Date/Time: 7/27/2023 1010	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks:

MICROBAC®

Work Order # M361487

COOLER TEMP >6° C LOG

SAMPLE ID	Bottle 1 °C	Bottle 2 °C	Bottle 3 °C	Bottle 4 °C	Bottle 5 °C	Bottle 6 °C

7/27/2023 SM

pH Lot # HC312501

pH Exceptions

SAMPLE ID	Bottle 1	Bottle 2	Bottle 3	Bottle 4	Bottle 5	Bottle 6

7/27/2023 SM

PRESERVATIVE EXCEPTIONS

✓ NONE

AS NOTED

7/27/2023 SM

Document Control # 1957
Last 04-10-2019

Issued to: Document Master File

Eurofins Edison
777 New Durham Road
Edison, NJ 08817
Phone: 732-549-3900 Fax: 732-549-3679

Chain of Custody Record

450-KOP

eurofins

Client Information	Sampler	Lab PM: Gilmore, Julie L	Carrier Tracking No(s):	COC No: 460-170645-111541 1
Client Contact: Andrew Gutshall	Phone:	E-Mail: Julie.Gilmore@et.eurofinsus.com	State of Origin:	Page: Page 1 of 2
Company: Heidelberg Materials Northeast LLC	PWSID:			Job #: 284669
Address: 7660 Imperial Way	Due Date Requested:			
City: Allentown	TAT Requested (days):			
State, Zip: PA, 18195	Compliance Project: Δ Yes Δ No			
Phone: 610-366-4819(Tel)	PO #: Purchase Order not required			
Email: andrew.gutshall@heidelbergmaterials.com	WO #:			
Project Name: Rock Hill Anti-Degradation	Project #: 46011424			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:
A HCL, B NaOH, C Zn Acetate, D Nitric Acid, E NaHSO4, F MeOH, G Amchlor, H Ascorbic Acid, I Ice, J DI Water, K EDTA, L EDA, M Hexane, N None, O AsNaO2, P Na2O4S, Q Na2SO3, R Na2S2O3, S H2SO4, T TSP Dodecahydrate, U Acetone, V MCAA, W pH 4-5, Y Trizma, Z other (specify)
Other

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020B Dissolved Lithium	6020B Total Lithium	351.2 Local Method	6020B Dissolved Cd/Fe/Zn	6020B (MOD) Total Fe	350.1, 410.4, 4500_P_E	120.1, 9040C	350.1 4500_P_E, 6020B	2320B (MOD) Alkalinity	6020B, SM2340B	9060A TOC	2540D, SM5210B_Calc	4500_P_E_Ortho Dissolved Orthophosphate	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	D	S	N	D	S	N	N	N	D	S	N	N		
Clarifying Pond	7/20/23	0830	G	Water			X	X	X	X	X	X	X	X	X	X	X	X	X	19	
NPDES 001	7/20/23	1030	G	Water			X	X	X	X	X	X	X	X	X	X	X	X	X	19	2
				Water																	
				Water																	
				Water																	

460-284669 Chain of Custody

SHORT HOLD

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I II III IV Other (specify)	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	7/20/23 1220			7/20/23 1220	EETNICOP
	7/20/23 1612	EETN-KOP		7/20/23 1615	ETA
	7/20/23 1900	ETA	Shrijula Casallas	7/20/23 1900	ETAEd

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver 06/08/2021

8/15/2023

Eurofins Edison
777 New Durham Road
Edison, NJ 08817
Phone: 732-549-3900 Fax: 732-549-3679

450-KOP

Chain of Custody Record

2 of 2 KOP 2

eurofins

Client Information	Sampler: ERG	Lab PM: Gilmore, Julie L	Carrier Tracking No(s):	COC No: 460-170645-111541.2
Client Contact: Andrew Gutshall	Phone:	E-Mail: Julie.Gilmore@et.eurofinsus.com	State of Origin:	Page: Page 2 of 2
Company: Heidelberg Materials Northeast LLC	PWSID:			Job #: 284669
Address: 7660 Imperial Way	Due Date Requested:			
City: Allentown	TAT Requested (days):			
State, Zip: PA, 18195	Compliance Project: Δ Yes Δ No			
Phone: 610-366-4819(Tel)	PO #: Purchase Order not required			
Email: andrew.gutshall@heidelbergmaterials.com	WO #:			
Project Name: Rock Hill Anti-Degradation	Project #: 46011424			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A HCL, B NaOH, C Zn Acetate, D Nitric Acid, E NaHSO4, F MeOH, G Amchlor, H Ascorbic Acid, I Ice, J DI Water, K EDTA, L EDA, M Hexane, N None, O AsNaO2, P Na2O4S, Q Na2SO3, R Na2S2O3, S H2SO4, T TSP Dodecahydrate, U Acetone, V MCAA, W pH 4-5, Y Trizma, Z other (specify)

Other

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	4500_P_E_Ortho Total Orthophosphate	2540C TDS	300_ORGFM_28D, 300_ORGFMS	245.1 Local Method	6020B Total Aluminum	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	N	D	D		
Clarifying Pond	7/20/23	0830	G	Water		X	X	X	X	X	X	19	1
NPDES 001	7/20/23	1030	G	Water		X	X	X	X	X	X	19	2
				Water									
				Water									
				Water									

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II III IV Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	7/20/23 1220			7/20/23 1220	EETN-KOP
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	7/20/23 1612	EETN KOP		7/20/23 1615	ETA
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	7/20/23 1900	ETA		7/20/23 19 00	ETA-Ed

Custody Seals Intact: Δ Yes Δ No	Custody Seal No:	Cooler Temperature(s) °C and Other Remarks:

Ver 06/08/2021

8/15/2023

TestAmerica Edison
Receipt Temperature and pH Log

Job Number: 284669

Number of Coolers: 2

IR Gun #: 2

Cooler Temps °C

	RAW	CORRECTED
Cooler #1	2.6 °C	2.6 °C
Cooler #2:	2.9 °C	2.9 °C
Cooler #3.	°C	°C
Cooler #4.	°C	°C
Cooler #5:	°C	°C
Cooler #6:	°C	°C
Cooler #7:	°C	°C
Cooler #8:	°C	°C
Cooler #9:	°C	°C

TALS Sample Number	Ammonia (pH<2)	COD (pH<2)	Nitrate Nitrite (pH<2)	Metals* (pH<2)	Hardness (pH<2)	Pest (pH 5-9)	EPH or QAM (pH<2)	Phenols (pH<2)	Sulfide (pH>9)	TKN (pH<2)	TOC (pH<2)	Total Cyanide (pH>12)	Total Phos (pH<2)	Other	Other
1	<2	<2		<2	<2					<2	<2		<2		
2	<2	<2		<2	<2					<2	<2		<2		

pH adjustment information below.

Sample No(s). adjusted: _____

Preservative Name/Conc.: _____ Volume of Preservative used (ml): _____

Lot # of Preservative(s): _____ Expiration Date: _____

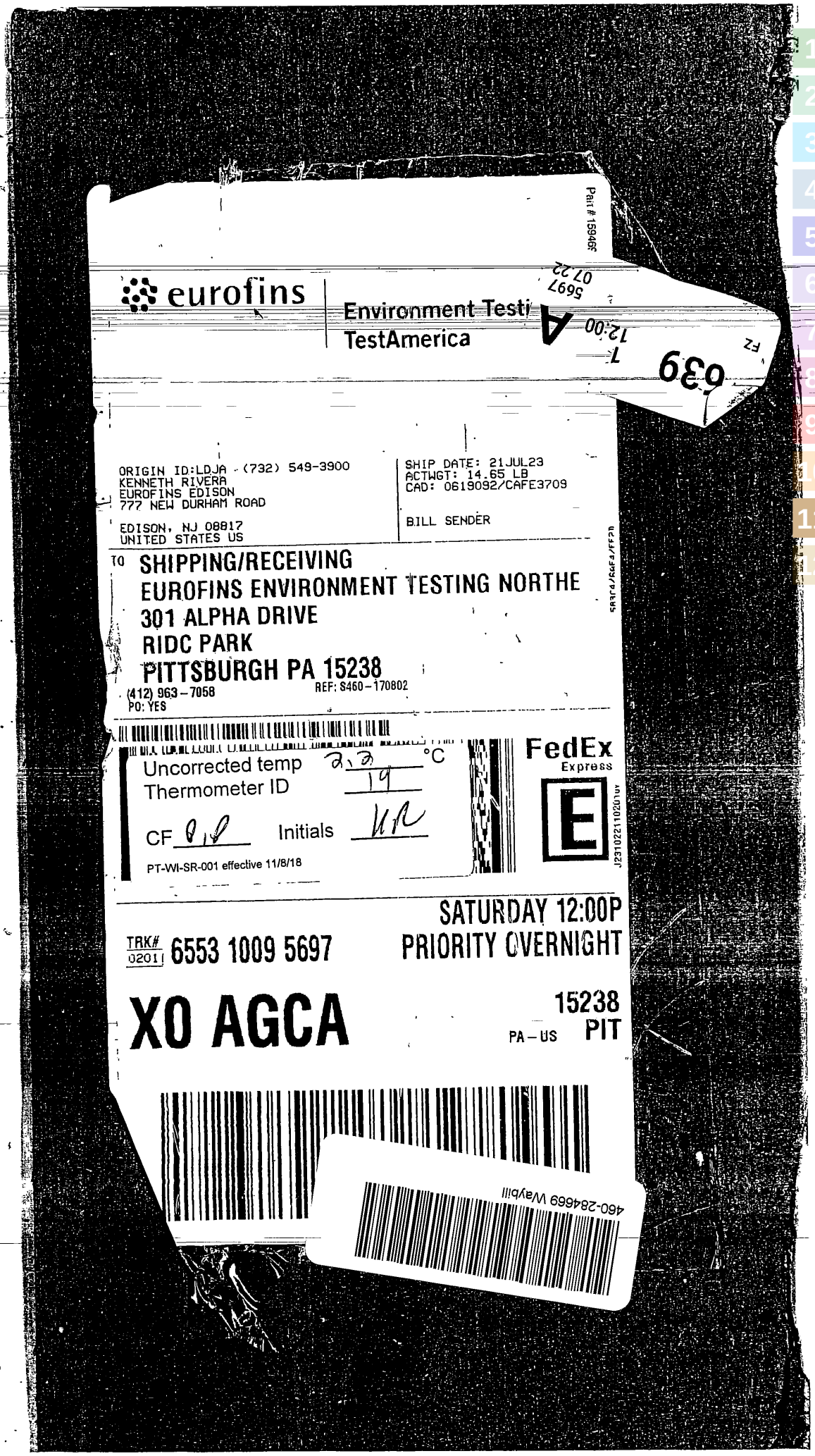
The appropriate Project [illegible] pH adjusted.

Samples for Metal analysis which are not properly preserved must be documented at least 24 hours prior to analysis.

Initials: KOP-2 Date: 7/20/23

EDS-WI-038, Rev 4, 06/09/2014

PG Filled out Sheet



eurofins | Environment Testi
TestAmerica

Part # 159465

5697 07 22

12:00 A

639

ORIGIN ID:LDJA (732) 549-3900
KENNETH RIVERA
EUROFINS EDISON
777 NEW DURHAM ROAD

EDISON, NJ 08817
UNITED STATES US

SHIP DATE: 21JUL23
ACTWGT: 14.65 LB
CAD: 0619092/CAFE3709

BILL SENDER

TO SHIPPING/RECEIVING
EUROFINS ENVIRONMENT TESTING NORTHE
301 ALPHA DRIVE
RIDC PARK
PITTSBURGH PA 15238
(412) 963-7058 REF: S460-170802
PO: YES

Uncorrected temp 2.2 °C
Thermometer ID 14
CF 0.0 Initials HR
PT-WI-SR-001 effective 11/8/18

FedEx Express

SATURDAY 12:00P
PRIORITY OVERNIGHT

TRK# 0201 6553 1009 5697

XO AGCA

15238
PA - US PIT

460-2846G9 Waybill

Eurofins Edison
777 New Durham Road
Edison, NJ 08817
Phone: 732-549-3900 Fax: 732-549-3679

net SAA

Chain of Custody Record

460-284669 Chain of Custody

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Gilmore, Julie L	COC No: 460-68732.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Julie.Gilmore@et.e	Page: Page 1 of 1
Company: Eurofins Environment Testing Northeast,		Accreditations Required (See note):	Job #: 460-284669-1
Address: 301 Alpha Drive, RIDC Park,	Due Date Requested: 8/2/2023		
City: Pittsburgh	TAT Requested (days):		
State, Zip: PA, 15238	PO #:		
Phone: 412-963-7058(Tel) 412-963-2468(Fax)	WO #:		
Email:	Project #: 46011424		
Project Name: Rock Hill - Anti-Degradation	SSOW#:		
Site:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020B/FILTRATION Dissolved Lithium	6020B/3005A Total Lithium	Total Number of containers	Special Instructions/Note:
		Preservation Code:								
Clalifins Pond (460-284669-1)	7/20/23	08.30 Eastern		Water			X	X	2	
NPDES 001 (460-284669-2)	7/20/23	10:30 Eastern		Water			X	X	2	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Northeast, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Northeast, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Northeast, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Northeast, LLC.

Possible Hazard Identification *Unconfirmed*	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*** ☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested. I, II, III, IV, Other (specify) — Primary Deliverable Rank: 1	Special Instructions/QC Requirements.

Empty Kit Relinquished by:		Date:		Time:		Method of Shipment:	
Relinquished by:	Date/Time: 7/21/23 1900	Company: EEN	Received by:	Date/Time: 7-22-23 0930	Company: EEN		
Relinquished by:	Date/Time	Company	Received by	Date/Time:	Company		
Relinquished by	Date/Time	Company	Received by:	Date/Time	Company		
Custody Seals Intact: ∆ Yes ∆ No	Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks:				

8/15/2023

Eurofins Edison
777 New Durham Road
Edison, NJ 08817
Phone: 732-549-3900 Fax: 732-549-3679

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Gilmore, Julie L	Carrier Tracking No(s):	COC No: 460-68726.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Julie.Gilmore@et.eurofinsus.com	State of Origin: Pennsylvania	Page: Page 1 of 1
Company: Eurofins Lancaster Laboratories Environm		Accreditations Required (See note): NELAP - Pennsylvania		Job #: 460-284669-1
Address: 2425 New Holland Pike, ,	Due Date Requested: 7/31/2023			
City: Lancaster	TAT Requested (days):			
State, Zip: PA, 17601				
Phone: 717-656-2300(Tel)	PO #:			
Email:	WO #:			
Project Name: Rock Hill - Anti-Degradation	Project #: 46011424			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)
Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020B/3005A (MOD) Total Fe	6020B/Filtration_ME Dissolved Cd/Fe/Zn	351.2/351.2_Prep	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
Clalifins Pond (460-284669-1)	7/20/23	08:30 Eastern		Water			X	X	X	3	
NPDES 001 (460-284669-2)	7/20/23	10:30 Eastern		Water			X	X	X	3	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Northeast, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Northeast, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Northeast, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Northeast, LLC.

Possible Hazard Identification	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 1	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	7/21/23	EET EL		21Jul23 1600	ELLE
Relinquished by:	21Jul23 1930	ELLE			
Relinquished by:			Received by:	7/21/23 1930	

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks: 1.0 - 2.1 / 0.7 - 1.9

Eurofins Edison
777 New Durham Road
Edison, NJ 08817
Phone: 732-549-3900 Fax: 732-549-3679

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Gilmore, Julie L	Carrier Tracking No(s):	COC No: 460-68731.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Julie.Gilmore@et.eurofinsus.com	State of Origin: Pennsylvania	Page: Page 1 of 1
Company: Eurofins Environment Testing Northeast,		Accreditations Required (See note):		Job #: 460-284669-1
Address: 10 Hazelwood Drive, ,	Due Date Requested: 7/31/2023			
City: Amherst	TAT Requested (days):			
State, Zip: NY, 14228-2298				
Phone: 716-691-2600(Tel) 716-691-7991(Fax)	PO #:			
Email:	WO #:			
Project Name: Rock Hill - Anti-Degradation	Project #: 46011424			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)
Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	245.1/245.1_Prep	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
Clalifins Pond (460-284669-1)	7/20/23	08:30 Eastern		Water			X	1	
NPDES 001 (460-284669-2)	7/20/23	10:30 Eastern		Water			X	1	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Northeast, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Northeast, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Northeast, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Northeast, LLC.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 1	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	7/21/23 1900	EET			
Relinquished by:	Date/Time:	Company	Received by:	Date/Time: 7-22-23 1230	Company TAB
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
			Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 3.5 ICE

8/15/2023

Eurofins Edison
777 New Durham Road
Edison, NJ 08817
Phone 732-549-3900 Fax 732-549-3679

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler	Lab PM: Gilmore, Julie L	Carrier Tracking No(s)	COC No: 460-68730 1
Client Contact: Shipping/Receiving	Phone	E-Mail: Julie Gilmore@et eurofinsus com	State of Origin: Pennsylvania	Page: Page 1 of 1
Company: Eurofins Environment Testing Southeast,		Accreditations Required (See note)		Job #: 460-284669-1
Address: 5102 LaRoche Avenue, ,	Due Date Requested: 8/1/2023			
City: Savannah	TAT Requested (days)			
State, Zip: GA, 31404	PO #.			
Phone: 912-354-7858(Tel) 912-352-0165(Fax)	WO #			
Email.	Project #: 46011424			
Project Name: Rock Hill - Anti-Degradation	SSOW#:			
Site				

Analysis Requested

Preservation Codes:
A - HCL; B NaOH; C - Zn Acetate; D - Nitric Acid; E - NaHSO4; F - MeOH; G - Amchlor; H - Ascorbic Acid; I - Ice; J - DI Water; K EDTA; L EDA; M - Hexane; N - None; O AsNaO2; P - Na2O4S; Q Na2SO3; R Na2S2O3; S - H2SO4; T - TSP Dodecahydrate; U - Acetone; V - MCAA; W pH 4-5; Y Trizma; Z other (specify); Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020B/3005A Total Aluminum	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
Clalifins Pond (460-284669-1)	7/20/23	08 30 Eastern		Water			X	1	
NPDES 001 (460-284669-2)	7/20/23	10 30 Eastern		Water			X	1	

Note Since laboratory accreditations are subject to change, Eurofins Environment Testing Northeast, LLC places the ownership of method analyte & accreditation compliance upon our subcontract laboratories This sample shipment is forwarded under chain-of-custody If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed the samples must be shipped back to the Eurofins Environment Testing Northeast LLC laboratory or other instructions will be provided Any changes to accreditation status should be brought to Eurofins Environment Testing Northeast, LLC attention immediately If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Northeast, LLC

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested I, II, III, IV, Other (specify) Primary Deliverable Rank 1	Special Instructions/QC Requirements

Empty Kit Relinquished by	Date	Time	Method of Shipment.

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
	7/21/23 1900	EET		07/22/23 10:00	
Relinquished by	Date/Time:	Company	Received by	Date/Time	Company
Relinquished by	Date/Time	Company	Received by	Date/Time	Company

Custody Seals Intact	Custody Seal No	Cooler Temperature(s) °C and Other Remarks.
Δ Yes Δ No		0.6 / 0.7

8/15/2023

Login Sample Receipt Checklist

Client: Heidelberg Materials Northeast LLC

Job Number: 460-284669-1

Login Number: 284669
List Number: 1
Creator: Thundathorn, Sukanan 1

List Source: Eurofins Edison

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	False	Refer to Job Narrative for details.
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Heidelberg Materials Northeast LLC

Job Number: 460-284669-1

Login Number: 284669
List Number: 5
Creator: Yeager, Brian A

List Source: Eurofins Buffalo
List Creation: 07/24/23 12:31 PM

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	3.8 ICE
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	True	

Login Sample Receipt Checklist

Client: Heidelberg Materials Northeast LLC

Job Number: 460-284669-1

Login Number: 284669
List Number: 2
Creator: Wrye, Shaun

List Source: Eurofins Lancaster Laboratories Environment Testing, LLC
List Creation: 07/21/23 11:33 PM

Question	Answer	Comment
The cooler's custody seal is intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable (</=6C, not frozen).	True	
Cooler Temperature is recorded.	True	
WV: Container Temperature is acceptable (</=6C, not frozen).	N/A	
WV: Container Temperature is recorded.	N/A	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the containers received and the COC.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
There is sufficient vol. for all requested analyses.	True	
Is the Field Sampler's name present on COC?	False	Received project as a subcontract.
Sample custody seals are intact.	N/A	
VOA sample vials do not have headspace >6mm in diameter (none, if from WV)?	N/A	

Login Sample Receipt Checklist

Client: Heidelberg Materials Northeast LLC

Job Number: 460-284669-1

Login Number: 284669
List Number: 4
Creator: Watson, Debbie

List Source: Eurofins Pittsburgh
List Creation: 07/22/23 02:53 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Heidelberg Materials Northeast LLC

Job Number: 460-284669-1

Login Number: 284669
List Number: 3
Creator: Padayao, Abigail

List Source: Eurofins Savannah
List Creation: 07/22/23 01:10 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Lab Results

July 26, 2023

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Andrew Gutshall
Heidelberg Materials Northeast LLC
7660 Imperial Way
Allentown, Pennsylvania 18195

Generated 8/17/2023 9:48:34 AM

JOB DESCRIPTION

Rock Hill - Anti-Degradation

JOB NUMBER

460-284985-1

Eurofins Edison
777 New Durham Road
Edison NJ 08817

See page two for job notes and contact information.

my EOL

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing Northeast, LLC Project Manager.

Authorization



Generated
8/17/2023 9:48:34 AM

Authorized for release by
April Fox, Project Manager
April.Callahan@et.eurofinsus.com
Designee for
Julie Gilmore, Project Manager I
Julie.Gilmore@et.eurofinsus.com
(484)685-0865

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Definitions/Glossary

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill - Anti-Degradation

Job ID: 460-284985-1

Qualifiers

HPLC/IC

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

General Chemistry

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
H	Sample was prepped or analyzed beyond the specified holding time. This does not meet regulatory requirements.
H3	Sample was received and analyzed past holding time. This does not meet regulatory requirements.
HF	Field parameter with a holding time of 15 minutes. Test performed by laboratory at client's request.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 460-284985-1

Laboratory: Eurofins Edison

Narrative

Job Narrative
460-284985-1

Comments
No additional comments.

Receipt
The samples were received on 7/26/2023 7:00 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 3 coolers at receipt time were 2.2º C, 2.9º C and 3.1º C.

Receipt Exceptions

The method detection limit (MDL) is the lowest value detectable by the laboratory for a given analyte as determined by the MDL procedure detailed in EPA 40 CFR 136. Reported MDL values are adjusted for any dilutions and percent moisture (as applicable). The lab is unable to report values below the MDL.

GC Semi VOA
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Metals
Method Filtration: The following samples were not filtered within 15 minutes of sample collection as required by the method: NPDES 001 (460-284985-1), Basin 2 (460-284985-2), Basin 1 (460-284985-3), Up gradient (460-284985-4) and Clalifying Pond (460-284985-5). The samples were filtered prior to analysis at the laboratory, and the results have been reported.

Method Filtration: The following samples were not filtered within 15 minutes of sample collection as required by the method: NPDES 001 (460-284985-1), Basin 2 (460-284985-2), Basin 1 (460-284985-3), Up gradient (460-284985-4) and Clalifying Pond (460-284985-5). The sample(s) was filtered prior to analysis at the laboratory, and the results have been reported. This does not meet regulatory requirements.

Method FILTRATION: The following samples were not filtered and preserved within 15 minutes of sample collection in accordance with 40 CFR Part 136 Table II, Footnote 7, method 6020B. The samples were filtered prior to analysis at the laboratory.

NPDES 001 (460-284985-1), Basin 2 (460-284985-2), Basin 1 (460-284985-3), Up gradient (460-284985-4) and Clalifying Pond (460-284985-5)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

General Chemistry
Method SM 4500 O C: This analysis is normally performed in the field and has a method-defined holding time of 15 minutes. The following samples has been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe: NPDES 001 (460-284985-1), Basin 2 (460-284985-2), Basin 1 (460-284985-3), Up gradient (460-284985-4) and Clalifying Pond (460-284985-5).

Methods 9040C, SM 4500 H+ B: This analysis is normally performed in the field and has a method-defined holding time of 15 minutes. The following samples has been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe: NPDES 001 (460-284985-1), Basin 2 (460-284985-2), Basin 1 (460-284985-3), Up gradient (460-284985-4), Clalifying Pond (460-284985-5), (460-284955-A-8) and (460-284955-A-8 DU).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Client Sample ID: NPDES 001

Date Collected: 07/26/23 08:40
Date Received: 07/26/23 19:00

Lab Sample ID: 460-284985-1

Matrix: Water

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide	**0.12**	**J**	0.32	0.054	mg/L			07/27/23 12:42	1
Nitrate as N	**0.090**	**J**	0.16	0.070	mg/L			07/27/23 12:42	1
Chloride	**3.01**		0.32	0.039	mg/L			07/27/23 12:42	1
Nitrate Nitrite as N	**0.090**	**J**	0.16	0.070	mg/L			07/27/23 12:42	1
Nitrite as N	0.023	U	0.16	0.023	mg/L			07/27/23 12:42	1
Sulfate	**7.57**		0.48	0.095	mg/L			07/27/23 12:42	1

Method: SM-Online 2340B-2011 - Total Hardness (as CaCO3) by calculation - SM Online, 2011

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**92.7**		33.1	33.1	mg/L			08/10/23 07:07	1

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000043	U	0.00020	0.000043	mg/L		07/31/23 11:34	07/31/23 14:38	1

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**7.2**		4.0	0.91	ug/L		07/28/23 18:00	07/31/23 15:08	1
Boron	**70.9**	**J**	80.0	30.4	ug/L		07/28/23 18:00	07/31/23 15:08	1
Calcium	**22500**		500	53.6	ug/L		07/28/23 18:00	07/31/23 15:08	1
Copper	**3.2**	**J**	4.0	2.5	ug/L		07/28/23 18:00	07/31/23 15:08	1
Lead	0.84	U	1.2	0.84	ug/L		07/28/23 18:00	07/31/23 15:08	1
Magnesium	**8880**		200	46.9	ug/L		07/28/23 18:00	07/31/23 15:08	1
Manganese	**31.3**		8.0	1.5	ug/L		07/28/23 18:00	07/31/23 15:08	1
Nickel	0.91	U	4.0	0.91	ug/L		07/28/23 18:00	07/31/23 15:08	1
Potassium	**1730**		200	112	ug/L		07/28/23 18:00	07/31/23 15:08	1
Selenium	0.59	U	2.5	0.59	ug/L		07/28/23 18:00	07/31/23 15:08	1
Sodium	**4500**		500	219	ug/L		07/28/23 18:00	07/31/23 15:08	1
Strontium	**75.7**		4.0	0.50	ug/L		07/28/23 18:00	07/31/23 15:08	1
Zinc	6.5	U	16.0	6.5	ug/L		07/28/23 18:00	07/31/23 15:08	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**152**		100	35.0	ug/L		07/31/23 09:07	08/01/23 13:55	1
Iron	**467**		50.0	20.0	ug/L		07/31/23 11:17	08/08/23 08:17	1

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	19.5	U	40.0	19.5	ug/L		08/02/23 23:35	08/03/23 00:54	1
Cadmium	0.15	U	0.50	0.15	ug/L		08/01/23 00:08	08/01/23 08:32	1
Arsenic	0.89	U	2.0	0.89	ug/L		08/02/23 23:35	08/03/23 00:54	1
Iron	**124**		50.0	20.0	ug/L		08/01/23 00:08	08/01/23 08:32	1
Calcium	**21700**		500	53.6	ug/L		08/02/23 23:35	08/03/23 00:54	1
Zinc	4.0	U	10.0	4.0	ug/L		08/01/23 00:08	08/01/23 08:32	1
Copper	2.5	U	4.0	2.5	ug/L		08/02/23 23:35	08/03/23 00:54	1
Iron	58.2	U	120	58.2	ug/L		08/02/23 23:35	08/03/23 00:54	1
Lead	0.84	U	1.2	0.84	ug/L		08/02/23 23:35	08/03/23 00:54	1
Magnesium	**8650**		200	46.9	ug/L		08/02/23 23:35	08/03/23 00:54	1
Manganese	1.5	U	8.0	1.5	ug/L		08/02/23 23:35	08/03/23 00:54	1
Nickel	0.91	U	4.0	0.91	ug/L		08/02/23 23:35	08/03/23 00:54	1

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill - Anti-Degradation

Job ID: 460-284985-1

Client Sample ID: NPDES 001
Date Collected: 07/26/23 08:40
Date Received: 07/26/23 19:00

Lab Sample ID: 460-284985-1
Matrix: Water

Method: SW846 EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	1.3	U	5.0	1.3	ug/L		08/07/23 08:20	08/16/23 00:35	1

Method: SW846 EPA 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	1.3	U	5.0	1.3	ug/L		08/07/23 08:20	08/16/23 01:01	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Resistivity (EPA 120.1)	**0.00485**		0.000100	0.000100	Mohm-cm			07/31/23 13:28	1
Specific Conductance (EPA 120.1)	**206**		1.00	1.00	umhos/cm			07/31/23 13:28	1
Acidity (SM 2310B-2011)	20.0	U	20.0	20.0	mg/L			08/09/23 09:03	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-2011)	**88.1**		5.0	5.0	mg/L			07/31/23 18:03	1
Carbonate Alkalinity as CaCO3 (SM 2320B-2011)	5.0	U	5.0	5.0	mg/L			07/31/23 18:03	1
Alkalinity as CaCO3 to pH 4.5 (SM 2320B-2011)	**88.1**		5.0	5.0	mg/L			07/31/23 18:03	1
Total Dissolved Solids (SM 2540C-2015)	**143**		2.5	2.5	mg/L			07/28/23 09:43	1
Total Suspended Solids (SM 2540D-2015)	2.5	U	2.5	2.5	mg/L			07/31/23 07:43	1
Ammonia (EPA 350.1)	0.050	U	0.10	0.050	mg/L			08/02/23 10:53	1
Total Kjeldahl Nitrogen (EPA 351.2)	0.50	U	1.0	0.50	mg/L		08/07/23 12:45	08/08/23 11:41	1
Chemical Oxygen Demand (EPA 410.4)	**4.8**	**J**	10.0	3.3	mg/L			08/08/23 17:14	1
Oxygen, Dissolved (SM 4500 O C-2016)	**5.2**	**H H3**	1.0	1.0	mg/L			07/27/23 14:15	1
Orthophosphate as P (SM 4500 P E-2011)	0.0050	U	0.030	0.0050	mg/L			07/28/23 08:00	1
Carbonaceous Biochemical Oxygen Demand 5 (SM 5210 B-2016)	1.0	U	1.0	1.0	mg/L			07/27/23 13:54	1
pH (SW846 9040C)	**7.7**	**HF**	0.1	0.1	SU			08/07/23 14:38	1
Temperature (SW846 9040C)	**22.6**	**HF**	0.1	0.1	Degrees C			08/07/23 14:38	1
Total Organic Carbon (SW846 9060A)	**3.3**		1.0	0.53	mg/L			08/09/23 06:26	1
Phosphorus as PO4 (SM4500 P E-2011)	**4.2**		0.45	0.36	mg/L		08/07/23 12:51	08/07/23 13:11	5
Phosphorus as P (SM4500 P E-2011)	**1.4**		0.15	0.12	mg/L		08/07/23 12:51	08/07/23 13:11	5
Nitrogen, Total (EPA Total Nitrogen)	0.50	U	0.50	0.50	mg/L			08/08/23 18:00	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (EPA 350.1)	0.050	U	0.10	0.050	mg/L			08/04/23 13:16	1
Orthophosphate as P (SM 4500 P E-2011)	0.0050	U	0.030	0.0050	mg/L			07/28/23 08:00	1
Phosphorus as PO4 (SM4500 P E-2011)	**4.0**		0.45	0.36	mg/L		08/07/23 12:51	08/07/23 13:11	5
Phosphorus as P (SM4500 P E-2011)	**1.3**		0.15	0.12	mg/L		08/07/23 12:51	08/07/23 13:11	5

Client Sample ID: Basin 2

Date Collected: 07/26/23 09:30
Date Received: 07/26/23 19:00

Lab Sample ID: 460-284985-2

Matrix: Water

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide	**0.13**	**J**	0.32	0.054	mg/L			07/27/23 12:57	1
Nitrate as N	**0.080**	**J**	0.16	0.070	mg/L			07/27/23 12:57	1
Chloride	**1.88**		0.32	0.039	mg/L			07/27/23 12:57	1
Nitrate Nitrite as N	**0.080**	**J**	0.16	0.070	mg/L			07/27/23 12:57	1
Nitrite as N	0.023	U	0.16	0.023	mg/L			07/27/23 12:57	1
Sulfate	**5.32**		0.48	0.095	mg/L			07/27/23 12:57	1

Method: SM-Online 2340B-2011 - Total Hardness (as CaCO3) by calculation - SM Online, 2011

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**78.8**		33.1	33.1	mg/L			08/10/23 07:07	1

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000043	U	0.00020	0.000043	mg/L		07/31/23 11:34	07/31/23 14:39	1

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**5.8**		4.0	0.91	ug/L		07/28/23 18:00	07/31/23 15:59	1
Boron	**55.6**	**J**	80.0	30.4	ug/L		07/28/23 18:00	07/31/23 15:59	1
Calcium	**16600**		500	53.6	ug/L		07/28/23 18:00	07/31/23 15:59	1
Copper	**3.8**	**J**	4.0	2.5	ug/L		07/28/23 18:00	07/31/23 15:59	1
Lead	0.84	U	1.2	0.84	ug/L		07/28/23 18:00	07/31/23 15:59	1
Magnesium	**9060**		200	46.9	ug/L		07/28/23 18:00	07/31/23 15:59	1
Manganese	**83.3**		8.0	1.5	ug/L		07/28/23 18:00	07/31/23 15:59	1
Nickel	0.91	U	4.0	0.91	ug/L		07/28/23 18:00	07/31/23 15:59	1
Potassium	**1200**		200	112	ug/L		07/28/23 18:00	07/31/23 15:59	1
Selenium	0.59	U	2.5	0.59	ug/L		07/28/23 18:00	07/31/23 15:59	1
Sodium	**2970**		500	219	ug/L		07/28/23 18:00	07/31/23 15:59	1
Strontium	**43.5**		4.0	0.50	ug/L		07/28/23 18:00	07/31/23 15:59	1
Zinc	6.5	U	16.0	6.5	ug/L		07/28/23 18:00	07/31/23 15:59	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**268**		100	35.0	ug/L		07/31/23 09:07	08/01/23 13:50	1
Iron	**665**		50.0	20.0	ug/L		07/31/23 11:17	08/08/23 08:15	1

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	19.5	U	40.0	19.5	ug/L		08/02/23 23:35	08/03/23 00:57	1
Cadmium	0.15	U	0.50	0.15	ug/L		08/01/23 00:08	08/01/23 08:34	1
Arsenic	0.89	U	2.0	0.89	ug/L		08/02/23 23:35	08/03/23 00:57	1
Iron	**37.5**	**J**	50.0	20.0	ug/L		08/01/23 00:08	08/01/23 08:34	1
Calcium	**16700**		500	53.6	ug/L		08/02/23 23:35	08/03/23 00:57	1
Zinc	4.0	U	10.0	4.0	ug/L		08/01/23 00:08	08/01/23 08:34	1
Copper	2.5	U	4.0	2.5	ug/L		08/02/23 23:35	08/03/23 00:57	1
Iron	58.2	U	120	58.2	ug/L		08/02/23 23:35	08/03/23 00:57	1
Lead	0.84	U	1.2	0.84	ug/L		08/02/23 23:35	08/03/23 00:57	1
Magnesium	**8780**		200	46.9	ug/L		08/02/23 23:35	08/03/23 00:57	1
Manganese	1.5	U	8.0	1.5	ug/L		08/02/23 23:35	08/03/23 00:57	1
Nickel	0.91	U	4.0	0.91	ug/L		08/02/23 23:35	08/03/23 00:57	1

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill - Anti-Degradation

Job ID: 460-284985-1

Client Sample ID: Basin 2

Date Collected: 07/26/23 09:30
Date Received: 07/26/23 19:00

Lab Sample ID: 460-284985-2

Matrix: Water

Method: SW846 EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	1.3	U	5.0	1.3	ug/L		08/07/23 08:20	08/16/23 00:39	1

Method: SW846 EPA 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	1.3	U	5.0	1.3	ug/L		08/07/23 08:20	08/16/23 01:04	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Resistivity (EPA 120.1)	**0.00570**		0.000100	0.000100	Mohm-cm			07/31/23 13:28	1
Specific Conductance (EPA 120.1)	**175**		1.00	1.00	umhos/cm			07/31/23 13:28	1
Acidity (SM 2310B-2011)	20.0	U	20.0	20.0	mg/L			08/09/23 09:03	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-2011)	**83.1**		5.0	5.0	mg/L			07/31/23 18:10	1
Carbonate Alkalinity as CaCO3 (SM 2320B-2011)	5.0	U	5.0	5.0	mg/L			07/31/23 18:10	1
Alkalinity as CaCO3 to pH 4.5 (SM 2320B-2011)	**83.1**		5.0	5.0	mg/L			07/31/23 18:10	1
Total Dissolved Solids (SM 2540C-2015)	**118**		2.5	2.5	mg/L			07/28/23 09:43	1
Total Suspended Solids (SM 2540D-2015)	**7.3**		2.5	2.5	mg/L			07/31/23 07:43	1
Ammonia (EPA 350.1)	0.050	U	0.10	0.050	mg/L			08/02/23 10:55	1
Total Kjeldahl Nitrogen (EPA 351.2)	0.50	U	1.0	0.50	mg/L		08/07/23 12:45	08/08/23 11:43	1
Chemical Oxygen Demand (EPA 410.4)	**10.5**		10.0	3.3	mg/L			08/08/23 17:14	1
Oxygen, Dissolved (SM 4500 O C-2016)	**6.6**	**H H3**	1.0	1.0	mg/L			07/27/23 14:17	1
Orthophosphate as P (SM 4500 P E-2011)	**0.0079**	**J**	0.030	0.0050	mg/L			07/28/23 08:00	1
Carbonaceous Biochemical Oxygen Demand 5 (SM 5210 B-2016)	**1.1**		1.0	1.0	mg/L			07/27/23 13:59	1
pH (SW846 9040C)	**7.8**	**HF**	0.1	0.1	SU			08/07/23 14:40	1
Temperature (SW846 9040C)	**22.5**	**HF**	0.1	0.1	Degrees C			08/07/23 14:40	1
Total Organic Carbon (SW846 9060A)	**3.5**		1.0	0.53	mg/L			08/09/23 06:51	1
Phosphorus as PO4 (SM4500 P E-2011)	**2.3**		0.18	0.14	mg/L		08/07/23 12:51	08/07/23 13:11	2
Phosphorus as P (SM4500 P E-2011)	**0.76**		0.060	0.046	mg/L		08/07/23 12:51	08/07/23 13:11	2
Nitrogen, Total (EPA Total Nitrogen)	0.50	U	0.50	0.50	mg/L			08/08/23 18:00	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (EPA 350.1)	0.050	U	0.10	0.050	mg/L			08/04/23 13:17	1
Orthophosphate as P (SM 4500 P E-2011)	0.0050	U	0.030	0.0050	mg/L			07/28/23 08:00	1
Phosphorus as PO4 (SM4500 P E-2011)	**2.3**		0.18	0.14	mg/L		08/07/23 12:51	08/07/23 13:11	2
Phosphorus as P (SM4500 P E-2011)	**0.74**		0.060	0.046	mg/L		08/07/23 12:51	08/07/23 13:11	2

Client Sample ID: Basin 1

Date Collected: 07/26/23 10:15
Date Received: 07/26/23 19:00

Lab Sample ID: 460-284985-3

Matrix: Water

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide	**0.11**	**J**	0.32	0.054	mg/L			07/27/23 13:12	1
Nitrate as N	0.070	U	0.16	0.070	mg/L			07/27/23 13:12	1
Chloride	**6.14**		0.32	0.039	mg/L			07/27/23 13:12	1
Nitrate Nitrite as N	0.070	U	0.16	0.070	mg/L			07/27/23 13:12	1
Nitrite as N	0.023	U	0.16	0.023	mg/L			07/27/23 13:12	1
Sulfate	**2.33**		0.48	0.095	mg/L			07/27/23 13:12	1

Method: SM-Online 2340B-2011 - Total Hardness (as CaCO3) by calculation - SM Online, 2011

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**117**		33.1	33.1	mg/L			08/10/23 07:07	1

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000043	U	0.00020	0.000043	mg/L		07/31/23 11:34	07/31/23 14:40	1

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**6.6**		4.0	0.91	ug/L		07/28/23 18:00	07/31/23 16:02	1
Boron	**84.8**		80.0	30.4	ug/L		07/28/23 18:00	07/31/23 16:02	1
Calcium	**26400**		500	53.6	ug/L		07/28/23 18:00	07/31/23 16:02	1
Copper	**2.5**	**J**	4.0	2.5	ug/L		07/28/23 18:00	07/31/23 16:02	1
Lead	0.84	U	1.2	0.84	ug/L		07/28/23 18:00	07/31/23 16:02	1
Magnesium	**12400**		200	46.9	ug/L		07/28/23 18:00	07/31/23 16:02	1
Manganese	**136**		8.0	1.5	ug/L		07/28/23 18:00	07/31/23 16:02	1
Nickel	0.91	U	4.0	0.91	ug/L		07/28/23 18:00	07/31/23 16:02	1
Potassium	**1380**		200	112	ug/L		07/28/23 18:00	07/31/23 16:02	1
Selenium	0.59	U	2.5	0.59	ug/L		07/28/23 18:00	07/31/23 16:02	1
Sodium	**5340**		500	219	ug/L		07/28/23 18:00	07/31/23 16:02	1
Strontium	**71.8**		4.0	0.50	ug/L		07/28/23 18:00	07/31/23 16:02	1
Zinc	6.5	U	16.0	6.5	ug/L		07/28/23 18:00	07/31/23 16:02	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**232**		100	35.0	ug/L		07/31/23 09:07	08/01/23 14:03	1
Iron	**1340**		50.0	20.0	ug/L		07/31/23 11:17	08/08/23 08:19	1

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	19.5	U	40.0	19.5	ug/L		08/02/23 23:35	08/03/23 00:59	1
Cadmium	0.15	U	0.50	0.15	ug/L		08/01/23 00:08	08/01/23 08:36	1
Arsenic	0.89	U	2.0	0.89	ug/L		08/02/23 23:35	08/03/23 00:59	1
Iron	**171**		50.0	20.0	ug/L		08/01/23 00:08	08/01/23 08:36	1
Calcium	**24500**		500	53.6	ug/L		08/02/23 23:35	08/03/23 00:59	1
Zinc	4.0	U	10.0	4.0	ug/L		08/01/23 00:08	08/01/23 08:36	1
Copper	2.5	U	4.0	2.5	ug/L		08/02/23 23:35	08/03/23 00:59	1
Iron	**110**	**J**	120	58.2	ug/L		08/02/23 23:35	08/03/23 00:59	1
Lead	0.84	U	1.2	0.84	ug/L		08/02/23 23:35	08/03/23 00:59	1
Magnesium	**11700**		200	46.9	ug/L		08/02/23 23:35	08/03/23 00:59	1
Manganese	1.5	U	8.0	1.5	ug/L		08/02/23 23:35	08/03/23 00:59	1
Nickel	0.91	U	4.0	0.91	ug/L		08/02/23 23:35	08/03/23 00:59	1

Client Sample ID: Basin 1

Date Collected: 07/26/23 10:15
Date Received: 07/26/23 19:00

Lab Sample ID: 460-284985-3

Matrix: Water

Method: SW846 EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	1.3	U	5.0	1.3	ug/L		08/07/23 08:20	08/16/23 00:50	1

Method: SW846 EPA 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	**1.9**	**J**	5.0	1.3	ug/L		08/07/23 08:20	08/16/23 01:08	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Resistivity (EPA 120.1)	**0.00411**		0.000100	0.000100	Mohm-cm			07/31/23 13:28	1
Specific Conductance (EPA 120.1)	**243**		1.00	1.00	umhos/cm			07/31/23 13:28	1
Acidity (SM 2310B-2011)	20.0	U	20.0	20.0	mg/L			08/09/23 09:03	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-2011)	**110**		5.0	5.0	mg/L			07/31/23 18:17	1
Carbonate Alkalinity as CaCO3 (SM 2320B-2011)	5.0	U	5.0	5.0	mg/L			07/31/23 18:17	1
Alkalinity as CaCO3 to pH 4.5 (SM 2320B-2011)	**110**		5.0	5.0	mg/L			07/31/23 18:17	1
Total Dissolved Solids (SM 2540C-2015)	**159**		2.5	2.5	mg/L			07/28/23 09:43	1
Total Suspended Solids (SM 2540D-2015)	**4.5**		2.5	2.5	mg/L			07/31/23 07:43	1
Ammonia (EPA 350.1)	0.050	U	0.10	0.050	mg/L			08/02/23 11:19	1
Total Kjeldahl Nitrogen (EPA 351.2)	0.50	U	1.0	0.50	mg/L		08/07/23 12:45	08/08/23 11:18	1
Chemical Oxygen Demand (EPA 410.4)	**7.3**	**J**	10.0	3.3	mg/L			08/08/23 17:14	1
Oxygen, Dissolved (SM 4500 O C-2016)	**6.1**	**H H3**	1.0	1.0	mg/L			07/27/23 14:19	1
Orthophosphate as P (SM 4500 P E-2011)	**0.0052**	**J**	0.030	0.0050	mg/L			07/28/23 08:00	1
Carbonaceous Biochemical Oxygen Demand 5 (SM 5210 B-2016)	1.0	U	1.0	1.0	mg/L			07/27/23 14:04	1
pH (SW846 9040C)	**7.8**	**HF**	0.1	0.1	SU			08/07/23 14:43	1
Temperature (SW846 9040C)	**22.8**	**HF**	0.1	0.1	Degrees C			08/07/23 14:43	1
Total Organic Carbon (SW846 9060A)	**3.0**		1.0	0.53	mg/L			08/09/23 07:15	1
Phosphorus as PO4 (SM4500 P E-2011)	**9.3**		0.90	0.71	mg/L		08/07/23 12:51	08/07/23 13:11	10
Phosphorus as P (SM4500 P E-2011)	**3.0**		0.30	0.23	mg/L		08/07/23 12:51	08/07/23 13:11	10
Nitrogen, Total (EPA Total Nitrogen)	0.50	U	0.50	0.50	mg/L			08/08/23 18:00	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (EPA 350.1)	0.050	U	0.10	0.050	mg/L			08/04/23 13:19	1
Orthophosphate as P (SM 4500 P E-2011)	0.0050	U	0.030	0.0050	mg/L			07/28/23 08:00	1
Phosphorus as PO4 (SM4500 P E-2011)	**0.78**		0.090	0.071	mg/L		08/07/23 12:51	08/07/23 13:11	1
Phosphorus as P (SM4500 P E-2011)	**0.25**		0.030	0.023	mg/L		08/07/23 12:51	08/07/23 13:11	1

Client Sample ID: Up gradient

Date Collected: 07/26/23 11:15
Date Received: 07/26/23 19:00

Lab Sample ID: 460-284985-4

Matrix: Water

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide	0.054	U	0.32	0.054	mg/L			07/27/23 14:06	1
Nitrate as N	0.070	U	0.16	0.070	mg/L			07/27/23 14:06	1
Chloride	**1.53**		0.32	0.039	mg/L			07/27/23 14:06	1
Nitrate Nitrite as N	0.070	U	0.16	0.070	mg/L			07/27/23 14:06	1
Nitrite as N	0.023	U	0.16	0.023	mg/L			07/27/23 14:06	1
Sulfate	**15.7**		0.48	0.095	mg/L			07/27/23 14:06	1

Method: SM-Online 2340B-2011 - Total Hardness (as CaCO3) by calculation - SM Online, 2011

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**128**		33.1	33.1	mg/L			08/10/23 07:07	1

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000043	U	0.00020	0.000043	mg/L		07/31/23 11:34	07/31/23 14:42	1

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**16.6**		4.0	0.91	ug/L		07/28/23 18:00	07/31/23 16:04	1
Boron	**84.0**		80.0	30.4	ug/L		07/28/23 18:00	07/31/23 16:04	1
Calcium	**33900**		500	53.6	ug/L		07/28/23 18:00	07/31/23 16:04	1
Copper	**5.2**		4.0	2.5	ug/L		07/28/23 18:00	07/31/23 16:04	1
Lead	0.84	U	1.2	0.84	ug/L		07/28/23 18:00	07/31/23 16:04	1
Magnesium	**10500**		200	46.9	ug/L		07/28/23 18:00	07/31/23 16:04	1
Manganese	**279**		8.0	1.5	ug/L		07/28/23 18:00	07/31/23 16:04	1
Nickel	0.91	U	4.0	0.91	ug/L		07/28/23 18:00	07/31/23 16:04	1
Potassium	**2010**		200	112	ug/L		07/28/23 18:00	07/31/23 16:04	1
Selenium	0.59	U	2.5	0.59	ug/L		07/28/23 18:00	07/31/23 16:04	1
Sodium	**4160**		500	219	ug/L		07/28/23 18:00	07/31/23 16:04	1
Strontium	**132**		4.0	0.50	ug/L		07/28/23 18:00	07/31/23 16:04	1
Zinc	6.5	U	16.0	6.5	ug/L		07/28/23 18:00	07/31/23 16:04	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**274**		100	35.0	ug/L		07/31/23 09:07	08/01/23 13:59	1
Iron	**651**		50.0	20.0	ug/L		07/31/23 11:17	08/08/23 08:13	1

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	19.5	U	40.0	19.5	ug/L		08/02/23 23:35	08/03/23 01:01	1
Cadmium	0.15	U	0.50	0.15	ug/L		08/01/23 00:08	08/01/23 08:44	1
Arsenic	0.89	U	2.0	0.89	ug/L		08/02/23 23:35	08/03/23 01:01	1
Iron	**25.2**	**J**	50.0	20.0	ug/L		08/01/23 00:08	08/01/23 08:44	1
Calcium	**32400**		500	53.6	ug/L		08/02/23 23:35	08/03/23 01:01	1
Zinc	4.0	U	10.0	4.0	ug/L		08/01/23 00:08	08/01/23 08:44	1
Copper	**3.5**	**J**	4.0	2.5	ug/L		08/02/23 23:35	08/03/23 01:01	1
Iron	58.2	U	120	58.2	ug/L		08/02/23 23:35	08/03/23 01:01	1
Lead	0.84	U	1.2	0.84	ug/L		08/02/23 23:35	08/03/23 01:01	1
Magnesium	**10100**		200	46.9	ug/L		08/02/23 23:35	08/03/23 01:01	1
Manganese	**126**		8.0	1.5	ug/L		08/02/23 23:35	08/03/23 01:01	1
Nickel	**1.0**	**J**	4.0	0.91	ug/L		08/02/23 23:35	08/03/23 01:01	1

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill - Anti-Degradation

Job ID: 460-284985-1

Client Sample ID: Up gradient

Date Collected: 07/26/23 11:15
Date Received: 07/26/23 19:00

Lab Sample ID: 460-284985-4
Matrix: Water

Method: SW846 EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	**2.3**	**J**	5.0	1.3	ug/L		08/07/23 08:20	08/16/23 00:53	1

Method: SW846 EPA 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	1.3	U	5.0	1.3	ug/L		08/07/23 08:20	08/16/23 01:12	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Resistivity (EPA 120.1)	**0.00376**		0.000100	0.000100	Mohm-cm			07/31/23 13:28	1
Specific Conductance (EPA 120.1)	**266**		1.00	1.00	umhos/cm			07/31/23 13:28	1
Acidity (SM 2310B-2011)	20.0	U	20.0	20.0	mg/L			08/09/23 09:03	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-2011)	**109**		5.0	5.0	mg/L			07/31/23 18:24	1
Carbonate Alkalinity as CaCO3 (SM 2320B-2011)	5.0	U	5.0	5.0	mg/L			07/31/23 18:24	1
Alkalinity as CaCO3 to pH 4.5 (SM 2320B-2011)	**109**		5.0	5.0	mg/L			07/31/23 18:24	1
Total Dissolved Solids (SM 2540C-2015)	**182**		2.5	2.5	mg/L			07/28/23 09:43	1
Total Suspended Solids (SM 2540D-2015)	**10.2**		2.5	2.5	mg/L			07/31/23 07:43	1
Ammonia (EPA 350.1)	0.050	U	0.10	0.050	mg/L			08/02/23 11:20	1
Total Kjeldahl Nitrogen (EPA 351.2	**0.68**	**J**	1.0	0.50	mg/L		08/07/23 12:45	08/08/23 11:20	1
Chemical Oxygen Demand (EPA 410.4)	**7.7**	**J**	10.0	3.3	mg/L			08/08/23 17:14	1
Oxygen, Dissolved (SM 4500 O C-2016)	**5.9**	**H**	1.0	1.0	mg/L			07/27/23 14:36	1
Orthophosphate as P (SM 4500 P E-2011)	0.0050	U	0.030	0.0050	mg/L			07/28/23 08:00	1
Carbonaceous Biochemical Oxygen Demand 5 (SM 5210 B-2016)	1.0	U	1.0	1.0	mg/L			07/27/23 14:10	1
pH (SW846 9040C)	**7.5**	**HF**	0.1	0.1	SU			08/07/23 14:45	1
Temperature (SW846 9040C)	**22.5**	**HF**	0.1	0.1	Degrees C			08/07/23 14:45	1
Total Organic Carbon (SW846 9060A)	**4.5**		1.0	0.53	mg/L			08/09/23 07:40	1
Phosphorus as PO4 (SM4500 P E-2011)	0.071	U F1	0.090	0.071	mg/L		08/09/23 13:15	08/09/23 19:00	1
Phosphorus as P (SM4500 P E-2011)	0.023	U	0.030	0.023	mg/L		08/09/23 13:15	08/09/23 19:00	1
Nitrogen, Total (EPA Total Nitrogen)	**0.68**		0.50	0.50	mg/L			08/08/23 18:00	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (EPA 350.1)	0.050	U	0.10	0.050	mg/L			08/04/23 13:20	1
Orthophosphate as P (SM 4500 P E-2011)	0.0050	U	0.030	0.0050	mg/L			07/28/23 08:00	1
Phosphorus as PO4 (SM4500 P E-2011)	0.071	U F1	0.090	0.071	mg/L		08/09/23 13:15	08/09/23 19:00	1
Phosphorus as P (SM4500 P E-2011)	0.023	U	0.030	0.023	mg/L		08/09/23 13:15	08/09/23 19:00	1

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill - Anti-Degradation

Job ID: 460-284985-1

Client Sample ID: Clalifying Pond

Date Collected: 07/26/23 11:30
Date Received: 07/26/23 19:00

Lab Sample ID: 460-284985-5

Matrix: Water

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide	0.054	U	0.32	0.054	mg/L			07/27/23 14:46	1
Nitrate as N	**0.14**	**J**	0.16	0.070	mg/L			07/27/23 14:46	1
Chloride	**0.85**		0.32	0.039	mg/L			07/27/23 14:46	1
Nitrate Nitrite as N	**0.19**		0.16	0.070	mg/L			07/27/23 14:46	1
Nitrite as N	**0.045**	**J**	0.16	0.023	mg/L			07/27/23 14:46	1
Sulfate	**3.32**		0.48	0.095	mg/L			07/27/23 14:46	1

Method: SM-Online 2340B-2011 - Total Hardness (as CaCO3) by calculation - SM Online, 2011

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**51.3**		33.1	33.1	mg/L			08/10/23 07:07	1

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000043	U	0.00020	0.000043	mg/L		07/31/23 11:34	07/31/23 14:43	1

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**5.0**		4.0	0.91	ug/L		07/28/23 18:00	07/31/23 16:06	1
Boron	**52.0**	**J**	80.0	30.4	ug/L		07/28/23 18:00	07/31/23 16:06	1
Calcium	**13400**		500	53.6	ug/L		07/28/23 18:00	07/31/23 16:06	1
Copper	**6.5**		4.0	2.5	ug/L		07/28/23 18:00	07/31/23 16:06	1
Lead	0.84	U	1.2	0.84	ug/L		07/28/23 18:00	07/31/23 16:06	1
Magnesium	**4310**		200	46.9	ug/L		07/28/23 18:00	07/31/23 16:06	1
Manganese	**39.2**		8.0	1.5	ug/L		07/28/23 18:00	07/31/23 16:06	1
Nickel	**1.2**	**J**	4.0	0.91	ug/L		07/28/23 18:00	07/31/23 16:06	1
Potassium	**1450**		200	112	ug/L		07/28/23 18:00	07/31/23 16:06	1
Selenium	0.59	U	2.5	0.59	ug/L		07/28/23 18:00	07/31/23 16:06	1
Sodium	**2440**		500	219	ug/L		07/28/23 18:00	07/31/23 16:06	1
Strontium	**25.7**		4.0	0.50	ug/L		07/28/23 18:00	07/31/23 16:06	1
Zinc	6.5	U	16.0	6.5	ug/L		07/28/23 18:00	07/31/23 16:06	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**616**		100	35.0	ug/L		07/31/23 09:07	08/01/23 13:46	1
Iron	**886**		50.0	20.0	ug/L		07/31/23 11:17	08/08/23 08:25	1

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**62.2**		40.0	19.5	ug/L		08/02/23 23:35	08/03/23 01:06	1
Cadmium	0.15	U	0.50	0.15	ug/L		08/01/23 00:08	08/01/23 08:46	1
Arsenic	0.89	U	2.0	0.89	ug/L		08/02/23 23:35	08/03/23 01:06	1
Iron	**89.4**		50.0	20.0	ug/L		08/01/23 00:08	08/01/23 08:46	1
Calcium	**14400**		500	53.6	ug/L		08/02/23 23:35	08/03/23 01:06	1
Zinc	4.0	U	10.0	4.0	ug/L		08/01/23 00:08	08/01/23 08:46	1
Copper	2.5	U	4.0	2.5	ug/L		08/02/23 23:35	08/03/23 01:06	1
Iron	58.2	U	120	58.2	ug/L		08/02/23 23:35	08/03/23 01:06	1
Lead	0.84	U	1.2	0.84	ug/L		08/02/23 23:35	08/03/23 01:06	1
Magnesium	**4410**		200	46.9	ug/L		08/02/23 23:35	08/03/23 01:06	1
Manganese	**10.0**		8.0	1.5	ug/L		08/02/23 23:35	08/03/23 01:06	1
Nickel	0.91	U	4.0	0.91	ug/L		08/02/23 23:35	08/03/23 01:06	1

Client Sample ID: Clalifying Pond

Date Collected: 07/26/23 11:30
Date Received: 07/26/23 19:00

Lab Sample ID: 460-284985-5

Matrix: Water

Method: SW846 EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	1.3	U	5.0	1.3	ug/L		08/07/23 08:20	08/16/23 00:57	1

Method: SW846 EPA 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	**33.8**		5.0	1.3	ug/L		08/07/23 08:20	08/16/23 01:15	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Resistivity (EPA 120.1)	**0.00871**		0.000100	0.000100	Mohm-cm			07/31/23 13:28	1
Specific Conductance (EPA 120.1)	**115**		1.00	1.00	umhos/cm			07/31/23 13:28	1
Acidity (SM 2310B-2011)	20.0	U	20.0	20.0	mg/L			08/09/23 09:03	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-2011)	**49.8**		5.0	5.0	mg/L			07/31/23 18:31	1
Carbonate Alkalinity as CaCO3 (SM 2320B-2011)	5.0	U	5.0	5.0	mg/L			07/31/23 18:31	1
Alkalinity as CaCO3 to pH 4.5 (SM 2320B-2011)	**49.8**		5.0	5.0	mg/L			07/31/23 18:31	1
Total Dissolved Solids (SM 2540C-2015)	**91.0**		2.5	2.5	mg/L			07/28/23 09:43	1
Total Suspended Solids (SM 2540D-2015)	**12.8**		2.5	2.5	mg/L			07/31/23 07:43	1
Ammonia (EPA 350.1)	0.050	U	0.10	0.050	mg/L			08/02/23 11:22	1
Total Kjeldahl Nitrogen (EPA 351.2)	0.50	U	1.0	0.50	mg/L		08/07/23 12:45	08/08/23 11:22	1
Chemical Oxygen Demand (EPA 410.4)	**4.2**	**J**	10.0	3.3	mg/L			08/08/23 17:14	1
Oxygen, Dissolved (SM 4500 O C-2016)	**5.3**	**H**	1.0	1.0	mg/L			07/27/23 14:23	1
Orthophosphate as P (SM 4500 P E-2011)	**0.011**	**J**	0.030	0.0050	mg/L			07/28/23 08:00	1
Carbonaceous Biochemical Oxygen Demand 5 (SM 5210 B-2016)	1.0	U	1.0	1.0	mg/L			07/27/23 14:16	1
pH (SW846 9040C)	**7.5**	**HF**	0.1	0.1	SU			08/07/23 14:46	1
Temperature (SW846 9040C)	**22.5**	**HF**	0.1	0.1	Degrees C			08/07/23 14:46	1
Total Organic Carbon (SW846 9060A)	**2.0**		1.0	0.53	mg/L			08/09/23 11:12	1
Phosphorus as PO4 (SM4500 P E-2011)	**0.31**		0.090	0.071	mg/L		08/09/23 13:15	08/09/23 19:00	1
Phosphorus as P (SM4500 P E-2011)	**0.10**		0.030	0.023	mg/L		08/09/23 13:15	08/09/23 19:00	1
Nitrogen, Total (EPA Total Nitrogen)	0.50	U	0.50	0.50	mg/L			08/08/23 18:00	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (EPA 350.1)	0.050	U	0.10	0.050	mg/L			08/04/23 13:22	1
Orthophosphate as P (SM 4500 P E-2011)	0.0050	U	0.030	0.0050	mg/L			07/28/23 08:00	1
Phosphorus as PO4 (SM4500 P E-2011)	0.071	U	0.090	0.071	mg/L		08/09/23 13:15	08/09/23 19:00	1
Phosphorus as P (SM4500 P E-2011)	0.023	U	0.030	0.023	mg/L		08/09/23 13:15	08/09/23 19:00	1

Lab Chronicle

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill - Anti-Degradation

Job ID: 460-284985-1

Client Sample ID: NPDES 001

Date Collected: 07/26/23 08:40
Date Received: 07/26/23 19:00

Lab Sample ID: 460-284985-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		1	923383	OXG	EET EDI	07/27/23 12:42
Total/NA	Analysis	300.0		1	923384	OXG	EET EDI	07/27/23 12:42
Total/NA	Analysis	2340B-2011		1	925835	LBD	EET EDI	08/10/23 07:07
Total/NA	Prep	245.1			678311	NVK	EET BUF	07/31/23 11:34
Total/NA	Analysis	245.1		1	678432	NVK	EET BUF	07/31/23 14:38
Dissolved	Filtration	Filtration			402456	UDL9	ELLE	07/31/23 07:23
Dissolved	Prep	3005A			402834	UAMX	ELLE	08/01/23 00:08
Dissolved	Analysis	6020B		1	403047	F7JF	ELLE	08/01/23 08:32
Dissolved	Filtration	FILTRATION			924606	VAD	EET EDI	08/02/23 23:28
Dissolved	Prep	3010A			924607	VAD	EET EDI	08/02/23 23:35
Dissolved	Analysis	6020B		1	924585	CDC	EET EDI	08/03/23 00:54
Total Recoverable	Prep	3005A			402619	HUH3	ELLE	07/31/23 11:17
Total Recoverable	Analysis	6020B		1	405732	F7JF	ELLE	08/08/23 08:17
Total Recoverable	Prep	3005A			790894	RR	EET SAV	07/31/23 09:07
Total Recoverable	Analysis	6020B		1	791296	BWR	EET SAV	08/01/23 13:55
Total/NA	Prep	3010A			923730	GAE	EET EDI	07/28/23 18:00
Total/NA	Analysis	6020B		1	924131	CDC	EET EDI	07/31/23 15:08
Dissolved	Filtration	Filtration			442164	S1Z	EET PIT	08/02/23 07:00
Dissolved	Prep	3005A			442484	S1Z	EET PIT	08/07/23 08:20
Dissolved	Analysis	EPA 6020B		1	443625	KED	EET PIT	08/16/23 01:01
Total Recoverable	Prep	3005A			442484	S1Z	EET PIT	08/07/23 08:20
Total Recoverable	Analysis	EPA 6020B		1	443625	KED	EET PIT	08/16/23 00:35
Total/NA	Analysis	120.1		1	924088	MMC	EET EDI	07/31/23 13:28
Total/NA	Analysis	2310B-2011		1	925648	IAA	EET EDI	08/09/23 09:03
Total/NA	Analysis	2320B-2011		1	924252	AXP	EET EDI	07/31/23 18:03
Total/NA	Analysis	2540C-2015		1	923635	PLS	EET EDI	07/28/23 09:43
Total/NA	Analysis	2540D-2015		1	924005	PLS	EET EDI	07/31/23 07:43
Dissolved	Filtration	FILTRATION			924938	AXP	EET EDI	08/04/23 11:02
Dissolved	Analysis	350.1		1	924986	AXP	EET EDI	08/04/23 13:16
Total/NA	Analysis	350.1		1	924515	AXP	EET EDI	08/02/23 10:53
Total/NA	Prep	351.2			405325	NLE3	ELLE	08/07/23 12:45 - 08/07/23 15:45 [1]
Total/NA	Analysis	351.2		1	405779	JCG7	ELLE	08/08/23 11:41
Total/NA	Analysis	410.4		1	925539	HTV	EET EDI	08/08/23 17:14
Total/NA	Analysis	4500 O C-2016		1	923454	PLS	EET EDI	07/27/23 14:15
Dissolved	Filtration	FILTRATION			923599	HTV	EET EDI	07/28/23 07:50
Dissolved	Analysis	4500 P E-2011		1	923606	HTV	EET EDI	07/28/23 08:00
Total/NA	Analysis	4500 P E-2011		1	923606	HTV	EET EDI	07/28/23 08:00
Total/NA	Analysis	5210 B-2016		1	923456	RXA	EET EDI	07/27/23 13:54
Total/NA	Analysis	9040C		1	925325	GSM	EET EDI	08/07/23 14:38
Total/NA	Analysis	9060A		1	925751	MMC	EET EDI	08/09/23 06:26
Dissolved	Filtration	FILTRATION			925237	IAA	EET EDI	08/07/23 08:18
Dissolved	Prep	SM 4500 P B			925298	IAA	EET EDI	08/07/23 12:51
Dissolved	Analysis	SM4500 P E-2011		5	925302	IAA	EET EDI	08/07/23 13:11

Eurofins Edison

Client Sample ID: NPDES 001

Lab Sample ID: 460-284985-1

Date Collected: 07/26/23 08:40

Matrix: Water

Date Received: 07/26/23 19:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	SM 4500 P B			925298	IAA	EET EDI	08/07/23 12:51
Total/NA	Analysis	SM4500 P E-2011		5	925302	IAA	EET EDI	08/07/23 13:11
Total/NA	Analysis	Total Nitrogen		1	921978	TJW	EET EDI	08/08/23 18:00

Client Sample ID: Basin 2

Lab Sample ID: 460-284985-2

Date Collected: 07/26/23 09:30

Matrix: Water

Date Received: 07/26/23 19:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		1	923383	OXG	EET EDI	07/27/23 12:57
Total/NA	Analysis	300.0		1	923384	OXG	EET EDI	07/27/23 12:57
Total/NA	Analysis	2340B-2011		1	925835	LBD	EET EDI	08/10/23 07:07
Total/NA	Prep	245.1			678311	NVK	EET BUF	07/31/23 11:34
Total/NA	Analysis	245.1		1	678432	NVK	EET BUF	07/31/23 14:39
Dissolved	Filtration	Filtration			402456	UDL9	ELLE	07/31/23 07:23
Dissolved	Prep	3005A			402834	UAMX	ELLE	08/01/23 00:08
Dissolved	Analysis	6020B		1	403047	F7JF	ELLE	08/01/23 08:34
Dissolved	Filtration	FILTRATION			924606	VAD	EET EDI	08/02/23 23:28
Dissolved	Prep	3010A			924607	VAD	EET EDI	08/02/23 23:35
Dissolved	Analysis	6020B		1	924585	CDC	EET EDI	08/03/23 00:57
Total Recoverable	Prep	3005A			402619	HUH3	ELLE	07/31/23 11:17
Total Recoverable	Analysis	6020B		1	405732	F7JF	ELLE	08/08/23 08:15
Total Recoverable	Prep	3005A			790894	RR	EET SAV	07/31/23 09:07
Total Recoverable	Analysis	6020B		1	791296	BWR	EET SAV	08/01/23 13:50
Total/NA	Prep	3010A			923730	GAE	EET EDI	07/28/23 18:00
Total/NA	Analysis	6020B		1	924131	CDC	EET EDI	07/31/23 15:59
Dissolved	Filtration	Filtration			442164	S1Z	EET PIT	08/02/23 07:00
Dissolved	Prep	3005A			442484	S1Z	EET PIT	08/07/23 08:20
Dissolved	Analysis	EPA 6020B		1	443625	KED	EET PIT	08/16/23 01:04
Total Recoverable	Prep	3005A			442484	S1Z	EET PIT	08/07/23 08:20
Total Recoverable	Analysis	EPA 6020B		1	443625	KED	EET PIT	08/16/23 00:39
Total/NA	Analysis	120.1		1	924088	MMC	EET EDI	07/31/23 13:28
Total/NA	Analysis	2310B-2011		1	925648	IAA	EET EDI	08/09/23 09:03
Total/NA	Analysis	2320B-2011		1	924252	AXP	EET EDI	07/31/23 18:10
Total/NA	Analysis	2540C-2015		1	923635	PLS	EET EDI	07/28/23 09:43
Total/NA	Analysis	2540D-2015		1	924005	PLS	EET EDI	07/31/23 07:43
Dissolved	Filtration	FILTRATION			924938	AXP	EET EDI	08/04/23 11:02
Dissolved	Analysis	350.1		1	924986	AXP	EET EDI	08/04/23 13:17
Total/NA	Analysis	350.1		1	924515	AXP	EET EDI	08/02/23 10:55
Total/NA	Prep	351.2			405325	NLE3	ELLE	08/07/23 12:45 - 08/07/23 15:45 [1]
Total/NA	Analysis	351.2		1	405779	JCG7	ELLE	08/08/23 11:43
Total/NA	Analysis	410.4		1	925539	HTV	EET EDI	08/08/23 17:14
Total/NA	Analysis	4500 O C-2016		1	923454	PLS	EET EDI	07/27/23 14:17

Client Sample ID: Basin 2

Lab Sample ID: 460-284985-2

Date Collected: 07/26/23 09:30

Matrix: Water

Date Received: 07/26/23 19:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Filtration	FILTRATION			923599	HTV	EET EDI	07/28/23 07:50
Dissolved	Analysis	4500 P E-2011		1	923606	HTV	EET EDI	07/28/23 08:00
Total/NA	Analysis	4500 P E-2011		1	923606	HTV	EET EDI	07/28/23 08:00
Total/NA	Analysis	5210 B-2016		1	923456	RXA	EET EDI	07/27/23 13:59
Total/NA	Analysis	9040C		1	925325	GSM	EET EDI	08/07/23 14:40
Total/NA	Analysis	9060A		1	925751	MMC	EET EDI	08/09/23 06:51
Dissolved	Filtration	FILTRATION			925237	IAA	EET EDI	08/07/23 08:18
Dissolved	Prep	SM 4500 P B			925298	IAA	EET EDI	08/07/23 12:51
Dissolved	Analysis	SM4500 P E-2011		2	925302	IAA	EET EDI	08/07/23 13:11
Total/NA	Prep	SM 4500 P B			925298	IAA	EET EDI	08/07/23 12:51
Total/NA	Analysis	SM4500 P E-2011		2	925302	IAA	EET EDI	08/07/23 13:11
Total/NA	Analysis	Total Nitrogen		1	921978	TJW	EET EDI	08/08/23 18:00

Client Sample ID: Basin 1

Lab Sample ID: 460-284985-3

Date Collected: 07/26/23 10:15

Matrix: Water

Date Received: 07/26/23 19:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		1	923383	OXG	EET EDI	07/27/23 13:12
Total/NA	Analysis	300.0		1	923384	OXG	EET EDI	07/27/23 13:12
Total/NA	Analysis	2340B-2011		1	925835	LBD	EET EDI	08/10/23 07:07
Total/NA	Prep	245.1			678311	NVK	EET BUF	07/31/23 11:34
Total/NA	Analysis	245.1		1	678432	NVK	EET BUF	07/31/23 14:40
Dissolved	Filtration	Filtration			402456	UDL9	ELLE	07/31/23 07:23
Dissolved	Prep	3005A			402834	UAMX	ELLE	08/01/23 00:08
Dissolved	Analysis	6020B		1	403047	F7JF	ELLE	08/01/23 08:36
Dissolved	Filtration	FILTRATION			924606	VAD	EET EDI	08/02/23 23:28
Dissolved	Prep	3010A			924607	VAD	EET EDI	08/02/23 23:35
Dissolved	Analysis	6020B		1	924585	CDC	EET EDI	08/03/23 00:59
Total Recoverable	Prep	3005A			402619	HUH3	ELLE	07/31/23 11:17
Total Recoverable	Analysis	6020B		1	405732	F7JF	ELLE	08/08/23 08:19
Total Recoverable	Prep	3005A			790894	RR	EET SAV	07/31/23 09:07
Total Recoverable	Analysis	6020B		1	791296	BWR	EET SAV	08/01/23 14:03
Total/NA	Prep	3010A			923730	GAE	EET EDI	07/28/23 18:00
Total/NA	Analysis	6020B		1	924131	CDC	EET EDI	07/31/23 16:02
Dissolved	Filtration	Filtration			442164	S1Z	EET PIT	08/02/23 07:00
Dissolved	Prep	3005A			442484	S1Z	EET PIT	08/07/23 08:20
Dissolved	Analysis	EPA 6020B		1	443625	KED	EET PIT	08/16/23 01:08
Total Recoverable	Prep	3005A			442484	S1Z	EET PIT	08/07/23 08:20
Total Recoverable	Analysis	EPA 6020B		1	443625	KED	EET PIT	08/16/23 00:50
Total/NA	Analysis	120.1		1	924088	MMC	EET EDI	07/31/23 13:28
Total/NA	Analysis	2310B-2011		1	925648	IAA	EET EDI	08/09/23 09:03
Total/NA	Analysis	2320B-2011		1	924252	AXP	EET EDI	07/31/23 18:17
Total/NA	Analysis	2540C-2015		1	923635	PLS	EET EDI	07/28/23 09:43

Lab Chronicle

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill - Anti-Degradation

Job ID: 460-284985-1

Client Sample ID: Basin 1

Date Collected: 07/26/23 10:15
Date Received: 07/26/23 19:00

Lab Sample ID: 460-284985-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	2540D-2015		1	924005	PLS	EET EDI	07/31/23 07:43
Dissolved	Filtration	FILTRATION			924938	AXP	EET EDI	08/04/23 11:02
Dissolved	Analysis	350.1		1	924986	AXP	EET EDI	08/04/23 13:19
Total/NA	Analysis	350.1		1	924515	AXP	EET EDI	08/02/23 11:19
Total/NA	Prep	351.2			405325	NLE3	ELLE	08/07/23 12:45 - 08/07/23 15:45 [1]
Total/NA	Analysis	351.2		1	405779	JCG7	ELLE	08/08/23 11:18
Total/NA	Analysis	410.4		1	925539	HTV	EET EDI	08/08/23 17:14
Total/NA	Analysis	4500 O C-2016		1	923454	PLS	EET EDI	07/27/23 14:19
Dissolved	Filtration	FILTRATION			923599	HTV	EET EDI	07/28/23 07:50
Dissolved	Analysis	4500 P E-2011		1	923606	HTV	EET EDI	07/28/23 08:00
Total/NA	Analysis	4500 P E-2011		1	923606	HTV	EET EDI	07/28/23 08:00
Total/NA	Analysis	5210 B-2016		1	923456	RXA	EET EDI	07/27/23 14:04
Total/NA	Analysis	9040C		1	925325	GSM	EET EDI	08/07/23 14:43
Total/NA	Analysis	9060A		1	925751	MMC	EET EDI	08/09/23 07:15
Dissolved	Filtration	FILTRATION			925237	IAA	EET EDI	08/07/23 08:18
Dissolved	Prep	SM 4500 P B			925298	IAA	EET EDI	08/07/23 12:51
Dissolved	Analysis	SM4500 P E-2011		1	925302	IAA	EET EDI	08/07/23 13:11
Total/NA	Prep	SM 4500 P B			925298	IAA	EET EDI	08/07/23 12:51
Total/NA	Analysis	SM4500 P E-2011		10	925302	IAA	EET EDI	08/07/23 13:11
Total/NA	Analysis	Total Nitrogen		1	921978	TJW	EET EDI	08/08/23 18:00

Client Sample ID: Up gradient

Date Collected: 07/26/23 11:15
Date Received: 07/26/23 19:00

Lab Sample ID: 460-284985-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		1	923383	OXG	EET EDI	07/27/23 14:06
Total/NA	Analysis	300.0		1	923384	OXG	EET EDI	07/27/23 14:06
Total/NA	Analysis	2340B-2011		1	925835	LBD	EET EDI	08/10/23 07:07
Total/NA	Prep	245.1			678311	NVK	EET BUF	07/31/23 11:34
Total/NA	Analysis	245.1		1	678432	NVK	EET BUF	07/31/23 14:42
Dissolved	Filtration	Filtration			402456	UDL9	ELLE	07/31/23 07:23
Dissolved	Prep	3005A			402834	UAMX	ELLE	08/01/23 00:08
Dissolved	Analysis	6020B		1	403047	F7JF	ELLE	08/01/23 08:44
Dissolved	Filtration	FILTRATION			924606	VAD	EET EDI	08/02/23 23:28
Dissolved	Prep	3010A			924607	VAD	EET EDI	08/02/23 23:35
Dissolved	Analysis	6020B		1	924585	CDC	EET EDI	08/03/23 01:01
Total Recoverable	Prep	3005A			402619	HUH3	ELLE	07/31/23 11:17
Total Recoverable	Analysis	6020B		1	405732	F7JF	ELLE	08/08/23 08:13
Total Recoverable	Prep	3005A			790894	RR	EET SAV	07/31/23 09:07
Total Recoverable	Analysis	6020B		1	791296	BWR	EET SAV	08/01/23 13:59
Total/NA	Prep	3010A			923730	GAE	EET EDI	07/28/23 18:00
Total/NA	Analysis	6020B		1	924131	CDC	EET EDI	07/31/23 16:04

Client Sample ID: Up gradient

Lab Sample ID: 460-284985-4

Date Collected: 07/26/23 11:15

Matrix: Water

Date Received: 07/26/23 19:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Filtration	Filtration			442164	S1Z	EET PIT	08/02/23 07:00
Dissolved	Prep	3005A			442484	S1Z	EET PIT	08/07/23 08:20
Dissolved	Analysis	EPA 6020B		1	443625	KED	EET PIT	08/16/23 01:12
Total Recoverable	Prep	3005A			442484	S1Z	EET PIT	08/07/23 08:20
Total Recoverable	Analysis	EPA 6020B		1	443625	KED	EET PIT	08/16/23 00:53
Total/NA	Analysis	120.1		1	924088	MMC	EET EDI	07/31/23 13:28
Total/NA	Analysis	2310B-2011		1	925648	IAA	EET EDI	08/09/23 09:03
Total/NA	Analysis	2320B-2011		1	924252	AXP	EET EDI	07/31/23 18:24
Total/NA	Analysis	2540C-2015		1	923635	PLS	EET EDI	07/28/23 09:43
Total/NA	Analysis	2540D-2015		1	924005	PLS	EET EDI	07/31/23 07:43
Dissolved	Filtration	FILTRATION			924938	AXP	EET EDI	08/04/23 11:02
Dissolved	Analysis	350.1		1	924986	AXP	EET EDI	08/04/23 13:20
Total/NA	Analysis	350.1		1	924515	AXP	EET EDI	08/02/23 11:20
Total/NA	Prep	351.2			405325	NLE3	ELLE	08/07/23 12:45 - 08/07/23 15:45 [1]
Total/NA	Analysis	351.2		1	405779	JCG7	ELLE	08/08/23 11:20
Total/NA	Analysis	410.4		1	925539	HTV	EET EDI	08/08/23 17:14
Total/NA	Analysis	4500 O C-2016		1	923454	PLS	EET EDI	07/27/23 14:36
Dissolved	Filtration	FILTRATION			923599	HTV	EET EDI	07/28/23 07:50
Dissolved	Analysis	4500 P E-2011		1	923606	HTV	EET EDI	07/28/23 08:00
Total/NA	Analysis	4500 P E-2011		1	923606	HTV	EET EDI	07/28/23 08:00
Total/NA	Analysis	5210 B-2016		1	923456	RXA	EET EDI	07/27/23 14:10
Total/NA	Analysis	9040C		1	925325	GSM	EET EDI	08/07/23 14:45
Total/NA	Analysis	9060A		1	925751	MMC	EET EDI	08/09/23 07:40
Dissolved	Filtration	FILTRATION			925781	HTV	EET EDI	08/09/23 13:00
Dissolved	Prep	SM 4500 P B			925782	HTV	EET EDI	08/09/23 13:15
Dissolved	Analysis	SM4500 P E-2011		1	925787	HTV	EET EDI	08/09/23 19:00
Total/NA	Prep	SM 4500 P B			925782	HTV	EET EDI	08/09/23 13:15
Total/NA	Analysis	SM4500 P E-2011		1	925787	HTV	EET EDI	08/09/23 19:00
Total/NA	Analysis	Total Nitrogen		1	921978	TJW	EET EDI	08/08/23 18:00

Client Sample ID: Clalifying Pond

Lab Sample ID: 460-284985-5

Date Collected: 07/26/23 11:30

Matrix: Water

Date Received: 07/26/23 19:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		1	923383	OXG	EET EDI	07/27/23 14:46
Total/NA	Analysis	300.0		1	923384	OXG	EET EDI	07/27/23 14:46
Total/NA	Analysis	2340B-2011		1	925835	LBD	EET EDI	08/10/23 07:07
Total/NA	Prep	245.1			678311	NVK	EET BUF	07/31/23 11:34
Total/NA	Analysis	245.1		1	678432	NVK	EET BUF	07/31/23 14:43
Dissolved	Filtration	Filtration			402456	UDL9	ELLE	07/31/23 07:23
Dissolved	Prep	3005A			402834	UAMX	ELLE	08/01/23 00:08
Dissolved	Analysis	6020B		1	403047	F7JF	ELLE	08/01/23 08:46

Lab Chronicle

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill - Anti-Degradation

Job ID: 460-284985-1

Client Sample ID: Clalifying Pond

Date Collected: 07/26/23 11:30
Date Received: 07/26/23 19:00

Lab Sample ID: 460-284985-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Filtration	FILTRATION			924606	VAD	EET EDI	08/02/23 23:28
Dissolved	Prep	3010A			924607	VAD	EET EDI	08/02/23 23:35
Dissolved	Analysis	6020B		1	924585	CDC	EET EDI	08/03/23 01:06
Total Recoverable	Prep	3005A			402619	HUH3	ELLE	07/31/23 11:17
Total Recoverable	Analysis	6020B		1	405732	F7JF	ELLE	08/08/23 08:25
Total Recoverable	Prep	3005A			790894	RR	EET SAV	07/31/23 09:07
Total Recoverable	Analysis	6020B		1	791296	BWR	EET SAV	08/01/23 13:46
Total/NA	Prep	3010A			923730	GAE	EET EDI	07/28/23 18:00
Total/NA	Analysis	6020B		1	924131	CDC	EET EDI	07/31/23 16:06
Dissolved	Filtration	Filtration			442164	S1Z	EET PIT	08/02/23 07:00
Dissolved	Prep	3005A			442484	S1Z	EET PIT	08/07/23 08:20
Dissolved	Analysis	EPA 6020B		1	443625	KED	EET PIT	08/16/23 01:15
Total Recoverable	Prep	3005A			442484	S1Z	EET PIT	08/07/23 08:20
Total Recoverable	Analysis	EPA 6020B		1	443625	KED	EET PIT	08/16/23 00:57
Total/NA	Analysis	120.1		1	924088	MMC	EET EDI	07/31/23 13:28
Total/NA	Analysis	2310B-2011		1	925648	IAA	EET EDI	08/09/23 09:03
Total/NA	Analysis	2320B-2011		1	924252	AXP	EET EDI	07/31/23 18:31
Total/NA	Analysis	2540C-2015		1	923635	PLS	EET EDI	07/28/23 09:43
Total/NA	Analysis	2540D-2015		1	924005	PLS	EET EDI	07/31/23 07:43
Dissolved	Filtration	FILTRATION			924938	AXP	EET EDI	08/04/23 11:02
Dissolved	Analysis	350.1		1	924986	AXP	EET EDI	08/04/23 13:22
Total/NA	Analysis	350.1		1	924515	AXP	EET EDI	08/02/23 11:22
Total/NA	Prep	351.2			405325	NLE3	ELLE	08/07/23 12:45 - 08/07/23 15:45 [1]
Total/NA	Analysis	351.2		1	405779	JCG7	ELLE	08/08/23 11:22
Total/NA	Analysis	410.4		1	925539	HTV	EET EDI	08/08/23 17:14
Total/NA	Analysis	4500 O C-2016		1	923454	PLS	EET EDI	07/27/23 14:23
Dissolved	Filtration	FILTRATION			923599	HTV	EET EDI	07/28/23 07:50
Dissolved	Analysis	4500 P E-2011		1	923606	HTV	EET EDI	07/28/23 08:00
Total/NA	Analysis	4500 P E-2011		1	923606	HTV	EET EDI	07/28/23 08:00
Total/NA	Analysis	5210 B-2016		1	923456	RXA	EET EDI	07/27/23 14:16
Total/NA	Analysis	9040C		1	925325	GSM	EET EDI	08/07/23 14:46
Total/NA	Analysis	9060A		1	925751	MMC	EET EDI	08/09/23 11:12
Dissolved	Filtration	FILTRATION			925781	HTV	EET EDI	08/09/23 13:00
Dissolved	Prep	SM 4500 P B			925782	HTV	EET EDI	08/09/23 13:15
Dissolved	Analysis	SM4500 P E-2011		1	925787	HTV	EET EDI	08/09/23 19:00
Total/NA	Prep	SM 4500 P B			925782	HTV	EET EDI	08/09/23 13:15
Total/NA	Analysis	SM4500 P E-2011		1	925787	HTV	EET EDI	08/09/23 19:00
Total/NA	Analysis	Total Nitrogen		1	921978	TJW	EET EDI	08/08/23 18:00

[1] This procedure uses a method stipulated length of time for the process. Both start and end times are displayed.

Lab Chronicle

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill - Anti-Degradation

Job ID: 460-284985-1

Laboratory References:

EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

EET EDI = Eurofins Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

EET PIT = Eurofins Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

EET SAV = Eurofins Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Accreditation/Certification Summary

Client: Heidelberg Materials Northeast LLC
Job ID: 460-284985-1
Project/Site: Rock Hill - Anti-Degradation

Laboratory: Eurofins Edison

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Connecticut	State	PH-0818	01-30-24
DE Haz. Subst. Cleanup Act (HSCA)	State	N/A	01-01-24
Georgia	State	12028 (NJ)	06-30-24
Massachusetts	State	M-NJ312	06-30-24
New Jersey	NELAP	12028	06-30-24
New York	NELAP	11452	08-13-23
Pennsylvania	NELAP	68-00522	03-01-24
Rhode Island	State	LAO00376	12-30-23
USDA	US Federal Programs	P330-20-00244	11-03-23

Laboratory: Eurofins Buffalo

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Arkansas DEQ	State	88-0686	07-06-23 *
Connecticut	State	PH-0568	03-31-24
Florida	NELAP	E87672	06-30-23 *
Georgia	State	10026 (NY)	03-31-24
Georgia	State Program	N/A	03-31-09 *
Illinois	NELAP	200003	09-30-23
Iowa	State	374	03-01-25
Iowa	State Program	374	03-01-09 *
Kansas	NELAP	E-10187	02-01-24
Kentucky (DW)	State	90029	01-01-24
Kentucky (UST)	State	108092	04-01-24
Kentucky (WW)	State	KY90029	12-31-23
Louisiana	NELAP	02031	06-30-23 *
Louisiana (All)	NELAP	02031	06-30-23 *
Maine	State	NY00044	12-04-24
Maryland	State	294	06-30-24
Massachusetts	State	M-NY044	07-01-24
Michigan	State	9937	04-01-24
Michigan	State Program	9937	04-01-09 *
New Hampshire	NELAP	2973	09-11-19 *
New Hampshire	NELAP	2337	11-17-23
New Jersey	NELAP	NY455	06-30-24
New York	NELAP	10026	03-31-24
Pennsylvania	NELAP	68-00281	07-31-23
Rhode Island	State	LAO00328	12-30-23
Texas	NELAP	T104704412-18-10	07-31-23
USDA	US Federal Programs	P330-18-00039	03-25-24
Virginia	NELAP	460185	09-14-23
Washington	State	C784	02-10-24
Wisconsin	State	998310390	08-31-23

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
A2LA	Dept. of Defense ELAP	0001.01	11-30-24
A2LA	ISO/IEC 17025	0001.01	11-30-24

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Accreditation/Certification Summary

Client: Heidelberg Materials Northeast LLC
Job ID: 460-284985-1
Project/Site: Rock Hill - Anti-Degradation

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC (Continued)

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alabama	State	43200	01-31-24
Alaska	State	PA00009	06-30-24
Alaska (UST)	State	17-027	02-28-24
Arizona	State	AZ0780	03-12-24
Arkansas DEQ	State	88-00660	08-08-23
California	State	2792	11-30-23
Colorado	State	PA00009	06-30-24
Connecticut	State	PH-0746	06-30-25
DE Haz. Subst. Cleanup Act (HSCA)	State	019-006 (PA cert)	01-31-24
Delaware (DW)	State	N/A	01-31-24
Florida	NELAP	E87997	06-30-24
Georgia (DW)	State	C048	01-31-24
Hawaii	State	N/A	01-31-24
Illinois	NELAP	200027	01-31-24
Iowa	State	361	03-01-24
Kansas	NELAP	E-10151	10-31-23
Kentucky (DW)	State	KY90088	12-31-23
Kentucky (UST)	State	0001.01	11-30-24
Kentucky (WW)	State	KY90088	12-31-23
Louisiana (All)	NELAP	02055	06-30-24
Maine	State	2019012	03-12-25
Maryland	State	100	06-30-24
Massachusetts	State	M-PA009	06-30-24
Michigan	State	9930	01-31-24
Minnesota	NELAP	042-999-487	12-31-23
Mississippi	State	023	01-31-24
Missouri	State	450	01-31-25
Montana (DW)	State	0098	01-01-24
Nebraska	State	NE-OS-32-17	01-31-24
New Hampshire	NELAP	2730	01-10-24
New Jersey	NELAP	PA011	06-30-24
New York	NELAP	10670	04-01-24
North Carolina (DW)	State	42705	07-31-24
North Carolina (WW/SW)	State	521	12-31-23
North Dakota	State	R-205	01-31-24
Oklahoma	NELAP	9804	08-31-23
Oregon	NELAP	PA200001	09-11-23
PALA	Canada	1978	09-16-24
Pennsylvania	NELAP	36-00037	01-31-24
Rhode Island	State	LAO00338	12-31-23
South Carolina	State	89002	01-31-24
Tennessee	State	02838	01-31-24
Texas	NELAP	T104704194-23-46	08-31-23
USDA	US Federal Programs	525-22-298-19481	10-25-25
Vermont	State	VT - 36037	10-28-23
Virginia	NELAP	460182	06-14-25
Washington	State	C457	04-11-24
West Virginia (DW)	State	9906 C	12-31-23
West Virginia DEP	State	055	07-31-24
Wyoming	State	8TMS-L	01-31-24

Client: Heidelberg Materials Northeast LLC
Job ID: 460-284985-1
Project/Site: Rock Hill - Anti-Degradation

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC (Continued)

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Wyoming (UST)	A2LA	0001.01	11-30-24

Laboratory: Eurofins Pittsburgh

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Arkansas DEQ	State	19-033-0	06-27-24
California	State	2891	04-30-24
Connecticut	State	PH-0688	09-30-24
Florida	NELAP	E871008	06-30-24
Georgia	State	PA 02-00416	04-30-24
Illinois	NELAP	004375	06-30-24
Kansas	NELAP	E-10350	01-31-24
Kentucky (UST)	State	162013	04-30-23 *
Kentucky (WW)	State	KY98043	12-31-23
Louisiana	NELAP	04041	06-30-22 *
Louisiana (All)	NELAP	04041	06-30-24
Maine	State	PA00164	03-06-24
Minnesota	NELAP	042-999-482	12-31-23
New Hampshire	NELAP	2030	04-04-24
New Jersey	NELAP	PA005	06-30-24
New York	NELAP	11182	04-01-24
North Carolina (WW/SW)	State	434	12-31-23
North Dakota	State	R-227	04-30-24
Oregon	NELAP	PA-2151	02-06-24
Pennsylvania	NELAP	02-00416	04-30-24
Rhode Island	State	LAO00362	12-31-22 *
South Carolina	State	89014	04-30-23 *
Texas	NELAP	T104704528	03-31-24
US Fish & Wildlife	US Federal Programs	058448	03-31-24
USDA	US Federal Programs	P330-16-00211	06-21-24
Utah	NELAP	PA001462019-8	05-31-24
Virginia	NELAP	10043	09-14-23
West Virginia DEP	State	142	01-31-24
Wisconsin	State	998027800	08-31-24

Laboratory: Eurofins Savannah

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
	AFCEE	SAVLAB	
Alabama	State	41450	06-30-24
ANAB	Dept. of Defense ELAP	L2463	09-22-24
Arkansas DEQ	State	19-015-0	02-01-24
California	State	2939	06-30-23 *
Florida	NELAP	E87052	06-30-24
Georgia	State	E87052	06-30-24
Georgia (DW)	State	803	06-30-24
Guam	State	19-007R	04-17-24
Illinois	NELAP	200022	11-30-23
Indiana	State	C-GA-02	06-30-24

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Accreditation/Certification Summary

Client: Heidelberg Materials Northeast LLC
Job ID: 460-284985-1
Project/Site: Rock Hill - Anti-Degradation

Laboratory: Eurofins Savannah (Continued)

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Iowa	State	353	07-01-25
Kentucky (UST)	State	NA	06-30-24
Louisiana	NELAP	30690	06-30-24
Louisiana (All)	NELAP	30690	06-30-24
Louisiana (DW)	State	LA009	12-31-23
Maine	State	GA00006	09-25-24
Maryland	State	250	12-31-23
Massachusetts	State	M-GA006	06-30-24
Michigan	State	9925	06-30-24
Mississippi	State	<cert No.>	06-30-24
Nebraska	State	NE-OS-7-04	06-30-24
New Jersey	NELAP	GA769	06-30-24
New Mexico	State	GA00006	06-30-24
North Carolina (DW)	State	13701	07-31-24
North Carolina (WW/SW)	State	269	08-01-23
Pennsylvania	NELAP	68-00474	06-30-24
Puerto Rico	State	GA00006	01-01-24
South Carolina	State	98001	06-30-23 *
Tennessee	State	TN02961	06-30-24
Texas	NELAP	T1047004185	08-14-23
Texas	TCEQ Water Supply	T104704185	06-30-24
USDA	US Federal Programs	P330-18-00313	09-03-24
Virginia	NELAP	460161	06-14-24
Wyoming	State	8TMS-L	06-30-23 *

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Method Summary

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill - Anti-Degradation

Job ID: 460-284985-1

Method	Method Description	Protocol	Laboratory
300.0	Anions, Ion Chromatography	EPA	EET EDI
2340B-2011	Total Hardness (as CaCO3) by calculation - SM Online, 2011	SM-Online	EET EDI
245.1	Mercury (CVAA)	EPA	EET BUF
6020B	Metals (ICP/MS)	SW846	EET EDI
6020B	Metals (ICP/MS)	SW846	EET SAV
6020B	Metals (ICP/MS)	SW846	ELLE
EPA 6020B	Metals (ICP/MS)	SW846	EET PIT
120.1	Conductivity, Specific Conductance	EPA	EET EDI
2310B-2011	Acidity	SM	EET EDI
2320B-2011	Alkalinity, Total	SM	EET EDI
2540C-2015	Total Dissolved Solids (Dried at 180 °C)	SM	EET EDI
2540D-2015	Total Suspended Solids (Dried at 103-105°C)	SM	EET EDI
350.1	Nitrogen, Ammonia	EPA	EET EDI
351.2	Nitrogen, Total Kjeldahl	EPA	ELLE
410.4	COD	EPA	EET EDI
4500 O C-2016	Oxygen, Dissolved	SM	EET EDI
4500 P E-2011	Orthophosphate	SM	EET EDI
5210 B-2016	BOD, 5-Day	SM	EET EDI
9040C	pH	SW846	EET EDI
9060A	Organic Carbon, Total (TOC)	SW846	EET EDI
SM4500 P E-2011	Phosphorus	SM	EET EDI
Total Nitrogen	Nitrogen, Total	EPA	EET EDI
245.1	Preparation, Mercury	EPA	EET BUF
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	EET PIT
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	EET SAV
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	ELLE
3010A	Preparation, Total Metals	SW846	EET EDI
351.2	Nitrogen, Total Kjeldahl	EPA	ELLE
FILTRATION	Sample Filtration	None	EET EDI
Filtration	Sample Filtration	None	EET PIT
Filtration	Sample Filtration	None	ELLE
SM 4500 P B	Phosphorous, Total and Ortho	SM	EET EDI

Protocol References:

EPA = US Environmental Protection Agency
None = None
SM = "Standard Methods For The Examination Of Water And Wastewater"
SM-Online = Standard Methods Online
SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600
EET EDI = Eurofins Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900
EET PIT = Eurofins Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058
EET SAV = Eurofins Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858
ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Sample Summary

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill - Anti-Degradation

Job ID: 460-284985-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
460-284985-1	NPDES 001	Water	07/26/23 08:40	07/26/23 19:00
460-284985-2	Basin 2	Water	07/26/23 09:30	07/26/23 19:00
460-284985-3	Basin 1	Water	07/26/23 10:15	07/26/23 19:00
460-284985-4	Up gradient	Water	07/26/23 11:15	07/26/23 19:00
460-284985-5	Clalifying Pond	Water	07/26/23 11:30	07/26/23 19:00

Eurofins Edison
777 New Durham Road
Edison, NJ 08817
Phone: 732-549-3900 Fax: 732-549-3679

450-KOP

Chain of Custody Record

22 °
31 °
29 °
KOP 2

eurofins

Client Information	Sampler: ERG	Lab PM: Gilmore, Julie L	Carrier Tracking No(s):	COC No: 460-170811 111665.1
Client Contact: Andrew Gutshall	Phone:	E-Mail: Julie.Gilmore@et.eurofinsus.com	State of Origin:	Page: Page 1 of 2
Company: Heidelberg Materials Northeast LLC	PWSID:			Job #: 284985
Address: 7660 Imperial Way	Due Date Requested:			
City: Allentown	TAT Requested (days):			
State, Zip: PA, 18195	Compliance Project: Δ Yes Δ No			
Phone: 610-366-4819(Tel)	PO #: Purchase Order not required			
Email: andrew.gutshall@heidelbergmaterials.com	WO #:			
Project Name: Rock Hill Anti-Degradation	Project #: 46011424			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:
A HCL, B NaOH, C Zn Acetate, D Nitric Acid, E NaHSO4, F MeOH, G Amch, H Asc, I Ice, J DI, K ED, L EDA, M Hexane, N None, O AsNaO2, P Na2O4S, Q Na2SO3, Other

SHORT HOLD

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020B Dissolved Lithium N	6020B Dissolved Lithium D	6020B Total Lithium S	351.2 Local Method N	6020B Dissolved Cd/Fe/Zn D	6020B (MOD) Total Fe S	350.1 410.4, 4500_P_E N	120.1 9040C N	350.1, 4500_P_E, 6020B N	2320B (MOD) Alkalinity N	6020B, SM2340B D	9060A TOC S	2540D, SM5210B_Calc N	4500_P_E_Ortho Dissolved Orthophosphate N	Total Number of containers	Special Instructions/Note:
	Preservation Code:																					
NPDES 001	7/26/23	0840	G	Water			X	X	X	X	X	X	X	X	X	X	X	X	X	X	2L	1
Basin 2	7/26/23	0930	G	Water			X	X	X	X	X	X	X	X	X	X	X	X	X	X	2D	2
Basin 1	7/26/23	1015	G	W			X	X	X	X	X	X	X	X	X	X	X	X	X	X	2D	3
Upgradient	7/26/23	1115	G	W			X	X	X	X	X	X	X	X	X	X	X	X	X	X	2D	4
Clarifying Pond	7/26/23	1130	G	W			X	X	X	X	X	X	X	X	X	X	X	X	X	X	2D	5

460-284985 Chain of Custody

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I II III IV Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	7/26/23	ERG		7/26/23 1527	ETN KOP
Relinquished by:	7/26/23 1822	ETN KOP		7/26 1822	ETA
Relinquished by:	7/26 1900	ETA		7/26/23 1900	ETA

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks:

Ver: 06/08/2021

8/17/2023

Eurofins Edison
777 New Durham Road
Edison, NJ 08817
Phone: 732-549-3900 Fax: 732-549-3679

450-KOP

Chain of Custody Record

22 - KOP 2
30
29 -

eurofins

Client Information	Sampler: EZG	Lab PM: Gilmore, Julie L	Carrier Tracking No(s):	COC No: 460-170811 111665.2
Client Contact: Andrew Gutshall	Phone:	E-Mail: Julie.Gilmore@et.eurofinsus.com	State of Origin:	Page: Page 2 of 2
Company: Heidelberg Materials Northeast LLC	PWSID:			Job #: 284985
Address: 7660 Imperial Way	Due Date Requested:			
City: Allentown	TAT Requested (days):			
State, Zip: PA, 18195	Compliance Project: Δ Yes Δ No			
Phone: 610-366-4819(Tel)	PO #: Purchase Order not required			
Email: andrew.gutshall@heidelbergmaterials.com	WO #:			
Project Name: Rock Hill Anti-Degradation	Project #: 46011424			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:
A HCL, B NaOH, C Zn Acetate, D Nitric Acid, E NaHSO4, F MeOH, G Amchlor, H Ascorbic Acid, I Ice, J DI Water, K EDTA, L EDA, M Hexane, N None, O AsNaO2, P Na2O4S, Q Na2SO3, R Na2S2O3, S H2SO4, T TSP Dodecahydrate, U Acetone, V MCAA, W pH 4-5, Y Trizma, Z other (specify)
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	4500_P_E_Ortho Total Orthophosphate	2540C TDS	300_ORGFM_28D, 300_ORGFMS	245.1 Local Method	6020B Total Aluminum	Acid Pres	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	N	D	D			
NPDES 001	7/24/23	0840	G	Water			X	X	X	X	X	X	21	1
Basin #2	7/26/23	0930	G	Water			X	X	X	X	X		20	2
Basin 1	7/26/23	1015	G	W			X	X	X	X	X		20	3
Upgradient	7/26/23	1115	G	W			X	X	X	X	X		20	4
Clarifying Pond	7/26/23	1130	G	W			X	X	X	X	X		20	5

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I II III IV Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		7/26/23	EZG		7/26/23 1329	EETN-KOP
2		7/26/23 1822	EETN KOP		7/26 1822	ETA
3		7/26 1900	ETA		7/26/23 1910	EETE

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks:

Ver: 06/08/2021

Eurofins TestAmerica Edison
Receipt Temperature and pH Log

Job Number: 284985

Number of Coolers: 3 IR Gun # 2

Cooler Temperatures

	RAW	CORRECTED		RAW	CORRECTED		RAW	CORRECTED
Cooler #1:	2.2 °C	2.2 °C	Cooler #4:	°C	°C	Cooler #7:	°C	°C
Cooler #2:	3.1 °C	3.1 °C	Cooler #5:	°C	°C	Cooler #8:	°C	°C
Cooler #3:	2.9 °C	2.9 °C	Cooler #6:	°C	°C	Cooler #9:	°C	°C

TALS Sample Number	Ammonia (pH<2)	COD (pH<2)	Nitrate Nitrite (pH<2)	Metals* (pH<2)	Hardness (pH<2)	Pest (pH 5-9)	EPH or OAM (pH<2)	Phenols (pH<2)	Sulfide (pH>9)	TKN (pH<2)	TOC (pH<2)	Total Cyanide (pH>12)	Total Phos (pH<2)	Other	Other
1	<2	<2		<2	<2					<2	<2		<2		
2	<2	<2		<2	<2					<2	<2		<2		
3	<2	<2		<2	<2					<2	<2		<2		
4	<2	<2		<2	<2					<2	<2		<2		
5	<2	<2		<2	<2					<2	<2		<2		

If pH adjustments are required record the information below*

Sample No(s). adjusted: _____

Preservative Name/Conc. _____ Volume of Preservative used (ml) _____

Lot # of Preservative(s) _____ Expiration Date: _____

The appropriate Project Manager and Department Manager should be notified about the samples which were pH adjusted.

Samples for Metal analysis which are out of compliance must be acidified at least 24 hours prior to analysis.

Initials: KDP Date: 7/28/23

EDS-WI-038 Rev 4.1
10/22/2019

Eurofins Edison
777 New Durham Road
Edison, NJ 08817
Phone: 732-549-3900 Fax: 732-549-3679

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Gilmore, Julie L	Carrier Tracking No(s):	COC No: 460-68782.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Julie.Gilmore@et.eurofinsus.com	State of Origin: Pennsylvania	Page: Page 1 of 1
Company: Eurofins Lancaster Laboratories Environm		Accreditations Required (See note):		Job #: 460-284985-1
Address: 2425 New Holland Pike, ,	Due Date Requested: 8/4/2023			
City: Lancaster	TAT Requested (days):			
State, Zip: PA, 17601				
Phone: 717-656-2300(Tel)	PO #:			
Email:	WO #:			
Project Name: Rock Hill - Anti-Degradation	Project #: 46011424			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)
Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020B/3005A (MOD) Total Fe	6020B/Filtration_ME Dissolved Cd/Fe/Zn	351.2/351.2_Prep	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
NPDES 001 (460-284985-1)	7/26/23	08:40 Eastern		Water			X	X	X	3	
Basin 2 (460-284985-2)	7/26/23	09:30 Eastern		Water			X	X	X	3	
Basin 1 (460-284985-3)	7/26/23	10:15 Eastern		Water			X	X	X	3	
Up gradient (460-284985-4)	7/26/23	11:15 Eastern		Water			X	X	X	3	
Clalifying Pond (460-284985-5)	7/26/23	11:30 Eastern		Water			X	X	X	3	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Northeast, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Northeast, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Northeast, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Northeast, LLC.

Possible Hazard Identification	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 1	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		7/27/23 1618	EETEL		7/27/23 1618	
2		7/27/23 1943	EETEL			
3					7/27/23 1943	EETEL

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 3.0/2.8

Eurofins Edison
777 New Durham Road
Edison, NJ 08817
Phone: 732-549-3900 Fax: 732-549-3679

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Gilmore, Julie L	Carrier Tracking No(s):	COC No: 460-68787 1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Julie.Gilmore@et.eurofinsus.com	State of Origin: Pennsylvania	Page: Page 1 of 1
Company: Eurofins Environment Testing Northeast,		Accreditations Required (See note):		Job #: 460-284985-1
Address: 10 Hazelwood Drive, ,	Due Date Requested: 8/4/2023			
City: Amherst	TAT Requested (days):			
State, Zip: NY, 14228-2298				
Phone: 716-691-2600(Tel) 716-691-7991(Fax)	PO #:			
Email:	WO #:			
Project Name: Rock Hill - Anti-Degradation	Project #: 46011424			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	245.1/245.1_Prep	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
NPDES 001 (460-284985-1)	7/26/23	08:40 Eastern		Water			X	1	
Basin 2 (460-284985-2)	7/26/23	09:30 Eastern		Water			X	1	
Basin 1 (460-284985-3)	7/26/23	10:15 Eastern		Water			X	1	
Up gradient (460-284985-4)	7/26/23	11:15 Eastern		Water			X	1	
Clalifying Pond (460-284985-5)	7/26/23	11:30 Eastern		Water			X	1	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Northeast, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Northeast, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Northeast, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Northeast, LLC

Possible Hazard Identification: Unconfirmed	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month): ☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 1	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time: 7/27/23 1900	Company: EET	Received by:	Date/Time: 7-28-23 1045	Company: TAB
Relinquished by:	Date/Time:	Company:	Received by:	Date/Time:	Company:
Relinquished by:	Date/Time:	Company:	Received by:	Date/Time:	Company:

Custody Seals Intact: ∆ Yes ∆ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 4.1 ICE

Eurofins Edison
777 New Durham Road
Edison, NJ 08817
Phone 732-549-3900 Fax: 732-549-3679

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler	Lab PM: Gilmore, Julie L	Carrier Tracking No(s).	COC No: 460-68786 1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Julie.Gilmore@et.eurofinsus.com	State of Origin: Pennsylvania	Page: Page 1 of 1
Company: Eurofins Environment Testing Southeast,		Accreditations Required (See note):		Job #: 460-284985-1
Address: 5102 LaRoche Avenue, ,	Due Date Requested: 8/7/2023			
City: Savannah	TAT Requested (days):			
State, Zip: GA, 31404				
Phone: 912-354-7858(Tel) 912-352-0165(Fax)	PO #:			
Email:	WO #:			
Project Name: Rock Hill - Anti-Degradation	Project #: 46011424			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020B/3005A Total Aluminum	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
NPDES 001 (460-284985-1)	7/26/23	08 40 Eastern		Water			X	1	
Basin 2 (460-284985-2)	7/26/23	09 30 Eastern		Water			X	1	
Basin 1 (460-284985-3)	7/26/23	10 15 Eastern		Water			X	1	
Up gradient (460-284985-4)	7/26/23	11 15 Eastern		Water			X	1	
Clarifying Pond (460-284985-5)	7/26/23	11 30 Eastern		Water			X	1	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Northeast, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories This sample shipment is forwarded under chain-of-custody If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed the samples must be shipped back to the Eurofins Environment Testing Northeast, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Northeast, LLC attention immediately If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Northeast, LLC.

Possible Hazard Identification	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested I, II, III, IV, Other (specify) Primary Deliverable Rank: 1	Special Instructions/QC Requirements

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		7/27/23 1900	EST	TH	07-28-23	
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time: 9:58	Company
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: ∆ Yes ∆ No	Custody Seal No	Cooler Temperature(s) °C and Other Remarks. 4.6-4.7

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8/1/2023

Login Sample Receipt Checklist

Client: Heidelberg Materials Northeast LLC

Job Number: 460-284985-1

Login Number: 284985
List Number: 1
Creator: Thundathorn, Sukanan 1

List Source: Eurofins Edison

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Heidelberg Materials Northeast LLC

Job Number: 460-284985-1

Login Number: 284985
List Number: 4
Creator: Yeager, Brian A

List Source: Eurofins Buffalo
List Creation: 07/28/23 02:26 PM

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	4.1 ICE
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	True	

Login Sample Receipt Checklist

Client: Heidelberg Materials Northeast LLC

Job Number: 460-284985-1

Login Number: 284985
List Number: 2
Creator: Wrye, Shaun

List Source: Eurofins Lancaster Laboratories Environment Testing, LLC
List Creation: 07/27/23 09:18 PM

Question	Answer	Comment
The cooler's custody seal is intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable (</=6C, not frozen).	True	
Cooler Temperature is recorded.	True	
WV: Container Temperature is acceptable (</=6C, not frozen).	N/A	
WV: Container Temperature is recorded.	N/A	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the containers received and the COC.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
There is sufficient vol. for all requested analyses.	True	
Is the Field Sampler's name present on COC?	False	Received project as a subcontract.
Sample custody seals are intact.	N/A	
VOA sample vials do not have headspace >6mm in diameter (none, if from WV)?	N/A	

Login Sample Receipt Checklist

Client: Heidelberg Materials Northeast LLC

Job Number: 460-284985-1

Login Number: 284985
List Number: 5
Creator: Kovitch, Christina M

List Source: Eurofins Pittsburgh
List Creation: 07/28/23 06:17 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Heidelberg Materials Northeast LLC

Job Number: 460-284985-1

Login Number: 284985
List Number: 3
Creator: Harley, Tynisha

List Source: Eurofins Savannah
List Creation: 07/28/23 12:06 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Lab Results

August 10, 2023

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Andrew Gutshall
Heidelberg Materials Northeast LLC
7660 Imperial Way
Allentown, Pennsylvania 18195

Generated 9/22/2023 8:50:35 AM

JOB DESCRIPTION

Rock Hill - Anti-Degradation

JOB NUMBER

460-285937-1

Eurofins Edison
777 New Durham Road
Edison NJ 08817

See page two for job notes and contact information.

my EOL

Job Notes

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The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing Northeast, LLC Project Manager.

Authorization



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Definitions/Glossary

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill - Anti-Degradation

Job ID: 460-285937-1

Qualifiers

HPLC/IC

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

General Chemistry

Qualifier	Qualifier Description
^-	Continuing Calibration Verification (CCV) is outside acceptance limits, low biased.
F1	MS and/or MSD recovery exceeds control limits.
H	Sample was prepped or analyzed beyond the specified holding time. This does not meet regulatory requirements.
H3	Sample was received and analyzed past holding time. This does not meet regulatory requirements.
HF	Parameter with a holding time of 15 minutes. Test performed by laboratory at client's request. Sample was analyzed outside of hold time.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 460-285937-1

Laboratory: Eurofins Edison

Narrative

Job Narrative
460-285937-1

Receipt
The samples were received on 8/10/2023 7:00 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 4.6º C and 5.0º C.

Receipt Exceptions
The method detection limit (MDL) is the lowest value detectable by the laboratory for a given analyte as determined by the MDL procedure detailed in EPA 40 CFR 136. Reported MDL values are adjusted for any dilutions and percent moisture (as applicable). The lab is unable to report values below the MDL.

GC Semi VOA
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Metals
Method Filtration: The following samples were not filtered within 15 minutes of sample collection as required by the method: NPDES 001 (460-285937-1), Basin 1 (460-285937-2), Upstream (460-285937-3) and Clarifying Pond (460-285937-4). The samples were filtered prior to analysis at the laboratory, and the results have been reported.

Method Filtration: The following samples were not filtered within 15 minutes of sample collection as required by the method: NPDES 001 (460-285937-1), Basin 1 (460-285937-2), Upstream (460-285937-3) and Clarifying Pond (460-285937-4). The sample(s) was filtered prior to analysis at the laboratory, and the results have been reported.

Method FILTRATION: The following samples were not filtered and preserved within 15 minutes of sample collection in accordance with 40 CFR Part 136 Table II, Footnote 7, method 6020B. The samples were filtered prior to analysis at the laboratory.

NPDES 001 (460-285937-1), Basin 1 (460-285937-2), Upstream (460-285937-3) and Clarifying Pond (460-285937-4)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

General Chemistry
Method SM 4500 P E: The following samples were not filtered within 15 minutes of sample collection as required by the method: NPDES 001 (460-285937-1), Basin 1 (460-285937-2), Upstream (460-285937-3), Clarifying Pond (460-285937-4), (MB 460-926095/5-A), (460-285937-D-1-A MS) and (460-285937-D-1-A MSD). The samples were filtered prior to analysis at the laboratory, and the results have been reported.

Method SM 4500 O C: This analysis is normally performed in the field and has a method-defined holding time of 15 minutes. The following samples has been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe: NPDES 001 (460-285937-1), Basin 1 (460-285937-2), Upstream (460-285937-3) and Clarifying Pond (460-285937-4).

Method 9040C: This analysis is normally performed in the field and has a method-defined holding time of 15 minutes. The following sample has been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe: Clarifying Pond (460-285937-4).

Methods 9040C, SM 4500 H+ B: This analysis is normally performed in the field and has a method-defined holding time of 15 minutes. The following samples has been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe: NPDES 001 (460-285937-1), Basin 1 (460-285937-2), Upstream (460-285937-3), (460-286314-B-4) and (460-286314-B-4 DU).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Client Sample ID: NPDES 001

Date Collected: 08/10/23 08:00
Date Received: 08/10/23 19:00

Lab Sample ID: 460-285937-1

Matrix: Water

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide	0.054	U	0.32	0.054	mg/L			08/11/23 11:45	1
Nitrate as N	**0.10**	**J**	0.16	0.070	mg/L			08/11/23 11:45	1
Chloride	**3.74**		0.32	0.039	mg/L			08/11/23 11:45	1
Nitrate Nitrite as N	**0.10**	**J**	0.16	0.070	mg/L			08/11/23 11:45	1
Nitrite as N	0.023	U	0.16	0.023	mg/L			08/11/23 11:45	1
Sulfate	**7.06**		0.48	0.095	mg/L			08/11/23 11:45	1

Method: SM-Online 2340B-2011 - Total Hardness (as CaCO3) by calculation - SM Online, 2011

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**103**		33.1	33.1	mg/L			08/28/23 07:54	1

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000043	U	0.00020	0.000043	mg/L		08/15/23 11:31	08/16/23 09:33	1

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**5.6**		4.0	0.91	ug/L		08/15/23 10:09	08/15/23 17:10	1
Boron	**86.8**		80.0	30.4	ug/L		08/15/23 10:09	08/15/23 17:10	1
Calcium	**24600**		500	53.6	ug/L		08/15/23 10:09	08/15/23 17:10	1
Copper	2.5	U	4.0	2.5	ug/L		08/15/23 10:09	08/15/23 17:10	1
Lead	0.84	U	1.2	0.84	ug/L		08/15/23 10:09	08/15/23 17:10	1
Magnesium	**10000**		200	46.9	ug/L		08/15/23 10:09	08/15/23 17:10	1
Manganese	**21.3**		8.0	1.5	ug/L		08/15/23 10:09	08/15/23 17:10	1
Nickel	0.91	U	4.0	0.91	ug/L		08/15/23 10:09	08/15/23 17:10	1
Potassium	**1200**		200	112	ug/L		08/15/23 10:09	08/15/23 17:10	1
Selenium	0.59	U	2.5	0.59	ug/L		08/15/23 10:09	08/15/23 17:10	1
Sodium	**4630**		500	219	ug/L		08/15/23 10:09	08/15/23 17:10	1
Strontium	**69.1**		4.0	0.50	ug/L		08/15/23 10:09	08/15/23 17:10	1
Zinc	6.5	U	16.0	6.5	ug/L		08/15/23 10:09	08/15/23 17:10	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	35.0	U	100	35.0	ug/L		08/14/23 08:09	08/15/23 00:47	1
Iron	**139**		50.0	20.0	ug/L		08/15/23 01:44	08/17/23 20:34	1

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**1390**		40.0	19.5	ug/L		08/14/23 22:20	08/15/23 00:02	1
Cadmium	0.15	U	0.50	0.15	ug/L		08/16/23 09:39	08/21/23 09:07	1
Arsenic	**1.4**	**J**	2.0	0.89	ug/L		08/14/23 22:20	08/15/23 00:02	1
Iron	**57.1**		50.0	20.0	ug/L		08/16/23 09:39	08/21/23 09:07	1
Calcium	**34100**		500	53.6	ug/L		08/14/23 22:20	08/15/23 00:02	1
Zinc	4.0	U	10.0	4.0	ug/L		08/16/23 09:39	08/21/23 09:07	1
Copper	**4.5**		4.0	2.5	ug/L		08/14/23 22:20	08/15/23 00:02	1
Iron	58.2	U	120	58.2	ug/L		08/14/23 22:20	08/15/23 00:02	1
Lead	0.84	U	1.2	0.84	ug/L		08/14/23 22:20	08/15/23 00:02	1
Magnesium	**50.4**	**J**	200	46.9	ug/L		08/14/23 22:20	08/15/23 00:02	1
Manganese	**3.1**	**J**	8.0	1.5	ug/L		08/14/23 22:20	08/15/23 00:02	1
Nickel	**6.2**		4.0	0.91	ug/L		08/14/23 22:20	08/15/23 00:02	1

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill - Anti-Degradation

Job ID: 460-285937-1

Client Sample ID: NPDES 001

Date Collected: 08/10/23 08:00
Date Received: 08/10/23 19:00

Lab Sample ID: 460-285937-1

Matrix: Water

Method: SW846 EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	1.3	U	5.0	1.3	ug/L		08/18/23 09:45	09/20/23 17:30	1

Method: SW846 EPA 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	1.3	U	5.0	1.3	ug/L		08/16/23 10:50	08/30/23 00:27	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Resistivity (EPA 120.1)	**0.00466**		0.000100	0.000100	Mohm-cm			08/21/23 14:13	1
Specific Conductance (EPA 120.1)	**214**		1.00	1.00	umhos/cm			08/21/23 14:13	1
Acidity (SM 2310B-2011)	20.0	U	20.0	20.0	mg/L			08/18/23 14:55	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-2011)	**94.3**		5.0	5.0	mg/L			08/14/23 18:25	1
Carbonate Alkalinity as CaCO3 (SM 2320B-2011)	5.0	U	5.0	5.0	mg/L			08/14/23 18:25	1
Alkalinity as CaCO3 to pH 4.5 (SM 2320B-2011)	**94.3**		5.0	5.0	mg/L			08/14/23 18:25	1
Total Dissolved Solids (SM 2540C-2015)	**129**		2.5	2.5	mg/L			08/16/23 09:16	1
Total Suspended Solids (SM 2540D-2015)	2.5	U	2.5	2.5	mg/L			08/17/23 07:00	1
Settleable Solids (SM 2540F-2015)	0.50	U	0.50	0.50	mL/L			08/12/23 00:45	1
Ammonia (EPA 350.1)	0.050	U	0.10	0.050	mg/L			08/22/23 12:35	1
Total Kjeldahl Nitrogen (EPA 351.2)	0.50	U	1.0	0.50	mg/L		08/17/23 15:00	08/18/23 11:39	1
Chemical Oxygen Demand (EPA 410.4)	**7.4**	**J**	10.0	3.3	mg/L			08/26/23 17:33	1
Oxygen, Dissolved (SM 4500 O C-2016)	**4.3**	**H H3**	1.0	1.0	mg/L			08/11/23 15:04	1
Orthophosphate as P (SM 4500 P E-2011)	**0.0057**	**J**	0.030	0.0050	mg/L			08/11/23 10:15	1
Carbonaceous Biochemical Oxygen Demand 5 (SM 5210 B-2016)	1.0	U	1.0	1.0	mg/L			08/11/23 16:18	1
pH (SW846 9040C)	**8.0**	**HF**	0.1	0.1	SU			08/22/23 12:39	1
Temperature (SW846 9040C)	**22.2**	**HF**	0.1	0.1	Degrees C			08/22/23 12:39	1
Total Organic Carbon (SW846 9060A)	**1.9**		1.0	0.53	mg/L			09/06/23 07:56	1
Phosphorus as PO4 (SM4500 P E-2011)	**6.2**		0.45	0.36	mg/L		08/24/23 12:35	08/24/23 12:54	5
Phosphorus as P (SM4500 P E-2011)	**2.0**	**^-**	0.15	0.12	mg/L		08/24/23 12:35	08/24/23 12:54	5
Nitrogen, Total (EPA Total Nitrogen)	0.50	U	0.50	0.50	mg/L			08/24/23 06:51	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (EPA 350.1)	0.050	U	0.10	0.050	mg/L			08/22/23 10:51	1
Orthophosphate as P (SM 4500 P E-2011)	0.0050	U	0.030	0.0050	mg/L			08/11/23 10:15	1
Phosphorus as PO4 (SM4500 P E-2011)	**6.1**		0.45	0.36	mg/L		08/24/23 12:35	08/24/23 12:54	5
Phosphorus as P (SM4500 P E-2011)	**2.0**		0.15	0.12	mg/L		08/24/23 12:35	08/24/23 12:54	5

Client Sample ID: Basin 1

Date Collected: 08/10/23 08:40
Date Received: 08/10/23 19:00

Lab Sample ID: 460-285937-2

Matrix: Water

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide	0.054	U	0.32	0.054	mg/L			08/11/23 12:00	1
Nitrate as N	0.070	U	0.16	0.070	mg/L			08/11/23 12:00	1
Chloride	**6.31**		0.32	0.039	mg/L			08/11/23 12:00	1
Nitrate Nitrite as N	0.070	U	0.16	0.070	mg/L			08/11/23 12:00	1
Nitrite as N	0.023	U	0.16	0.023	mg/L			08/11/23 12:00	1
Sulfate	**2.98**		0.48	0.095	mg/L			08/11/23 12:00	1

Method: SM-Online 2340B-2011 - Total Hardness (as CaCO3) by calculation - SM Online, 2011

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**126**		33.1	33.1	mg/L			08/28/23 07:54	1

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.000043**	**J**	0.00020	0.000043	mg/L		08/15/23 11:31	08/16/23 09:37	1

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**6.6**		4.0	0.91	ug/L		08/15/23 10:09	08/15/23 17:12	1
Boron	**104**		80.0	30.4	ug/L		08/15/23 10:09	08/15/23 17:12	1
Calcium	**28300**		500	53.6	ug/L		08/15/23 10:09	08/15/23 17:12	1
Copper	2.5	U	4.0	2.5	ug/L		08/15/23 10:09	08/15/23 17:12	1
Lead	0.84	U	1.2	0.84	ug/L		08/15/23 10:09	08/15/23 17:12	1
Magnesium	**13300**		200	46.9	ug/L		08/15/23 10:09	08/15/23 17:12	1
Manganese	**77.0**		8.0	1.5	ug/L		08/15/23 10:09	08/15/23 17:12	1
Nickel	0.91	U	4.0	0.91	ug/L		08/15/23 10:09	08/15/23 17:12	1
Potassium	**1240**		200	112	ug/L		08/15/23 10:09	08/15/23 17:12	1
Selenium	0.59	U	2.5	0.59	ug/L		08/15/23 10:09	08/15/23 17:12	1
Sodium	**5890**		500	219	ug/L		08/15/23 10:09	08/15/23 17:12	1
Strontium	**75.9**		4.0	0.50	ug/L		08/15/23 10:09	08/15/23 17:12	1
Zinc	**14.1**	**J**	16.0	6.5	ug/L		08/15/23 10:09	08/15/23 17:12	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	35.0	U	100	35.0	ug/L		08/14/23 08:09	08/15/23 00:51	1
Iron	**822**		50.0	20.0	ug/L		08/15/23 01:44	08/16/23 17:13	1

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**290**		40.0	19.5	ug/L		08/14/23 22:20	08/15/23 00:04	1
Cadmium	0.15	U	0.50	0.15	ug/L		08/16/23 09:39	08/21/23 09:13	1
Arsenic	0.89	U	2.0	0.89	ug/L		08/14/23 22:20	08/15/23 00:04	1
Iron	**49.9**	**J**	50.0	20.0	ug/L		08/16/23 09:39	08/21/23 09:13	1
Calcium	**6960**		500	53.6	ug/L		08/14/23 22:20	08/15/23 00:04	1
Zinc	**8.6**	**J**	10.0	4.0	ug/L		08/16/23 09:39	08/21/23 09:13	1
Copper	2.5	U	4.0	2.5	ug/L		08/14/23 22:20	08/15/23 00:04	1
Iron	58.2	U	120	58.2	ug/L		08/14/23 22:20	08/15/23 00:04	1
Lead	0.84	U	1.2	0.84	ug/L		08/14/23 22:20	08/15/23 00:04	1
Magnesium	46.9	U	200	46.9	ug/L		08/14/23 22:20	08/15/23 00:04	1
Manganese	**1.5**	**J**	8.0	1.5	ug/L		08/14/23 22:20	08/15/23 00:04	1
Nickel	**1.2**	**J**	4.0	0.91	ug/L		08/14/23 22:20	08/15/23 00:04	1

Client Sample ID: Basin 1

Date Collected: 08/10/23 08:40
Date Received: 08/10/23 19:00

Lab Sample ID: 460-285937-2

Matrix: Water

Method: SW846 EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	1.3	U	5.0	1.3	ug/L		08/18/23 09:45	09/20/23 17:33	1

Method: SW846 EPA 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	1.3	U	5.0	1.3	ug/L		08/16/23 10:50	08/29/23 23:58	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Resistivity (EPA 120.1)	**0.00386**		0.000100	0.000100	Mohm-cm			08/21/23 14:13	1
Specific Conductance (EPA 120.1)	**259**		1.00	1.00	umhos/cm			08/21/23 14:13	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-2011)	**127**		5.0	5.0	mg/L			08/14/23 18:32	1
Carbonate Alkalinity as CaCO3 (SM 2320B-2011)	5.0	U	5.0	5.0	mg/L			08/14/23 18:32	1
Alkalinity as CaCO3 to pH 4.5 (SM 2320B-2011)	**127**		5.0	5.0	mg/L			08/14/23 18:32	1
Total Dissolved Solids (SM 2540C-2015)	**172**		2.5	2.5	mg/L			08/16/23 09:16	1
Total Suspended Solids (SM 2540D-2015)	**2.5**		2.5	2.5	mg/L			08/17/23 07:00	1
Ammonia (EPA 350.1)	0.050	U	0.10	0.050	mg/L			08/22/23 12:36	1
Total Kjeldahl Nitrogen (EPA 351.2	**0.55**	**J**	1.0	0.50	mg/L		08/17/23 15:00	08/18/23 11:56	1
Chemical Oxygen Demand (EPA 410.4)	**10.0**		10.0	3.3	mg/L			08/26/23 17:33	1
Oxygen, Dissolved (SM 4500 O C-2016)	**6.7**	**H H3**	1.0	1.0	mg/L			08/11/23 15:06	1
Orthophosphate as P (SM 4500 P E-2011)	**0.0084**	**J**	0.030	0.0050	mg/L			08/11/23 10:15	1
Carbonaceous Biochemical Oxygen Demand 5 (SM 5210 B-2016)	**1.2**		1.0	1.0	mg/L			08/11/23 16:22	1
pH (SW846 9040C)	**8.1**	**HF**	0.1	0.1	SU			08/22/23 12:41	1
Temperature (SW846 9040C)	**22.3**	**HF**	0.1	0.1	Degrees C			08/22/23 12:41	1
Total Organic Carbon (SW846 9060A)	**2.9**		1.0	0.53	mg/L			09/06/23 10:02	1
Phosphorus as PO4 (SM4500 P E-2011)	**3.5**		0.45	0.36	mg/L		08/24/23 12:35	08/24/23 12:54	5
Phosphorus as P (SM4500 P E-2011)	**1.1**		0.15	0.12	mg/L		08/24/23 12:35	08/24/23 12:54	5
Nitrogen, Total (EPA Total Nitrogen)	**0.55**		0.50	0.50	mg/L			08/24/23 06:51	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (EPA 350.1)	0.050	U	0.10	0.050	mg/L			08/22/23 10:53	1
Orthophosphate as P (SM 4500 P E-2011)	0.0050	U	0.030	0.0050	mg/L			08/11/23 10:15	1
Phosphorus as PO4 (SM4500 P E-2011)	**3.4**		0.45	0.36	mg/L		08/24/23 12:35	08/24/23 12:54	5
Phosphorus as P (SM4500 P E-2011)	**1.1**		0.15	0.12	mg/L		08/24/23 12:35	08/24/23 12:54	5

Client Sample ID: Upstream

Date Collected: 08/10/23 09:15
Date Received: 08/10/23 19:00

Lab Sample ID: 460-285937-3

Matrix: Water

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide	0.054	U	0.32	0.054	mg/L			08/11/23 12:15	1
Nitrate as N	**0.072**	**J**	0.16	0.070	mg/L			08/11/23 12:15	1
Chloride	**2.22**		0.32	0.039	mg/L			08/11/23 12:15	1
Nitrate Nitrite as N	**0.072**	**J**	0.16	0.070	mg/L			08/11/23 12:15	1
Nitrite as N	0.023	U	0.16	0.023	mg/L			08/11/23 12:15	1
Sulfate	**33.7**		0.48	0.095	mg/L			08/11/23 12:15	1

Method: SM-Online 2340B-2011 - Total Hardness (as CaCO3) by calculation - SM Online, 2011

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**168**		33.1	33.1	mg/L			08/28/23 07:54	1

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.000043**	**J**	0.00020	0.000043	mg/L		08/15/23 11:31	08/16/23 09:39	1

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**20.5**		4.0	0.91	ug/L		08/15/23 10:09	08/15/23 16:38	1
Boron	**95.8**		80.0	30.4	ug/L		08/15/23 10:09	08/15/23 16:38	1
Calcium	**43800**		500	53.6	ug/L		08/15/23 10:09	08/15/23 16:38	1
Copper	2.5	U	4.0	2.5	ug/L		08/15/23 10:09	08/15/23 16:38	1
Lead	0.84	U	1.2	0.84	ug/L		08/15/23 10:09	08/15/23 16:38	1
Magnesium	**14200**		200	46.9	ug/L		08/15/23 10:09	08/15/23 16:38	1
Manganese	**480**		8.0	1.5	ug/L		08/15/23 10:09	08/15/23 16:38	1
Nickel	**2.5**	**J**	4.0	0.91	ug/L		08/15/23 10:09	08/15/23 16:38	1
Potassium	**1630**		200	112	ug/L		08/15/23 10:09	08/15/23 16:38	1
Selenium	0.59	U	2.5	0.59	ug/L		08/15/23 10:09	08/15/23 16:38	1
Sodium	**4510**		500	219	ug/L		08/15/23 10:09	08/15/23 16:38	1
Strontium	**178**		4.0	0.50	ug/L		08/15/23 10:09	08/15/23 16:38	1
Zinc	6.5	U	16.0	6.5	ug/L		08/15/23 10:09	08/15/23 16:38	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	35.0	U	100	35.0	ug/L		08/14/23 08:09	08/15/23 01:03	1
Iron	**702**		50.0	20.0	ug/L		08/15/23 01:44	08/16/23 17:11	1

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	19.5	U	40.0	19.5	ug/L		08/14/23 22:20	08/15/23 00:06	1
Cadmium	0.15	U	0.50	0.15	ug/L		08/16/23 09:39	08/21/23 09:11	1
Arsenic	0.89	U	2.0	0.89	ug/L		08/14/23 22:20	08/15/23 00:06	1
Iron	**28.4**	**J**	50.0	20.0	ug/L		08/16/23 09:39	08/21/23 09:11	1
Calcium	**24300**		500	53.6	ug/L		08/14/23 22:20	08/15/23 00:06	1
Zinc	**4.4**	**J**	10.0	4.0	ug/L		08/16/23 09:39	08/21/23 09:11	1
Copper	2.5	U	4.0	2.5	ug/L		08/14/23 22:20	08/15/23 00:06	1
Iron	58.2	U	120	58.2	ug/L		08/14/23 22:20	08/15/23 00:06	1
Lead	0.84	U	1.2	0.84	ug/L		08/14/23 22:20	08/15/23 00:06	1
Magnesium	**10100**		200	46.9	ug/L		08/14/23 22:20	08/15/23 00:06	1
Manganese	**1.7**	**J**	8.0	1.5	ug/L		08/14/23 22:20	08/15/23 00:06	1
Nickel	0.91	U	4.0	0.91	ug/L		08/14/23 22:20	08/15/23 00:06	1

Client Sample ID: Upstream

Date Collected: 08/10/23 09:15
Date Received: 08/10/23 19:00

Lab Sample ID: 460-285937-3

Matrix: Water

Method: SW846 EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	2.6	J	5.0	1.3	ug/L		08/18/23 09:45	09/20/23 17:37	1

Method: SW846 EPA 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	3.4	J	5.0	1.3	ug/L		08/16/23 10:50	08/30/23 00:38	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Resistivity (EPA 120.1)	0.00294		0.000100	0.000100	Mohm-cm			08/21/23 14:13	1
Specific Conductance (EPA 120.1)	340		1.00	1.00	umhos/cm			08/21/23 14:13	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-2011)	135		5.0	5.0	mg/L			08/14/23 18:40	1
Carbonate Alkalinity as CaCO3 (SM 2320B-2011)	5.0	U	5.0	5.0	mg/L			08/14/23 18:40	1
Alkalinity as CaCO3 to pH 4.5 (SM 2320B-2011)	135		5.0	5.0	mg/L			08/14/23 18:40	1
Total Dissolved Solids (SM 2540C-2015)	274		2.5	2.5	mg/L			08/16/23 09:16	1
Total Suspended Solids (SM 2540D-2015)	15.1		2.5	2.5	mg/L			08/17/23 07:00	1
Ammonia (EPA 350.1)	0.050	U	0.10	0.050	mg/L			08/22/23 12:38	1
Total Kjeldahl Nitrogen (EPA 351.2	0.59	J	1.0	0.50	mg/L		08/17/23 15:00	08/18/23 12:02	1
Chemical Oxygen Demand (EPA 410.4)	13.9		10.0	3.3	mg/L			08/26/23 17:33	1
Oxygen, Dissolved (SM 4500 O C-2016)	5.7	H H3	1.0	1.0	mg/L			08/11/23 15:09	1
Orthophosphate as P (SM 4500 P E-2011)	0.0071	J	0.030	0.0050	mg/L			08/11/23 10:15	1
Carbonaceous Biochemical Oxygen Demand 5 (SM 5210 B-2016)	1.0	U	1.0	1.0	mg/L			08/11/23 16:26	1
pH (SW846 9040C)	7.8	HF	0.1	0.1	SU			08/22/23 12:43	1
Temperature (SW846 9040C)	23.0	HF	0.1	0.1	Degrees C			08/22/23 12:43	1
Total Organic Carbon (SW846 9060A)	4.3		1.0	0.53	mg/L			09/06/23 10:26	1
Phosphorus as PO4 (SM4500 P E-2011)	1.5		0.18	0.14	mg/L		08/24/23 12:35	08/24/23 12:54	2
Phosphorus as P (SM4500 P E-2011)	0.49		0.060	0.046	mg/L		08/24/23 12:35	08/24/23 12:54	2
Nitrogen, Total (EPA Total Nitrogen)	0.66		0.50	0.50	mg/L			08/24/23 06:51	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (EPA 350.1)	0.050	U	0.10	0.050	mg/L			08/22/23 10:54	1
Orthophosphate as P (SM 4500 P E-2011)	0.0050	U	0.030	0.0050	mg/L			08/11/23 10:15	1
Phosphorus as PO4 (SM4500 P E-2011)	1.5		0.18	0.14	mg/L		08/24/23 12:35	08/24/23 12:54	2
Phosphorus as P (SM4500 P E-2011)	0.48		0.060	0.046	mg/L		08/24/23 12:35	08/24/23 12:54	2

Client Sample ID: Clarifying Pond

Date Collected: 08/10/23 09:45
Date Received: 08/10/23 19:00

Lab Sample ID: 460-285937-4

Matrix: Water

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide	0.054	U	0.32	0.054	mg/L			08/11/23 13:45	1
Nitrate as N	**0.13**	**J**	0.16	0.070	mg/L			08/11/23 13:45	1
Chloride	**1.34**		0.32	0.039	mg/L			08/11/23 13:45	1
Nitrate Nitrite as N	**0.13**	**J**	0.16	0.070	mg/L			08/11/23 13:45	1
Nitrite as N	0.023	U	0.16	0.023	mg/L			08/11/23 13:45	1
Sulfate	**5.77**		0.48	0.095	mg/L			08/11/23 13:45	1

Method: SM-Online 2340B-2011 - Total Hardness (as CaCO3) by calculation - SM Online, 2011

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**71.0**		33.1	33.1	mg/L			08/28/23 07:54	1

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.000098**	**J**	0.00020	0.000043	mg/L		08/15/23 11:31	08/16/23 09:40	1

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**10.7**		4.0	0.91	ug/L		08/15/23 10:09	08/15/23 16:31	1
Boron	**69.8**	**J**	80.0	30.4	ug/L		08/15/23 10:09	08/15/23 16:31	1
Calcium	**18200**		500	53.6	ug/L		08/15/23 10:09	08/15/23 16:31	1
Copper	**9.4**		4.0	2.5	ug/L		08/15/23 10:09	08/15/23 16:31	1
Lead	**2.4**		1.2	0.84	ug/L		08/15/23 10:09	08/15/23 16:31	1
Magnesium	**6200**		200	46.9	ug/L		08/15/23 10:09	08/15/23 16:31	1
Manganese	**156**		8.0	1.5	ug/L		08/15/23 10:09	08/15/23 16:31	1
Nickel	**4.5**		4.0	0.91	ug/L		08/15/23 10:09	08/15/23 16:31	1
Potassium	**1480**		200	112	ug/L		08/15/23 10:09	08/15/23 16:31	1
Selenium	0.59	U	2.5	0.59	ug/L		08/15/23 10:09	08/15/23 16:31	1
Sodium	**3540**		500	219	ug/L		08/15/23 10:09	08/15/23 16:31	1
Strontium	**35.5**		4.0	0.50	ug/L		08/15/23 10:09	08/15/23 16:31	1
Zinc	**8.2**	**J**	16.0	6.5	ug/L		08/15/23 10:09	08/15/23 16:31	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**569**		100	35.0	ug/L		08/14/23 08:09	08/15/23 00:43	1
Iron	**752**		50.0	20.0	ug/L		08/15/23 01:44	08/16/23 17:15	1

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	19.5	U	40.0	19.5	ug/L		08/14/23 22:20	08/15/23 00:11	1
Cadmium	0.15	U	0.50	0.15	ug/L		08/16/23 09:39	08/21/23 09:09	1
Arsenic	0.89	U	2.0	0.89	ug/L		08/14/23 22:20	08/15/23 00:11	1
Iron	**37.2**	**J**	50.0	20.0	ug/L		08/16/23 09:39	08/21/23 09:09	1
Calcium	**28400**		500	53.6	ug/L		08/14/23 22:20	08/15/23 00:11	1
Zinc	4.0	U	10.0	4.0	ug/L		08/16/23 09:39	08/21/23 09:09	1
Copper	2.5	U	4.0	2.5	ug/L		08/14/23 22:20	08/15/23 00:11	1
Iron	58.2	U	120	58.2	ug/L		08/14/23 22:20	08/15/23 00:11	1
Lead	0.84	U	1.2	0.84	ug/L		08/14/23 22:20	08/15/23 00:11	1
Magnesium	**13400**		200	46.9	ug/L		08/14/23 22:20	08/15/23 00:11	1
Manganese	**5.0**	**J**	8.0	1.5	ug/L		08/14/23 22:20	08/15/23 00:11	1
Nickel	0.91	U	4.0	0.91	ug/L		08/14/23 22:20	08/15/23 00:11	1

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill - Anti-Degradation

Job ID: 460-285937-1

Client Sample ID: Clarifying Pond

Date Collected: 08/10/23 09:45
Date Received: 08/10/23 19:00

Lab Sample ID: 460-285937-4

Matrix: Water

Method: SW846 EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	**1.5**	**J**	5.0	1.3	ug/L		08/18/23 09:45	09/20/23 01:52	1

Method: SW846 EPA 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	1.3	U	5.0	1.3	ug/L		08/16/23 10:50	08/30/23 00:01	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Resistivity (EPA 120.1)	**0.00716**		0.000100	0.000100	Mohm-cm			08/21/23 14:13	1
Specific Conductance (EPA 120.1)	**140**		1.00	1.00	umhos/cm			08/21/23 14:13	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-2011)	**65.5**		5.0	5.0	mg/L			08/14/23 18:47	1
Carbonate Alkalinity as CaCO3 (SM 2320B-2011)	5.0	U	5.0	5.0	mg/L			08/14/23 18:47	1
Alkalinity as CaCO3 to pH 4.5 (SM 2320B-2011)	**65.5**		5.0	5.0	mg/L			08/14/23 18:47	1
Total Dissolved Solids (SM 2540C-2015)	**86.0**		2.5	2.5	mg/L			08/16/23 09:16	1
Total Suspended Solids (SM 2540D-2015)	**16.1**		2.5	2.5	mg/L			08/17/23 07:00	1
Ammonia (EPA 350.1)	0.050	U	0.10	0.050	mg/L			08/22/23 12:39	1
Total Kjeldahl Nitrogen (EPA 351.2	**0.54**	**J**	1.0	0.50	mg/L		08/17/23 15:00	08/18/23 12:04	1
Chemical Oxygen Demand (EPA 410.4)	**18.8**		10.0	3.3	mg/L			08/26/23 17:33	1
Oxygen, Dissolved (SM 4500 O C-2016)	**4.2**	**H H3**	1.0	1.0	mg/L			08/11/23 15:11	1
Orthophosphate as P (SM 4500 P E-2011)	**0.017**	**J**	0.030	0.0050	mg/L			08/11/23 10:15	1
Carbonaceous Biochemical Oxygen Demand 5 (SM 5210 B-2016)	1.0	U	1.0	1.0	mg/L			08/11/23 16:31	1
pH (SW846 9040C)	**7.9**	**HF**	0.1	0.1	SU			08/22/23 13:07	1
Temperature (SW846 9040C)	**23.4**	**HF**	0.1	0.1	Degrees C			08/22/23 13:07	1
Total Organic Carbon (SW846 9060A)	**1.3**		1.0	0.53	mg/L			09/06/23 11:00	1
Phosphorus as PO4 (SM4500 P E-2011)	**0.093**	**F1**	0.090	0.071	mg/L		08/24/23 12:35	08/24/23 12:54	1
Phosphorus as P (SM4500 P E-2011)	**0.030**	**^-**	0.030	0.023	mg/L		08/24/23 12:35	08/24/23 12:54	1
Nitrogen, Total (EPA Total Nitrogen)	**0.67**		0.50	0.50	mg/L			08/31/23 06:51	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (EPA 350.1)	0.050	U	0.10	0.050	mg/L			08/22/23 10:56	1
Orthophosphate as P (SM 4500 P E-2011)	**0.0084**	**J**	0.030	0.0050	mg/L			08/11/23 10:15	1
Phosphorus as PO4 (SM4500 P E-2011)	0.071	U	0.090	0.071	mg/L		08/24/23 12:35	08/24/23 12:54	1
Phosphorus as P (SM4500 P E-2011)	0.023	U ^-	0.030	0.023	mg/L		08/24/23 12:35	08/24/23 12:54	1

Lab Chronicle

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill - Anti-Degradation

Job ID: 460-285937-1

Client Sample ID: NPDES 001

Date Collected: 08/10/23 08:00
Date Received: 08/10/23 19:00

Lab Sample ID: 460-285937-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		1	926066	OXG	EET EDI	08/11/23 11:45
Total/NA	Analysis	300.0		1	926067	OXG	EET EDI	08/11/23 11:45
Total/NA	Analysis	2340B-2011		1	928990	LBD	EET EDI	08/28/23 07:54
Total/NA	Prep	245.1			680016	VAK	EET BUF	08/15/23 11:31
Total/NA	Analysis	245.1		1	680241	NVK	EET BUF	08/16/23 09:33
Dissolved	Filtration	Filtration			408699	UAMX	ELLE	08/16/23 05:27
Dissolved	Prep	3005A			408858	HUH3	ELLE	08/16/23 09:39
Dissolved	Analysis	6020B		1	410628	F7JF	ELLE	08/21/23 09:07
Dissolved	Filtration	FILTRATION			926535	VAD	EET EDI	08/14/23 22:16
Dissolved	Prep	3010A			926536	VAD	EET EDI	08/14/23 22:20
Dissolved	Analysis	6020B		1	926463	YZH	EET EDI	08/15/23 00:02
Total Recoverable	Prep	3005A			408173	HUH3	ELLE	08/15/23 01:44
Total Recoverable	Analysis	6020B		1	409702	UCIG	ELLE	08/17/23 20:34
Total Recoverable	Prep	3005A			793258	RR	EET SAV	08/14/23 08:09
Total Recoverable	Analysis	6020B		1	793414	BWR	EET SAV	08/15/23 00:47
Total/NA	Prep	3010A			926618	NNW	EET EDI	08/15/23 10:09
Total/NA	Analysis	6020B		1	926692	CDC	EET EDI	08/15/23 17:10
Dissolved	Filtration	Filtration			443362	S1Z	EET PIT	08/15/23 10:00
Dissolved	Prep	3005A			443654	S1Z	EET PIT	08/16/23 10:50
Dissolved	Analysis	EPA 6020B		1	445077	KED	EET PIT	08/30/23 00:27
Total Recoverable	Prep	3005A			443889	S1Z	EET PIT	08/18/23 09:45
Total Recoverable	Analysis	EPA 6020B		1	447184	MRG	EET PIT	09/20/23 17:30
Total/NA	Analysis	120.1		1	927708	MMC	EET EDI	08/21/23 14:13
Total/NA	Analysis	2310B-2011		1	927380	RAK	EET EDI	08/18/23 14:55
Total/NA	Analysis	2320B-2011		1	926597	AXP	EET EDI	08/14/23 18:25
Total/NA	Analysis	2540C-2015		1	926839	PLS	EET EDI	08/16/23 09:16
Total/NA	Analysis	2540D-2015		1	927019	AMN	EET EDI	08/17/23 07:00
Total/NA	Analysis	2540F-2015		1	926195	VBG	EET EDI	08/12/23 00:45
Dissolved	Filtration	FILTRATION			927862	AXP	EET EDI	08/22/23 10:15
Dissolved	Analysis	350.1		1	927872	AXP	EET EDI	08/22/23 10:51
Total/NA	Analysis	350.1		1	927872	AXP	EET EDI	08/22/23 12:35
Total/NA	Prep	351.2			409569	NLE3	ELLE	08/17/23 15:00 - 08/17/23 18:00 [1]
Total/NA	Analysis	351.2		1	410095	JCG7	ELLE	08/18/23 11:39
Total/NA	Analysis	410.4		1	928804	HTV	EET EDI	08/26/23 17:33
Total/NA	Analysis	4500 O C-2016		1	926134	PLS	EET EDI	08/11/23 15:04
Dissolved	Filtration	FILTRATION			926095	HTV	EET EDI	08/11/23 10:00
Dissolved	Analysis	4500 P E-2011		1	926106	HTV	EET EDI	08/11/23 10:15
Total/NA	Analysis	4500 P E-2011		1	926106	HTV	EET EDI	08/11/23 10:15
Total/NA	Analysis	5210 B-2016		1	926150	RXA	EET EDI	08/11/23 16:18
Total/NA	Analysis	9040C		1	927919	GSM	EET EDI	08/22/23 12:39
Total/NA	Analysis	9060A		1	930719	HTV	EET EDI	09/06/23 07:56

Lab Chronicle

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill - Anti-Degradation

Job ID: 460-285937-1

Client Sample ID: NPDES 001

Lab Sample ID: 460-285937-1

Date Collected: 08/10/23 08:00
Date Received: 08/10/23 19:00

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Filtration	FILTRATION			928370	IAA	EET EDI	08/24/23 11:50
Dissolved	Prep	SM 4500 P B			928381	IAA	EET EDI	08/24/23 12:35
Dissolved	Analysis	SM4500 P E-2011		5	928383	IAA	EET EDI	08/24/23 12:54
Total/NA	Prep	SM 4500 P B			928381	IAA	EET EDI	08/24/23 12:35
Total/NA	Analysis	SM4500 P E-2011		5	928383	IAA	EET EDI	08/24/23 12:54
Total/NA	Analysis	Total Nitrogen		1	927617	TJW	EET EDI	08/24/23 06:51

Client Sample ID: Basin 1

Lab Sample ID: 460-285937-2

Date Collected: 08/10/23 08:40
Date Received: 08/10/23 19:00

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		1	926066	OXG	EET EDI	08/11/23 12:00
Total/NA	Analysis	300.0		1	926067	OXG	EET EDI	08/11/23 12:00
Total/NA	Analysis	2340B-2011		1	928990	LBD	EET EDI	08/28/23 07:54
Total/NA	Prep	245.1			680016	VAK	EET BUF	08/15/23 11:31
Total/NA	Analysis	245.1		1	680241	NVK	EET BUF	08/16/23 09:37
Dissolved	Filtration	Filtration			408699	UAMX	ELLE	08/16/23 05:27
Dissolved	Prep	3005A			408858	HUH3	ELLE	08/16/23 09:39
Dissolved	Analysis	6020B		1	410628	F7JF	ELLE	08/21/23 09:13
Dissolved	Filtration	FILTRATION			926535	VAD	EET EDI	08/14/23 22:16
Dissolved	Prep	3010A			926536	VAD	EET EDI	08/14/23 22:20
Dissolved	Analysis	6020B		1	926463	YZH	EET EDI	08/15/23 00:04
Total Recoverable	Prep	3005A			408173	HUH3	ELLE	08/15/23 01:44
Total Recoverable	Analysis	6020B		1	409140	UCIG	ELLE	08/16/23 17:13
Total Recoverable	Prep	3005A			793258	RR	EET SAV	08/14/23 08:09
Total Recoverable	Analysis	6020B		1	793414	BWR	EET SAV	08/15/23 00:51
Total/NA	Prep	3010A			926618	NNW	EET EDI	08/15/23 10:09
Total/NA	Analysis	6020B		1	926692	CDC	EET EDI	08/15/23 17:12
Dissolved	Filtration	Filtration			443362	S1Z	EET PIT	08/15/23 10:00
Dissolved	Prep	3005A			443654	S1Z	EET PIT	08/16/23 10:50
Dissolved	Analysis	EPA 6020B		1	445077	KED	EET PIT	08/29/23 23:58
Total Recoverable	Prep	3005A			443889	S1Z	EET PIT	08/18/23 09:45
Total Recoverable	Analysis	EPA 6020B		1	447184	MRG	EET PIT	09/20/23 17:33
Total/NA	Analysis	120.1		1	927708	MMC	EET EDI	08/21/23 14:13
Total/NA	Analysis	2320B-2011		1	926597	AXP	EET EDI	08/14/23 18:32
Total/NA	Analysis	2540C-2015		1	926839	PLS	EET EDI	08/16/23 09:16
Total/NA	Analysis	2540D-2015		1	927019	AMN	EET EDI	08/17/23 07:00
Dissolved	Filtration	FILTRATION			927862	AXP	EET EDI	08/22/23 10:15
Dissolved	Analysis	350.1		1	927872	AXP	EET EDI	08/22/23 10:53
Total/NA	Analysis	350.1		1	927872	AXP	EET EDI	08/22/23 12:36
Total/NA	Prep	351.2			409569	NLE3	ELLE	08/17/23 15:00 - 08/17/23 18:00 [1]
Total/NA	Analysis	351.2		1	410095	JCG7	ELLE	08/18/23 11:56
Total/NA	Analysis	410.4		1	928804	HTV	EET EDI	08/26/23 17:33

Client Sample ID: Basin 1

Lab Sample ID: 460-285937-2

Date Collected: 08/10/23 08:40

Matrix: Water

Date Received: 08/10/23 19:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	4500 O C-2016		1	926134	PLS	EET EDI	08/11/23 15:06
Dissolved	Filtration	FILTRATION			926095	HTV	EET EDI	08/11/23 10:00
Dissolved	Analysis	4500 P E-2011		1	926106	HTV	EET EDI	08/11/23 10:15
Total/NA	Analysis	4500 P E-2011		1	926106	HTV	EET EDI	08/11/23 10:15
Total/NA	Analysis	5210 B-2016		1	926150	RXA	EET EDI	08/11/23 16:22
Total/NA	Analysis	9040C		1	927919	GSM	EET EDI	08/22/23 12:41
Total/NA	Analysis	9060A		1	930719	HTV	EET EDI	09/06/23 10:02
Dissolved	Filtration	FILTRATION			928370	IAA	EET EDI	08/24/23 11:50
Dissolved	Prep	SM 4500 P B			928381	IAA	EET EDI	08/24/23 12:35
Dissolved	Analysis	SM4500 P E-2011		5	928383	IAA	EET EDI	08/24/23 12:54
Total/NA	Prep	SM 4500 P B			928381	IAA	EET EDI	08/24/23 12:35
Total/NA	Analysis	SM4500 P E-2011		5	928383	IAA	EET EDI	08/24/23 12:54
Total/NA	Analysis	Total Nitrogen		1	927617	TJW	EET EDI	08/24/23 06:51

Client Sample ID: Upstream

Lab Sample ID: 460-285937-3

Date Collected: 08/10/23 09:15

Matrix: Water

Date Received: 08/10/23 19:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		1	926066	OXG	EET EDI	08/11/23 12:15
Total/NA	Analysis	300.0		1	926067	OXG	EET EDI	08/11/23 12:15
Total/NA	Analysis	2340B-2011		1	928990	LBD	EET EDI	08/28/23 07:54
Total/NA	Prep	245.1			680016	VAK	EET BUF	08/15/23 11:31
Total/NA	Analysis	245.1		1	680241	NVK	EET BUF	08/16/23 09:39
Dissolved	Filtration	Filtration			408699	UAMX	ELLE	08/16/23 05:27
Dissolved	Prep	3005A			408858	HUH3	ELLE	08/16/23 09:39
Dissolved	Analysis	6020B		1	410628	F7JF	ELLE	08/21/23 09:11
Dissolved	Filtration	FILTRATION			926535	VAD	EET EDI	08/14/23 22:16
Dissolved	Prep	3010A			926536	VAD	EET EDI	08/14/23 22:20
Dissolved	Analysis	6020B		1	926463	YZH	EET EDI	08/15/23 00:06
Total Recoverable	Prep	3005A			408173	HUH3	ELLE	08/15/23 01:44
Total Recoverable	Analysis	6020B		1	409140	UCIG	ELLE	08/16/23 17:11
Total Recoverable	Prep	3005A			793258	RR	EET SAV	08/14/23 08:09
Total Recoverable	Analysis	6020B		1	793414	BWR	EET SAV	08/15/23 01:03
Total/NA	Prep	3010A			926618	NNW	EET EDI	08/15/23 10:09
Total/NA	Analysis	6020B		1	926692	CDC	EET EDI	08/15/23 16:38
Dissolved	Filtration	Filtration			443362	S1Z	EET PIT	08/15/23 10:00
Dissolved	Prep	3005A			443654	S1Z	EET PIT	08/16/23 10:50
Dissolved	Analysis	EPA 6020B		1	445077	KED	EET PIT	08/30/23 00:38
Total Recoverable	Prep	3005A			443889	S1Z	EET PIT	08/18/23 09:45
Total Recoverable	Analysis	EPA 6020B		1	447184	MRG	EET PIT	09/20/23 17:37
Total/NA	Analysis	120.1		1	927708	MMC	EET EDI	08/21/23 14:13
Total/NA	Analysis	2320B-2011		1	926597	AXP	EET EDI	08/14/23 18:40
Total/NA	Analysis	2540C-2015		1	926839	PLS	EET EDI	08/16/23 09:16

Lab Chronicle

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill - Anti-Degradation

Job ID: 460-285937-1

Client Sample ID: Upstream

Date Collected: 08/10/23 09:15
Date Received: 08/10/23 19:00

Lab Sample ID: 460-285937-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	2540D-2015		1	927019	AMN	EET EDI	08/17/23 07:00
Dissolved	Filtration	FILTRATION			927862	AXP	EET EDI	08/22/23 10:15
Dissolved	Analysis	350.1		1	927872	AXP	EET EDI	08/22/23 10:54
Total/NA	Analysis	350.1		1	927872	AXP	EET EDI	08/22/23 12:38
Total/NA	Prep	351.2			409569	NLE3	ELLE	08/17/23 15:00 - 08/17/23 18:00 [1]
Total/NA	Analysis	351.2		1	410095	JCG7	ELLE	08/18/23 12:02
Total/NA	Analysis	410.4		1	928804	HTV	EET EDI	08/26/23 17:33
Total/NA	Analysis	4500 O C-2016		1	926134	PLS	EET EDI	08/11/23 15:09
Dissolved	Filtration	FILTRATION			926095	HTV	EET EDI	08/11/23 10:00
Dissolved	Analysis	4500 P E-2011		1	926106	HTV	EET EDI	08/11/23 10:15
Total/NA	Analysis	4500 P E-2011		1	926106	HTV	EET EDI	08/11/23 10:15
Total/NA	Analysis	5210 B-2016		1	926150	RXA	EET EDI	08/11/23 16:26
Total/NA	Analysis	9040C		1	927919	GSM	EET EDI	08/22/23 12:43
Total/NA	Analysis	9060A		1	930719	HTV	EET EDI	09/06/23 10:26
Dissolved	Filtration	FILTRATION			928370	IAA	EET EDI	08/24/23 11:50
Dissolved	Prep	SM 4500 P B			928381	IAA	EET EDI	08/24/23 12:35
Dissolved	Analysis	SM4500 P E-2011		2	928383	IAA	EET EDI	08/24/23 12:54
Total/NA	Prep	SM 4500 P B			928381	IAA	EET EDI	08/24/23 12:35
Total/NA	Analysis	SM4500 P E-2011		2	928383	IAA	EET EDI	08/24/23 12:54
Total/NA	Analysis	Total Nitrogen		1	927617	TJW	EET EDI	08/24/23 06:51

Client Sample ID: Clarifying Pond

Date Collected: 08/10/23 09:45
Date Received: 08/10/23 19:00

Lab Sample ID: 460-285937-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		1	926066	OXG	EET EDI	08/11/23 13:45
Total/NA	Analysis	300.0		1	926067	OXG	EET EDI	08/11/23 13:45
Total/NA	Analysis	2340B-2011		1	928990	LBD	EET EDI	08/28/23 07:54
Total/NA	Prep	245.1			680016	VAK	EET BUF	08/15/23 11:31
Total/NA	Analysis	245.1		1	680241	NVK	EET BUF	08/16/23 09:40
Dissolved	Filtration	Filtration			408699	UAMX	ELLE	08/16/23 05:27
Dissolved	Prep	3005A			408858	HUH3	ELLE	08/16/23 09:39
Dissolved	Analysis	6020B		1	410628	F7JF	ELLE	08/21/23 09:09
Dissolved	Filtration	FILTRATION			926535	VAD	EET EDI	08/14/23 22:16
Dissolved	Prep	3010A			926536	VAD	EET EDI	08/14/23 22:20
Dissolved	Analysis	6020B		1	926463	YZH	EET EDI	08/15/23 00:11
Total Recoverable	Prep	3005A			408173	HUH3	ELLE	08/15/23 01:44
Total Recoverable	Analysis	6020B		1	409140	UCIG	ELLE	08/16/23 17:15
Total Recoverable	Prep	3005A			793258	RR	EET SAV	08/14/23 08:09
Total Recoverable	Analysis	6020B		1	793414	BWR	EET SAV	08/15/23 00:43
Total/NA	Prep	3010A			926618	NNW	EET EDI	08/15/23 10:09
Total/NA	Analysis	6020B		1	926692	CDC	EET EDI	08/15/23 16:31

Lab Chronicle

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill - Anti-Degradation

Job ID: 460-285937-1

Client Sample ID: Clarifying Pond

Date Collected: 08/10/23 09:45
Date Received: 08/10/23 19:00

Lab Sample ID: 460-285937-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Filtration	Filtration			443362	S1Z	EET PIT	08/15/23 10:00
Dissolved	Prep	3005A			443654	S1Z	EET PIT	08/16/23 10:50
Dissolved	Analysis	EPA 6020B		1	445077	KED	EET PIT	08/30/23 00:01
Total Recoverable	Prep	3005A			443889	S1Z	EET PIT	08/18/23 09:45
Total Recoverable	Analysis	EPA 6020B		1	447124	KED	EET PIT	09/20/23 01:52
Total/NA	Analysis	120.1		1	927708	MMC	EET EDI	08/21/23 14:13
Total/NA	Analysis	2320B-2011		1	926597	AXP	EET EDI	08/14/23 18:47
Total/NA	Analysis	2540C-2015		1	926839	PLS	EET EDI	08/16/23 09:16
Total/NA	Analysis	2540D-2015		1	927019	AMN	EET EDI	08/17/23 07:00
Dissolved	Filtration	FILTRATION			927862	AXP	EET EDI	08/22/23 10:15
Dissolved	Analysis	350.1		1	927872	AXP	EET EDI	08/22/23 10:56
Total/NA	Analysis	350.1		1	927872	AXP	EET EDI	08/22/23 12:39
Total/NA	Prep	351.2			409569	NLE3	ELLE	08/17/23 15:00 - 08/17/23 18:00 [1]
Total/NA	Analysis	351.2		1	410095	JCG7	ELLE	08/18/23 12:04
Total/NA	Analysis	410.4		1	928804	HTV	EET EDI	08/26/23 17:33
Total/NA	Analysis	4500 O C-2016		1	926134	PLS	EET EDI	08/11/23 15:11
Dissolved	Filtration	FILTRATION			926095	HTV	EET EDI	08/11/23 10:00
Dissolved	Analysis	4500 P E-2011		1	926106	HTV	EET EDI	08/11/23 10:15
Total/NA	Analysis	4500 P E-2011		1	926106	HTV	EET EDI	08/11/23 10:15
Total/NA	Analysis	5210 B-2016		1	926150	RXA	EET EDI	08/11/23 16:31
Total/NA	Analysis	9040C		1	927919	GSM	EET EDI	08/22/23 13:07
Total/NA	Analysis	9060A		1	930719	HTV	EET EDI	09/06/23 11:00
Dissolved	Filtration	FILTRATION			928370	IAA	EET EDI	08/24/23 11:50
Dissolved	Prep	SM 4500 P B			928381	IAA	EET EDI	08/24/23 12:35
Dissolved	Analysis	SM4500 P E-2011		1	928383	IAA	EET EDI	08/24/23 12:54
Total/NA	Prep	SM 4500 P B			928381	IAA	EET EDI	08/24/23 12:35
Total/NA	Analysis	SM4500 P E-2011		1	928383	IAA	EET EDI	08/24/23 12:54
Total/NA	Analysis	Total Nitrogen		1	927617	TJW	EET EDI	08/31/23 06:51

[1] This procedure uses a method stipulated length of time for the process. Both start and end times are displayed.

Laboratory References:

EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600
EET EDI = Eurofins Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900
EET PIT = Eurofins Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058
EET SAV = Eurofins Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858
ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300
Microbac = Marietta, OH, 158 Starlite Drive, Marietta, OH 45750

Accreditation/Certification Summary

Client: Heidelberg Materials Northeast LLC
Job ID: 460-285937-1
Project/Site: Rock Hill - Anti-Degradation

Laboratory: Eurofins Edison

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Connecticut	State	PH-0818	01-30-24
DE Haz. Subst. Cleanup Act (HSCA)	State	N/A	01-01-24
Georgia	State	12028 (NJ)	06-30-24
Massachusetts	State	M-NJ312	06-30-24
New Jersey	NELAP	12028	06-30-24
New York	NELAP	11452	04-01-24
Pennsylvania	NELAP	68-00522	03-01-24
Rhode Island	State	LAO00376	12-30-23
USDA	US Federal Programs	P330-20-00244	11-03-23

Laboratory: Eurofins Buffalo

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Arkansas DEQ	State	88-0686	07-06-23 *
Connecticut	State	PH-0568	03-31-24
Florida	NELAP	E87672	06-30-23 *
Georgia	State	10026 (NY)	03-31-24
Georgia	State Program	N/A	03-31-09 *
Illinois	NELAP	200003	09-30-23
Iowa	State	374	03-01-25
Iowa	State Program	374	03-01-09 *
Kansas	NELAP	E-10187	02-01-24
Kentucky (DW)	State	90029	01-01-24
Kentucky (UST)	State	108092	04-01-24
Kentucky (WW)	State	KY90029	12-31-23
Louisiana	NELAP	02031	06-30-23 *
Louisiana (All)	NELAP	02031	06-30-23 *
Maine	State	NY00044	12-04-24
Maryland	State	294	06-30-24
Massachusetts	State	M-NY044	07-01-24
Michigan	State	9937	04-01-24
Michigan	State Program	9937	04-01-09 *
New Hampshire	NELAP	2973	09-11-19 *
New Hampshire	NELAP	2337	11-17-23
New Jersey	NELAP	NY455	06-30-24
New York	NELAP	10026	03-31-24
Pennsylvania	NELAP	68-00281	08-31-24
Rhode Island	State	LAO00328	12-30-23
Texas	NELAP	T104704412-18-10	07-31-23 *
USDA	US Federal Programs	P330-18-00039	03-25-24
Virginia	NELAP	460185	09-14-23
Washington	State	C784	02-10-24
Wisconsin	State	998310390	08-29-23

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
A2LA	Dept. of Defense ELAP	0001.01	11-30-24
A2LA	ISO/IEC 17025	0001.01	11-30-24

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Accreditation/Certification Summary

Client: Heidelberg Materials Northeast LLC
Job ID: 460-285937-1
Project/Site: Rock Hill - Anti-Degradation

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC (Continued)

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alabama	State	43200	01-31-24
Alaska	State	PA00009	08-30-23
Alaska (UST)	State	17-027	02-28-24
Arizona	State	AZ0780	03-12-24
Arkansas DEQ	State	88-00660	08-09-24
California	State	2792	11-30-23
Colorado	State	PA00009	06-30-24
Connecticut	State	PH-0746	06-30-25
DE Haz. Subst. Cleanup Act (HSCA)	State	019-006 (PA cert)	01-31-24
Delaware (DW)	State	N/A	01-31-24
Florida	NELAP	E87997	06-30-24
Georgia (DW)	State	C048	01-31-24
Hawaii	State	N/A	01-31-24
Illinois	NELAP	200027	01-31-24
Iowa	State	361	03-01-24
Kansas	NELAP	E-10151	10-31-23
Kentucky (DW)	State	KY90088	12-31-23
Kentucky (UST)	State	0001.01	11-30-24
Kentucky (WW)	State	KY90088	12-31-23
Louisiana (All)	NELAP	02055	06-30-24
Maine	State	2019012	03-12-25
Maryland	State	100	06-30-24
Massachusetts	State	M-PA009	06-30-24
Michigan	State	9930	01-31-24
Minnesota	NELAP	042-999-487	12-31-23
Mississippi	State	023	01-31-24
Missouri	State	450	01-31-25
Montana (DW)	State	0098	01-01-24
Nebraska	State	NE-OS-32-17	01-31-24
New Hampshire	NELAP	2730	01-10-24
New Jersey	NELAP	PA011	09-17-23
New York	NELAP	10670	04-01-24
North Carolina (DW)	State	42705	07-31-24
North Carolina (WW/SW)	State	521	08-21-23
North Dakota	State	R-205	01-31-24
Oklahoma	NELAP	9804	08-31-23
Oregon	NELAP	PA200001	09-11-23
PALA	Canada	1978	09-16-24
Pennsylvania	NELAP	36-00037	01-31-24
Rhode Island	State	LAO00338	12-31-23
South Carolina	State	89002	01-31-24
Tennessee	State	02838	01-31-24
Texas	NELAP	T104704194-23-46	08-31-23
USDA	US Federal Programs	525-22-298-19481	10-25-25
Vermont	State	VT - 36037	10-28-23
Virginia	NELAP	460182	06-14-25
Washington	State	C457	04-11-24
West Virginia (DW)	State	9906 C	12-31-23
West Virginia DEP	State	055	09-06-23
Wyoming	State	8TMS-L	01-31-24

Accreditation/Certification Summary

Client: Heidelberg Materials Northeast LLC
Job ID: 460-285937-1
Project/Site: Rock Hill - Anti-Degradation

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC (Continued)

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Wyoming (UST)	A2LA	0001.01	11-30-24

Laboratory: Eurofins Pittsburgh

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Arkansas DEQ	State	19-033-0	06-27-24
California	State	2891	04-30-24
Connecticut	State	PH-0688	09-30-24
Florida	NELAP	E871008	06-30-24
Georgia	State	PA 02-00416	04-30-24
Illinois	NELAP	004375	06-30-24
Kansas	NELAP	E-10350	01-31-24
Kentucky (UST)	State	162013	04-30-23 *
Kentucky (WW)	State	KY98043	12-31-23
Louisiana	NELAP	04041	06-30-22 *
Louisiana (All)	NELAP	04041	06-30-24
Maine	State	PA00164	03-06-24
Minnesota	NELAP	042-999-482	12-31-23
New Hampshire	NELAP	2030	04-04-24
New Jersey	NELAP	PA005	06-30-24
New York	NELAP	11182	04-01-24
North Carolina (WW/SW)	State	434	12-31-23
North Dakota	State	R-227	04-30-24
Oregon	NELAP	PA-2151	02-06-24
Pennsylvania	NELAP	02-00416	04-30-24
Rhode Island	State	LAO00362	12-31-22 *
South Carolina	State	89014	04-30-23 *
Texas	NELAP	T104704528	03-31-24
US Fish & Wildlife	US Federal Programs	058448	03-31-24
USDA	US Federal Programs	P330-16-00211	06-21-24
Utah	NELAP	PA001462019-8	05-31-24
Virginia	NELAP	10043	09-14-23 *
West Virginia DEP	State	142	01-31-24
Wisconsin	State	998027800	08-31-24

Laboratory: Eurofins Savannah

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
	AFCEE	SAVLAB	
Alabama	State	41450	06-30-24
ANAB	Dept. of Defense ELAP	L2463	09-22-24
Arkansas DEQ	State	19-015-0	02-01-24
California	State	2939	06-30-24
Florida	NELAP	E87052	08-23-23
Georgia	State	E87052	06-30-24
Georgia (DW)	State	803	06-30-24
Guam	State	19-007R	04-17-24
Hawaii	State	<cert No.>	06-30-24
Illinois	NELAP	200022	11-30-23

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Accreditation/Certification Summary

Client: Heidelberg Materials Northeast LLC
Job ID: 460-285937-1
Project/Site: Rock Hill - Anti-Degradation

Laboratory: Eurofins Savannah (Continued)

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Indiana	State	C-GA-02	06-30-24
Iowa	State	353	07-01-25
Kentucky (UST)	State	NA	06-30-24
Louisiana	NELAP	30690	06-30-24
Louisiana (All)	NELAP	30690	06-30-24
Louisiana (DW)	State	LA009	12-31-23
Maine	State	GA00006	08-24-23
Maryland	State	250	12-31-23
Massachusetts	State	M-GA006	06-30-24
Michigan	State	9925	06-30-24
Mississippi	State	<cert No.>	06-30-24
Nebraska	State	NE-OS-7-04	06-30-24
New Jersey	NELAP	GA769	06-30-24
New Mexico	State	GA00006	06-30-24
North Carolina (DW)	State	13701	07-31-24
North Carolina (WW/SW)	State	269	09-21-23
Pennsylvania	NELAP	68-00474	06-30-24
Puerto Rico	State	GA00006	01-01-24
South Carolina	State	98001	06-30-23 *
Tennessee	State	TN02961	06-30-24
Texas	NELAP	T1047004185	11-30-23
Texas	TCEQ Water Supply	T104704185	06-30-24
USDA	US Federal Programs	P330-18-00313	09-03-24
Virginia	NELAP	460161	06-14-24
Wyoming	State	8TMS-L	06-30-23 *

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Method Summary

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill - Anti-Degradation

Job ID: 460-285937-1

Method	Method Description	Protocol	Laboratory
300.0	Anions, Ion Chromatography	EPA	EET EDI
2340B-2011	Total Hardness (as CaCO3) by calculation - SM Online, 2011	SM-Online	EET EDI
245.1	Mercury (CVAA)	EPA	EET BUF
6020B	Metals (ICP/MS)	SW846	EET EDI
6020B	Metals (ICP/MS)	SW846	EET SAV
6020B	Metals (ICP/MS)	SW846	ELLE
EPA 6020B	Metals (ICP/MS)	SW846	EET PIT
120.1	Conductivity, Specific Conductance	EPA	EET EDI
2310B-2011	Acidity	SM	EET EDI
2320B-2011	Alkalinity, Total	SM	EET EDI
2540C-2015	Total Dissolved Solids (Dried at 180 °C)	SM	EET EDI
2540D-2015	Total Suspended Solids (Dried at 103-105°C)	SM	EET EDI
2540F-2015	Solids, Settleable	SM	EET EDI
350.1	Nitrogen, Ammonia	EPA	EET EDI
351.2	Nitrogen, Total Kjeldahl	EPA	ELLE
410.4	COD	EPA	EET EDI
4500 O C-2016	Oxygen, Dissolved	SM	EET EDI
4500 P E-2011	Orthophosphate	SM	EET EDI
5210 B-2016	BOD, 5-Day	SM	EET EDI
9040C	pH	SW846	EET EDI
9060A	Organic Carbon, Total (TOC)	SW846	EET EDI
SM4500 P E-2011	Phosphorus	SM	EET EDI
Total Nitrogen	Nitrogen, Total	EPA	EET EDI
Subcontract	Osomotic Pressure	None	Microbac
245.1	Preparation, Mercury	EPA	EET BUF
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	EET PIT
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	EET SAV
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	ELLE
3010A	Preparation, Total Metals	SW846	EET EDI
351.2	Nitrogen, Total Kjeldahl	EPA	ELLE
FILTRATION	Sample Filtration	None	EET EDI
Filtration	Sample Filtration	None	EET PIT
Filtration	Sample Filtration	None	ELLE
SM 4500 P B	Phosphorous, Total and Ortho	SM	EET EDI

Protocol References:

EPA = US Environmental Protection Agency
None = None
SM = "Standard Methods For The Examination Of Water And Wastewater"
SM-Online = Standard Methods Online
SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600
EET EDI = Eurofins Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900
EET PIT = Eurofins Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058
EET SAV = Eurofins Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858
ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300
Microbac = Marietta, OH, 158 Starlite Drive, Marietta, OH 45750

Sample Summary

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill - Anti-Degradation

Job ID: 460-285937-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
460-285937-1	NPDES 001	Water	08/10/23 08:00	08/10/23 19:00
460-285937-2	Basin 1	Water	08/10/23 08:40	08/10/23 19:00
460-285937-3	Upstream	Water	08/10/23 09:15	08/10/23 19:00
460-285937-4	Clarifying Pond	Water	08/10/23 09:45	08/10/23 19:00

Microbac Laboratories Inc., - Marietta, OH

Client Project ID:

46011424

For:

Julie Gilmore

Eurofins TestAmerica Edison

777 New Durham RD

Edison, NJ 08817

Project State of Origin: Pennsylvania

Project Requested Certification:

Microbac Laboratories Inc., - Marietta, OH	68-01670	PA Department of Environmental Protection

All test results meet the requirements of the QAPP and other applicable contract terms and conditions. Any exceptions are attached to this cover page or addressed in the method narratives presented in the report. All results for soil samples are reported on a 'dry-weight' basis unless specified otherwise. Analytical results for water and wastes are reported on a 'as received' basis unless specified otherwise. A statement of uncertainty for each analysis is available upon request. The reported results are related only to the samples analyzed as received. This laboratory report may be released as a hardcopy and in computer-readable form submitted electronically or on diskette. This laboratory report shall not be reproduced, except in full, without the written approval of Microbac Laboratories, Inc.

Laboratory Project Manager:

Michelle Taylor

Project Manager

Michelle.Taylor@microbac.com

Authorized By:

Michelle Taylor

Project Manager

Issued: 09/20/2023

MICROBAC®

Laboratory Report Number: M3I0940

Client Project ID: 46011424

Cooler Receipt Log

Cooler ID: Default Cooler Temp: 0.8°C

Cooler Inspection Checklist

Ice Present or not required?	Yes
Shipping containers sealed or not required?	Yes
Custody seals intact or not required?	Yes
Chain of Custody (COC) Present?	Yes
COC includes customer information?	Yes
Relinquished and received signature on COC?	Yes
Sample collector identified on COC?	Yes
Sample type identified on COC?	Yes
Correct type of Containers Received	No
Correct number of containers listed on COC?	Yes
Containers Intact?	Yes
COC includes requested analyses?	Yes
Enough sample volume for indicated tests received?	Yes
Sample labels match COC (Name, Date & Time?)	Yes
Samples arrived within hold time?	No
Correct preservatives on COC or not required?	Yes
Chemical preservations checked or not required?	Yes
Preservation checks meet method requirements?	Yes
VOA vials have zero headspace, or not recd.?	Yes

Laboratory Report Number: M3I0940

Client Project ID: 46011424

Case Narrative

Samples out of hold, proceed per the client.

Laboratory Report Number: M3I0940

Client Project ID: 46011424

Sample Notes

PADEP 391-2000-008

A4 **Sample was received with head space.**

Osmotic Pressure

M3I0940-01	NPDES 001 (460-285937-1)	M3I0940-02	Basin 1 (460-285937-2)
M3I0940-03	Upstream (460-285937-3)	M3I0940-04	Clarifying Pond (460-285937-4)

H1 **Sample was received past holding time.**

Osmotic Pressure

M3I0940-01	NPDES 001 (460-285937-1)	M3I0940-02	Basin 1 (460-285937-2)
M3I0940-03	Upstream (460-285937-3)	M3I0940-04	Clarifying Pond (460-285937-4)

MICROBAC®

Laboratory Report Number: M3I0940

Client Project ID: 46011424

Microbac Laboratories Inc., - Marietta, OH

CERTIFICATE OF ANALYSIS

Client ID:	NPDES 001 (460-285937-1)			**Collection Date:**	08/10/2023 08:00
Laboratory ID:	M3I0940-01			**Prep Date:**	09/18/2023 15:00
Matrix:	Aqueous			**Analyzed:**	09/18/2023 16:28
Batch / Sequence:	B3I0819 /	**Analytical Method:**	PADEP 391-2000-008	**Calibration:**	NA
Instrument:	OSMOMETER 5004	**Units:**	mOsm/kg	**File ID:**	OsmoticPressure_B3I0819_230918030356.xls
Analyst:	APH	**Dilution:**	1		

Analyte	CAS Number	Result	MDL	RL	Flag	Qualifier
Osmotic Pressure		9.00	6.00	10.0		A4, H1

MICROBAC®

Laboratory Report Number: M3I0940

Client Project ID: 46011424

Microbac Laboratories Inc., - Marietta, OH

CERTIFICATE OF ANALYSIS

Client ID:	Basin 1 (460-285937-2)			**Collection Date:**	08/10/2023 08:40
Laboratory ID:	M3I0940-02			**Prep Date:**	09/18/2023 15:00
Matrix:	Aqueous			**Analyzed:**	09/18/2023 16:28
Batch / Sequence:	B3I0819 /	**Analytical Method:**	PADEP 391-2000-008	**Calibration:**	NA
Instrument:	OSMOMETER 5004	**Units:**	mOsm/kg	**File ID:**	OsmoticPressure_B3I0819_230918030356.xls
Analyst:	APH	**Dilution:**	1		

Analyte	CAS Number	Result	MDL	RL	Flag	Qualifier
Osmotic Pressure		**11.0**	6.00	10.0		A4, H1

MICROBAC®

Laboratory Report Number: M3I0940

Client Project ID: 46011424

Microbac Laboratories Inc., - Marietta, OH

CERTIFICATE OF ANALYSIS

Client ID:	Upstream (460-285937-3)			**Collection Date:**	08/10/2023 09:15
Laboratory ID:	M3I0940-03			**Prep Date:**	09/18/2023 15:00
Matrix:	Aqueous			**Analyzed:**	09/18/2023 16:28
Batch / Sequence:	B3I0819 /	**Analytical Method:**	PADEP 391-2000-008	**Calibration:**	NA
Instrument:	OSMOMETER 5004	**Units:**	mOsm/kg	**File ID:**	OsmoticPressure_B3I0819_230918030356.xls
Analyst:	APH	**Dilution:**	1		

Analyte	CAS Number	Result	MDL	RL	Flag	Qualifier
Osmotic Pressure		**12.0**	6.00	10.0		A4, H1

MICROBAC®

Laboratory Report Number: M3I0940

Client Project ID: 46011424

Microbac Laboratories Inc., - Marietta, OH

CERTIFICATE OF ANALYSIS

Client ID:	Clarifying Pond (460-285937-4)			**Collection Date:**	08/10/2023 09:45
Laboratory ID:	M3I0940-04			**Prep Date:**	09/18/2023 15:00
Matrix:	Aqueous			**Analyzed:**	09/18/2023 16:28
Batch / Sequence:	B3I0819 /	**Analytical Method:**	PADEP 391-2000-008	**Calibration:**	NA
Instrument:	OSMOMETER 5004	**Units:**	mOsm/kg	**File ID:**	OsmoticPressure_B3I0819_230918030356.xls
Analyst:	APH	**Dilution:**	1		

Analyte	CAS Number	Result	MDL	RL	Flag	Qualifier
Osmotic Pressure		9.00	6.00	10.0		A4, H1

Laboratory Report Number: M3I0940

Client Project ID: 46011424

Notes and Definitions

A4: Sample was received with head space.
H1: Sample was received past holding time.
MDL: Method Detection Limit
RL: Reporting Limit

MICROBAC®

Laboratory Report Number: M3I0940

Client Project ID: 46011424

METHOD BLANKS

Sample ID:	B3I0819-BLK1	**Prep Date:**	09/18/23 15:00	**Matrix:**	Aqueous
Instrument:	OSMOMETER 5004	**Analyzed:**	09/18/23 16:28	**Method:**	PADEP 391-2000-008
File ID:	OsmoticPressure_B3I0	**Sequence:**		**Analyst:**	APH
Batch:	B3I0819	**Units:**	mOsm/kg	**Calibration:**	

Analyte	Result	MDL	RL	Dilution	Flag	Q
Osmotic Pressure	6.00	6.00	10.0	1	U	

* - Detected in the associated method Blank at a concentration >= RL

MICROBAC®

Laboratory Report Number: M3I0940

Client Project ID: 46011424

BLANK SPIKE / DUPLICATE (BS/BSD)

Method:	PADEP 391-2000-008		**Blank Spike**	**Duplicate**
Batch:	B3I0819	**Spike ID:**	B3I0819-BS1	B3I0819-BSD1
Analyst:	APH	**Prepared:**	09/18/23 15:00	09/18/23 15:00
Matrix:	Aqueous	**Analyzed:**	09/18/23 16:28	09/18/23 16:28
Units:	mOsm/kg	**File ID:**	OsmoticPressure_B3I0819_2309	OsmoticPressure_B3I0819_2309
Instrument:	OSMOMETER 5004	**Initial/Final:**	1mL/1mL	1mL/1mL
Calibration:				

Analyte	BS Spiked	BS Found	BS %Rec	BSD Spiked	BSD Found	BSD %Rec	%RPD	%Rec Limts	RPD Limit	Q
Osmotic Pressure	290	299	103	290	300	103	0.334	90 - 110	20	

* - Does not meet %Rec acceptance criteria.
- Does not meet RPD acceptance criteria.

Eurofins Edison
777 New Durham Road
Edison, NJ 08817
Phone: 732-549-3900 Fax: 732-549-3679

Chain of Custody Record

eurofins | Environment Testing

9/22/2023

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Gilmore, Julie L	Carrier Tracking No(s):	COC No: 460-69243.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Julie.Gilmore@et.eurofinsus.com	State of Origin: Pennsylvania	Page: Page 1 of 1
Company: Microbac Laboratories, Inc.		Accreditations Required (See note):		Job #: 460-285937-2
Address: 158 Starlite Drive, ,	Due Date Requested: 9/28/2023			
City: Marietta	TAT Requested (days):			
State, Zip: OH, 45750				
Phone: 800-373-4071(Tel)	PO #:			
Email:	WO #:			
Project Name: Rock Hill - Anti-Degradation	Project #: 46011424			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)
Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	SUB (Osomotic Pressure)/ Osomotic Pressure	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
NPDES 001 (460-285937-1)	8/10/23	08:00 Eastern		Water			X	1	
Basin 1 (460-285937-2)	8/10/23	08:40 Eastern		Water			X	1	
Upstream (460-285937-3)	8/10/23	09:15 Eastern		Water			X	1	
Clarifying Pond (460-285937-4)	8/10/23	09:45 Eastern		Water			X	1	

M3I0940
Eurofins TestAmerica Edison
Rec'd: 09/15/2023 11:00
By: Stephanie Murphy Temp: 0.8 (Signature)

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Northeast, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Northeast, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Northeast, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Northeast, LLC.

Possible Hazard Identification	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 1	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	9/14/23 1900	EEG			
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time: 9/15/2023 1100	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

MICROBAC®

Work Order # M310440

COOLER TEMP >6° C LOG

SAMPLE ID	Bottle 1 °C	Bottle 2 °C	Bottle 3 °C	Bottle 4 °C	Bottle 5 °C	Bottle 6 °C

9/15/2023 SM

pH Lot # N/A

pH Exceptions

SAMPLE ID	Bottle 1	Bottle 2	Bottle 3	Bottle 4	Bottle 5	Bottle 6

9/15/2023 SM

PRESERVATIVE EXCEPTIONS

✓ NONE

AS NOTED

9/15/2023 SM

Document Control # 1957
Last 04-10-2019

Issued to: Document Master File

Eurofins Edison
777 New Durham Road
Edison, NJ 08817
Phone: 732-549-3900 Fax: 732-549-3679

450-KOP

Chain of Custody Record

5 C
46 KOP-2

eurofins

Client Information	Sampler	Lab PM: Gilmore, Julie L	Carrier Tracking No(s):	COC No: 460-171387 111665.1
Client Contact: Andrew Gutshall	Phone:	E-Mail: Julie.Gilmore@et.eurofinsus.com	State of Origin:	Page: Page 1 of 2
Company: Heidelberg Materials Northeast LLC	PWSID:			Job #: 285937
Address: 7660 Imperial Way	Due Date Requested:			
City: Allentown	TAT Requested (days):			
State, Zip: PA, 18195	Compliance Project: Δ Yes Δ No			
Phone: 610-366-4819(Tel)	PO #: Purchase Order not required			
Email: andrew.gutshall@heidelbergmaterials.com	WO #:			
Project Name: Rock Hill Anti-Degradation	Project #: 46011424			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:
A HCL, B NaOH, C Zn Acetate, D Nitric Acid, E NaHSO4, F MeOH, G Amchlor, H Ascorbic Acid, I Ice, J DI Water, K EDTA, L EDA, M Hexane, N None, O AsNaO2, P Na2O4S, Q Na2SO3, R Na2S2O3, S H2SO4, T TSP Dodecahydrate, U Acetone, V MCAA, W pH 4-5, Y Trizma, Z other (specify)
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020B Dissolved Lithium N	6020B Total Lithium D	6020B Total Lithium S	351.2 Local Method S	6020B Dissolved Cd/Fe/Zn N	6020B (MOD) Total Fe D	350.1 410.4, 4500_P_E S	120.1 9040C N	350.1, 4500_P_E, 6020B N	2320B (MOD) Alkalinity N	6020B, SM2340B D	9060A TOC S	2540D, SM5210B_Calc N	4500_P_E_Ortho Dissolved Orthophosphate N	Total Number of containers	Special Instructions/Note:
			Preservation Code:																			
NPDES 001	8/10/23	0800	G	Water				–	–	–		–	–	–			–	–	–	–	20	1
Bass n 2	8/10/23	0840	G	Water					–			–		–		–	–	–	–	–	20	2
Upstream	8/10/23	0945	G	Water			–	–	–	–				–	–	–	–	–	–	–	20	3
Landfarming Pond	8/10/23	0945	G	Water				–	–			–		–	–	–				–	20	4
				Water																		

460-285937 Chain of Custody

SHORT HOLD

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I II III IV Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		8/10/23 1145	EEN		8/10/23 1210	EEN KOP
2		8/10/23 1627	EEN-KOP		8/10/23 1700	ETA
3		8/10 1900	ETA		8/10/23 2100	ETA

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks:

Ver 06/08/2021

Eurofins Edison
777 New Durham Road
Edison, NJ 08817
Phone: 732-549-3900 Fax: 732-549-3679

KOP

Chain of Custody Record

eurofins

Client Information	Sampler: EZG	Lab PM: Gilmore, Julie L	Carrier Tracking No(s):	COC No: 460-171387 111665.2
Client Contact: Andrew Gutshall	Phone:	E-Mail: Julie.Gilmore@et.eurofinsus.com	State of Origin:	Page: Page 2 of 2
Company: Heidelberg Materials Northeast LLC	PWSID:			Job #: 285937
Address: 7660 Imperial Way	Due Date Requested:			
City: Allentown	TAT Requested (days):			
State, Zip: PA, 18195	Compliance Project: Δ Yes Δ No			
Phone: 610-366-4819(Tel)	PO #: Purchase Order not required			
Email: andrew.gutshall@heidelbergmaterials.com	WO #:			
Project Name: Rock Hill Anti-Degradation	Project #: 46011424			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:
A HCL, B NaOH, C Zn Acetate, D Nitric Acid, E NaHSO4, F MeOH, G Amchlor, H Ascorbic Acid, I Ice, J DI Water, K EDTA, L EDA, M Hexane, N None, O AsNaO2, P Na2O4S, Q Na2SO3, R Na2S2O3, S H2SO4, T TSP Dodecahydrate, U Acetone, V MCAA, W pH 4-5, Y Trizma, Z other (specify)
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water S=solid, O=waste/oil BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	4500_P_E_Ortho Total Orthophosphate	2540C TDS	300_ORGFM_28D, 300_ORGFMS	245.1 Local Method	6020B Total Aluminum	Acidity	Settleable Solids	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	N	D	D				
NPDES 001	8/10/23	0800	G	Water			/			/	/	/	/	2	1
Basin 2	8/10/23	0810	C	Water			/				/			2	2
upstream	8/10/23	0915	G	Water			/				/			2	3
Settling Pond	8/10/23	0940	G	Water			/			/				2	4
				Water											

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I II III IV Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
				8/10/23 1210	EETN-KOP
Relinquished by:	Date/Time: 8/10/23	Company EETN-KOP	Received by:	Date/Time: 8/10/23 1700	Company ETA
Relinquished by:	Date/Time: 8/10/23 1900	Company ETA	Received by:	Date/Time: 8/10/23 7:2	Company ETA

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks:

Ver 06/08/2021

9/22/2023

Eurofins TestAmerica Edison
Receipt Temperature and pH Log

Job Number: 2859237

Number of Coolers: 2 IR Gun # 2/KOP

Cooler Temperatures

	RAW	CORRECTED		RAW	CORRECTED		RAW	CORRECTED
Cooler #1:	5.0 °C	5.0 °C	Cooler #4:	°C	°C	Cooler #7:	°C	°C
Cooler #2:	4.6 °C	4.6 °C	Cooler #5:	°C	°C	Cooler #8:	°C	°C
Cooler #3:	°C	°C	Cooler #6:	°C	°C	Cooler #9:	°C	°C

TALS Sample Number	Ammonia (pH<2)	COD (pH<2)	Nitrate Nitrite (pH<2)	Metals* (pH<2)	Hardness (pH<2)	Pest (pH 5-9)	EPH or QAM (pH<2)	Phenols (pH<2)	Sulfide (pH>9)	TKN (pH<2)	TOC (pH<2)	Total Cyanide (pH>12)	Total Phos (pH<2)	Other	Other
1	<2	<2		<2	<2					<2	<2		<2		
2	<2	<2		<2	<2					<2	<2		<2		
3	<2	<2		<2	<2					<2	<2		<2		
4	<2	<2		<2	<2					<2	<2		<2		

If pH adjustments are required record the information below*

Sample No(s). adjusted: _____

Preservative Name/Conc.: _____ Volume of Preservative used (ml): _____

Lot # of Preservative(s): _____ Expiration Date: _____

The appropriate Project Manager and Department Manager should be notified about the samples which were pH adjusted.

**Samples for Metal analysis which are out of compliance must be acidified at least 24 hours prior to analysis.*

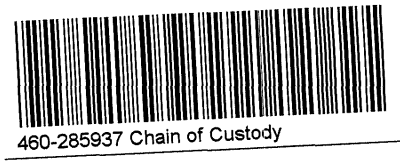
Initials: KOP Date: 8/10/23

PG = Filled out sheet

XO AGCA
TRK# 6553 1009 7851
0201
SATURDAY 12:00P
PRIORITY OVERNIGHT
15238 PIT
PA-US
460-285937 Waybill
Uncorrected Temp
Thermometer ID
Initials
CF 0.0
PT-WI-SR-001 effective 11/8/18
FedEx Express
SHIPPING/RECEIVING
EUROFINS ENVIRONMENT TESTING NORTHE
301 ALPHA DRIVE
RIDC PARK
PITTSBURGH PA 15238
REF: 8460-171610
(412) 963-7058
PO: YES
ORIGIN ID:LDJA (732) 549-3900
EUROFINS EDISON
777 NEW DURHAM ROAD
EDISON, NJ 08817
UNITED STATES US
SHIP DATE: 11AUG23
ACTWGT: 15.55 LB
CAD: 6619092/CAFE3709
BILL SENDER
Environment Testing
TestAmerica
eurofins
MTW EXP 01/24

Eurofins Edison
777 New Durham Road
Edison, NJ 08817
Phone: 732-549-3900 Fax: 732-549-3679

Chain of Custody Record



Eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Gilmore, Julie L	Carrier Tracking No(s): 8930.1
Client Contact: Shipping/Receiving	Phone	E-Mail: Julie.Gilmore@et.eurofins	Page 1 of 1
Company: Eurofins Environment Testing Northeast,		Accreditations Required (See note): NELAP - Pennsylvania	Job #: 460-285937-1
Address: 301 Alpha Drive, RIDC Park,	Due Date Requested: 8/23/2023		
City: Pittsburgh	TAT Requested (days):		
State, Zip: PA, 15238			
Phone: 412-963-7058(Tel) 412-963-2468(Fax)	PO #:		
Email	WO #:		
Project Name: Rock Hill - Anti-Degradation	Project #: 46011424		
Site	SSOW#:		

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Tnzma, Z - other (specify)
Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020B/Filtration_ME Dissolved Lithium	6020B/3005A (MOD) Total Lithium	Total Number of containers	Special Instructions/Note:
			Preservation Code:							
NPDWS 001 (460-285937-1)	8/10/23	08.00 Eastern		Water			X	X	2	
Basin 1 (460-285937-2)	8/10/23	08:40 Eastern		Water			X	X	2	
Upstream (460-285937-3)	8/10/23	09 15 Eastern		Water			X	X	2	
Clarifying Pond (460-285937-4)	8/10/23	09 45 Eastern		Water			X	X	2	

Note Since laboratory accreditations are subject to change, Eurofins Environment Testing Northeast, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories This sample shipment is forwarded under chain-of-custody If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Northeast, LLC laboratory or other instructions will be provided Any changes to accreditation status should be brought to Eurofins Environment Testing Northeast, LLC attention immediately If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Northeast, LLC

Possible Hazard Identification *Unconfirmed*	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*** ☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank. 1	Special Instructions/QC Requirements.

Empty Kit Relinquished by	Date	Time	Method of Shipment:

Relinquished by:	Date/Time: 8/11/23 1900	Company: EETNE	Received by:	Date/Time: 8/12-23 0955	Company: EP, Hunt
Relinquished by:	Date/Time	Company	Received by:	Date/Time.	Company
Relinquished by:	Date/Time	Company	Received by:	Date/Time	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks.

9/22/2023

Eurofins Edison
777 New Durham Road
Edison, NJ 08817
Phone: 732-549-3900 Fax: 732-549-3679

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Gilmore, Julie L	Carrier Tracking No(s):	COC No: 460-68924.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Julie.Gilmore@et.eurofinsus.com	State of Origin: Pennsylvania	Page: Page 1 of 1
Company: Eurofins Lancaster Laboratories Environm		Accreditations Required (See note): NELAP - Pennsylvania		Job #: 460-285937-1
Address: 2425 New Holland Pike,	Due Date Requested: 8/21/2023			
City: Lancaster	TAT Requested (days):			
State, Zip: PA, 17601				
Phone: 717-656-2300(Tel)	PO #:			
Email:	WO #:			
Project Name: Rock Hill - Anti-Degradation	Project #: 46011424			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify), Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020B/3005A (MOD) Total Fe	6020B/Filtration_ME Dissolved Cd/Fe/Zn	351.2/351.2_Prep	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
NPDWS 001 (460-285937-1)	8/10/23	08:00 Eastern		Water			X	X	X	3	
Basin 1 (460-285937-2)	8/10/23	08:40 Eastern		Water			X	X	X	3	
Upstream (460-285937-3)	8/10/23	09:15 Eastern		Water			X	X	X	3	
Clarifying Pond (460-285937-4)	8/10/23	09:45 Eastern		Water			X	X	X	3	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Northeast, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Northeast, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Northeast, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Northeast, LLC.

Possible Hazard Identification	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 1	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
1		8/11/23 1630	FEDEX		8/11/23 1630	ET
2	Bay	8/11/23 1948	ET			
3					8/11/23 1948	ELNET

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 0.1/-0.2

777 New Durham Road
Edison, NJ 08817
Phone: 732-549-3900 Fax: 732-549-3679

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Gilmore, Julie L	Carrier Tracking No(s):	COC No: 460-68928.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Julie.Gilmore@et.eurofinsus.com	State of Origin: Pennsylvania	Page: Page 1 of 1
Company: Eurofins Environment Testing Northeast,		Accreditations Required (See note): NELAP - Pennsylvania		Job #: 460-285937-1
Address: 10 Hazelwood Drive, ,	Due Date Requested: 8/21/2023			
City: Amherst	TAT Requested (days):			
State, Zip: NY, 14228-2298				
Phone: 716-691-2600(Tel) 716-691-7991(Fax)	PO #:			
Email:	WO #:			
Project Name: Rock Hill - Anti-Degradation	Project #: 46011424			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)
Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	245.1/245.1_Prep	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
NPDWS 001 (460-285937-1)	8/10/23	08:00 Eastern		Water			X	1	
Basin 1 (460-285937-2)	8/10/23	08:40 Eastern		Water			X	1	
Upstream (460-285937-3)	8/10/23	09:15 Eastern		Water			X	1	
Clarifying Pond (460-285937-4)	8/10/23	09:45 Eastern		Water			X	1	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Northeast, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Northeast, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Northeast, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Northeast, LLC.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 1	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		8/11/23 1900	EET		8-12-23 1000	TAB
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 3.0 ICE

9/22/2023

Eurofins Edison
777 New Durham Road
Edison, NJ 08817
Phone: 732-549-3900 Fax: 732-549-3679

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Gilmore, Julie L	Carrier Tracking No(s):	COC No: 460-68927.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Julie.Gilmore@et.eurofinsus.com	State of Origin: Pennsylvania	Page: Page 1 of 1
Company: Eurofins Environment Testing Southeast,		Accreditations Required (See note): NELAP - Pennsylvania		Job #: 460-285937-1
Address: 5102 LaRoche Avenue, ,	Due Date Requested: 8/22/2023			
City: Savannah	TAT Requested (days):			
State, Zip: GA, 31404				
Phone: 912-354-7858(Tel) 912-352-0165(Fax)	PO #:			
Email:	WO #:			
Project Name: Rock Hill - Anti-Degradation	Project #: 46011424			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)
Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020B/3005A Total Aluminum	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
NPDWS 001 (460-285937-1)	8/10/23	08:00 Eastern		Water			X	1	
Basin 1 (460-285937-2)	8/10/23	08:40 Eastern		Water			X	1	
Upstream (460-285937-3)	8/10/23	09:15 Eastern		Water			X	1	
Clarifying Pond (460-285937-4)	8/10/23	09:45 Eastern		Water			X	1	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Northeast, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Northeast, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Northeast, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Northeast, LLC.

Possible Hazard Identification	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 1	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		8/11/23 1900	FEDEX	TH	08-12-23	
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time: 8:37	Company
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 2.3 - 2.4

Login Sample Receipt Checklist

Client: Heidelberg Materials Northeast LLC

Job Number: 460-285937-1

Login Number: 285937
List Number: 1
Creator: Thundathorn, Sukanan 1

List Source: Eurofins Edison

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	False	Refer to Job Narrative for details.
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Heidelberg Materials Northeast LLC

Job Number: 460-285937-1

Login Number: 285937
List Number: 5
Creator: Yeager, Brian A

List Source: Eurofins Buffalo
List Creation: 08/14/23 12:51 PM

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	3.0 ICE
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	True	

Login Sample Receipt Checklist

Client: Heidelberg Materials Northeast LLC

Job Number: 460-285937-1

Login Number: 285937
List Number: 2
Creator: Wrye, Shaun

List Source: Eurofins Lancaster Laboratories Environment Testing, LLC
List Creation: 08/11/23 10:56 PM

Question	Answer	Comment
The cooler's custody seal is intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature acceptable,where thermal pres is required(</=6C, not frozen).	True	
Cooler Temperature is recorded.	True	
WV:Container Temp acceptable,where thermal pres is required (</=6C, not frozen).	N/A	
WV: Container Temperature is recorded.	N/A	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the containers received and the COC.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
There is sufficient vol. for all requested analyses.	True	
Is the Field Sampler's name present on COC?	False	Received project as a subcontract.
Sample custody seals are intact.	N/A	
VOA sample vials do not have headspace >6mm in diameter (none, if from WV)?	N/A	

Login Sample Receipt Checklist

Client: Heidelberg Materials Northeast LLC

Job Number: 460-285937-1

Login Number: 285937
List Number: 4
Creator: Watson, Debbie

List Source: Eurofins Pittsburgh
List Creation: 08/12/23 03:48 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Heidelberg Materials Northeast LLC

Job Number: 460-285937-1

Login Number: 285937
List Number: 3
Creator: Johnson, Corey M

List Source: Eurofins Savannah
List Creation: 08/12/23 01:03 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Lab Results

August 24, 2023

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Matthew Weikel
Heidelberg Materials
7660 Imperial Way
Allentown, Pennsylvania 18195

Generated 9/28/2023 9:37:15 AM

JOB DESCRIPTION

Rock Hill - Anti Degradation

JOB NUMBER

460-286856-1

Eurofins Edison
777 New Durham Road
Edison NJ 08817

See page two for job notes and contact information.

my EOL

Job Notes

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The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing Northeast, LLC Project Manager.

Authorization



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Authorized for release by
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Definitions/Glossary

Client: Heidelberg Materials
Job ID: 460-286856-1
Project/Site: Rock Hill - Anti Degradation

Qualifiers

HPLC/IC

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

General Chemistry

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
H	Sample was prepped or analyzed beyond the specified holding time. This does not meet regulatory requirements.
H3	Sample was received and analyzed past holding time. This does not meet regulatory requirements.
HF	Parameter with a holding time of 15 minutes. Test performed by laboratory at client's request. Sample was analyzed outside of hold time.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 460-286856-1

Laboratory: Eurofins Edison

Narrative

Job Narrative
460-286856-1

Receipt
The samples were received on 8/24/2023 7:00 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 4.5°C and 4.9°C

Receipt Exceptions
The method detection limit (MDL) is the lowest value detectable by the laboratory for a given analyte as determined by the MDL procedure detailed in EPA 40 CFR 136. Reported MDL values are adjusted for any dilutions and percent moisture (as applicable). The lab is unable to report values below the MDL.

HPLC/IC
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Metals
Method 6020B: The linear range check (LRC) was below the control limits for cadmium and zinc. The samples had results below the next highest standard and did not require any dilutions. Samples NPDES 001 (460-286856-1) are reported, as is, with this narrative.

Method 6020B: The following samples were not filtered within 15 minutes of sample collection as required by the method: NPDES 001 (460-286856-1), Basin 1 (460-286856-2), Upgradient (460-286856-3) and Clarifying Pond (460-286856-4). The sample(s) was filtered prior to analysis at the laboratory, and the results have been reported. This does not meet regulatory requirements.

Method 6020B: The following samples were not filtered within 15 minutes of sample collection as required by the method: NPDES 001 (460-286856-1), Basin 1 (460-286856-2), Upgradient (460-286856-3) and Clarifying Pond (460-286856-4). The samples were filtered prior to analysis at the laboratory, and the results have been reported.

Method 6020B: The following samples were not filtered and preserved within15 minutes of sample collection in accordance with 40 CFR part 136 Table II, Footnote 7, method 6020B. The samples were filtered prior to analysis at the laboratory.NPDES 001 (460-286856-1), Basin 1 (460-286856-2), Upgradient (460-286856-3) and Clarifying Pond (460-286856-4)

Method 6020B: The linear range check (LRC) was below the control limits for cadmium and zinc. The samples had results below the next highest standard and did not require any dilutions. Samples NPDES 001 (460-286856-1) are reported, as is, with this narrative.

Method 6020B: The following samples were not filtered within 15 minutes of sample collection as required by the method: NPDES 001 (460-286856-1), Basin 1 (460-286856-2), Upgradient (460-286856-3) and Clarifying Pond (460-286856-4). The sample(s) was filtered prior to analysis at the laboratory, and the results have been reported. This does not meet regulatory requirements.

Method 6020B: The following samples were not filtered within 15 minutes of sample collection as required by the method: NPDES 001 (460-286856-1), Basin 1 (460-286856-2), Upgradient (460-286856-3) and Clarifying Pond (460-286856-4). The samples were filtered prior to analysis at the laboratory, and the results have been reported.

Method 6020B: The following samples were not filtered and preserved within15 minutes of sample collection in accordance with 40 CFR part 136 Table II, Footnote 7, method 6020B. The samples were filtered prior to analysis at the laboratory.NPDES 001 (460-286856-1), Basin 1 (460-286856-2), Upgradient (460-286856-3) and Clarifying Pond (460-286856-4)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

General Chemistry
Method 4500_O_C: This analysis is normally performed in the field and has a method-defined holding time of 15 minutes. The following samples has been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe: NPDES 001 (460-286856-1), Basin 1 (460-286856-2), Upgradient (460-286856-3) and Clarifying Pond (460-286856-4).

Job ID: 460-286856-1 (Continued)

Laboratory: Eurofins Edison (Continued)

Method 9040C: This analysis is normally performed in the field and has a method-defined holding time of 15 minutes. The following samples has been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe: NPDES 001 (460-286856-1), Basin 1 (460-286856-2), Upgradient (460-286856-3), Clarifying Pond (460-286856-4), (460-286827-D-1) and (460-286827-D-1 DU).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Client Sample ID: NPDES 001

Date Collected: 08/24/23 08:30
Date Received: 08/24/23 19:00

Lab Sample ID: 460-286856-1

Matrix: Water

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide	0.054	U	0.32	0.054	mg/L			08/25/23 21:21	1
Nitrate as N	**0.085**	**J**	0.16	0.070	mg/L			08/25/23 21:21	1
Chloride	**3.53**		0.32	0.039	mg/L			08/25/23 21:21	1
Nitrate Nitrite as N	**0.085**	**J**	0.16	0.070	mg/L			08/25/23 21:21	1
Nitrite as N	0.023	U	0.16	0.023	mg/L			08/25/23 21:21	1
Sulfate	**6.65**		0.48	0.095	mg/L			08/25/23 21:21	1

Method: SM-Online 2340B-2011 - Total Hardness (as CaCO3) by calculation - SM Online, 2011

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**96.8**		33.1	33.1	mg/L			09/15/23 16:22	1

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000043	U	0.00020	0.000043	mg/L		08/30/23 09:49	08/30/23 15:00	1

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**3.8**	**J**	4.0	0.91	ug/L		09/03/23 12:32	09/05/23 21:44	1
Boron	**60.1**	**J**	80.0	30.4	ug/L		09/03/23 12:32	09/05/23 21:44	1
Calcium	**23200**		500	53.6	ug/L		09/03/23 12:32	09/05/23 21:44	1
Copper	2.5	U	4.0	2.5	ug/L		09/03/23 12:32	09/05/23 21:44	1
Lead	0.84	U	1.2	0.84	ug/L		09/03/23 12:32	09/05/23 21:44	1
Magnesium	**9440**		200	46.9	ug/L		09/03/23 12:32	09/05/23 21:44	1
Manganese	**21.3**		8.0	1.5	ug/L		09/03/23 12:32	09/05/23 21:44	1
Nickel	0.91	U	4.0	0.91	ug/L		09/03/23 12:32	09/05/23 21:44	1
Potassium	**2170**		200	112	ug/L		09/03/23 12:32	09/05/23 21:44	1
Selenium	0.59	U	2.5	0.59	ug/L		09/03/23 12:32	09/05/23 21:44	1
Sodium	**4210**		500	219	ug/L		09/03/23 12:32	09/05/23 21:44	1
Strontium	**63.0**		4.0	0.50	ug/L		09/03/23 12:32	09/05/23 21:44	1
Zinc	6.5	U	16.0	6.5	ug/L		09/03/23 12:32	09/05/23 21:44	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	35.0	U	100	35.0	ug/L		08/28/23 07:26	08/28/23 22:14	1
Iron	**213**		50.0	20.0	ug/L		08/31/23 11:01	09/10/23 15:43	1

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	19.5	U	40.0	19.5	ug/L		09/06/23 22:42	09/07/23 01:14	1
Cadmium	0.15	U	0.50	0.15	ug/L		08/31/23 11:44	09/06/23 09:12	1
Arsenic	0.89	U	2.0	0.89	ug/L		09/06/23 22:42	09/07/23 01:14	1
Iron	**28.6**	**J**	50.0	20.0	ug/L		08/31/23 11:44	09/06/23 09:12	1
Calcium	**23500**		500	53.6	ug/L		09/06/23 22:42	09/07/23 01:14	1
Zinc	4.0	U	10.0	4.0	ug/L		08/31/23 11:44	09/06/23 09:12	1
Copper	2.5	U	4.0	2.5	ug/L		09/06/23 22:42	09/07/23 01:14	1
Iron	58.2	U	120	58.2	ug/L		09/06/23 22:42	09/07/23 01:14	1
Lead	0.84	U	1.2	0.84	ug/L		09/06/23 22:42	09/07/23 01:14	1
Magnesium	**9560**		200	46.9	ug/L		09/06/23 22:42	09/07/23 01:14	1
Manganese	**3.0**	**J**	8.0	1.5	ug/L		09/06/23 22:42	09/07/23 01:14	1
Nickel	0.91	U	4.0	0.91	ug/L		09/06/23 22:42	09/07/23 01:14	1

Client Sample ID: NPDES 001
Date Collected: 08/24/23 08:30
Date Received: 08/24/23 19:00

Lab Sample ID: 460-286856-1
Matrix: Water

Method: SW846 EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	1.3	U	5.0	1.3	ug/L		08/30/23 11:25	09/20/23 20:46	1

Method: SW846 EPA 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	1.3	U	5.0	1.3	ug/L		09/01/23 10:30	09/20/23 18:08	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Resistivity (EPA 120.1)	**0.00462**		0.000100	0.000100	Mohm-cm			08/31/23 11:24	1
Specific Conductance (EPA 120.1)	**217**		1.00	1.00	umhos/cm			08/31/23 11:24	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-2011)	**93.6**		5.0	5.0	mg/L			08/28/23 14:09	1
Carbonate Alkalinity as CaCO3 (SM 2320B-2011)	5.0	U	5.0	5.0	mg/L			08/28/23 14:09	1
Alkalinity as CaCO3 to pH 4.5 (SM 2320B-2011)	**93.6**		5.0	5.0	mg/L			08/28/23 14:09	1
Total Dissolved Solids (SM 2540C-2015)	**122**		2.5	2.5	mg/L			08/31/23 09:33	1
Total Suspended Solids (SM 2540D-2015)	2.5	U	2.5	2.5	mg/L			08/30/23 07:22	1
Ammonia (EPA 350.1)	0.050	U	0.10	0.050	mg/L			09/06/23 14:01	1
Total Kjeldahl Nitrogen (EPA 351.2)	0.50	U	1.0	0.50	mg/L		09/14/23 15:30	09/15/23 11:08	1
Chemical Oxygen Demand (EPA 410.4)	**3.4**	**J**	10.0	3.3	mg/L			09/05/23 17:26	1
Oxygen, Dissolved (SM 4500 O C-2016)	**4.7**	**H H3**	1.0	1.0	mg/L			08/28/23 08:35	1
Orthophosphate as P (SM 4500 P E-2011)	**0.011**	**J**	0.030	0.0050	mg/L			08/26/23 02:15	1
Carbonaceous Biochemical Oxygen Demand 5 (SM 5210 B-2016)	1.0	U	1.0	1.0	mg/L			08/25/23 15:50	1
pH (SW846 9040C)	**7.9**	**HF**	0.1	0.1	SU			09/05/23 17:20	1
Temperature (SW846 9040C)	**23.5**	**HF**	0.1	0.1	Degrees C			09/05/23 17:20	1
Total Organic Carbon (SW846 9060A)	**1.7**		1.0	0.53	mg/L			09/06/23 05:27	1
Phosphorus as PO4 (SM4500 P E-2011)	**0.16**	**F1**	0.090	0.071	mg/L		09/06/23 11:42	09/06/23 15:21	1
Phosphorus as P (SM4500 P E-2011)	**0.051**		0.030	0.023	mg/L		09/06/23 11:42	09/06/23 15:21	1
Nitrogen, Total (EPA Total Nitrogen)	0.50	U	0.50	0.50	mg/L			08/28/23 06:58	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (EPA 350.1)	0.050	U	0.10	0.050	mg/L			09/06/23 14:25	1
Orthophosphate as P (SM 4500 P E-2011)	**0.0057**	**J**	0.030	0.0050	mg/L			08/26/23 02:15	1
Phosphorus as PO4 (SM4500 P E-2011)	0.071	U	0.090	0.071	mg/L		09/06/23 11:42	09/06/23 15:21	1
Phosphorus as P (SM4500 P E-2011)	0.023	U	0.030	0.023	mg/L		09/06/23 11:42	09/06/23 15:21	1

Client: Heidelberg Materials
Project/Site: Rock Hill - Anti Degradation

Job ID: 460-286856-1

Client Sample ID: Basin 1

Date Collected: 08/24/23 09:00
Date Received: 08/24/23 19:00

Lab Sample ID: 460-286856-2

Matrix: Water

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide	0.054	U	0.32	0.054	mg/L			08/25/23 21:36	1
Nitrate as N	**0.071**	**J**	0.16	0.070	mg/L			08/25/23 21:36	1
Chloride	**6.33**		0.32	0.039	mg/L			08/25/23 21:36	1
Nitrate Nitrite as N	**0.071**	**J**	0.16	0.070	mg/L			08/25/23 21:36	1
Nitrite as N	0.023	U	0.16	0.023	mg/L			08/25/23 21:36	1
Sulfate	**3.11**		0.48	0.095	mg/L			08/25/23 21:36	1

Method: SM-Online 2340B-2011 - Total Hardness (as CaCO3) by calculation - SM Online, 2011

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**125**		33.1	33.1	mg/L			09/15/23 16:22	1

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000043	U	0.00020	0.000043	mg/L		08/30/23 09:49	08/30/23 15:05	1

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**10.3**		4.0	0.91	ug/L		09/03/23 12:32	09/05/23 21:47	1
Boron	**83.7**		80.0	30.4	ug/L		09/03/23 12:32	09/05/23 21:47	1
Calcium	**28100**		500	53.6	ug/L		09/03/23 12:32	09/05/23 21:47	1
Copper	2.5	U	4.0	2.5	ug/L		09/03/23 12:32	09/05/23 21:47	1
Lead	0.84	U	1.2	0.84	ug/L		09/03/23 12:32	09/05/23 21:47	1
Magnesium	**13300**		200	46.9	ug/L		09/03/23 12:32	09/05/23 21:47	1
Manganese	**53.8**		8.0	1.5	ug/L		09/03/23 12:32	09/05/23 21:47	1
Nickel	0.91	U	4.0	0.91	ug/L		09/03/23 12:32	09/05/23 21:47	1
Potassium	**1280**		200	112	ug/L		09/03/23 12:32	09/05/23 21:47	1
Selenium	0.59	U	2.5	0.59	ug/L		09/03/23 12:32	09/05/23 21:47	1
Sodium	**5900**		500	219	ug/L		09/03/23 12:32	09/05/23 21:47	1
Strontium	**79.9**		4.0	0.50	ug/L		09/03/23 12:32	09/05/23 21:47	1
Zinc	**32.4**		16.0	6.5	ug/L		09/03/23 12:32	09/05/23 21:47	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	35.0	U	100	35.0	ug/L		08/28/23 07:26	08/28/23 22:26	1
Iron	**299**		50.0	20.0	ug/L		08/31/23 11:01	09/10/23 15:39	1

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	19.5	U	40.0	19.5	ug/L		09/06/23 22:42	09/07/23 01:16	1
Cadmium	0.15	U	0.50	0.15	ug/L		08/31/23 11:44	09/06/23 09:10	1
Arsenic	0.89	U	2.0	0.89	ug/L		09/06/23 22:42	09/07/23 01:16	1
Iron	**89.6**		50.0	20.0	ug/L		08/31/23 11:44	09/06/23 09:10	1
Calcium	**28200**		500	53.6	ug/L		09/06/23 22:42	09/07/23 01:16	1
Zinc	**23.1**		10.0	4.0	ug/L		08/31/23 11:44	09/06/23 09:10	1
Copper	2.5	U	4.0	2.5	ug/L		09/06/23 22:42	09/07/23 01:16	1
Iron	58.2	U	120	58.2	ug/L		09/06/23 22:42	09/07/23 01:16	1
Lead	0.84	U	1.2	0.84	ug/L		09/06/23 22:42	09/07/23 01:16	1
Magnesium	**12900**		200	46.9	ug/L		09/06/23 22:42	09/07/23 01:16	1
Manganese	**21.1**		8.0	1.5	ug/L		09/06/23 22:42	09/07/23 01:16	1
Nickel	0.91	U	4.0	0.91	ug/L		09/06/23 22:42	09/07/23 01:16	1

Client Sample ID: Basin 1
Date Collected: 08/24/23 09:00
Date Received: 08/24/23 19:00

Lab Sample ID: 460-286856-2
Matrix: Water

Method: SW846 EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	1.3	U	5.0	1.3	ug/L		08/30/23 11:25	09/20/23 21:10	1

Method: SW846 EPA 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	1.3	U	5.0	1.3	ug/L		09/01/23 10:30	09/20/23 18:15	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Resistivity (EPA 120.1)	**0.00367**		0.000100	0.000100	Mohm-cm			08/31/23 11:24	1
Specific Conductance (EPA 120.1)	**272**		1.00	1.00	umhos/cm			08/31/23 11:24	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-2011)	**129**		5.0	5.0	mg/L			08/28/23 14:16	1
Carbonate Alkalinity as CaCO3 (SM 2320B-2011)	5.0	U	5.0	5.0	mg/L			08/28/23 14:16	1
Alkalinity as CaCO3 to pH 4.5 (SM 2320B-2011)	**129**		5.0	5.0	mg/L			08/28/23 14:16	1
Total Dissolved Solids (SM 2540C-2015)	**163**		2.5	2.5	mg/L			08/31/23 09:33	1
Total Suspended Solids (SM 2540D-2015)	2.5	U	2.5	2.5	mg/L			08/30/23 07:22	1
Ammonia (EPA 350.1)	0.050	U	0.10	0.050	mg/L			09/06/23 14:02	1
Total Kjeldahl Nitrogen (EPA 351.2	**0.58**	**J**	1.0	0.50	mg/L		09/14/23 15:30	09/15/23 11:10	1
Chemical Oxygen Demand (EPA 410.4)	**8.9**	**J**	10.0	3.3	mg/L			09/05/23 17:26	1
Oxygen, Dissolved (SM 4500 O C-2016)	**6.7**	**H H3**	1.0	1.0	mg/L			08/28/23 08:40	1
Orthophosphate as P (SM 4500 P E-2011)	0.0050	U	0.030	0.0050	mg/L			08/26/23 02:15	1
Carbonaceous Biochemical Oxygen Demand 5 (SM 5210 B-2016)	1.0	U	1.0	1.0	mg/L			08/25/23 15:41	1
pH (SW846 9040C)	**8.1**	**HF**	0.1	0.1	SU			09/05/23 17:23	1
Temperature (SW846 9040C)	**24.3**	**HF**	0.1	0.1	Degrees C			09/05/23 17:23	1
Total Organic Carbon (SW846 9060A)	**2.9**		1.0	0.53	mg/L			09/06/23 05:51	1
Phosphorus as PO4 (SM4500 P E-2011)	**0.11**		0.090	0.071	mg/L		09/06/23 11:42	09/06/23 15:21	1
Phosphorus as P (SM4500 P E-2011)	**0.036**		0.030	0.023	mg/L		09/06/23 11:42	09/06/23 15:21	1
Nitrogen, Total (EPA Total Nitrogen)	**0.65**		0.50	0.50	mg/L			08/28/23 06:58	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (EPA 350.1)	0.050	U	0.10	0.050	mg/L			09/06/23 14:27	1
Orthophosphate as P (SM 4500 P E-2011)	0.0050	U	0.030	0.0050	mg/L			08/26/23 02:15	1
Phosphorus as PO4 (SM4500 P E-2011)	0.071	U	0.090	0.071	mg/L		09/06/23 11:42	09/06/23 15:21	1
Phosphorus as P (SM4500 P E-2011)	0.023	U	0.030	0.023	mg/L		09/06/23 11:42	09/06/23 15:21	1

Client Sample ID: Upgradient

Date Collected: 08/24/23 09:30
Date Received: 08/24/23 19:00

Lab Sample ID: 460-286856-3

Matrix: Water

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide	0.054	U	0.32	0.054	mg/L			08/25/23 21:51	1
Nitrate as N	**0.080**	**J**	0.16	0.070	mg/L			08/25/23 21:51	1
Chloride	**1.86**		0.32	0.039	mg/L			08/25/23 21:51	1
Nitrate Nitrite as N	**0.080**	**J**	0.16	0.070	mg/L			08/25/23 21:51	1
Nitrite as N	0.023	U	0.16	0.023	mg/L			08/25/23 21:51	1
Sulfate	**23.2**		0.48	0.095	mg/L			08/25/23 21:51	1

Method: SM-Online 2340B-2011 - Total Hardness (as CaCO3) by calculation - SM Online, 2011

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**169**		33.1	33.1	mg/L			09/15/23 16:22	1

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000043	U	0.00020	0.000043	mg/L		08/30/23 09:49	08/30/23 15:06	1

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**16.7**		4.0	0.91	ug/L		09/03/23 12:32	09/05/23 21:49	1
Boron	**76.9**	**J**	80.0	30.4	ug/L		09/03/23 12:32	09/05/23 21:49	1
Calcium	**44200**		500	53.6	ug/L		09/03/23 12:32	09/05/23 21:49	1
Copper	2.5	U	4.0	2.5	ug/L		09/03/23 12:32	09/05/23 21:49	1
Lead	0.84	U	1.2	0.84	ug/L		09/03/23 12:32	09/05/23 21:49	1
Magnesium	**14200**		200	46.9	ug/L		09/03/23 12:32	09/05/23 21:49	1
Manganese	**309**		8.0	1.5	ug/L		09/03/23 12:32	09/05/23 21:49	1
Nickel	**1.9**	**J**	4.0	0.91	ug/L		09/03/23 12:32	09/05/23 21:49	1
Potassium	**1440**		200	112	ug/L		09/03/23 12:32	09/05/23 21:49	1
Selenium	0.59	U	2.5	0.59	ug/L		09/03/23 12:32	09/05/23 21:49	1
Sodium	**4190**		500	219	ug/L		09/03/23 12:32	09/05/23 21:49	1
Strontium	**179**		4.0	0.50	ug/L		09/03/23 12:32	09/05/23 21:49	1
Zinc	6.5	U	16.0	6.5	ug/L		09/03/23 12:32	09/05/23 21:49	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**52.6**	**J**	100	35.0	ug/L		08/28/23 06:15	08/28/23 19:43	1
Iron	**577**		50.0	20.0	ug/L		08/31/23 11:01	09/10/23 15:30	1

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	19.5	U	40.0	19.5	ug/L		09/06/23 22:42	09/07/23 01:18	1
Cadmium	0.15	U	0.50	0.15	ug/L		08/31/23 11:44	09/06/23 09:06	1
Arsenic	0.89	U	2.0	0.89	ug/L		09/06/23 22:42	09/07/23 01:18	1
Iron	20.0	U	50.0	20.0	ug/L		08/31/23 11:44	09/06/23 09:06	1
Calcium	**42300**		500	53.6	ug/L		09/06/23 22:42	09/07/23 01:18	1
Zinc	4.0	U	10.0	4.0	ug/L		08/31/23 11:44	09/06/23 09:06	1
Copper	2.5	U	4.0	2.5	ug/L		09/06/23 22:42	09/07/23 01:18	1
Iron	58.2	U	120	58.2	ug/L		09/06/23 22:42	09/07/23 01:18	1
Lead	0.84	U	1.2	0.84	ug/L		09/06/23 22:42	09/07/23 01:18	1
Magnesium	**14300**		200	46.9	ug/L		09/06/23 22:42	09/07/23 01:18	1
Manganese	**34.6**		8.0	1.5	ug/L		09/06/23 22:42	09/07/23 01:18	1
Nickel	**1.4**	**J**	4.0	0.91	ug/L		09/06/23 22:42	09/07/23 01:18	1

Client Sample ID: Upgradient

Date Collected: 08/24/23 09:30
Date Received: 08/24/23 19:00

Lab Sample ID: 460-286856-3
Matrix: Water

Method: SW846 EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	2.1	J	5.0	1.3	ug/L		08/30/23 11:25	09/20/23 21:13	1

Method: SW846 EPA 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	2.3	J	5.0	1.3	ug/L		09/01/23 10:30	09/20/23 18:18	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Resistivity (EPA 120.1)	0.00281		0.000100	0.000100	Mohm-cm			08/31/23 11:24	1
Specific Conductance (EPA 120.1)	356		1.00	1.00	umhos/cm			08/31/23 11:24	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-2011)	152		5.0	5.0	mg/L			08/28/23 14:23	1
Carbonate Alkalinity as CaCO3 (SM 2320B-2011)	5.0	U	5.0	5.0	mg/L			08/28/23 14:23	1
Alkalinity as CaCO3 to pH 4.5 (SM 2320B-2011)	152		5.0	5.0	mg/L			08/28/23 14:23	1
Total Dissolved Solids (SM 2540C-2015)	216		2.5	2.5	mg/L			08/31/23 09:33	1
Total Suspended Solids (SM 2540D-2015)	9.0		2.5	2.5	mg/L			08/30/23 07:22	1
Ammonia (EPA 350.1)	0.050	U	0.10	0.050	mg/L			09/06/23 14:03	1
Total Kjeldahl Nitrogen (EPA 351.2	0.61	J	1.0	0.50	mg/L		09/14/23 15:30	09/15/23 11:17	1
Chemical Oxygen Demand (EPA 410.4)	14.1		10.0	3.3	mg/L			09/05/23 17:26	1
Oxygen, Dissolved (SM 4500 O C-2016)	6.3	H H3	1.0	1.0	mg/L			08/28/23 08:45	1
Orthophosphate as P (SM 4500 P E-2011)	0.0057	J	0.030	0.0050	mg/L			08/26/23 02:15	1
Carbonaceous Biochemical Oxygen Demand 5 (SM 5210 B-2016)	1.0	U	1.0	1.0	mg/L			08/25/23 15:45	1
pH (SW846 9040C)	8.0	HF	0.1	0.1	SU			09/05/23 17:24	1
Temperature (SW846 9040C)	23.7	HF	0.1	0.1	Degrees C			09/05/23 17:24	1
Total Organic Carbon (SW846 9060A)	4.8		1.0	0.53	mg/L			09/06/23 06:16	1
Phosphorus as PO4 (SM4500 P E-2011)	0.071	U	0.090	0.071	mg/L		09/06/23 11:42	09/06/23 15:21	1
Phosphorus as P (SM4500 P E-2011)	0.023	U	0.030	0.023	mg/L		09/06/23 11:42	09/06/23 15:21	1
Nitrogen, Total (EPA Total Nitrogen)	0.69		0.50	0.50	mg/L			08/28/23 06:58	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (EPA 350.1)	0.050	U	0.10	0.050	mg/L			09/06/23 14:28	1
Orthophosphate as P (SM 4500 P E-2011)	0.0050	U	0.030	0.0050	mg/L			08/26/23 02:15	1
Phosphorus as PO4 (SM4500 P E-2011)	0.071	U	0.090	0.071	mg/L		09/06/23 11:42	09/06/23 15:21	1
Phosphorus as P (SM4500 P E-2011)	0.023	U	0.030	0.023	mg/L		09/06/23 11:42	09/06/23 15:21	1

Client: Heidelberg Materials
Project/Site: Rock Hill - Anti Degradation

Job ID: 460-286856-1

Client Sample ID: Clarifying Pond

Date Collected: 08/24/23 10:00
Date Received: 08/24/23 19:00

Lab Sample ID: 460-286856-4
Matrix: Water

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide	0.054	U	0.32	0.054	mg/L			08/25/23 22:06	1
Nitrate as N	**0.12**	**J**	0.16	0.070	mg/L			08/25/23 22:06	1
Chloride	**1.39**		0.32	0.039	mg/L			08/25/23 22:06	1
Nitrate Nitrite as N	**0.12**	**J**	0.16	0.070	mg/L			08/25/23 22:06	1
Nitrite as N	0.023	U	0.16	0.023	mg/L			08/25/23 22:06	1
Sulfate	**6.03**		0.48	0.095	mg/L			08/25/23 22:06	1

Method: SM-Online 2340B-2011 - Total Hardness (as CaCO3) by calculation - SM Online, 2011

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**66.5**		33.1	33.1	mg/L			09/15/23 16:22	1

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000043	U	0.00020	0.000043	mg/L		08/30/23 09:49	08/30/23 15:08	1

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**5.0**		4.0	0.91	ug/L		09/03/23 12:32	09/05/23 21:51	1
Boron	**54.7**	**J**	80.0	30.4	ug/L		09/03/23 12:32	09/05/23 21:51	1
Calcium	**17600**		500	53.6	ug/L		09/03/23 12:32	09/05/23 21:51	1
Copper	2.5	U	4.0	2.5	ug/L		09/03/23 12:32	09/05/23 21:51	1
Lead	0.84	U	1.2	0.84	ug/L		09/03/23 12:32	09/05/23 21:51	1
Magnesium	**5490**		200	46.9	ug/L		09/03/23 12:32	09/05/23 21:51	1
Manganese	**71.5**		8.0	1.5	ug/L		09/03/23 12:32	09/05/23 21:51	1
Nickel	0.91	U	4.0	0.91	ug/L		09/03/23 12:32	09/05/23 21:51	1
Potassium	**1150**		200	112	ug/L		09/03/23 12:32	09/05/23 21:51	1
Selenium	0.59	U	2.5	0.59	ug/L		09/03/23 12:32	09/05/23 21:51	1
Sodium	**3260**		500	219	ug/L		09/03/23 12:32	09/05/23 21:51	1
Strontium	**31.0**		4.0	0.50	ug/L		09/03/23 12:32	09/05/23 21:51	1
Zinc	6.5	U	16.0	6.5	ug/L		09/03/23 12:32	09/05/23 21:51	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**96.5**	**J**	100	35.0	ug/L		08/28/23 06:15	08/28/23 19:39	1
Iron	**428**		50.0	20.0	ug/L		08/31/23 11:01	09/10/23 15:41	1

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	19.5	U	40.0	19.5	ug/L		09/06/23 22:42	09/07/23 01:26	1
Cadmium	0.15	U	0.50	0.15	ug/L		08/31/23 11:44	09/06/23 09:08	1
Arsenic	0.89	U	2.0	0.89	ug/L		09/06/23 22:42	09/07/23 01:26	1
Iron	**35.4**	**J**	50.0	20.0	ug/L		08/31/23 11:44	09/06/23 09:08	1
Calcium	**17800**		500	53.6	ug/L		09/06/23 22:42	09/07/23 01:26	1
Zinc	4.0	U	10.0	4.0	ug/L		08/31/23 11:44	09/06/23 09:08	1
Copper	2.5	U	4.0	2.5	ug/L		09/06/23 22:42	09/07/23 01:26	1
Iron	58.2	U	120	58.2	ug/L		09/06/23 22:42	09/07/23 01:26	1
Lead	0.84	U	1.2	0.84	ug/L		09/06/23 22:42	09/07/23 01:26	1
Magnesium	**5520**		200	46.9	ug/L		09/06/23 22:42	09/07/23 01:26	1
Manganese	**2.9**	**J**	8.0	1.5	ug/L		09/06/23 22:42	09/07/23 01:26	1
Nickel	0.91	U	4.0	0.91	ug/L		09/06/23 22:42	09/07/23 01:26	1

Client: Heidelberg Materials
Project/Site: Rock Hill - Anti Degradation

Job ID: 460-286856-1

Client Sample ID: Clarifying Pond

Date Collected: 08/24/23 10:00
Date Received: 08/24/23 19:00

Lab Sample ID: 460-286856-4
Matrix: Water

Method: SW846 EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	1.3	U	5.0	1.3	ug/L		08/30/23 11:25	09/20/23 21:17	1

Method: SW846 EPA 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	1.3	U	5.0	1.3	ug/L		09/01/23 10:30	09/20/23 18:22	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Resistivity (EPA 120.1)	**0.00667**		0.000100	0.000100	Mohm-cm			08/31/23 11:24	1
Specific Conductance (EPA 120.1)	**150**		1.00	1.00	umhos/cm			08/31/23 11:24	1
Acidity (SM 2310B-2011)	20.0	U	20.0	20.0	mg/L			09/05/23 14:56	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-2011)	**67.4**		5.0	5.0	mg/L			08/28/23 14:30	1
Carbonate Alkalinity as CaCO3 (SM 2320B-2011)	5.0	U	5.0	5.0	mg/L			08/28/23 14:30	1
Alkalinity as CaCO3 to pH 4.5 (SM 2320B-2011)	**67.4**		5.0	5.0	mg/L			08/28/23 14:30	1
Total Dissolved Solids (SM 2540C-2015)	**73.0**		2.5	2.5	mg/L			08/31/23 09:33	1
Total Suspended Solids (SM 2540D-2015)	**4.6**		2.5	2.5	mg/L			08/30/23 07:22	1
Ammonia (EPA 350.1)	0.050	U	0.10	0.050	mg/L			09/06/23 14:05	1
Total Kjeldahl Nitrogen (EPA 351.2	**0.55**	**J**	1.0	0.50	mg/L		09/14/23 15:30	09/15/23 11:19	1
Chemical Oxygen Demand (EPA 410.4)	**8.2**	**J**	10.0	3.3	mg/L			09/05/23 17:26	1
Oxygen, Dissolved (SM 4500 O C-2016)	**5.1**	**H H3**	1.0	1.0	mg/L			08/28/23 08:50	1
Orthophosphate as P (SM 4500 P E-2011)	**0.0071**	**J**	0.030	0.0050	mg/L			08/26/23 02:15	1
Carbonaceous Biochemical Oxygen Demand 5 (SM 5210 B-2016)	1.0	U	1.0	1.0	mg/L			08/25/23 15:55	1
pH (SW846 9040C)	**7.9**	**HF**	0.1	0.1	SU			09/05/23 17:26	1
Temperature (SW846 9040C)	**24.0**	**HF**	0.1	0.1	Degrees C			09/05/23 17:26	1
Total Organic Carbon (SW846 9060A)	**1.2**		1.0	0.53	mg/L			09/06/23 06:41	1
Phosphorus as PO4 (SM4500 P E-2011)	**0.57**		0.090	0.071	mg/L		09/06/23 11:42	09/06/23 15:21	1
Phosphorus as P (SM4500 P E-2011)	**0.19**		0.030	0.023	mg/L		09/06/23 11:42	09/06/23 15:21	1
Nitrogen, Total (EPA Total Nitrogen)	**0.67**		0.50	0.50	mg/L			08/28/23 06:58	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (EPA 350.1)	0.050	U	0.10	0.050	mg/L			09/06/23 14:30	1
Orthophosphate as P (SM 4500 P E-2011)	0.0050	U	0.030	0.0050	mg/L			08/26/23 02:15	1
Phosphorus as PO4 (SM4500 P E-2011)	**0.50**		0.090	0.071	mg/L		09/06/23 11:42	09/06/23 15:21	1
Phosphorus as P (SM4500 P E-2011)	**0.16**		0.030	0.023	mg/L		09/06/23 11:42	09/06/23 15:21	1

Client Sample ID: NPDES 001

Date Collected: 08/24/23 08:30
Date Received: 08/24/23 19:00

Lab Sample ID: 460-286856-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		1	928629	OXG	EET EDI	08/25/23 21:21
Total/NA	Analysis	300.0		1	928630	OXG	EET EDI	08/25/23 21:21
Total/NA	Analysis	2340B-2011		1	932463	LBD	EET EDI	09/15/23 16:22
Total/NA	Prep	245.1			681765	NVK	EET BUF	08/30/23 09:49
Total/NA	Analysis	245.1		1	681917	NVK	EET BUF	08/30/23 15:00
Dissolved	Filtration	Filtration			414657	UDL9	ELLE	08/31/23 07:51
Dissolved	Prep	3005A			414876	HUH3	ELLE	08/31/23 11:44
Dissolved	Analysis	6020B		1	416479	F7JF	ELLE	09/06/23 09:12
Dissolved	Filtration	FILTRATION			930720	VAD	EET EDI	09/06/23 22:38
Dissolved	Prep	3010A			930722	VAD	EET EDI	09/06/23 22:42
Dissolved	Analysis	6020B		1	930688	VAD	EET EDI	09/07/23 01:14
Total Recoverable	Prep	3005A			414853	UAMX	ELLE	08/31/23 11:01
Total Recoverable	Analysis	6020B		1	417966	F7JF	ELLE	09/10/23 15:43
Total Recoverable	Prep	3005A			795384	RR	EET SAV	08/28/23 07:26
Total Recoverable	Analysis	6020B		1	795561	BWR	EET SAV	08/28/23 22:14
Total/NA	Prep	3010A			930254	NNW	EET EDI	09/03/23 12:32
Total/NA	Analysis	6020B		1	930539	CDC	EET EDI	09/05/23 21:44
Dissolved	Filtration	Filtration			445330	S1Z	EET PIT	09/01/23 07:54
Dissolved	Prep	3005A			445354	S1Z	EET PIT	09/01/23 10:30
Dissolved	Analysis	EPA 6020B		1	447187	MRG	EET PIT	09/20/23 18:08
Total Recoverable	Prep	3005A			445089	S1Z	EET PIT	08/30/23 11:25
Total Recoverable	Analysis	EPA 6020B		1	447187	MRG	EET PIT	09/20/23 20:46
Total/NA	Analysis	120.1		1	929791	MMC	EET EDI	08/31/23 11:24
Total/NA	Analysis	2320B-2011		1	929096	AXP	EET EDI	08/28/23 14:09
Total/NA	Analysis	2540C-2015		1	929758	PLS	EET EDI	08/31/23 09:33
Total/NA	Analysis	2540D-2015		1	929441	PLS	EET EDI	08/30/23 07:22
Dissolved	Filtration	FILTRATION			930616	AXP	EET EDI	09/06/23 13:47
Dissolved	Analysis	350.1		1	930637	AXP	EET EDI	09/06/23 14:25
Total/NA	Analysis	350.1		1	930637	AXP	EET EDI	09/06/23 14:01
Total/NA	Prep	351.2			419584	NLE3	ELLE	09/14/23 15:30 - 09/14/23 18:30 [1]
Total/NA	Analysis	351.2		1	420045	JCG7	ELLE	09/15/23 11:08
Total/NA	Analysis	410.4		1	930457	HTV	EET EDI	09/05/23 17:26
Total/NA	Analysis	4500 O C-2016		1	929001	PLS	EET EDI	08/28/23 08:35
Dissolved	Filtration	FILTRATION			928722	VBG	EET EDI	08/25/23 23:45
Dissolved	Analysis	4500 P E-2011		1	928721	VBG	EET EDI	08/26/23 02:15
Total/NA	Analysis	4500 P E-2011		1	928721	VBG	EET EDI	08/26/23 02:15
Total/NA	Analysis	5210 B-2016		1	928651	RXA	EET EDI	08/25/23 15:50
Total/NA	Analysis	9040C		1	930462	GSM	EET EDI	09/05/23 17:20
Total/NA	Analysis	9060A		1	930719	HTV	EET EDI	09/06/23 05:27
Dissolved	Filtration	FILTRATION			930597	RAK	EET EDI	09/06/23 11:38
Dissolved	Prep	SM 4500 P B			930598	RAK	EET EDI	09/06/23 11:42
Dissolved	Analysis	SM4500 P E-2011		1	930639	RAK	EET EDI	09/06/23 15:21

Lab Chronicle

Client: Heidelberg Materials
Project/Site: Rock Hill - Anti Degradation

Job ID: 460-286856-1

Client Sample ID: NPDES 001

Date Collected: 08/24/23 08:30
Date Received: 08/24/23 19:00

Lab Sample ID: 460-286856-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	SM 4500 P B			930598	RAK	EET EDI	09/06/23 11:42
Total/NA	Analysis	SM4500 P E-2011		1	930639	RAK	EET EDI	09/06/23 15:21
Total/NA	Analysis	Total Nitrogen		1	928980	TJW	EET EDI	08/28/23 06:58

Client Sample ID: Basin 1

Date Collected: 08/24/23 09:00
Date Received: 08/24/23 19:00

Lab Sample ID: 460-286856-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		1	928629	OXG	EET EDI	08/25/23 21:36
Total/NA	Analysis	300.0		1	928630	OXG	EET EDI	08/25/23 21:36
Total/NA	Analysis	2340B-2011		1	932463	LBD	EET EDI	09/15/23 16:22
Total/NA	Prep	245.1			681765	NVK	EET BUF	08/30/23 09:49
Total/NA	Analysis	245.1		1	681917	NVK	EET BUF	08/30/23 15:05
Dissolved	Filtration	Filtration			414657	UDL9	ELLE	08/31/23 07:51
Dissolved	Prep	3005A			414876	HUH3	ELLE	08/31/23 11:44
Dissolved	Analysis	6020B		1	416479	F7JF	ELLE	09/06/23 09:10
Dissolved	Filtration	FILTRATION			930720	VAD	EET EDI	09/06/23 22:38
Dissolved	Prep	3010A			930722	VAD	EET EDI	09/06/23 22:42
Dissolved	Analysis	6020B		1	930688	VAD	EET EDI	09/07/23 01:16
Total Recoverable	Prep	3005A			414853	UAMX	ELLE	08/31/23 11:01
Total Recoverable	Analysis	6020B		1	417966	F7JF	ELLE	09/10/23 15:39
Total Recoverable	Prep	3005A			795384	RR	EET SAV	08/28/23 07:26
Total Recoverable	Analysis	6020B		1	795561	BWR	EET SAV	08/28/23 22:26
Total/NA	Prep	3010A			930254	NNW	EET EDI	09/03/23 12:32
Total/NA	Analysis	6020B		1	930539	CDC	EET EDI	09/05/23 21:47
Dissolved	Filtration	Filtration			445330	S1Z	EET PIT	09/01/23 07:54
Dissolved	Prep	3005A			445354	S1Z	EET PIT	09/01/23 10:30
Dissolved	Analysis	EPA 6020B		1	447187	MRG	EET PIT	09/20/23 18:15
Total Recoverable	Prep	3005A			445089	S1Z	EET PIT	08/30/23 11:25
Total Recoverable	Analysis	EPA 6020B		1	447187	MRG	EET PIT	09/20/23 21:10
Total/NA	Analysis	120.1		1	929791	MMC	EET EDI	08/31/23 11:24
Total/NA	Analysis	2320B-2011		1	929096	AXP	EET EDI	08/28/23 14:16
Total/NA	Analysis	2540C-2015		1	929758	PLS	EET EDI	08/31/23 09:33
Total/NA	Analysis	2540D-2015		1	929441	PLS	EET EDI	08/30/23 07:22
Dissolved	Filtration	FILTRATION			930616	AXP	EET EDI	09/06/23 13:47
Dissolved	Analysis	350.1		1	930637	AXP	EET EDI	09/06/23 14:27
Total/NA	Analysis	350.1		1	930637	AXP	EET EDI	09/06/23 14:02
Total/NA	Prep	351.2			419584	NLE3	ELLE	09/14/23 15:30 - 09/14/23 18:30 [1]
Total/NA	Analysis	351.2		1	420045	JCG7	ELLE	09/15/23 11:10
Total/NA	Analysis	410.4		1	930457	HTV	EET EDI	09/05/23 17:26
Total/NA	Analysis	4500 O C-2016		1	929001	PLS	EET EDI	08/28/23 08:40
Dissolved	Filtration	FILTRATION			928722	VBG	EET EDI	08/25/23 23:45
Dissolved	Analysis	4500 P E-2011		1	928721	VBG	EET EDI	08/26/23 02:15

Eurofins Edison

Client Sample ID: Basin 1

Lab Sample ID: 460-286856-2

Date Collected: 08/24/23 09:00

Matrix: Water

Date Received: 08/24/23 19:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	4500 P E-2011		1	928721	VBG	EET EDI	08/26/23 02:15
Total/NA	Analysis	5210 B-2016		1	928651	RXA	EET EDI	08/25/23 15:41
Total/NA	Analysis	9040C		1	930462	GSM	EET EDI	09/05/23 17:23
Total/NA	Analysis	9060A		1	930719	HTV	EET EDI	09/06/23 05:51
Dissolved	Filtration	FILTRATION			930597	RAK	EET EDI	09/06/23 11:38
Dissolved	Prep	SM 4500 P B			930598	RAK	EET EDI	09/06/23 11:42
Dissolved	Analysis	SM4500 P E-2011		1	930639	RAK	EET EDI	09/06/23 15:21
Total/NA	Prep	SM 4500 P B			930598	RAK	EET EDI	09/06/23 11:42
Total/NA	Analysis	SM4500 P E-2011		1	930639	RAK	EET EDI	09/06/23 15:21
Total/NA	Analysis	Total Nitrogen		1	928980	TJW	EET EDI	08/28/23 06:58

Client Sample ID: Upgradient

Lab Sample ID: 460-286856-3

Date Collected: 08/24/23 09:30

Matrix: Water

Date Received: 08/24/23 19:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		1	928629	OXG	EET EDI	08/25/23 21:51
Total/NA	Analysis	300.0		1	928630	OXG	EET EDI	08/25/23 21:51
Total/NA	Analysis	2340B-2011		1	932463	LBD	EET EDI	09/15/23 16:22
Total/NA	Prep	245.1			681765	NVK	EET BUF	08/30/23 09:49
Total/NA	Analysis	245.1		1	681917	NVK	EET BUF	08/30/23 15:06
Dissolved	Filtration	Filtration			414657	UDL9	ELLE	08/31/23 07:51
Dissolved	Prep	3005A			414876	HUH3	ELLE	08/31/23 11:44
Dissolved	Analysis	6020B		1	416479	F7JF	ELLE	09/06/23 09:06
Dissolved	Filtration	FILTRATION			930720	VAD	EET EDI	09/06/23 22:38
Dissolved	Prep	3010A			930722	VAD	EET EDI	09/06/23 22:42
Dissolved	Analysis	6020B		1	930688	VAD	EET EDI	09/07/23 01:18
Total Recoverable	Prep	3005A			414853	UAMX	ELLE	08/31/23 11:01
Total Recoverable	Analysis	6020B		1	417966	F7JF	ELLE	09/10/23 15:30
Total Recoverable	Prep	3005A			795378	RR	EET SAV	08/28/23 06:15
Total Recoverable	Analysis	6020B		1	795561	BWR	EET SAV	08/28/23 19:43
Total/NA	Prep	3010A			930254	NNW	EET EDI	09/03/23 12:32
Total/NA	Analysis	6020B		1	930539	CDC	EET EDI	09/05/23 21:49
Dissolved	Filtration	Filtration			445330	S1Z	EET PIT	09/01/23 07:54
Dissolved	Prep	3005A			445354	S1Z	EET PIT	09/01/23 10:30
Dissolved	Analysis	EPA 6020B		1	447187	MRG	EET PIT	09/20/23 18:18
Total Recoverable	Prep	3005A			445089	S1Z	EET PIT	08/30/23 11:25
Total Recoverable	Analysis	EPA 6020B		1	447187	MRG	EET PIT	09/20/23 21:13
Total/NA	Analysis	120.1		1	929791	MMC	EET EDI	08/31/23 11:24
Total/NA	Analysis	2320B-2011		1	929096	AXP	EET EDI	08/28/23 14:23
Total/NA	Analysis	2540C-2015		1	929758	PLS	EET EDI	08/31/23 09:33
Total/NA	Analysis	2540D-2015		1	929441	PLS	EET EDI	08/30/23 07:22
Dissolved	Filtration	FILTRATION			930616	AXP	EET EDI	09/06/23 13:47
Dissolved	Analysis	350.1		1	930637	AXP	EET EDI	09/06/23 14:28

Lab Chronicle

Client: Heidelberg Materials
Project/Site: Rock Hill - Anti Degradation

Job ID: 460-286856-1

Client Sample ID: Upgradient

Date Collected: 08/24/23 09:30
Date Received: 08/24/23 19:00

Lab Sample ID: 460-286856-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	350.1		1	930637	AXP	EET EDI	09/06/23 14:03
Total/NA	Prep	351.2			419584	NLE3	ELLE	09/14/23 15:30 - 09/14/23 18:30 [1]
Total/NA	Analysis	351.2		1	420045	JCG7	ELLE	09/15/23 11:17
Total/NA	Analysis	410.4		1	930457	HTV	EET EDI	09/05/23 17:26
Total/NA	Analysis	4500 O C-2016		1	929001	PLS	EET EDI	08/28/23 08:45
Dissolved	Filtration	FILTRATION			928722	VBG	EET EDI	08/25/23 23:45
Dissolved	Analysis	4500 P E-2011		1	928721	VBG	EET EDI	08/26/23 02:15
Total/NA	Analysis	4500 P E-2011		1	928721	VBG	EET EDI	08/26/23 02:15
Total/NA	Analysis	5210 B-2016		1	928651	RXA	EET EDI	08/25/23 15:45
Total/NA	Analysis	9040C		1	930462	GSM	EET EDI	09/05/23 17:24
Total/NA	Analysis	9060A		1	930719	HTV	EET EDI	09/06/23 06:16
Dissolved	Filtration	FILTRATION			930597	RAK	EET EDI	09/06/23 11:38
Dissolved	Prep	SM 4500 P B			930598	RAK	EET EDI	09/06/23 11:42
Dissolved	Analysis	SM4500 P E-2011		1	930639	RAK	EET EDI	09/06/23 15:21
Total/NA	Prep	SM 4500 P B			930598	RAK	EET EDI	09/06/23 11:42
Total/NA	Analysis	SM4500 P E-2011		1	930639	RAK	EET EDI	09/06/23 15:21
Total/NA	Analysis	Total Nitrogen		1	928980	TJW	EET EDI	08/28/23 06:58

Client Sample ID: Clarifying Pond

Date Collected: 08/24/23 10:00
Date Received: 08/24/23 19:00

Lab Sample ID: 460-286856-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		1	928629	OXG	EET EDI	08/25/23 22:06
Total/NA	Analysis	300.0		1	928630	OXG	EET EDI	08/25/23 22:06
Total/NA	Analysis	2340B-2011		1	932463	LBD	EET EDI	09/15/23 16:22
Total/NA	Prep	245.1			681765	NVK	EET BUF	08/30/23 09:49
Total/NA	Analysis	245.1		1	681917	NVK	EET BUF	08/30/23 15:08
Dissolved	Filtration	Filtration			414657	UDL9	ELLE	08/31/23 07:51
Dissolved	Prep	3005A			414876	HUH3	ELLE	08/31/23 11:44
Dissolved	Analysis	6020B		1	416479	F7JF	ELLE	09/06/23 09:08
Dissolved	Filtration	FILTRATION			930720	VAD	EET EDI	09/06/23 22:38
Dissolved	Prep	3010A			930722	VAD	EET EDI	09/06/23 22:42
Dissolved	Analysis	6020B		1	930688	VAD	EET EDI	09/07/23 01:26
Total Recoverable	Prep	3005A			414853	UAMX	ELLE	08/31/23 11:01
Total Recoverable	Analysis	6020B		1	417966	F7JF	ELLE	09/10/23 15:41
Total Recoverable	Prep	3005A			795378	RR	EET SAV	08/28/23 06:15
Total Recoverable	Analysis	6020B		1	795561	BWR	EET SAV	08/28/23 19:39
Total/NA	Prep	3010A			930254	NNW	EET EDI	09/03/23 12:32
Total/NA	Analysis	6020B		1	930539	CDC	EET EDI	09/05/23 21:51
Dissolved	Filtration	Filtration			445330	S1Z	EET PIT	09/01/23 07:54
Dissolved	Prep	3005A			445354	S1Z	EET PIT	09/01/23 10:30
Dissolved	Analysis	EPA 6020B		1	447187	MRG	EET PIT	09/20/23 18:22

Lab Chronicle

Client: Heidelberg Materials
Project/Site: Rock Hill - Anti Degradation

Job ID: 460-286856-1

Client Sample ID: Clarifying Pond

Date Collected: 08/24/23 10:00
Date Received: 08/24/23 19:00

Lab Sample ID: 460-286856-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			445089	S1Z	EET PIT	08/30/23 11:25
Total Recoverable	Analysis	EPA 6020B		1	447187	MRG	EET PIT	09/20/23 21:17
Total/NA	Analysis	120.1		1	929791	MMC	EET EDI	08/31/23 11:24
Total/NA	Analysis	2310B-2011		1	930427	RAK	EET EDI	09/05/23 14:56
Total/NA	Analysis	2320B-2011		1	929096	AXP	EET EDI	08/28/23 14:30
Total/NA	Analysis	2540C-2015		1	929758	PLS	EET EDI	08/31/23 09:33
Total/NA	Analysis	2540D-2015		1	929441	PLS	EET EDI	08/30/23 07:22
Dissolved	Filtration	FILTRATION			930616	AXP	EET EDI	09/06/23 13:47
Dissolved	Analysis	350.1		1	930637	AXP	EET EDI	09/06/23 14:30
Total/NA	Analysis	350.1		1	930637	AXP	EET EDI	09/06/23 14:05
Total/NA	Prep	351.2			419584	NLE3	ELLE	09/14/23 15:30 - 09/14/23 18:30 [1]
Total/NA	Analysis	351.2		1	420045	JCG7	ELLE	09/15/23 11:19
Total/NA	Analysis	410.4		1	930457	HTV	EET EDI	09/05/23 17:26
Total/NA	Analysis	4500 O C-2016		1	929001	PLS	EET EDI	08/28/23 08:50
Dissolved	Filtration	FILTRATION			928722	VBG	EET EDI	08/25/23 23:45
Dissolved	Analysis	4500 P E-2011		1	928721	VBG	EET EDI	08/26/23 02:15
Total/NA	Analysis	4500 P E-2011		1	928721	VBG	EET EDI	08/26/23 02:15
Total/NA	Analysis	5210 B-2016		1	928651	RXA	EET EDI	08/25/23 15:55
Total/NA	Analysis	9040C		1	930462	GSM	EET EDI	09/05/23 17:26
Total/NA	Analysis	9060A		1	930719	HTV	EET EDI	09/06/23 06:41
Dissolved	Filtration	FILTRATION			930597	RAK	EET EDI	09/06/23 11:38
Dissolved	Prep	SM 4500 P B			930598	RAK	EET EDI	09/06/23 11:42
Dissolved	Analysis	SM4500 P E-2011		1	930639	RAK	EET EDI	09/06/23 15:21
Total/NA	Prep	SM 4500 P B			930598	RAK	EET EDI	09/06/23 11:42
Total/NA	Analysis	SM4500 P E-2011		1	930639	RAK	EET EDI	09/06/23 15:21
Total/NA	Analysis	Total Nitrogen		1	928980	TJW	EET EDI	08/28/23 06:58

[1] This procedure uses a method stipulated length of time for the process. Both start and end times are displayed.

Laboratory References:

EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600
EET EDI = Eurofins Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900
EET PIT = Eurofins Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058
EET SAV = Eurofins Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858
ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Accreditation/Certification Summary

Client: Heidelberg Materials
Job ID: 460-286856-1
Project/Site: Rock Hill - Anti Degradation

Laboratory: Eurofins Edison

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Connecticut	State	PH-0818	01-30-24
DE Haz. Subst. Cleanup Act (HSCA)	State	N/A	01-01-24
Georgia	State	12028 (NJ)	06-30-24
Massachusetts	State	M-NJ312	06-30-24
New Jersey	NELAP	12028	06-30-24
New York	NELAP	11452	04-01-24
Pennsylvania	NELAP	68-00522	03-01-24
Rhode Island	State	LAO00376	12-30-23
USDA	US Federal Programs	P330-20-00244	11-03-23

Laboratory: Eurofins Buffalo

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Arkansas DEQ	State	88-0686	07-06-23 *
Connecticut	State	PH-0568	03-31-24
Florida	NELAP	E87672	06-30-23 *
Georgia	State	10026 (NY)	03-31-24
Georgia	State Program	N/A	03-31-09 *
Illinois	NELAP	200003	09-30-23
Iowa	State	374	03-01-25
Iowa	State Program	374	03-01-09 *
Kansas	NELAP	E-10187	02-01-24
Kentucky (DW)	State	90029	01-01-24
Kentucky (UST)	State	108092	04-01-24
Kentucky (WW)	State	KY90029	12-31-23
Louisiana	NELAP	02031	06-30-23 *
Louisiana (All)	NELAP	02031	06-30-23 *
Maine	State	NY00044	12-04-24
Maryland	State	294	06-30-24
Massachusetts	State	M-NY044	07-01-24
Michigan	State	9937	04-01-24
Michigan	State Program	9937	04-01-09 *
New Hampshire	NELAP	2973	09-11-19 *
New Hampshire	NELAP	2337	11-17-23
New Jersey	NELAP	NY455	06-30-24
New York	NELAP	10026	03-31-24
Pennsylvania	NELAP	68-00281	08-31-24
Rhode Island	State	LAO00328	12-30-23
Texas	NELAP	T104704412-18-10	07-31-23 *
USDA	US Federal Programs	P330-18-00039	03-25-24
Virginia	NELAP	460185	09-14-23
Washington	State	C784	02-10-24
Wisconsin	State	998310390	08-31-24

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
A2LA	Dept. of Defense ELAP	0001.01	11-30-24
A2LA	ISO/IEC 17025	0001.01	11-30-24

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Accreditation/Certification Summary

Client: Heidelberg Materials
Job ID: 460-286856-1
Project/Site: Rock Hill - Anti Degradation

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC (Continued)

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alabama	State	43200	01-31-24
Alaska	State	PA00009	06-30-24
Alaska (UST)	State	17-027	02-28-24
Arizona	State	AZ0780	03-12-24
Arkansas DEQ	State	88-00660	08-09-24
California	State	2792	11-30-23
Colorado	State	PA00009	06-30-24
Connecticut	State	PH-0746	06-30-25
DE Haz. Subst. Cleanup Act (HSCA)	State	019-006 (PA cert)	01-31-24
Delaware (DW)	State	N/A	01-31-24
Florida	NELAP	E87997	06-30-24
Georgia (DW)	State	C048	01-31-24
Hawaii	State	N/A	01-31-24
Illinois	NELAP	200027	01-31-24
Iowa	State	361	03-01-24
Kansas	NELAP	E-10151	10-31-23
Kentucky (DW)	State	KY90088	12-31-23
Kentucky (UST)	State	0001.01	11-30-24
Kentucky (WW)	State	KY90088	12-31-23
Louisiana (All)	NELAP	02055	06-30-24
Maine	State	2019012	03-12-25
Maryland	State	100	06-30-24
Massachusetts	State	M-PA009	06-30-24
Michigan	State	9930	01-31-24
Minnesota	NELAP	042-999-487	12-31-23
Mississippi	State	023	01-31-24
Missouri	State	450	01-31-25
Montana (DW)	State	0098	01-01-24
Nebraska	State	NE-OS-32-17	01-31-24
New Hampshire	NELAP	2730	01-10-24
New Jersey	NELAP	PA011	09-17-23
New York	NELAP	10670	04-01-24
North Carolina (DW)	State	42705	07-31-24
North Carolina (WW/SW)	State	521	12-31-23
North Dakota	State	R-205	01-31-24
Oklahoma	NELAP	9804	08-31-23 *
Oregon	NELAP	PA200001	09-11-24
PALA	Canada	1978	09-16-24
Pennsylvania	NELAP	36-00037	01-31-24
Rhode Island	State	LAO00338	12-31-23
South Carolina	State	89002	01-31-24
Tennessee	State	02838	01-31-24
Texas	NELAP	T104704194-23-46	08-31-24
USDA	US Federal Programs	525-22-298-19481	10-25-25
Vermont	State	VT - 36037	10-28-23
Virginia	NELAP	460182	06-14-25
Washington	State	C457	04-11-24
West Virginia (DW)	State	9906 C	12-31-23
West Virginia DEP	State	055	07-31-24
Wyoming	State	8TMS-L	01-31-24

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Accreditation/Certification Summary

Client: Heidelberg Materials
Job ID: 460-286856-1
Project/Site: Rock Hill - Anti Degradation

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC (Continued)

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Wyoming (UST)	A2LA	0001.01	11-30-24

Laboratory: Eurofins Pittsburgh

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Arkansas DEQ	State	19-033-0	06-27-24
California	State	2891	04-30-24
Connecticut	State	PH-0688	09-30-24
Florida	NELAP	E871008	06-30-24
Georgia	State	PA 02-00416	04-30-24
Illinois	NELAP	004375	06-30-24
Kansas	NELAP	E-10350	01-31-24
Kentucky (UST)	State	162013	04-30-23 *
Kentucky (WW)	State	KY98043	12-31-23
Louisiana	NELAP	04041	06-30-22 *
Louisiana (All)	NELAP	04041	06-30-24
Maine	State	PA00164	03-06-24
Minnesota	NELAP	042-999-482	12-31-23
New Hampshire	NELAP	2030	04-04-24
New Jersey	NELAP	PA005	06-30-24
New York	NELAP	11182	04-01-24
North Carolina (WW/SW)	State	434	12-31-23
North Dakota	State	R-227	04-30-24
Oregon	NELAP	PA-2151	02-06-24
Pennsylvania	NELAP	02-00416	04-30-24
Rhode Island	State	LAO00362	12-31-22 *
South Carolina	State	89014	04-30-23 *
Texas	NELAP	T104704528	03-31-24
US Fish & Wildlife	US Federal Programs	058448	03-31-24
USDA	US Federal Programs	P330-16-00211	04-11-26
Utah	NELAP	PA001462019-8	05-31-24
Virginia	NELAP	10043	09-14-23 *
West Virginia DEP	State	142	01-31-24
Wisconsin	State	998027800	08-31-24

Laboratory: Eurofins Savannah

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
	AFCEE	SAVLAB	
Alabama	State	41450	06-30-24
ANAB	Dept. of Defense ELAP	L2463	09-22-24
Arkansas DEQ	State	19-015-0	02-01-24
California	State	2939	06-30-24
Florida	NELAP	E87052	06-30-24
Georgia	State	E87052	06-30-24
Georgia (DW)	State	803	06-30-24
Guam	State	19-007R	04-17-24
Hawaii	State	<cert No.>	06-30-24
Illinois	NELAP	200022	11-30-23

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Accreditation/Certification Summary

Client: Heidelberg Materials
Job ID: 460-286856-1
Project/Site: Rock Hill - Anti Degradation

Laboratory: Eurofins Savannah (Continued)

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Indiana	State	C-GA-02	06-30-24
Iowa	State	353	07-01-25
Kentucky (UST)	State	NA	06-30-24
Louisiana	NELAP	30690	06-30-24
Louisiana (All)	NELAP	30690	06-30-24
Louisiana (DW)	State	LA009	12-31-23
Maine	State	GA00006	09-25-24
Maryland	State	250	12-31-23
Massachusetts	State	M-GA006	06-30-24
Michigan	State	9925	06-30-24
Mississippi	State	<cert No.>	06-30-24
Nebraska	State	NE-OS-7-04	06-30-24
New Jersey	NELAP	GA769	06-30-24
New Mexico	State	GA00006	06-30-24
North Carolina (DW)	State	13701	07-31-24
North Carolina (WW/SW)	State	269	09-21-23
Pennsylvania	NELAP	68-00474	06-30-24
Puerto Rico	State	GA00006	01-01-24
South Carolina	State	98001	06-30-23 *
Tennessee	State	TN02961	06-30-24
Texas	NELAP	T1047004185	11-30-23
Texas	TCEQ Water Supply	T104704185	06-30-24
USDA	US Federal Programs	P330-18-00313	09-03-24
Virginia	NELAP	460161	06-14-24
Wyoming	State	8TMS-L	06-30-23 *

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Method Summary

Client: Heidelberg Materials
Project/Site: Rock Hill - Anti Degradation

Job ID: 460-286856-1

Method	Method Description	Protocol	Laboratory
300.0	Anions, Ion Chromatography	EPA	EET EDI
2340B-2011	Total Hardness (as CaCO3) by calculation - SM Online, 2011	SM-Online	EET EDI
245.1	Mercury (CVAA)	EPA	EET BUF
6020B	Metals (ICP/MS)	SW846	EET EDI
6020B	Metals (ICP/MS)	SW846	EET SAV
6020B	Metals (ICP/MS)	SW846	ELLE
EPA 6020B	Metals (ICP/MS)	SW846	EET PIT
120.1	Conductivity, Specific Conductance	EPA	EET EDI
2310B-2011	Acidity	SM	EET EDI
2320B-2011	Alkalinity, Total	SM	EET EDI
2540C-2015	Total Dissolved Solids (Dried at 180 °C)	SM	EET EDI
2540D-2015	Total Suspended Solids (Dried at 103-105°C)	SM	EET EDI
350.1	Nitrogen, Ammonia	EPA	EET EDI
351.2	Nitrogen, Total Kjeldahl	EPA	ELLE
410.4	COD	EPA	EET EDI
4500 O C-2016	Oxygen, Dissolved	SM	EET EDI
4500 P E-2011	Orthophosphate	SM	EET EDI
5210 B-2016	BOD, 5-Day	SM	EET EDI
9040C	pH	SW846	EET EDI
9060A	Organic Carbon, Total (TOC)	SW846	EET EDI
SM4500 P E-2011	Phosphorus	SM	EET EDI
Total Nitrogen	Nitrogen, Total	EPA	EET EDI
245.1	Preparation, Mercury	EPA	EET BUF
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	EET PIT
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	EET SAV
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	ELLE
3010A	Preparation, Total Metals	SW846	EET EDI
351.2	Nitrogen, Total Kjeldahl	EPA	ELLE
FILTRATION	Sample Filtration	None	EET EDI
Filtration	Sample Filtration	None	EET PIT
Filtration	Sample Filtration	None	ELLE
SM 4500 P B	Phosphorous, Total and Ortho	SM	EET EDI

Protocol References:

EPA = US Environmental Protection Agency
None = None
SM = "Standard Methods For The Examination Of Water And Wastewater"
SM-Online = Standard Methods Online
SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600
EET EDI = Eurofins Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900
EET PIT = Eurofins Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058
EET SAV = Eurofins Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858
ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Sample Summary

Client: Heidelberg Materials
Project/Site: Rock Hill - Anti Degradation

Job ID: 460-286856-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
460-286856-1	NPDES 001	Water	08/24/23 08:30	08/24/23 19:00
460-286856-2	Basin 1	Water	08/24/23 09:00	08/24/23 19:00
460-286856-3	Upgradient	Water	08/24/23 09:30	08/24/23 19:00
460-286856-4	Clarifying Pond	Water	08/24/23 10:00	08/24/23 19:00

Chain of Custody Record

700728

eurofins | Environment Testing America

TAL-8210

Address. _____

Regulatory Program ☐ DW ☐ NPDES ☐ RCRA ☐ Other

Client Contact	Project Manager: Matt Weikel	Site Contact:	Date:	COC No:
Company Name: Earthres Group, Inc	Tel/Email: mweikel@earthres.com	Lab Contact: Julie Gilmore	Carrier:	____ of ____ COCs
Address: 6912 Old Easton Rd	Analysis Turnaround Time			Sampler:
City/State/Zip: Pipersville, PA 18947	☐ CALENDAR DAYS ☒ WORKING DAYS			For Lab Use Only:
Phone: 215-766-1211	TAT if different from Below ____			Walk-in Client:
Fax: 215-766-1245	☒ 2 weeks			Lab Sampling
Project Name: Rock Hill - Anti Degradation	☐ 1 week			
Site: Rock Hill	☐ 2 days			Job / SDG No
P O #	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y / N)	Perform MS / MSD (Y / N)	See attached order	Add Acidity	Sample Specific Notes:
NPDES 001	8/24/23	0830	G	SW	20	N	N	X	X	1
Basin 1	8/24/23	0900	G	SW	20	N	N	X	X	2
Upgradient	8/24/23	0930	G	SW	20	N	N	X	X	3
Clarifying Pond	8/24/23	1000	G	SW	20	N	N	X	X	4

SHORT HOLD

460-286856 Chain of Custody

Preservation Used 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH, 6= Other _____

Possible Hazard Identification
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample

☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☒ Disposal by Lab ☐ Archive for_____ Months

Special Instructions/QC Requirements & Comments Add Acidity Bottle Order # 1116665

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No | Cooler Temp. (°C) Obs'd._____ Corr'd._____ Therm ID No._____

	Company	Date/Time		Company	Date/Time
Relinquished by:	EARTHRES	8/24/23 1155	Received by:	EETN-KOP	8/24/23 1155
Relinquished by:	EETN KOP	8/24/23 15 45	Received by:	ETA	8/24 1700
Relinquished by:	ETA	8/24/23 1900	Received in Laboratory by:	Eurofins	8/24/23 1900

9/28/2023

Eurofins TestAmerica Edison
Receipt Temperature and pH Log

Job Number: 266656

Number of Coolers: 2 IR Gun # 2/KOP

Cooler Temperatures

	RAW	CORRECTED		RAW	CORRECTED		RAW	CORRECTED
Cooler #1:	4.5 °C	4.5 °C	Cooler #4:	°C	°C	Cooler #7:	°C	°C
Cooler #2:	4.9 °C	4.9 °C	Cooler #5:	°C	°C	Cooler #8:	°C	°C
Cooler #3:	°C	°C	Cooler #6:	°C	°C	Cooler #9:	°C	°C

TALS Sample Number	Ammonia (pH<2)	COD (pH<2)	Nitrate Nitrite (pH<2)	Metals* (pH<2)	Hardness (pH<2)	Pest (pH 5-9)	EPH or QAM (pH<2)	Phenols (pH<2)	Sulfide (pH>9)	TKN (pH<2)	TOC (pH<2)	Total Cyanide (pH>12)	Total Phos (pH<2)	Other	Other
1	<2	<2		<2	<2						<2		<2		
2	<2	<2		<2	<2						<2		<2		
3	<2	<2		<2	<2						<2		<2		
4	<2	<2		<2	<2						<2		<2		

If pH adjustments are required record the information below:

Sample No(s). adjusted: _____

Preservative Name/Conc.. _____ Volume of Preservative used (ml): _____

Lot # of Preservative(s). _____ Expiration Date: _____

The appropriate Project Manager and Department Manager should be notified about the samples which were pH adjusted.

**Samples for Metal analysis which are out of compliance must be acidified at least 24 hours prior to analysis.*

Initials: KOP (Took Temp 2) Date: 8/23/23

PG = Filled out form

Bottle Order Information

Bottle Order	*Rock Hill - Anti-Degradation*
Bottle Order #	*111665*
Request From Client	*8/21/2023*
Date Order Posted	*7/24/2023 9 22.18AM*
Order Status.	*Ready To Process*
Prepared By	*Julie Gilmore*
Deliver By Date	***8/23/2023 4 59·00PM***
Lab Project Number	*46011424*
PWSID	

Order Completion Information

Creator	*Julie Gilmore*
Filled by	
Sent Date.	
Sent Via	
Tracking #	

Sets	Bottles/Set	Qty	Bottle Type Description	Preservative	Method	Matrix	Sample Type	Comments	Lot #
5	1	5	Plastic 250ml unpreserved	None	6020B - Dissolved Lithium	Water	Normal		
5	1	5	Plastic 250ml with Nitric Acid	Nitric Acid	6020B Total Lithium	Water	Normal		
5	1	5	Plastic 250ml with Sulfuric Acid	Sulfuric Acid	351.2 Local Method	Water	Normal		
5	1	5	Plastic 250ml unpreserved	None	6020B Dissolved Cd/Fe/Zn	Water	Normal		
5	1	5	Plastic 250ml with Nitric Acid	Nitric Acid	6020B (MOD) Total Fe	Water	Normal		
5	1	5	Plastic 250ml with Sulfuric Acid	Sulfuric Acid	350 1 - Total Ammonia	Water	Normal		
					410.4 COD	Water	Normal		
					4500_P_E Total Phosphorus	Water	Normal		
5	1	5	Plastic 250ml unpreserved	None	9040C Local Method	Water	Normal		
					120 1 - Specific Conductivity	Water	Normal		
5	1	5	Plastic 250ml unpreserved	None	350 1 - Dissolved Ammonia	Water	Normal		
					4500_P_E Dissolved Phosphorus	Water	Normal		
					6020B Dissolved Custom Metals	Water	Normal		
5	1	5	Plastic 250ml unpreserved	None	2320B (MOD) Alkalinity	Water	Normal		
5	1	5	Plastic 250ml with Nitric Acid	Nitric Acid	SM2340B Total Hardness	Water	Normal		
					6020B (MOD) Total Custom Metals	Water	Normal		
5	1	5	Amber Glass 250ml Sulfuric Acid	Sulfuric Acid	9060A TOC	Water	Normal		
5	2	10	Plastic 1 liter unpreserved	None	SM5210B_Calc CBOD	Water	Normal		
					2540D TSS	Water	Normal		
5	1	5	Plastic 250ml unpreserved	None	4500_P_E_Ortho Dissolved Orthophosphate	Water	Normal		
5	1	5	Plastic 250ml unpreserved	None	4500_P_E_Ortho Total Orthophosphate	Water	Normal		
5	1	5	Plastic 500ml unpreserved	None	2540C TDS	Water	Normal		
5	1	5	Plastic 125mL unpreserved	None	300_ORGFM_28D Bromide/Chloride/Sulfate	Water	Normal		
					300_ORGFMS Total Nitrate/Nitrite	Water	Normal		
5	1	5	Plastic 250ml with Nitric Acid	Nitric Acid	245 1 Local Method	Water	Normal		

Please notify your PM immediately if an error is found in shipment. When returning samples, please return all provided QC samples

5	1	5	Plastic 250ml with Nitric Acid	Nitric Acid	6020B Total Aluminum		Water	Normal		

Total Bottle Summary

Bottle Type Description	Preservative	Bottle Count
Amber Glass 250ml - Sulfuric Acid	Sulfuric Acid	5
Plastic 1 liter unpreserved	None	10
Plastic 125mL - unpreserved	None	5
Plastic 250ml unpreserved	None	35
Plastic 250ml - with Nitric Acid	Nitric Acid	25
Plastic 250ml with Sulfuric Acid	Sulfuric Acid	10
Plastic 500ml unpreserved	None	5
	Total Bottles.	**95**

Notes to Field Staff:

Scan QR code for field sampler instructions

Health and Safety Notes:

Preservative	Comment
Nitric Acid	CAUTION! STRONG OXIDIZER! CONTAINS 1 1 NITRIC ACID Avoid skin and eye contact. If contact is made, FLUSH IMMEDIATELY with water
Sulfuric Acid	CAUTION! CONTAINS 1 1 SULFURIC ACID Avoid skin and eye contact. If contact is made, FLUSH IMMEDIATELY with water

Add Acidity

Relinquished By	Company	Date	Time	Received By	Company	Seal#: Seal#: Seal#:
Relinquished By	Company	Date	Time	Received By	Company	Seal#: Seal#: Seal#:

Please notify your PM immediately if an error is found in shipment. When returning samples, please return all provided QC samples

NX AGCA

15238
PIT
PA – US

TUE – 29 AUG 10:30A
PRIORITY OVERNIGHT

TRK# 6553 1009 9100
0201

Thermometer ID 17
CF 0 Initials RB
PT-WI-SR-001 effective 7/26/13
Uncorrected temp 1.2 °C

FedEx Express

J2310221102201v

DEPT:
PO:
INV:
(412) 963-7058 REF:

TO SAMPLE CUSTODY
EUROFINS PITTSBURGH
301 ALPHA DRIVE
RIDC PARK
PITTSBURGH PA 152382907

ORIGIN ID:LDJA (732) 549-3900
EUROFINS EDISON
777 NEW DURHAM ROAD
EDISON, NJ 08817
UNITED STATES US

SHIP DATE: 28AUG23
ACTWGT: 15.25 LB
CAD: 0613092/CAFE3709
BILL SENDER

589C5/7558/JFP3B

460-286856 Waybill

1 2 3 4 5 6 7 8 9 10 11

9/28/2023

Eurofins Edison
777 New Durham Road
Edison, NJ 08817
Phone 732-549-3900 Fax 732-549-3679

Chain of Custody Record

460-286856 Chain of Custody

Eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Gilmore, Julie L	No: -69052 1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Julie Gilmore@et.eurofins...	Pennsylvania — Page 1 of 1
Company: Eurofins Environment Testing Northeast,		Accreditations Required (See note):	Job #: 460-286856-1
Address: 301 Alpha Drive, RIDC Park,	Due Date Requested: 9/22/2023		
City: Pittsburgh	TAT Requested (days):		
State, Zip: PA, 15238			
Phone: 412-963-7058(Tel) 412-963-2468(Fax)	PO #:		
Email	WO #:		
Project Name: Rock Hill - Anti Degradation	Project #: 46011424		
Site	SSOW#:		

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)

Other:

Analysis Requested

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020B/Filtration_ME Dissolved Lithium	6020B/3005A (MOD) Total Lithium	Total Number of containers	Special Instructions/Note:
			Preservation Code:							
NPDES 001 (460-286856-1)	8/24/23	08:30 Eastern		Water			X	X	2	
Basin 1 (460-286856-2)	8/24/23	09 00 Eastern		Water			X	X	2	
Upgradient (460-286856-3)	8/24/23	09:30 Eastern		Water			X	X	2	
Clarifying Pond (460-286856-4)	8/24/23	10 00 Eastern		Water			X	X	2	

Note Since laboratory accreditations are subject to change, Eurofins Environment Testing Northeast, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories This sample shipment is forwarded under chain-of-custody If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Northeast, LLC laboratory or other instructions will be provided Any changes to accreditation status should be brought to Eurofins Environment Testing Northeast, LLC attention immediately If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Northeast, LLC

Possible Hazard Identification *Unconfirmed*	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*** ☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested. I, II, III, IV, Other (specify) Primary Deliverable Rank: 1	Special Instructions/QC Requirements.

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment.			
Relinquished by:	Date/Time: 8/28/23 1900	Company: EET	Received by:	Date/Time: 8/29/23 0948	Company: EET	
Relinquished by:	Date/Time	Company	Received by:	Date/Time	Company	
Relinquished by:	Date/Time	Company	Received by:	Date/Time	Company	

Custody Seals Intact: ∆ Yes ∆ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

9/28/2023

Eurofins Edison
777 New Durham Road
Edison, NJ 08817
Phone: 732-549-3900 Fax: 732-549-3679

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Gilmore, Julie L	Carrier Tracking No(s):	COC No: 460-69045.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Julie.Gilmore@et.eurofinsus.com	State of Origin: Pennsylvania	Page: Page 1 of 1
Company: Eurofins Lancaster Laboratories Environm		Accreditations Required (See note):		Job #: 460-286856-1
Address: 2425 New Holland Pike, ,	Due Date Requested: 9/5/2023			
City: Lancaster	TAT Requested (days):			
State, Zip: PA, 17601				
Phone: 717-656-2300(Tel)	PO #:			
Email:	WO #:			
Project Name: Rock Hill - Anti Degradation	Project #: 46011424			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)
Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020B/3005A (MOD) Total Fe	6020B/Filtration_ME Dissolved Cd/Fe/Zn	351.2/351.2_Prep	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
NPDES 001 (460-286856-1)	8/24/23	08:30 Eastern		Water			X	X	X	3	
Basin 1 (460-286856-2)	8/24/23	09:00 Eastern		Water			X	X	X	3	
Upgradient (460-286856-3)	8/24/23	09:30 Eastern		Water			X	X	X	3	
Clarifying Pond (460-286856-4)	8/24/23	10:00 Eastern		Water			X	X	X	3	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Northeast, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Northeast, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Northeast, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Northeast, LLC.

Possible Hazard Identification	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* ____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 1	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
1		8/28/23 1650	EEL		8/28/23 1650	EEL
2		8/28/23 2025	EEL			
3					8/28/23 20:25	EEL

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks: raw: 0.9 cor: 0.7

Eurofins Edison
777 New Durham Road
Edison, NJ 08817
Phone: 732-549-3900 Fax: 732-549-3679

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Gilmore, Julie L	Carrier Tracking No(s):	COC No: 460-69051.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Julie.Gilmore@et.eurofinsus.com	State of Origin: Pennsylvania	Page: Page 1 of 1
Company: Eurofins Environment Testing Northeast,		Accreditations Required (See note):		Job #: 460-286856-1
Address: 10 Hazelwood Drive, ,	Due Date Requested: 9/5/2023			
City: Amherst	TAT Requested (days):			
State, Zip: NY, 14228-2298				
Phone: 716-691-2600(Tel) 716-691-7991(Fax)	PO #:			
Email:	WO #:			
Project Name: Rock Hill - Anti Degradation	Project #: 46011424			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCl, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)
Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	245.1/245.1_Prep	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
NPDES 001 (460-286856-1)	8/24/23	08:30 Eastern		Water			X	1	
Basin 1 (460-286856-2)	8/24/23	09:00 Eastern		Water			X	1	
Upgradient (460-286856-3)	8/24/23	09:30 Eastern		Water			X	1	
Clarifying Pond (460-286856-4)	8/24/23	10:00 Eastern		Water			X	1	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Northeast, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Northeast, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Northeast, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Northeast, LLC.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 1	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		8/28/23 1900	EET		8-29-23 1100	FAB
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 2.5 ICE

Login Sample Receipt Checklist

Client: Heidelberg Materials

Job Number: 460-286856-1

Login Number: 286856
List Number: 1
Creator: Thundathorn, Sukanan 1

List Source: Eurofins Edison

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Heidelberg Materials

Job Number: 460-286856-1

Login Number: 286856
List Number: 4
Creator: Yeager, Brian A

List Source: Eurofins Buffalo
List Creation: 08/29/23 01:17 PM

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	2.5 ICE
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	True	

Login Sample Receipt Checklist

Client: Heidelberg Materials

Job Number: 460-286856-1

Login Number: 286856
List Number: 3
Creator: Metzger, Katherine A

List Source: Eurofins Lancaster Laboratories Environment Testing, LLC
List Creation: 08/28/23 10:35 PM

Question	Answer	Comment
The cooler's custody seal is intact.	N/A	Not present
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature acceptable,where thermal pres is required(</=6C, not frozen).	True	
Cooler Temperature is recorded.	True	
WV:Container Temp acceptable,where thermal pres is required (</=6C, not frozen).	N/A	
WV: Container Temperature is recorded.	N/A	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the containers received and the COC.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
There is sufficient vol. for all requested analyses.	True	
Is the Field Sampler's name present on COC?	False	Received project as a subcontract.
Sample custody seals are intact.	N/A	Not present.
VOA sample vials do not have headspace >6mm in diameter (none, if from WV)?	N/A	

Login Sample Receipt Checklist

Client: Heidelberg Materials

Job Number: 460-286856-1

Login Number: 286856
List Number: 5
Creator: Watson, Debbie

List Source: Eurofins Pittsburgh
List Creation: 08/29/23 05:34 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Heidelberg Materials

Job Number: 460-286856-1

Login Number: 286856
List Number: 2
Creator: Sims, Robert D

List Source: Eurofins Savannah
List Creation: 08/26/23 11:22 AM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Matthew Weikel
Heidelberg Materials
7660 Imperial Way
Allentown, Pennsylvania 18195

Generated 10/2/2023 8:55:02 AM

JOB DESCRIPTION

Rock Hill - Anti Degradation

JOB NUMBER

460-286856-2

Eurofins Edison
777 New Durham Road
Edison NJ 08817

See page two for job notes and contact information.

my EOL

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing Northeast, LLC Project Manager.

Authorization



Generated
10/2/2023 8:55:02 AM

Authorized for release by
Julie Gilmore, Project Manager I
Julie.Gilmore@et.eurofinsus.com
(484)685-0865

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Definitions/Glossary

Client: Heidelberg Materials
Job ID: 460-286856-2
Project/Site: Rock Hill - Anti Degradation

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: Heidelberg Materials
Project/Site: Rock Hill - Anti Degradation

Job ID: 460-286856-2

Job ID: 460-286856-2

Laboratory: Eurofins Edison

Narrative

Job Narrative
460-286856-2

Receipt
The samples were received on 8/24/2023 7:00 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 4.5º C and 4.9º C.

Subcontract Work
Method Osomotic Pressure: This method was subcontracted to Microbac Laboratories, Inc. The subcontract laboratory certification is different from that of the facility issuing the final report. The subcontract report is appended in its entirety.

Method Summary

Client: Heidelberg Materials
Project/Site: Rock Hill - Anti Degradation

Job ID: 460-286856-2

Method	Method Description	Protocol	Laboratory
Subcontract	Osomotic Pressure	None	Microbac

Protocol References:

None = None

Laboratory References:

Microbac = Marietta, OH, 158 Starlite Drive, Marietta, OH 45750

Sample Summary

Client: Heidelberg Materials
Project/Site: Rock Hill - Anti Degradation

Job ID: 460-286856-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
460-286856-1	NPDES 001	Water	08/24/23 08:30	08/24/23 19:00
460-286856-2	Basin 1	Water	08/24/23 09:00	08/24/23 19:00
460-286856-3	Upgradient	Water	08/24/23 09:30	08/24/23 19:00
460-286856-4	Clarifying Pond	Water	08/24/23 10:00	08/24/23 19:00

Microbac Laboratories Inc., - Marietta, OH

Client Project ID:

46011424

For:

Julie Gilmore

Eurofins TestAmerica Edison

777 New Durham RD

Edison, NJ 08817

Project State of Origin: Pennsylvania

Project Requested Certification:

Microbac Laboratories Inc., - Marietta, OH 68-01670 PA Department of Environmental Protection

All test results meet the requirements of the QAPP and other applicable contract terms and conditions. Any exceptions are attached to this cover page or addressed in the method narratives presented in the report. All results for soil samples are reported on a 'dry-weight' basis unless specified otherwise. Analytical results for water and wastes are reported on a 'as received' basis unless specified otherwise. A statement of uncertainty for each analysis is available upon request. The reported results are related only to the samples analyzed as received. This laboratory report may be released as a hardcopy and in computer-readable form submitted electronically or on diskette. This laboratory report shall not be reproduced, except in full, without the written approval of Microbac Laboratories, Inc.

Laboratory Project Manager:

Michelle Taylor

Project Manager

Michelle.Taylor@microbac.com

Authorized By:

Michelle Taylor

Project Manager

Issued: 10/02/2023

MICROBAC®

Laboratory Report Number: M3I1897

Client Project ID: 46011424

Cooler Receipt Log

Cooler ID: Default Cooler Temp: 1.2°C

Cooler Inspection Checklist

Ice Present or not required?	Yes
Shipping containers sealed or not required?	Yes
Custody seals intact or not required?	Yes
Chain of Custody (COC) Present?	Yes
COC includes customer information?	Yes
Relinquished and received signature on COC?	Yes
Sample collector identified on COC?	Yes
Sample type identified on COC?	Yes
Correct type of Containers Received	Yes
Correct number of containers listed on COC?	Yes
Containers Intact?	Yes
COC includes requested analyses?	Yes
Enough sample volume for indicated tests received?	Yes
Sample labels match COC (Name, Date & Time?)	Yes
Samples arrived within hold time?	Yes
Correct preservatives on COC or not required?	Yes
Chemical preservations checked or not required?	Yes
Preservation checks meet method requirements?	Yes
VOA vials have zero headspace, or not recd.?	Yes

MICROBAC®

Laboratory Report Number: M3I1897

Client Project ID: 46011424

Microbac Laboratories Inc., - Marietta, OH

CERTIFICATE OF ANALYSIS

Client ID:	NPDES 001 (460-286856-1)			**Collection Date:**	09/24/2023 08:30
Laboratory ID:	M3I1897-01			**Prep Date:**	09/29/2023 16:15
Matrix:	Aqueous			**Analyzed:**	09/29/2023 16:57
Batch / Sequence:	B3I1512 /	**Analytical Method:**	PADEP 391-2000-008	**Calibration:**	NA
Instrument:	OSMOMETER 5004	**Units:**	mOsm/kg	**File ID:**	OsmoticPressure_B3I1512_230929041705.xls
Analyst:	APH	**Dilution:**	1		

Analyte	CAS Number	Result	MDL	RL	Flag	Qualifier
Osmotic Pressure		ND	6.00	10.0		

MICROBAC®

Laboratory Report Number: M3I1897

Client Project ID: 46011424

Microbac Laboratories Inc., - Marietta, OH

CERTIFICATE OF ANALYSIS

Client ID:	Basin 1 (460-286856-2)			**Collection Date:**	09/24/2023 09:00
Laboratory ID:	M3I1897-02			**Prep Date:**	09/29/2023 16:15
Matrix:	Aqueous			**Analyzed:**	09/29/2023 16:57
Batch / Sequence:	B3I1512 /	**Analytical Method:**	PADEP 391-2000-008	**Calibration:**	NA
Instrument:	OSMOMETER 5004	**Units:**	mOsm/kg	**File ID:**	OsmoticPressure_B3I1512_230929041705.xls
Analyst:	APH	**Dilution:**	1		

Analyte	CAS Number	Result	MDL	RL	Flag	Qualifier
Osmotic Pressure		8.00	6.00	10.0		

MICROBAC®

Laboratory Report Number: M3I1897

Client Project ID: 46011424

Microbac Laboratories Inc., - Marietta, OH

CERTIFICATE OF ANALYSIS

Client ID:	Upgradient (460-286856-3)			**Collection Date:**	09/24/2023 09:30
Laboratory ID:	M3I1897-03			**Prep Date:**	09/29/2023 16:15
Matrix:	Aqueous			**Analyzed:**	09/29/2023 16:57
Batch / Sequence:	B3I1512 /	**Analytical Method:**	PADEP 391-2000-008	**Calibration:**	NA
Instrument:	OSMOMETER 5004	**Units:**	mOsm/kg	**File ID:**	OsmoticPressure_B3I1512_230929041705.xls
Analyst:	APH	**Dilution:**	1		

Analyte	CAS Number	Result	MDL	RL	Flag	Qualifier
Osmotic Pressure		8.00	6.00	10.0		

MICROBAC®

Laboratory Report Number: M3I1897

Client Project ID: 46011424

Microbac Laboratories Inc., - Marietta, OH

CERTIFICATE OF ANALYSIS

Client ID:	Clarifying Pond (460-286856-4)			**Collection Date:**	09/24/2023 10:00
Laboratory ID:	M3I1897-04			**Prep Date:**	09/29/2023 16:15
Matrix:	Aqueous			**Analyzed:**	09/29/2023 16:57
Batch / Sequence:	B3I1512 /	**Analytical Method:**	PADEP 391-2000-008	**Calibration:**	NA
Instrument:	OSMOMETER 5004	**Units:**	mOsm/kg	**File ID:**	OsmoticPressure_B3I1512_230929041705.xls
Analyst:	APH	**Dilution:**	1		

Analyte	CAS Number	Result	MDL	RL	Flag	Qualifier
Osmotic Pressure		ND	6.00	10.0		

Laboratory Report Number: M3I1897

Client Project ID: 46011424

Notes and Definitions

:
DL: Detection Limit
LOD: Limit of Detection
LOQ: Limit of Quantitation
MDL: Method Detection Limit
RL: Reporting Limit

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Laboratory Report Number: M3I1897

Client Project ID: 46011424

METHOD BLANKS

Sample ID:	B3I1512-BLK1	**Prep Date:**	09/29/23 16:15	**Matrix:**	Aqueous
Instrument:	OSMOMETER 5004	**Analyzed:**	09/29/23 16:57	**Method:**	PADEP 391-2000-008
File ID:	OsmoticPressure_B3I1	**Sequence:**		**Analyst:**	APH
Batch:	B3I1512	**Units:**	mOsm/kg	**Calibration:**	

Analyte	Result	MDL	RL	Dilution	Flag	Q
Osmotic Pressure	6.00	6.00	10.0	1	U	

* - Detected in the associated method Blank at a concentration >= RL

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Laboratory Report Number: M3I1897

Client Project ID: 46011424

BLANK SPIKE / DUPLICATE (BS/BSD)

Method:	PADEP 391-2000-008		**Blank Spike**	**Duplicate**
Batch:	B3I1512	**Spike ID:**	B3I1512-BS1	B3I1512-BSD1
Analyst:	APH	**Prepared:**	09/29/23 16:15	09/29/23 16:15
Matrix:	Aqueous	**Analyzed:**	09/29/23 16:57	09/29/23 16:57
Units:	mOsm/kg	**File ID:**	OsmoticPressure_B3I1512_2309:	OsmoticPressure_B3I1512_2309:
Instrument:	OSMOMETER 5004	**Initial/Final:**	1mL/1mL	1mL/1mL
Calibration:				

Analyte	BS Spiked	BS Found	BS %Rec	BSD Spiked	BSD Found	BSD %Rec	%RPD	%Rec Limts	RPD Limit	Q
Osmotic Pressure	290	301	104	290	300	103	0.333	90 - 110	20	

* - Does not meet %Rec acceptance criteria.
- Does not meet RPD acceptance criteria.

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Laboratory Report Number: M3I1897

Client Project ID: 46011424

DUPLICATE

Parent ID:	M3I1897-04	**Calibration:**				**Method:**	PADEP 391-2000-008
Instrument:	OSMOMETER 500	**File ID:**	OsmoticPressure_B	**Dil:**	1	**Matrix:**	Aqueous
Sample ID:	B3I1512-DUP1	**Batch:**	B3I1512			**Units:**	mOsm/kg

Analyte	Parent	Duplicate	RPD	RPD Limit	Q
Osmotic Pressure	ND	ND		20	

Laboratory Report Number: M3I1897

Client Project ID: 46011424

* - Exceeds RPD Limit
- Based on the low concentration of this analyte, Relative Percent Difference is not an appropriate evaluator of precision. The precision of the duplicate analysis is considered acceptable

Eurofins Edison
777 New Durham Road
Edison, NJ 08817
Phone: 732-549-3900 Fax: 732-549-3679

Chain of Custody Record

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10/2/2023

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Gilmore, Julie L	Carrier Tracking No(s):	COC No: 460-69368.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Julie.Gilmore@et.eurofinsus.com	State of Origin: Pennsylvania	Page: Page 1 of 1
Company: Microbac Laboratories, Inc.		Accreditations Required (See note):		Job #: 460-286856-2
Address: 158 Starlite Drive, ,	Due Date Requested: 10/10/2023			
City: Marietta	TAT Requested (days):			
State, Zip: OH, 45750				
Phone: 800-373-4071(Tel)	PO #:			
Email:	WO #:			
Project Name: Rock Hill - Anti Degradation	Project #: 46011424			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	SUB (Osmotic Pressure) Osmotic Pressure	Total Number of containers	Special Instructions/Note:
		Preservation Code:							
NPDES 001 (460-286856-1)	8/24/23	08:30 Eastern		Water			X	1	
Basin 1 (460-286856-2)	8/24/23	09:00 Eastern		Water			X	1	
Upgradient (460-286856-3)	8/24/23	09:30 Eastern		Water			X	1	
Clarifying Pond (460-286856-4)	8/24/23	10:00 Eastern		Water			X	1	

M 3 I 1 8 9 7

Eurofins TestAmerica Edison
Rec'd: 09/29/2023 10:45
By: Erin Porter Temp: 1.2 (Signature)

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Northeast, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Northeast, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Northeast, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Northeast, LLC.

Possible Hazard Identification	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 1	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:		
Relinquished by:	Date/Time: 9/28/23 1900	Company: Estel	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time: 9-29-23 1045	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

MICROBAC®

Work Order # M3F1897

COOLER TEMP >6° C LOG

SAMPLE ID	Bottle 1 °C	Bottle 2 °C	Bottle 3 °C	Bottle 4 °C	Bottle 5 °C	Bottle 6 °C

9/29/2023 SM

pH Lot # HC318549

pH Exceptions

SAMPLE ID	Bottle 1	Bottle 2	Bottle 3	Bottle 4	Bottle 5	Bottle 6

9/29/2023 SM

PRESERVATIVE EXCEPTIONS

✓ NONE

AS NOTED

9/29/2023 SM

Document Control # 1957
Last 04-10-2019

Issued to: Document Master File

Login Sample Receipt Checklist

Client: Heidelberg Materials

Job Number: 460-286856-2

Login Number: 286856

List Source: Eurofins Edison

List Number: 1

Creator: Thundathorn, Sukanan 1

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Lab Results

September 7, 2023

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Andrew Gutshall
Heidelberg Materials Northeast LLC
7660 Imperial Way
Allentown, Pennsylvania 18195

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JOB DESCRIPTION

Rock Hill-Anti Degradation

JOB NUMBER

460-287694-1

Eurofins Edison
777 New Durham Road
Edison NJ 08817

See page two for job notes and contact information.

myEOL

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing Northeast, LLC Project Manager.

Authorization



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10/4/2023 5:07:10 PM

Authorized for release by
Julie Gilmore, Project Manager I
Julie.Gilmore@et.eurofinsus.com
(484)685-0865

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Definitions/Glossary

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill-Anti Degradation

Job ID: 460-287694-1

Qualifiers

HPLC/IC

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

General Chemistry

Qualifier	Qualifier Description
H	Sample was prepped or analyzed beyond the specified holding time. This does not meet regulatory requirements.
H3	Sample was received and analyzed past holding time. This does not meet regulatory requirements.
HF	Parameter with a holding time of 15 minutes. Test performed by laboratory at client's request. Sample was analyzed outside of hold time.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 460-287694-1

Laboratory: Eurofins Edison

Narrative

Job Narrative
460-287694-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt
The samples were received on 9/7/2023 7:00 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 4.8°C and 5.2°C

Receipt Exceptions
The method detection limit (MDL) is the lowest value detectable by the laboratory for a given analyte as determined by the MDL procedure detailed in EPA 40 CFR 136. Reported MDL values are adjusted for any dilutions and percent moisture (as applicable). The lab is unable to report values below the MDL.

Subcontract Work
Method Osomotic Pressure: This method was subcontracted to Microbac Laboratories, Inc. The subcontract laboratory certification is different from that of the facility issuing the final report. The subcontract report is appended in its entirety.

HPLC/IC
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Metals
Method 6020B: The following samples were not filtered within 15 minutes of sample collection as required by the method: NPDES 001 (460-287694-1), Basin 1 (460-287694-2) and Clarifying Pond (460-287694-3). The sample(s) was filtered prior to analysis at the laboratory, and the results have been reported. This does not meet regulatory requirements.

Method 6020B: The following samples were not filtered and preserved within 15 minutes of sample collection in accordance with 40 CFR Part 136 Table II, Footnote 7, method 6020B. The samples were filtered prior to analysis at the laboratory.NPDES 001 (460-287694-1), Basin 1 (460-287694-2) and Clarifying Pond (460-287694-3)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

General Chemistry
Method 4500_O_C: This analysis is normally performed in the field and has a method-defined holding time of 15 minutes. The following samples has been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe: NPDES 001 (460-287694-1), Basin 1 (460-287694-2) and Clarifying Pond (460-287694-3).

Method 9040C: This analysis is normally performed in the field and has a method-defined holding time of 15 minutes. The following samples has been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe: Basin 1 (460-287694-2) and Clarifying Pond (460-287694-3).

Method 9040C: This analysis is normally performed in the field and has a method-defined holding time of 15 minutes. The following samples has been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe: NPDES 001 (460-287694-1), (460-288473-B-1) and (460-288473-B-1 DU).

Job ID: 460-287694-1 (Continued)

Laboratory: Eurofins Edison (Continued)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Client Sample ID: NPDES 001

Date Collected: 09/07/23 08:00
Date Received: 09/07/23 19:00

Lab Sample ID: 460-287694-1

Matrix: Water

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide	0.054	U	0.32	0.054	mg/L			09/13/23 16:22	1
Nitrate as N	0.070	U	0.16	0.070	mg/L			09/08/23 12:37	1
Chloride	**4.51**		0.32	0.039	mg/L			09/08/23 12:37	1
Nitrate Nitrite as N	0.070	U	0.16	0.070	mg/L			09/08/23 12:37	1
Nitrite as N	0.023	U	0.16	0.023	mg/L			09/08/23 12:37	1
Sulfate	**5.34**		0.48	0.095	mg/L			09/08/23 12:37	1

Method: SM-Online 2340B-2011 - Total Hardness (as CaCO3) by calculation - SM Online, 2011

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**100**		33.1	33.1	mg/L			09/19/23 16:45	1

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000043	U	0.00020	0.000043	mg/L		09/13/23 11:13	09/13/23 14:02	1

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**5.0**		4.0	0.91	ug/L		09/11/23 10:39	09/12/23 11:01	1
Boron	**73.3**	**J**	80.0	30.4	ug/L		09/11/23 10:39	09/12/23 11:01	1
Calcium	**24100**		500	53.6	ug/L		09/11/23 10:39	09/12/23 11:01	1
Copper	2.5	U	4.0	2.5	ug/L		09/11/23 10:39	09/12/23 11:01	1
Lead	0.84	U	1.2	0.84	ug/L		09/11/23 10:39	09/12/23 11:01	1
Magnesium	**9800**		200	46.9	ug/L		09/11/23 10:39	09/12/23 11:01	1
Manganese	**14.4**		8.0	1.5	ug/L		09/11/23 10:39	09/12/23 11:01	1
Nickel	0.91	U	4.0	0.91	ug/L		09/11/23 10:39	09/12/23 11:01	1
Potassium	**978**		200	112	ug/L		09/11/23 10:39	09/12/23 11:01	1
Selenium	0.59	U	2.5	0.59	ug/L		09/11/23 10:39	09/12/23 11:01	1
Sodium	**4530**		500	219	ug/L		09/11/23 10:39	09/12/23 11:01	1
Strontium	**58.8**		4.0	0.50	ug/L		09/11/23 10:39	09/12/23 11:01	1
Zinc	6.5	U	16.0	6.5	ug/L		09/11/23 10:39	09/12/23 11:01	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	35.0	U	100	35.0	ug/L		09/11/23 05:23	09/11/23 16:17	1
Iron	**141**		50.0	20.0	ug/L		09/13/23 00:27	09/18/23 11:11	1

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	19.5	U	40.0	19.5	ug/L		09/08/23 18:40	09/08/23 20:42	1
Cadmium	0.15	U	0.50	0.15	ug/L		09/13/23 21:00	09/18/23 16:32	1
Arsenic	0.89	U	2.0	0.89	ug/L		09/08/23 18:40	09/08/23 20:42	1
Iron	**20.2**	**J**	50.0	20.0	ug/L		09/13/23 21:00	09/18/23 16:32	1
Calcium	**23000**		500	53.6	ug/L		09/08/23 18:40	09/08/23 20:42	1
Zinc	4.0	U	10.0	4.0	ug/L		09/13/23 21:00	09/18/23 16:32	1
Copper	2.5	U	4.0	2.5	ug/L		09/08/23 18:40	09/08/23 20:42	1
Iron	58.2	U	120	58.2	ug/L		09/08/23 18:40	09/08/23 20:42	1
Lead	0.84	U	1.2	0.84	ug/L		09/08/23 18:40	09/08/23 20:42	1
Magnesium	**9860**		200	46.9	ug/L		09/08/23 18:40	09/08/23 20:42	1
Manganese	**3.3**	**J**	8.0	1.5	ug/L		09/08/23 18:40	09/08/23 20:42	1
Nickel	0.91	U	4.0	0.91	ug/L		09/08/23 18:40	09/08/23 20:42	1

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill-Anti Degradation

Job ID: 460-287694-1

Client Sample ID: NPDES 001

Date Collected: 09/07/23 08:00
Date Received: 09/07/23 19:00

Lab Sample ID: 460-287694-1

Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Resistivity (EPA 120.1)	**0.00454**		0.000100	0.000100	Mohm-cm			09/19/23 13:45	1
Specific Conductance (EPA 120.1)	**220**		1.00	1.00	umhos/cm			09/19/23 13:45	1
Acidity (SM 2310B-2011)	20.0	U	20.0	20.0	mg/L			09/19/23 13:20	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-2011)	**130**		5.0	5.0	mg/L			09/13/23 15:15	1
Carbonate Alkalinity as CaCO3 (SM 2320B-2011)	5.0	U	5.0	5.0	mg/L			09/13/23 15:15	1
Alkalinity as CaCO3 to pH 4.5 (SM 2320B-2011)	**130**		5.0	5.0	mg/L			09/13/23 15:15	1
Total Dissolved Solids (SM 2540C-2015)	**133**		2.5	2.5	mg/L			09/13/23 13:13	1
Total Suspended Solids (SM 2540D-2015)	2.5	U	2.5	2.5	mg/L			09/13/23 07:37	1
Ammonia (EPA 350.1)	0.050	U	0.10	0.050	mg/L			09/18/23 09:57	1
Total Kjeldahl Nitrogen (EPA 351.2)	0.50	U	1.0	0.50	mg/L		09/27/23 15:40	09/28/23 14:11	1
Chemical Oxygen Demand (EPA 410.4)	3.3	U	10.0	3.3	mg/L			09/16/23 18:00	1
Oxygen, Dissolved (SM 4500 O C-2016)	**5.0**	**H H3**	1.0	1.0	mg/L			09/08/23 14:03	1
Orthophosphate as P (SM 4500 P E-2011)	**0.0057**	**J**	0.030	0.0050	mg/L			09/09/23 01:30	1
Carbonaceous Biochemical Oxygen Demand 5 (SM 5210 B-2016)	1.0	U	1.0	1.0	mg/L			09/08/23 16:17	1
pH (SW846 9040C)	**7.7**	**HF**	0.1	0.1	SU			09/21/23 09:46	1
Temperature (SW846 9040C)	**23.8**	**HF**	0.1	0.1	Degrees C			09/21/23 09:46	1
Total Organic Carbon (SW846 9060A)	**1.5**		1.0	0.53	mg/L			09/23/23 18:45	1
Phosphorus as PO4 (SM4500 P E-2011)	**0.99**		0.090	0.071	mg/L		10/04/23 10:55	10/04/23 15:35	1
Phosphorus as P (SM4500 P E-2011)	**0.32**		0.030	0.023	mg/L		10/04/23 10:55	10/04/23 15:35	1
Nitrogen, Total (EPA Total Nitrogen)	0.50	U	0.50	0.50	mg/L			09/29/23 07:10	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (EPA 350.1)	0.050	U	0.10	0.050	mg/L			09/20/23 10:51	1
Orthophosphate as P (SM 4500 P E-2011)	0.0050	U	0.030	0.0050	mg/L			09/09/23 01:30	1
Phosphorus as PO4 (SM4500 P E-2011)	**0.29**		0.090	0.071	mg/L		10/04/23 10:55	10/04/23 15:35	1
Phosphorus as P (SM4500 P E-2011)	**0.094**		0.030	0.023	mg/L		10/04/23 10:55	10/04/23 15:35	1

Client Sample ID: Basin 1

Date Collected: 09/07/23 09:30
Date Received: 09/07/23 19:00

Lab Sample ID: 460-287694-2

Matrix: Water

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide	0.054	U	0.32	0.054	mg/L			09/13/23 17:22	1
Nitrate as N	0.070	U	0.16	0.070	mg/L			09/08/23 13:21	1
Chloride	**7.04**		0.32	0.039	mg/L			09/08/23 13:21	1
Nitrate Nitrite as N	0.070	U	0.16	0.070	mg/L			09/08/23 13:21	1
Nitrite as N	0.023	U	0.16	0.023	mg/L			09/08/23 13:21	1

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill-Anti Degradation

Job ID: 460-287694-1

Client Sample ID: Basin 1
Date Collected: 09/07/23 09:30
Date Received: 09/07/23 19:00

Lab Sample ID: 460-287694-2
Matrix: Water

Method: EPA 300.0 - Anions, Ion Chromatography (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**2.99**		0.48	0.095	mg/L			09/08/23 13:21	1

Method: SM-Online 2340B-2011 - Total Hardness (as CaCO3) by calculation - SM Online, 2011

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**132**		33.1	33.1	mg/L			09/19/23 16:45	1

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.000067**	**J**	0.00020	0.000043	mg/L		09/13/23 11:13	09/13/23 14:07	1

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**5.0**		4.0	0.91	ug/L		09/11/23 10:39	09/12/23 11:08	1
Boron	**94.6**		80.0	30.4	ug/L		09/11/23 10:39	09/12/23 11:08	1
Calcium	**29200**		500	53.6	ug/L		09/11/23 10:39	09/12/23 11:08	1
Copper	2.5	U	4.0	2.5	ug/L		09/11/23 10:39	09/12/23 11:08	1
Lead	0.84	U	1.2	0.84	ug/L		09/11/23 10:39	09/12/23 11:08	1
Magnesium	**14300**		200	46.9	ug/L		09/11/23 10:39	09/12/23 11:08	1
Manganese	**39.1**		8.0	1.5	ug/L		09/11/23 10:39	09/12/23 11:08	1
Nickel	0.91	U	4.0	0.91	ug/L		09/11/23 10:39	09/12/23 11:08	1
Potassium	**1160**		200	112	ug/L		09/11/23 10:39	09/12/23 11:08	1
Selenium	0.59	U	2.5	0.59	ug/L		09/11/23 10:39	09/12/23 11:08	1
Sodium	**6240**		500	219	ug/L		09/11/23 10:39	09/12/23 11:08	1
Strontium	**78.0**		4.0	0.50	ug/L		09/11/23 10:39	09/12/23 11:08	1
Zinc	**23.7**		16.0	6.5	ug/L		09/11/23 10:39	09/12/23 11:08	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	35.0	U	100	35.0	ug/L		09/11/23 05:23	09/11/23 16:21	1
Iron	**230**		50.0	20.0	ug/L		09/13/23 00:18	09/13/23 19:33	1

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	19.5	U	40.0	19.5	ug/L		09/08/23 18:40	09/08/23 20:44	1
Cadmium	0.15	U	0.50	0.15	ug/L		09/13/23 21:00	09/18/23 16:34	1
Arsenic	0.89	U	2.0	0.89	ug/L		09/08/23 18:40	09/08/23 20:44	1
Iron	**69.2**		50.0	20.0	ug/L		09/13/23 21:00	09/18/23 16:34	1
Calcium	**29600**		500	53.6	ug/L		09/08/23 18:40	09/08/23 20:44	1
Zinc	**17.3**		10.0	4.0	ug/L		09/13/23 21:00	09/18/23 16:34	1
Copper	2.5	U	4.0	2.5	ug/L		09/08/23 18:40	09/08/23 20:44	1
Iron	58.2	U	120	58.2	ug/L		09/08/23 18:40	09/08/23 20:44	1
Lead	0.84	U	1.2	0.84	ug/L		09/08/23 18:40	09/08/23 20:44	1
Magnesium	**14500**		200	46.9	ug/L		09/08/23 18:40	09/08/23 20:44	1
Manganese	**18.9**		8.0	1.5	ug/L		09/08/23 18:40	09/08/23 20:44	1
Nickel	0.91	U	4.0	0.91	ug/L		09/08/23 18:40	09/08/23 20:44	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Resistivity (EPA 120.1)	**0.00348**		0.000100	0.000100	Mohm-cm			09/19/23 13:45	1
Specific Conductance (EPA 120.1)	**287**		1.00	1.00	umhos/cm			09/19/23 13:45	1
Acidity (SM 2310B-2011)	20.0	U	20.0	20.0	mg/L			09/19/23 13:20	1

Client Sample ID: Basin 1

Date Collected: 09/07/23 09:30
Date Received: 09/07/23 19:00

Lab Sample ID: 460-287694-2
Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3 (SM 2320B-2011)	**158**		5.0	5.0	mg/L			09/13/23 15:22	1
Carbonate Alkalinity as CaCO3 (SM 2320B-2011)	5.0	U	5.0	5.0	mg/L			09/13/23 15:22	1
Alkalinity as CaCO3 to pH 4.5 (SM 2320B-2011)	**158**		5.0	5.0	mg/L			09/13/23 15:22	1
Total Dissolved Solids (SM 2540C-2015)	**194**		2.5	2.5	mg/L			09/13/23 13:13	1
Total Suspended Solids (SM 2540D-2015)	2.5	U	2.5	2.5	mg/L			09/14/23 07:59	1
Ammonia (EPA 350.1)	0.050	U	0.10	0.050	mg/L			09/18/23 09:59	1
Total Kjeldahl Nitrogen (EPA 351.2	**0.53**	**J**	1.0	0.50	mg/L		09/27/23 15:40	09/28/23 14:13	1
Chemical Oxygen Demand (EPA 410.4)	**3.8**	**J**	10.0	3.3	mg/L			09/16/23 18:00	1
Oxygen, Dissolved (SM 4500 O C-2016)	**6.3**	**H H3**	1.0	1.0	mg/L			09/08/23 14:06	1
Orthophosphate as P (SM 4500 P E-2011)	0.0050	U	0.030	0.0050	mg/L			09/09/23 01:30	1
Carbonaceous Biochemical Oxygen Demand 5 (SM 5210 B-2016)	1.0	U	1.0	1.0	mg/L			09/08/23 16:26	1
pH (SW846 9040C)	**8.1**	**HF**	0.1	0.1	SU			09/21/23 09:50	1
Temperature (SW846 9040C)	**23.8**	**HF**	0.1	0.1	Degrees C			09/21/23 09:50	1
Total Organic Carbon (SW846 9060A)	**2.6**		1.0	0.53	mg/L			09/23/23 20:50	1
Phosphorus as PO4 (SM4500 P E-2011)	**0.67**		0.090	0.071	mg/L		10/04/23 10:55	10/04/23 15:35	1
Phosphorus as P (SM4500 P E-2011)	**0.22**		0.030	0.023	mg/L		10/04/23 10:55	10/04/23 15:35	1
Nitrogen, Total (EPA Total Nitrogen)	**0.53**		0.50	0.50	mg/L			09/29/23 07:10	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (EPA 350.1)	0.050	U	0.10	0.050	mg/L			09/20/23 10:52	1
Orthophosphate as P (SM 4500 P E-2011)	0.0050	U	0.030	0.0050	mg/L			09/09/23 01:30	1
Phosphorus as PO4 (SM4500 P E-2011)	**0.076**	**J**	0.090	0.071	mg/L		10/04/23 10:55	10/04/23 15:35	1
Phosphorus as P (SM4500 P E-2011)	**0.025**	**J**	0.030	0.023	mg/L		10/04/23 10:55	10/04/23 15:35	1

Client Sample ID: Clarifying Pond

Date Collected: 09/07/23 10:45
Date Received: 09/07/23 19:00

Lab Sample ID: 460-287694-3
Matrix: Water

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide	0.054	U	0.32	0.054	mg/L			09/13/23 17:37	1
Nitrate as N	**0.12**	**J**	0.16	0.070	mg/L			09/08/23 13:36	1
Chloride	**1.47**		0.32	0.039	mg/L			09/08/23 13:36	1
Nitrate Nitrite as N	**0.12**	**J**	0.16	0.070	mg/L			09/08/23 13:36	1
Nitrite as N	0.023	U	0.16	0.023	mg/L			09/08/23 13:36	1
Sulfate	**6.07**		0.48	0.095	mg/L			09/08/23 13:36	1

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill-Anti Degradation

Job ID: 460-287694-1

Client Sample ID: Clarifying Pond

Date Collected: 09/07/23 10:45
Date Received: 09/07/23 19:00

Lab Sample ID: 460-287694-3

Matrix: Water

Method: SM-Online 2340B-2011 - Total Hardness (as CaCO3) by calculation - SM Online, 2011

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**64.4**		33.1	33.1	mg/L			09/19/23 16:45	1

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.000070**	**J**	0.00020	0.000043	mg/L		09/13/23 11:13	09/13/23 14:11	1

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**3.4**	**J**	4.0	0.91	ug/L		09/11/23 10:39	09/12/23 11:11	1
Boron	**63.6**	**J**	80.0	30.4	ug/L		09/11/23 10:39	09/12/23 11:11	1
Calcium	**17100**		500	53.6	ug/L		09/11/23 10:39	09/12/23 11:11	1
Copper	2.5	U	4.0	2.5	ug/L		09/11/23 10:39	09/12/23 11:11	1
Lead	0.84	U	1.2	0.84	ug/L		09/11/23 10:39	09/12/23 11:11	1
Magnesium	**5260**		200	46.9	ug/L		09/11/23 10:39	09/12/23 11:11	1
Manganese	**32.8**		8.0	1.5	ug/L		09/11/23 10:39	09/12/23 11:11	1
Nickel	0.91	U	4.0	0.91	ug/L		09/11/23 10:39	09/12/23 11:11	1
Potassium	**1210**		200	112	ug/L		09/11/23 10:39	09/12/23 11:11	1
Selenium	0.59	U	2.5	0.59	ug/L		09/11/23 10:39	09/12/23 11:11	1
Sodium	**3250**		500	219	ug/L		09/11/23 10:39	09/12/23 11:11	1
Strontium	**27.4**		4.0	0.50	ug/L		09/11/23 10:39	09/12/23 11:11	1
Zinc	6.5	U	16.0	6.5	ug/L		09/11/23 10:39	09/12/23 11:11	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**177**		100	35.0	ug/L		09/11/23 05:23	09/11/23 16:25	1
Iron	**203**		50.0	20.0	ug/L		09/13/23 00:27	09/18/23 11:13	1

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	19.5	U	40.0	19.5	ug/L		09/08/23 18:40	09/08/23 20:46	1
Cadmium	0.15	U	0.50	0.15	ug/L		09/13/23 21:00	09/18/23 16:36	1
Arsenic	0.89	U	2.0	0.89	ug/L		09/08/23 18:40	09/08/23 20:46	1
Iron	**29.7**	**J**	50.0	20.0	ug/L		09/13/23 21:00	09/18/23 16:36	1
Calcium	**17400**		500	53.6	ug/L		09/08/23 18:40	09/08/23 20:46	1
Zinc	4.0	U	10.0	4.0	ug/L		09/13/23 21:00	09/18/23 16:36	1
Copper	2.5	U	4.0	2.5	ug/L		09/08/23 18:40	09/08/23 20:46	1
Iron	58.2	U	120	58.2	ug/L		09/08/23 18:40	09/08/23 20:46	1
Lead	0.84	U	1.2	0.84	ug/L		09/08/23 18:40	09/08/23 20:46	1
Magnesium	**5720**		200	46.9	ug/L		09/08/23 18:40	09/08/23 20:46	1
Manganese	**16.1**		8.0	1.5	ug/L		09/08/23 18:40	09/08/23 20:46	1
Nickel	0.91	U	4.0	0.91	ug/L		09/08/23 18:40	09/08/23 20:46	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Resistivity (EPA 120.1)	**0.00678**		0.000100	0.000100	Mohm-cm			09/19/23 13:45	1
Specific Conductance (EPA 120.1)	**148**		1.00	1.00	umhos/cm			09/19/23 13:45	1
Acidity (SM 2310B-2011)	20.0	U	20.0	20.0	mg/L			09/19/23 13:20	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-2011)	**96.9**		5.0	5.0	mg/L			09/13/23 15:29	1
Carbonate Alkalinity as CaCO3 (SM 2320B-2011)	5.0	U	5.0	5.0	mg/L			09/13/23 15:29	1

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill-Anti Degradation

Job ID: 460-287694-1

Client Sample ID: Clarifying Pond
Date Collected: 09/07/23 10:45
Date Received: 09/07/23 19:00

Lab Sample ID: 460-287694-3
Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity as CaCO3 to pH 4.5 (SM 2320B-2011)	**96.9**		5.0	5.0	mg/L			09/13/23 15:29	1
Total Dissolved Solids (SM 2540C-2015)	**116**		2.5	2.5	mg/L			09/13/23 13:13	1
Total Suspended Solids (SM 2540D-2015)	**38.6**		2.7	2.7	mg/L			09/14/23 07:59	1
Ammonia (EPA 350.1)	0.050	U	0.10	0.050	mg/L			09/15/23 10:49	1
Total Kjeldahl Nitrogen (EPA 351.2	**1.1**		1.0	0.50	mg/L		09/27/23 15:40	09/28/23 12:35	1
Chemical Oxygen Demand (EPA 410.4)	3.3	U	10.0	3.3	mg/L			09/16/23 18:00	1
Oxygen, Dissolved (SM 4500 O C-2016)	**3.8**	**H H3**	1.0	1.0	mg/L			09/08/23 14:09	1
Orthophosphate as P (SM 4500 P E-2011)	0.0050	U	0.030	0.0050	mg/L			09/09/23 01:30	1
Carbonaceous Biochemical Oxygen Demand 5 (SM 5210 B-2016)	1.0	U	1.0	1.0	mg/L			09/08/23 16:30	1
pH (SW846 9040C)	**7.6**	**HF**	0.1	0.1	SU			09/21/23 09:51	1
Temperature (SW846 9040C)	**23.4**	**HF**	0.1	0.1	Degrees C			09/21/23 09:51	1
Total Organic Carbon (SW846 9060A)	**1.1**		1.0	0.53	mg/L			09/23/23 21:15	1
Phosphorus as PO4 (SM4500 P E-2011)	**0.093**		0.090	0.071	mg/L		10/04/23 10:55	10/04/23 15:35	1
Phosphorus as P (SM4500 P E-2011)	**0.030**		0.030	0.023	mg/L		10/04/23 10:55	10/04/23 15:35	1
Nitrogen, Total (EPA Total Nitrogen)	**1.1**		0.50	0.50	mg/L			09/29/23 07:10	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (EPA 350.1)	0.050	U	0.10	0.050	mg/L			09/20/23 10:54	1
Orthophosphate as P (SM 4500 P E-2011)	0.0050	U	0.030	0.0050	mg/L			09/09/23 01:30	1
Phosphorus as PO4 (SM4500 P E-2011)	0.071	U	0.090	0.071	mg/L		10/04/23 10:55	10/04/23 15:35	1
Phosphorus as P (SM4500 P E-2011)	0.023	U	0.030	0.023	mg/L		10/04/23 10:55	10/04/23 15:35	1

Lab Chronicle

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill-Anti Degradation

Job ID: 460-287694-1

Client Sample ID: NPDES 001

Date Collected: 09/07/23 08:00
Date Received: 09/07/23 19:00

Lab Sample ID: 460-287694-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		1	931863	OXG	EET EDI	09/13/23 16:22
Total/NA	Analysis	300.0		1	931057	OXG	EET EDI	09/08/23 12:37
Total/NA	Analysis	300.0		1	931058	OXG	EET EDI	09/08/23 12:37
Total/NA	Analysis	2340B-2011		1	933095	LBD	EET EDI	09/19/23 16:45
Total/NA	Prep	245.1			683293	NVK	EET BUF	09/13/23 11:13
Total/NA	Analysis	245.1		1	683399	NVK	EET BUF	09/13/23 14:02
Dissolved	Filtration	Filtration			418379	UDL9	ELLE	09/12/23 07:46
Dissolved	Prep	3005A			418410	UAMX	ELLE	09/13/23 21:00
Dissolved	Analysis	6020B		1	420845	UCIG	ELLE	09/18/23 16:32
Dissolved	Filtration	FILTRATION			931172	VAD	EET EDI	09/08/23 18:35
Dissolved	Prep	3010A			931174	VAD	EET EDI	09/08/23 18:40
Dissolved	Analysis	6020B		1	931269	VAD	EET EDI	09/08/23 20:42
Total Recoverable	Prep	3005A			418784	HUH3	ELLE	09/13/23 00:27
Total Recoverable	Analysis	6020B		1	420603	F7JF	ELLE	09/18/23 11:11
Total Recoverable	Prep	3005A			797270	RR	EET SAV	09/11/23 05:23
Total Recoverable	Analysis	6020B		1	797474	BWR	EET SAV	09/11/23 16:17
Total/NA	Prep	3010A			931462	NNW	EET EDI	09/11/23 10:39
Total/NA	Analysis	6020B		1	931696	CDC	EET EDI	09/12/23 11:01
Total/NA	Analysis	120.1		1	933058	HTV	EET EDI	09/19/23 13:45
Total/NA	Analysis	2310B-2011		1	933060	RAK	EET EDI	09/19/23 13:20
Total/NA	Analysis	2320B-2011		1	931941	AXP	EET EDI	09/13/23 15:15
Total/NA	Analysis	2540C-2015		1	931904	HTV	EET EDI	09/13/23 13:13
Total/NA	Analysis	2540D-2015		1	931839	AMN	EET EDI	09/13/23 07:37
Dissolved	Filtration	FILTRATION			933260	AXP	EET EDI	09/20/23 10:21
Dissolved	Analysis	350.1		1	933293	AXP	EET EDI	09/20/23 10:51
Total/NA	Analysis	350.1		1	932815	AXP	EET EDI	09/18/23 09:57
Total/NA	Prep	351.2			424537	NLE3	ELLE	09/27/23 15:40 - 09/27/23 18:40 [1]
Total/NA	Analysis	351.2		1	425077	UJE2	ELLE	09/28/23 14:11
Total/NA	Analysis	410.4		1	932643	HTV	EET EDI	09/16/23 18:00
Total/NA	Analysis	4500 O C-2016		1	931069	PLS	EET EDI	09/08/23 14:03
Dissolved	Filtration	FILTRATION			931203	VBG	EET EDI	09/09/23 00:30
Dissolved	Analysis	4500 P E-2011		1	931205	VBG	EET EDI	09/09/23 01:30
Total/NA	Analysis	4500 P E-2011		1	931205	VBG	EET EDI	09/09/23 01:30
Total/NA	Analysis	5210 B-2016		1	931156	RXA	EET EDI	09/08/23 16:17
Total/NA	Analysis	9040C		1	933507	GSM	EET EDI	09/21/23 09:46
Total/NA	Analysis	9060A		1	934220	MMC	EET EDI	09/23/23 18:45
Dissolved	Filtration	FILTRATION			936128	RAK	EET EDI	10/04/23 10:51
Dissolved	Prep	SM 4500 P B			936130	RAK	EET EDI	10/04/23 10:55
Dissolved	Analysis	SM4500 P E-2011		1	936183	RAK	EET EDI	10/04/23 15:35
Total/NA	Prep	SM 4500 P B			936130	RAK	EET EDI	10/04/23 10:55
Total/NA	Analysis	SM4500 P E-2011		1	936183	RAK	EET EDI	10/04/23 15:35
Total/NA	Analysis	Total Nitrogen		1	931428	TJW	EET EDI	09/29/23 07:10

Eurofins Edison

Lab Chronicle

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill-Anti Degradation

Job ID: 460-287694-1

Client Sample ID: Basin 1

Date Collected: 09/07/23 09:30
Date Received: 09/07/23 19:00

Lab Sample ID: 460-287694-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		1	931863	OXG	EET EDI	09/13/23 17:22
Total/NA	Analysis	300.0		1	931057	OXG	EET EDI	09/08/23 13:21
Total/NA	Analysis	300.0		1	931058	OXG	EET EDI	09/08/23 13:21
Total/NA	Analysis	2340B-2011		1	933095	LBD	EET EDI	09/19/23 16:45
Total/NA	Prep	245.1			683293	NVK	EET BUF	09/13/23 11:13
Total/NA	Analysis	245.1		1	683399	NVK	EET BUF	09/13/23 14:07
Dissolved	Filtration	Filtration			418379	UDL9	ELLE	09/12/23 07:46
Dissolved	Prep	3005A			418410	UAMX	ELLE	09/13/23 21:00
Dissolved	Analysis	6020B		1	420845	UCIG	ELLE	09/18/23 16:34
Dissolved	Filtration	FILTRATION			931172	VAD	EET EDI	09/08/23 18:35
Dissolved	Prep	3010A			931174	VAD	EET EDI	09/08/23 18:40
Dissolved	Analysis	6020B		1	931269	VAD	EET EDI	09/08/23 20:44
Total Recoverable	Prep	3005A			418783	HUH3	ELLE	09/13/23 00:18
Total Recoverable	Analysis	6020B		1	419212	UCIG	ELLE	09/13/23 19:33
Total Recoverable	Prep	3005A			797270	RR	EET SAV	09/11/23 05:23
Total Recoverable	Analysis	6020B		1	797474	BWR	EET SAV	09/11/23 16:21
Total/NA	Prep	3010A			931462	NNW	EET EDI	09/11/23 10:39
Total/NA	Analysis	6020B		1	931696	CDC	EET EDI	09/12/23 11:08
Total/NA	Analysis	120.1		1	933058	HTV	EET EDI	09/19/23 13:45
Total/NA	Analysis	2310B-2011		1	933060	RAK	EET EDI	09/19/23 13:20
Total/NA	Analysis	2320B-2011		1	931941	AXP	EET EDI	09/13/23 15:22
Total/NA	Analysis	2540C-2015		1	931904	HTV	EET EDI	09/13/23 13:13
Total/NA	Analysis	2540D-2015		1	932080	PLS	EET EDI	09/14/23 07:59
Dissolved	Filtration	FILTRATION			933260	AXP	EET EDI	09/20/23 10:21
Dissolved	Analysis	350.1		1	933293	AXP	EET EDI	09/20/23 10:52
Total/NA	Analysis	350.1		1	932815	AXP	EET EDI	09/18/23 09:59
Total/NA	Prep	351.2			424537	NLE3	ELLE	09/27/23 15:40 - 09/27/23 18:40 [1]
Total/NA	Analysis	351.2		1	425077	UJE2	ELLE	09/28/23 14:13
Total/NA	Analysis	410.4		1	932643	HTV	EET EDI	09/16/23 18:00
Total/NA	Analysis	4500 O C-2016		1	931069	PLS	EET EDI	09/08/23 14:06
Dissolved	Filtration	FILTRATION			931203	VBG	EET EDI	09/09/23 00:30
Dissolved	Analysis	4500 P E-2011		1	931205	VBG	EET EDI	09/09/23 01:30
Total/NA	Analysis	4500 P E-2011		1	931205	VBG	EET EDI	09/09/23 01:30
Total/NA	Analysis	5210 B-2016		1	931156	RXA	EET EDI	09/08/23 16:26
Total/NA	Analysis	9040C		1	933507	GSM	EET EDI	09/21/23 09:50
Total/NA	Analysis	9060A		1	934220	MMC	EET EDI	09/23/23 20:50
Dissolved	Filtration	FILTRATION			936128	RAK	EET EDI	10/04/23 10:51
Dissolved	Prep	SM 4500 P B			936130	RAK	EET EDI	10/04/23 10:55
Dissolved	Analysis	SM4500 P E-2011		1	936183	RAK	EET EDI	10/04/23 15:35
Total/NA	Prep	SM 4500 P B			936130	RAK	EET EDI	10/04/23 10:55
Total/NA	Analysis	SM4500 P E-2011		1	936183	RAK	EET EDI	10/04/23 15:35
Total/NA	Analysis	Total Nitrogen		1	931428	TJW	EET EDI	09/29/23 07:10

Eurofins Edison

Lab Chronicle

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill-Anti Degradation

Job ID: 460-287694-1

Client Sample ID: Clarifying Pond

Date Collected: 09/07/23 10:45
Date Received: 09/07/23 19:00

Lab Sample ID: 460-287694-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		1	931863	OXG	EET EDI	09/13/23 17:37
Total/NA	Analysis	300.0		1	931057	OXG	EET EDI	09/08/23 13:36
Total/NA	Analysis	300.0		1	931058	OXG	EET EDI	09/08/23 13:36
Total/NA	Analysis	2340B-2011		1	933095	LBD	EET EDI	09/19/23 16:45
Total/NA	Prep	245.1			683293	NVK	EET BUF	09/13/23 11:13
Total/NA	Analysis	245.1		1	683399	NVK	EET BUF	09/13/23 14:11
Dissolved	Filtration	Filtration			418379	UDL9	ELLE	09/12/23 07:46
Dissolved	Prep	3005A			418410	UAMX	ELLE	09/13/23 21:00
Dissolved	Analysis	6020B		1	420845	UCIG	ELLE	09/18/23 16:36
Dissolved	Filtration	FILTRATION			931172	VAD	EET EDI	09/08/23 18:35
Dissolved	Prep	3010A			931174	VAD	EET EDI	09/08/23 18:40
Dissolved	Analysis	6020B		1	931269	VAD	EET EDI	09/08/23 20:46
Total Recoverable	Prep	3005A			418784	HUH3	ELLE	09/13/23 00:27
Total Recoverable	Analysis	6020B		1	420603	F7JF	ELLE	09/18/23 11:13
Total Recoverable	Prep	3005A			797270	RR	EET SAV	09/11/23 05:23
Total Recoverable	Analysis	6020B		1	797474	BWR	EET SAV	09/11/23 16:25
Total/NA	Prep	3010A			931462	NNW	EET EDI	09/11/23 10:39
Total/NA	Analysis	6020B		1	931696	CDC	EET EDI	09/12/23 11:11
Total/NA	Analysis	120.1		1	933058	HTV	EET EDI	09/19/23 13:45
Total/NA	Analysis	2310B-2011		1	933060	RAK	EET EDI	09/19/23 13:20
Total/NA	Analysis	2320B-2011		1	931941	AXP	EET EDI	09/13/23 15:29
Total/NA	Analysis	2540C-2015		1	931904	HTV	EET EDI	09/13/23 13:13
Total/NA	Analysis	2540D-2015		1	932080	PLS	EET EDI	09/14/23 07:59
Dissolved	Filtration	FILTRATION			933260	AXP	EET EDI	09/20/23 10:21
Dissolved	Analysis	350.1		1	933293	AXP	EET EDI	09/20/23 10:54
Total/NA	Analysis	350.1		1	932407	AXP	EET EDI	09/15/23 10:49
Total/NA	Prep	351.2			424537	NLE3	ELLE	09/27/23 15:40 - 09/27/23 18:40 [1]
Total/NA	Analysis	351.2		1	425077	UJE2	ELLE	09/28/23 12:35
Total/NA	Analysis	410.4		1	932643	HTV	EET EDI	09/16/23 18:00
Total/NA	Analysis	4500 O C-2016		1	931069	PLS	EET EDI	09/08/23 14:09
Dissolved	Filtration	FILTRATION			931203	VBG	EET EDI	09/09/23 00:30
Dissolved	Analysis	4500 P E-2011		1	931205	VBG	EET EDI	09/09/23 01:30
Total/NA	Analysis	4500 P E-2011		1	931205	VBG	EET EDI	09/09/23 01:30
Total/NA	Analysis	5210 B-2016		1	931156	RXA	EET EDI	09/08/23 16:30
Total/NA	Analysis	9040C		1	933507	GSM	EET EDI	09/21/23 09:51
Total/NA	Analysis	9060A		1	934220	MMC	EET EDI	09/23/23 21:15
Dissolved	Filtration	FILTRATION			936128	RAK	EET EDI	10/04/23 10:51
Dissolved	Prep	SM 4500 P B			936130	RAK	EET EDI	10/04/23 10:55
Dissolved	Analysis	SM4500 P E-2011		1	936183	RAK	EET EDI	10/04/23 15:35
Total/NA	Prep	SM 4500 P B			936130	RAK	EET EDI	10/04/23 10:55
Total/NA	Analysis	SM4500 P E-2011		1	936183	RAK	EET EDI	10/04/23 15:35
Total/NA	Analysis	Total Nitrogen		1	931428	TJW	EET EDI	09/29/23 07:10

[1] This procedure uses a method stipulated length of time for the process. Both start and end times are displayed.

Lab Chronicle

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill-Anti Degradation

Job ID: 460-287694-1

Laboratory References:

EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

EET EDI = Eurofins Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

EET SAV = Eurofins Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Microbac = Marietta, OH, 158 Starlite Drive, Marietta, OH 45750

Accreditation/Certification Summary

Client: Heidelberg Materials Northeast LLC
Job ID: 460-287694-1
Project/Site: Rock Hill-Anti Degradation

Laboratory: Eurofins Edison

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Connecticut	State	PH-0818	01-30-24
DE Haz. Subst. Cleanup Act (HSCA)	State	N/A	01-01-24
Georgia	State	12028 (NJ)	06-30-24
Massachusetts	State	M-NJ312	06-30-24
New Jersey	NELAP	12028	06-30-24
New York	NELAP	11452	04-01-24
Pennsylvania	NELAP	68-00522	03-01-24
Rhode Island	State	LAO00376	12-30-23
USDA	US Federal Programs	P330-20-00244	11-03-23

Laboratory: Eurofins Buffalo

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Arkansas DEQ	State	88-0686	07-06-23 *
Connecticut	State	PH-0568	03-31-24
Florida	NELAP	E87672	06-30-23 *
Georgia	State	10026 (NY)	03-31-24
Georgia	State Program	N/A	03-31-09 *
Illinois	NELAP	200003	09-30-23
Iowa	State	374	03-01-25
Iowa	State Program	374	03-01-09 *
Kansas	NELAP	E-10187	02-01-24
Kentucky (DW)	State	90029	01-01-24
Kentucky (UST)	State	108092	04-01-24
Kentucky (WW)	State	KY90029	12-31-23
Louisiana	NELAP	02031	06-30-23 *
Louisiana (All)	NELAP	02031	06-30-23 *
Maine	State	NY00044	12-04-24
Maryland	State	294	06-30-24
Massachusetts	State	M-NY044	07-01-24
Michigan	State	9937	04-01-24
Michigan	State Program	9937	04-01-09 *
New Hampshire	NELAP	2973	09-11-19 *
New Hampshire	NELAP	2337	11-17-23
New Jersey	NELAP	NY455	06-30-24
New York	NELAP	10026	03-31-24
Pennsylvania	NELAP	68-00281	08-31-24
Rhode Island	State	LAO00328	12-30-23
Texas	NELAP	T104704412-18-10	07-31-23 *
USDA	US Federal Programs	P330-18-00039	03-25-24
Virginia	NELAP	460185	09-14-23
Washington	State	C784	02-10-24
Wisconsin	State	998310390	08-31-24

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
A2LA	Dept. of Defense ELAP	0001.01	11-30-24
A2LA	ISO/IEC 17025	0001.01	11-30-24

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Accreditation/Certification Summary

Client: Heidelberg Materials Northeast LLC
Job ID: 460-287694-1
Project/Site: Rock Hill-Anti Degradation

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC (Continued)

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alabama	State	43200	01-31-24
Alaska	State	PA00009	06-30-24
Alaska (UST)	State	17-027	02-28-24
Arizona	State	AZ0780	03-12-24
Arkansas DEQ	State	88-00660	08-09-24
California	State	2792	11-30-23
Colorado	State	PA00009	06-30-24
Connecticut	State	PH-0746	06-30-25
DE Haz. Subst. Cleanup Act (HSCA)	State	019-006 (PA cert)	01-31-24
Delaware (DW)	State	N/A	01-31-24
Florida	NELAP	E87997	06-30-24
Georgia (DW)	State	C048	01-31-24
Hawaii	State	N/A	01-31-24
Illinois	NELAP	200027	01-31-24
Iowa	State	361	03-01-24
Kansas	NELAP	E-10151	10-31-23
Kentucky (DW)	State	KY90088	12-31-23
Kentucky (UST)	State	0001.01	11-30-24
Kentucky (WW)	State	KY90088	12-31-23
Louisiana (All)	NELAP	02055	06-30-24
Maine	State	2019012	03-12-25
Maryland	State	100	06-30-24
Massachusetts	State	M-PA009	06-30-24
Michigan	State	9930	01-31-24
Minnesota	NELAP	042-999-487	12-31-23
Mississippi	State	023	01-31-24
Missouri	State	450	01-31-25
Montana (DW)	State	0098	01-01-24
Nebraska	State	NE-OS-32-17	01-31-24
New Hampshire	NELAP	2730	01-10-24
New Jersey	NELAP	PA011	06-30-24
New York	NELAP	10670	04-01-24
North Carolina (DW)	State	42705	07-31-24
North Carolina (WW/SW)	State	521	12-31-23
North Dakota	State	R-205	01-31-24
Oklahoma	NELAP	9804	08-31-23 *
Oregon	NELAP	PA200001	09-11-24
PALA	Canada	1978	09-16-24
Pennsylvania	NELAP	36-00037	01-31-24
Rhode Island	State	LAO00338	12-31-23
South Carolina	State	89002	01-31-24
Tennessee	State	02838	01-31-24
Texas	NELAP	T104704194-23-46	08-31-24
USDA	US Federal Programs	525-22-298-19481	10-25-25
Vermont	State	VT - 36037	10-28-23
Virginia	NELAP	460182	06-14-25
Washington	State	C457	04-11-24
West Virginia (DW)	State	9906 C	12-31-23
West Virginia DEP	State	055	07-31-24
Wyoming	State	8TMS-L	01-31-24

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Accreditation/Certification Summary

Client: Heidelberg Materials Northeast LLC
Job ID: 460-287694-1
Project/Site: Rock Hill-Anti Degradation

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC (Continued)

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Wyoming (UST)	A2LA	0001.01	11-30-24

Laboratory: Eurofins Savannah

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
	AFCEE	SAVLAB	
Alabama	State	41450	06-30-24
ANAB	Dept. of Defense ELAP	L2463	09-22-24
Arkansas DEQ	State	19-015-0	02-01-24
California	State	2939	06-30-24
Florida	NELAP	E87052	06-30-24
Georgia	State	E87052	06-30-24
Georgia (DW)	State	803	06-30-24
Guam	State	19-007R	04-17-24
Hawaii	State	<cert No.>	06-30-24
Illinois	NELAP	200022	11-30-23
Indiana	State	C-GA-02	06-30-24
Iowa	State	353	07-01-25
Kentucky (UST)	State	NA	06-30-24
Louisiana	NELAP	30690	06-30-24
Louisiana (All)	NELAP	30690	06-30-24
Louisiana (DW)	State	LA009	12-31-23
Maine	State	GA00006	09-25-24
Maryland	State	250	12-31-23
Massachusetts	State	M-GA006	06-30-24
Michigan	State	9925	06-30-24
Mississippi	State	<cert No.>	06-30-24
Nebraska	State	NE-OS-7-04	06-30-24
New Jersey	NELAP	GA769	06-30-24
New Mexico	State	GA00006	06-30-24
North Carolina (DW)	State	13701	07-31-24
North Carolina (WW/SW)	State	269	09-21-23
Pennsylvania	NELAP	68-00474	06-30-24
Puerto Rico	State	GA00006	01-01-24
South Carolina	State	98001	06-30-23 *
Tennessee	State	TN02961	06-30-24
Texas	NELAP	T1047004185	11-30-23
Texas	TCEQ Water Supply	T104704185	06-30-24
USDA	US Federal Programs	P330-18-00313	09-03-24
Virginia	NELAP	460161	06-14-24
Wyoming	State	8TMS-L	06-30-23 *

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Method Summary

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill-Anti Degradation

Job ID: 460-287694-1

Method	Method Description	Protocol	Laboratory
300.0	Anions, Ion Chromatography	EPA	EET EDI
2340B-2011	Total Hardness (as CaCO3) by calculation - SM Online, 2011	SM-Online	EET EDI
245.1	Mercury (CVAA)	EPA	EET BUF
6020B	Metals (ICP/MS)	SW846	EET EDI
6020B	Metals (ICP/MS)	SW846	EET SAV
6020B	Metals (ICP/MS)	SW846	ELLE
120.1	Conductivity, Specific Conductance	EPA	EET EDI
2310B-2011	Acidity	SM	EET EDI
2320B-2011	Alkalinity, Total	SM	EET EDI
2540C-2015	Total Dissolved Solids (Dried at 180 °C)	SM	EET EDI
2540D-2015	Total Suspended Solids (Dried at 103-105°C)	SM	EET EDI
350.1	Nitrogen, Ammonia	EPA	EET EDI
351.2	Nitrogen, Total Kjeldahl	EPA	ELLE
410.4	COD	EPA	EET EDI
4500 O C-2016	Oxygen, Dissolved	SM	EET EDI
4500 P E-2011	Orthophosphate	SM	EET EDI
5210 B-2016	BOD, 5-Day	SM	EET EDI
9040C	pH	SW846	EET EDI
9060A	Organic Carbon, Total (TOC)	SW846	EET EDI
SM4500 P E-2011	Phosphorus	SM	EET EDI
Total Nitrogen	Nitrogen, Total	EPA	EET EDI
Subcontract	Osomotic Pressure	None	Microbac
245.1	Preparation, Mercury	EPA	EET BUF
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	EET SAV
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	ELLE
3010A	Preparation, Total Metals	SW846	EET EDI
351.2	Nitrogen, Total Kjeldahl	EPA	ELLE
FILTRATION	Sample Filtration	None	EET EDI
Filtration	Sample Filtration	None	ELLE
SM 4500 P B	Phosphorous, Total and Ortho	SM	EET EDI

Protocol References:

EPA = US Environmental Protection Agency
None = None
SM = "Standard Methods For The Examination Of Water And Wastewater"
SM-Online = Standard Methods Online
SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600
EET EDI = Eurofins Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900
EET SAV = Eurofins Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858
ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300
Microbac = Marietta, OH, 158 Starlite Drive, Marietta, OH 45750

Sample Summary

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill-Anti Degradation

Job ID: 460-287694-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
460-287694-1	NPDES 001	Water	09/07/23 08:00	09/07/23 19:00
460-287694-2	Basin 1	Water	09/07/23 09:30	09/07/23 19:00
460-287694-3	Clarifying Pond	Water	09/07/23 10:45	09/07/23 19:00

Microbac Laboratories Inc., - Marietta, OH

Client Project ID:

46011424

For:

Julie Gilmore

Eurofins TestAmerica Edison

777 New Durham RD

Edison, NJ 08817

Project State of Origin: Pennsylvania

Project Requested Certification:

Microbac Laboratories Inc., - Marietta, OH	68-01670	PA Department of Environmental Protection

All test results meet the requirements of the QAPP and other applicable contract terms and conditions. Any exceptions are attached to this cover page or addressed in the method narratives presented in the report. All results for soil samples are reported on a 'dry-weight' basis unless specified otherwise. Analytical results for water and wastes are reported on a 'as received' basis unless specified otherwise. A statement of uncertainty for each analysis is available upon request. The reported results are related only to the samples analyzed as received. This laboratory report may be released as a hardcopy and in computer-readable form submitted electronically or on diskette. This laboratory report shall not be reproduced, except in full, without the written approval of Microbac Laboratories, Inc.

Laboratory Project Manager:

Michelle Taylor

Project Manager

Michelle.Taylor@microbac.com

Authorized By:

Michelle Taylor

Project Manager

Issued: 09/20/2023

MICROBAC®

Laboratory Report Number: M3I0941

Client Project ID: 46011424

Cooler Receipt Log

Cooler ID: Default Cooler Temp: 0.8°C

Cooler Inspection Checklist

Ice Present or not required?	Yes
Shipping containers sealed or not required?	Yes
Custody seals intact or not required?	Yes
Chain of Custody (COC) Present?	Yes
COC includes customer information?	Yes
Relinquished and received signature on COC?	Yes
Sample collector identified on COC?	Yes
Sample type identified on COC?	Yes
Correct type of Containers Received	No
Correct number of containers listed on COC?	Yes
Containers Intact?	Yes
COC includes requested analyses?	Yes
Enough sample volume for indicated tests received?	Yes
Sample labels match COC (Name, Date & Time?)	Yes
Samples arrived within hold time?	Yes
Correct preservatives on COC or not required?	Yes
Chemical preservations checked or not required?	Yes
Preservation checks meet method requirements?	Yes
VOA vials have zero headspace, or not recd.?	Yes

Laboratory Report Number: M3I0941

Client Project ID: 46011424

Case Narrative

Samples out of hold, proceed per the client.

Laboratory Report Number: M3I0941

Client Project ID: 46011424

Sample Notes

PADEP 391-2000-008

A4 **Sample was received with head space.**

Osmotic Pressure

M3I0941-01	NPDES 001 (460-287694-1)	M3I0941-02	Basin 1 (460-287694-2)
M3I0941-03	Clarifying Pond (460-287694-3)		

H1 **Sample was received past holding time.**

Osmotic Pressure

M3I0941-01	NPDES 001 (460-287694-1)	M3I0941-02	Basin 1 (460-287694-2)
M3I0941-03	Clarifying Pond (460-287694-3)		

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Laboratory Report Number: M3I0941

Client Project ID: 46011424

Microbac Laboratories Inc., - Marietta, OH

CERTIFICATE OF ANALYSIS

Client ID:	NPDES 001 (460-287694-1)			**Collection Date:**	09/07/2023 08:00
Laboratory ID:	M3I0941-01			**Prep Date:**	09/18/2023 15:00
Matrix:	Aqueous			**Analyzed:**	09/18/2023 16:28
Batch / Sequence:	B3I0819 /	**Analytical Method:**	PADEP 391-2000-008	**Calibration:**	NA
Instrument:	OSMOMETER 5004	**Units:**	mOsm/kg	**File ID:**	OsmoticPressure_B3I0819_230918030356.xls
Analyst:	APH	**Dilution:**	1		

Analyte	CAS Number	Result	MDL	RL	Flag	Qualifier
Osmotic Pressure		**10.0**	6.00	10.0		A4, H1

MICROBAC®

Laboratory Report Number: M3I0941

Client Project ID: 46011424

Microbac Laboratories Inc., - Marietta, OH

CERTIFICATE OF ANALYSIS

Client ID:	Basin 1 (460-287694-2)			**Collection Date:**	09/07/2023 09:30
Laboratory ID:	M3I0941-02			**Prep Date:**	09/18/2023 15:00
Matrix:	Aqueous			**Analyzed:**	09/18/2023 16:28
Batch / Sequence:	B3I0819 /	**Analytical Method:**	PADEP 391-2000-008	**Calibration:**	NA
Instrument:	OSMOMETER 5004	**Units:**	mOsm/kg	**File ID:**	OsmoticPressure_B3I0819_230918030356.xls
Analyst:	APH	**Dilution:**	1		

Analyte	CAS Number	Result	MDL	RL	Flag	Qualifier
Osmotic Pressure		**12.0**	6.00	10.0		A4, H1

MICROBAC®

Laboratory Report Number: M3I0941

Client Project ID: 46011424

Microbac Laboratories Inc., - Marietta, OH

CERTIFICATE OF ANALYSIS

Client ID:	Clarifying Pond (460-287694-3)			**Collection Date:**	09/07/2023 10:45
Laboratory ID:	M3I0941-03			**Prep Date:**	09/18/2023 15:00
Matrix:	Aqueous			**Analyzed:**	09/18/2023 16:28
Batch / Sequence:	B3I0819 /	**Analytical Method:**	PADEP 391-2000-008	**Calibration:**	NA
Instrument:	OSMOMETER 5004	**Units:**	mOsm/kg	**File ID:**	OsmoticPressure_B3I0819_230918030356.xls
Analyst:	APH	**Dilution:**	1		

Analyte	CAS Number	Result	MDL	RL	Flag	Qualifier
Osmotic Pressure		8.00	6.00	10.0		A4, H1

Laboratory Report Number: M3I0941

Client Project ID: 46011424

Notes and Definitions

A4: Sample was received with head space.
H1: Sample was received past holding time.
MDL: Method Detection Limit
RL: Reporting Limit

MICROBAC®

Laboratory Report Number: M3I0941

Client Project ID: 46011424

METHOD BLANKS

Sample ID:	B3I0819-BLK1	**Prep Date:**	09/18/23 15:00	**Matrix:**	Aqueous
Instrument:	OSMOMETER 5004	**Analyzed:**	09/18/23 16:28	**Method:**	PADEP 391-2000-008
File ID:	OsmoticPressure_B3I0	**Sequence:**		**Analyst:**	APH
Batch:	B3I0819	**Units:**	mOsm/kg	**Calibration:**	

Analyte	Result	MDL	RL	Dilution	Flag	Q
Osmotic Pressure	6.00	6.00	10.0	1	U	

* - Detected in the associated method Blank at a concentration >= RL

Laboratory Report Number: M3I0941

Client Project ID: 46011424

BLANK SPIKE / DUPLICATE (BS/BSD)

Method:	PADEP 391-2000-008		**Blank Spike**	**Duplicate**
Batch:	B3I0819	**Spike ID:**	B3I0819-BS1	B3I0819-BSD1
Analyst:	APH	**Prepared:**	09/18/23 15:00	09/18/23 15:00
Matrix:	Aqueous	**Analyzed:**	09/18/23 16:28	09/18/23 16:28
Units:	mOsm/kg	**File ID:**	OsmoticPressure_B3I0819_2309	OsmoticPressure_B3I0819_2309
Instrument:	OSMOMETER 5004	**Initial/Final:**	1mL/1mL	1mL/1mL
Calibration:				

Analyte	BS Spiked	BS Found	BS %Rec	BSD Spiked	BSD Found	BSD %Rec	%RPD	%Rec Limts	RPD Limit	Q
Osmotic Pressure	290	299	103	290	300	103	0.334	90 - 110	20	

* - Does not meet %Rec acceptance criteria.
- Does not meet RPD acceptance criteria.

Eurofins Edison
777 New Durham Road
Edison, NJ 08817
Phone: 732-549-3900 Fax: 732-549-3679

Chain of Custody Record

eurofins | Environment Testing

10/4/2023

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Gilmore, Julie L	Carrier Tracking No(s):	COC No: 460-69243.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Julie.Gilmore@et.eurofinsus.com	State of Origin: Pennsylvania	Page: Page 1 of 1
Company: Microbac Laboratories, Inc.		Accreditations Required (See note):		Job #: 460-287694-2
Address: 158 Starlite Drive,	Due Date Requested: 9/26/2023			
City: Marietta	TAT Requested (days):			
State, Zip: OH, 45750				
Phone: 800-373-4071(Tel)	PO #:			
Email:	WO #:			
Project Name: Rock Hill-Anti Degradation	Project #: 46011424			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)
Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	SUB (Osomotic Pressure)/ Osomotic Pressure	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
NPDES 001 (460-287694-1)	9/7/23	08:00 Eastern		Water			X	1	
Basin 1 (460-287694-2)	9/7/23	09:30 Eastern		Water			X	1	
Clarifying Pond (460-287694-3)	9/7/23	10:45 Eastern		Water			X	1	

M 3 I 0 9 4 1
Eurofins TestAmerica Edison
Rec'd: 09/15/2023 11:00
By: Stephanie Murphy Temp: 0.8 (Signature)

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Northeast, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Northeast, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Northeast, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Northeast, LLC.

Possible Hazard Identification	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 1	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time: 9/14/23 1900	Company: FF	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

MICROBAC®

Work Order # M310941

COOLER TEMP >6° C LOG

SAMPLE ID	Bottle 1 °C	Bottle 2 °C	Bottle 3 °C	Bottle 4 °C	Bottle 5 °C	Bottle 6 °C

9/15/2023 SM

pH Lot # N/A

pH Exceptions

SAMPLE ID	Bottle 1	Bottle 2	Bottle 3	Bottle 4	Bottle 5	Bottle 6

9/15/2023 SM

PRESERVATIVE EXCEPTIONS

✓ NONE

AS NOTED

9/15/2023 SM

Document Control # 1957
Last 04-10-2019

Issued to: Document Master File

Eurofins Edison
777 New Durham Road
Edison, NJ 08817
Phone: 732-549-3900 Fax: 732-549-3679

Chain of Custody Record

450-KOP

eurofins

Client Information	Sampler: EG	Lab PM: Gilmore, Julie L	Carrier Tracking No(s):	COC No: 460-172306-111665.1
Client Contact: Andrew Gutshall	Phone:	E-Mail: Julie.Gilmore@et.eurofinsus.com	State of Origin:	Page: Page 1 of 2
Company: Heidelberg Materials Northeast LLC	PWSID:			Job #: 287694
Address: 7660 Imperial Way	Due Date Requested:			
City: Allentown	TAT Requested (days):			
State, Zip: PA, 18195	Compliance Project: Δ Yes Δ No			
Phone: 610-366-4819(Tel)	PO #: Purchase Order not required			
Email: andrew.gutshall@heidelbergmaterials.com	WO #:			
Project Name: Rock Hill Anti-Degradation	Project #: 46011424			
Site:	SSOW#:			

Analysis Requested

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water S=solid, O=waste/oil BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020B Dissolved Lithium N	6020B Total Lithium D	Local Method 351.2 S	6020B Dissolved Cd/Fe/Zn N	6020B (MOD) Total Fe D	410.4, 4500_P_E S	9040C N	4500_P_E, 6020B N	2320B (MOD) Alkalinity N	6020B, SM2340B D	9060A TOC S	5210B_Calc N	4500_P_E_Ortho Dissolved Orthophosphate N	Total Number of containers	Special Instructions/Note:
			Preservation Code:																		
NPDES 001	9/7/23	0800	G	Water																10	1
E. N 1	9/7/23	0930	G	Water																10	2
Clarify Pond	9/7/23	0400	G	Water																20	3
				Water																	
				Water																	

SHOR HOLI

Possible Hazard Identification	Sample Disposal (A fee may be assesse
☐ Non-Hazard ☐ Flammable ☐ Ski ☐ Poison B ☐ Unknown ☐ Radiological	☐ Return To Client ☐ Disposal
Deliverable Requested: I II III IV Other (specify)	Special Instructions/QC Requirements:

460-287694 Chain of Custody

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	9/7/23			9/7/23 1322	EETN-KOP
	9/7/23 1735	EETN-KOP		9/7/23 1800	ETA
	9/7/23 1900	ETA		9/7/23 1900	Eurofins

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.	Cooler Temperature(s) °C and Other Remarks: 5.0/5.2 4.6/4.8

Ver: 06/08/2021

10/4/2023

Eurofins Edison
777 New Durham Road
Edison, NJ 08817
Phone: 732-549-3900 Fax: 732-549-3679

Chain of Custody Record

450-KOP

13 3 c
12 0 KOP. 2
rec on ice

eurofins

Client Information	Sampler	Lab PM: Gilmore, Julie L	Carrier Tracking No(s):	COC No: 460-172306-111665.2
Client Contact: Andrew Gutshall	Phone:	E-Mail: Julie.Gilmore@et.eurofinsus.com	State of Origin:	Page: Page 2 of 2
Company: Heidelberg Materials Northeast LLC	PWSID:			Job #: 269694
Address: 7660 Imperial Way	Due Date Requested:			
City: Allentown	TAT Requested (days):			
State, Zip: PA, 18195	Compliance Project: Δ Yes Δ No			
Phone: 610-366-4819(Tel)	PO #: Purchase Order not required			
Email: andrew.gutshall@heidelbergmaterials.com	WO #:			
Project Name: Rock Hill Anti-Degradation	Project #: 46011424			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:
A HCL, B NaOH, C Zn Acetate, D Nitric Acid, E NaHSO4, F MeOH, G Amchlor, H Ascorbic Acid, I Ice, J DI Water, K EDTA, L EDA, M Hexane, N None, O AsNaO2, P Na2O4S, Q Na2SO3, R Na2S2O3, S H2SO4, T TSP Dodecahydrate, U Acetone, V MCAA, W pH 4-5, Y Trizma, Z other (specify), Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	4500_P_E_Ortho Total Orthophosphate	2540C TDS	300_ORGFM_28D, 300_ORGFMS	245.1 Local Method	6020B Total Aluminum	Acidity	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	N	D	D			
NPDES 001	9/7/23	0900	G	Water					/			/		1
Basin 1	9/7/23	0930	G	Water			/	/				/		2
Clarifying Pond	9/7/23	1045	G	Water								/		3
				Water										
				Water										

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I II III IV Other (specify)

Special Instructions/QC Requirements.

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	9/7/23			9/7/23 1722	EETN-KOP
	9/7/23 1735	EETN KOP		9/7/23 1800	ETA
	9/7/23 1900			9/7/23 1900	Eurofins

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.	Cooler Temperature(s) °C and Other Remarks: 5.0/5.2 4.6/4.8

Ver: 06/08/2021

Eurofins TestAmerica Edison
Receipt Temperature and pH Log

Job Number: 289694

Number of Coolers: 2 IR Gun # 10

Cooler Temperatures

	RAW	CORRECTED		RAW	CORRECTED		RAW	CORRECTED
Cooler #1:	5.0 °C	5.2 °C	Cooler #4:	°C	°C	Cooler #7:	°C	°C
Cooler #2:	4.6 °C	4.8 °C	Cooler #5:	°C	°C	Cooler #8:	°C	°C
Cooler #3:	°C	°C	Cooler #6:	°C	°C	Cooler #9:	°C	°C

TALS Sample Number	Ammonia (pH<2)	COD (pH<2)	Nitrate Nitrite (pH<2)	Metals* (pH<2)	Hardness (pH<2)	Pest (pH 5-9)	EPH or QAM (pH<2)	Phenols (pH<2)	Sulfide (pH>9)	TKN (pH<2)	TOC (pH<2)	Total Cyanide (pH>12)	Total Phos (pH<2)	Other	Other
1	<2	<2		<2						<2	<2		<2		
2	<2	<2		<2						<2	<2		<2		
3	<2	<2		<2						<2	<2		<2		

If pH adjustments are required record the information below*

Sample No(s). adjusted: _____

Preservative Name/Conc.: _____ Volume of Preservative used (ml): _____

Lot # of Preservative(s): _____ Expiration Date: _____

The appropriate Project Manager and Department Manager should be notified about the samples which were pH adjusted.

**Samples for Metal analysis which are out of compliance must be acidified at least 24 hours prior to analysis.*

Initials: PG Date: 9/7/23

EDS-WI-038, Rev 4.1
10/22/2019

460-287694 Waybill

Part # 159469-434 MTW EXP 01/24

1g

eurofins

Envir
TestAm

ORIGIN ID:LDJA (732) 549-3900
EUROFINS ENVIRONMENT TESTING NORTHE
777 NEW DURHAM ROAD
EDISON, NJ 08817
UNITED STATES US

SHIP DATE: 08SEP23
ACTWGT: 27.05 LB
CAD: 6619092/CAFE3753

BILL SENDER

TO SHIPPING/RECEIVING
EUROFINS ENVIRONMENT TESTING NORTHE
301 ALPHA DRIVE
RIDC PARK
PITTSBURGH PA 15238
(412) 963-7058
PO: YE8
REF: 8460-172611

°C

Uncorrected temp
Thermometer ID
initials
CF
PT-WI-SR-001 effective 4/18/19

FedEx Express

J238020605121UN

SATURDAY 12:00P
PRIORITY OVERNIGHT

TRK# 0201 6553 1009 9980

XO AGCA

15238 PIT
PA-US

FZ

639

12:00

Page 37 of 45

10/4/2023

Eurofins Edison
777 New Durham Road
Edison, NJ 08817
Phone 732-549-3900 Fax: 732-549-3679

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler	Lab PM: Gilmore, Julie L	Carrier Tracking No(s)	COC No: 460-69153 1
Client Contact: Shipping/Receiving	Phone	E-Mail: Julie.Gilmore@et.eurofinsus.com	State of Origin: Pennsylvania	Page: Page 1 of 1
Company: Eurofins Environment Testing Northeast,		Accreditations Required (See note)		Job #: 460-287694-1
Address: 301 Alpha Drive, RIDC Park,	Due Date Requested: 9/20/2023			
City: Pittsburgh	TAT Requested (days):			
State, Zip: PA, 15238				
Phone: 412-963-7058(Tel) 412-963-2468(Fax)	PO #:			
Email	WO #:			
Project Name: Rock Hill-Anti Degradation	Project #: 46011424			
Site	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)
Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020B/Filtration_ME Dissolved Lithium	6020B/3005A (MOD) Total Lithium	Total Number of containers	Special Instructions/Note:
			Preservation Code:							
NPDES 001 (460-287694-1)	9/7/23	08 00 Eastern		Water			X	X	2	
Basin 1 (460-287694-2)	9/7/23	09.30 Eastern		Water			X	X	2	
Clarifying Pond (460-287694-3)	9/7/23	10 45 Eastern		Water			X	X	2	

460-287694 Chain of Custody

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Northeast, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Northeast, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Northeast, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Northeast, LLC.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) — Primary Deliverable Rank: 1	Special Instructions/QC Requirements

Empty Kit Relinquished by:	Date	Time	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time	Company
	[signature]	9/8/23 1900	EDISON	[signature]	9/9/23 1046	EDISON
	Relinquished by:	Date/Time:	Company	Received by:	Date/Time	Company
	Relinquished by:	Date/Time:	Company	Received by:	Date/Time	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Eurofins Edison
777 New Durham Road
Edison, NJ 08817
Phone: 732-549-3900 Fax: 732-549-3679

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Gilmore, Julie L	Carrier Tracking No(s):	COC No: 460-69151.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Julie.Gilmore@et.eurofinsus.com	State of Origin: Pennsylvania	Page: Page 1 of 1
Company: Eurofins Lancaster Laboratories Environm		Accreditations Required (See note): NELAP - Pennsylvania		Job #: 460-287694-1
Address: 2425 New Holland Pike, ,	Due Date Requested: 9/18/2023			
City: Lancaster	TAT Requested (days):			
State, Zip: PA, 17601				
Phone: 717-656-2300(Tel)	PO #:			
Email:	WO #:			
Project Name: Rock Hill-Anti Degradation	Project #: 46011424			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify), Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020B/3005A (MOD) Total Fe	6020B/Filtration_ME Dissolved Cd/Fe/Zn	351.2/351.2_Prep	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
NPDES 001 (460-287694-1)	9/7/23	08:00 Eastern		Water			X	X	X	3	
Basin 1 (460-287694-2)	9/7/23	09:30 Eastern		Water			X	X	X	3	
Clarifying Pond (460-287694-3)	9/7/23	10:45 Eastern		Water			X	X	X	3	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Northeast, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Northeast, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Northeast, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Northeast, LLC.

Possible Hazard Identification	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 1	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
1		9/8/23 1607			9/8/23 1607	
2		9/8/23 1933				
3					9/8/23 1933	

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: raw: 2.4 corr: 2.3

Eurofins Edison
777 New Durham Road
Edison, NJ 08817
Phone: 732-549-3900 Fax: 732-549-3679

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Gilmore, Julie L	Carrier Tracking No(s):	COC No: 460-69157.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Julie.Gilmore@et.eurofinsus.com	State of Origin: Pennsylvania	Page: Page 1 of 1
Company: Eurofins Environment Testing Northeast,		Accreditations Required (See note):		Job #: 460-287694-1
Address: 10 Hazelwood Drive, ,	Due Date Requested: 9/18/2023			
City: Amherst	TAT Requested (days):			
State, Zip: NY, 14228-2298				
Phone: 716-691-2600(Tel) 716-691-7991(Fax)	PO #:			
Email:	WO #:			
Project Name: Rock Hill-Anti Degradation	Project #: 46011424			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	245.1/245.1_Prep	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
NPDES 001 (460-287694-1)	9/7/23	08:00 Eastern		Water			X	1	
Basin 1 (460-287694-2)	9/7/23	09:30 Eastern		Water			X	1	
Clarifying Pond (460-287694-3)	9/7/23	10:45 Eastern		Water			X	1	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Northeast, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Northeast, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Northeast, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Northeast, LLC.

Possible Hazard Identification	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 1	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
[signature]	9/8/23 1900	EET EK	[signature]	9-9-23 1000	TAB
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 2.5+6.6

Eurofins Edison
777 New Durham Road
Edison, NJ 08817
Phone: 732-549-3900 Fax: 732-549-3679

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Gilmore, Julie L	Carrier Tracking No(s):	COC No: 460-69158.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Julie.Gilmore@et.eurofinsus.com	State of Origin: Pennsylvania	Page: Page 1 of 1
Company: Eurofins Environment Testing Southeast,		Accreditations Required (See note):		Job #: 460-287694-1
Address: 5102 LaRoche Avenue,	Due Date Requested: 9/19/2023			
City: Savannah	TAT Requested (days):			
State, Zip: GA, 31404				
Phone: 912-354-7858(Tel) 912-352-0165(Fax)	PO #:			
Email:	WO #:			
Project Name: Rock Hill-Anti Degradation	Project #: 46011424			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020B/3005A Total Aluminum	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
NPDES 001 (460-287694-1)	9/7/23	08:00 Eastern		Water			X	1	
Basin 1 (460-287694-2)	9/7/23	09:30 Eastern		Water			X	1	
Clarifying Pond (460-287694-3)	9/7/23	10:45 Eastern		Water			X	1	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Northeast, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Northeast, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Northeast, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Northeast, LLC.

Possible Hazard Identification	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 1	Special Instructions/QC Requirements:
Empty Kit Relinquished by:	Date: Time: Method of Shipment:

	Date/Time	Company		Date/Time	Company
Relinquished by:	9/8/23 1900	EETEL	Received by:	9/9/23 11:00	
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 1.1/1.2

Login Sample Receipt Checklist

Client: Heidelberg Materials Northeast LLC

Job Number: 460-287694-1

Login Number: 287694
List Number: 1
Creator: Thundathorn, Sukanan 1

List Source: Eurofins Edison

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Heidelberg Materials Northeast LLC

Job Number: 460-287694-1

Login Number: 287694
List Number: 5
Creator: Yeager, Brian A

List Source: Eurofins Buffalo
List Creation: 09/11/23 11:38 AM

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	2.8 ice
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	True	

Login Sample Receipt Checklist

Client: Heidelberg Materials Northeast LLC

Job Number: 460-287694-1

Login Number: 287694
List Number: 2
Creator: Metzger, Katherine A

List Source: Eurofins Lancaster Laboratories Environment Testing, LLC
List Creation: 09/08/23 10:07 PM

Question	Answer	Comment
The cooler's custody seal is intact.	N/A	Not present
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature acceptable,where thermal pres is required(</=6C, not frozen).	True	
Cooler Temperature is recorded.	True	
WV:Container Temp acceptable,where thermal pres is required (</=6C, not frozen).	N/A	
WV: Container Temperature is recorded.	N/A	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the containers received and the COC.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
There is sufficient vol. for all requested analyses.	True	
Is the Field Sampler's name present on COC?	False	Received project as a subcontract.
Sample custody seals are intact.	N/A	Not present.
VOA sample vials do not have headspace >6mm in diameter (none, if from WV)?	N/A	

Login Sample Receipt Checklist

Client: Heidelberg Materials Northeast LLC

Job Number: 460-287694-1

Login Number: 287694
List Number: 3
Creator: Harley, Tynisha

List Source: Eurofins Savannah
List Creation: 09/09/23 12:13 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

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ANALYTICAL REPORT

PREPARED FOR

Attn: Andrew Gutshall
Heidelberg Materials Northeast LLC
7660 Imperial Way
Allentown, Pennsylvania 18195

Generated 11/13/2023 9:05:04 AM

JOB DESCRIPTION

Rock Hill-Anti Degradation

JOB NUMBER

460-287694-2

Eurofins Edison
777 New Durham Road
Edison NJ 08817

See page two for job notes and contact information.

my EOL

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing Northeast, LLC Project Manager.

Authorization



Generated
11/13/2023 9:05:04 AM

Authorized for release by
Julie Gilmore, Project Manager I
Julie.Gilmore@et.eurofinsus.com
(484)685-0865

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Definitions/Glossary

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill-Anti Degradation

Job ID: 460-287694-2

Qualifiers

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 460-287694-2

Laboratory: Eurofins Edison

Narrative

Job Narrative
460-287694-2

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt
The samples were received on 9/7/2023 7:00 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 4.8°C and 5.2°C

Receipt Exceptions
The method detection limit (MDL) is the lowest value detectable by the laboratory for a given analyte as determined by the MDL procedure detailed in EPA 40 CFR 136. Reported MDL values are adjusted for any dilutions and percent moisture (as applicable). The lab is unable to report values below the MDL.

Metals
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill-Anti Degradation

Job ID: 460-287694-2

Client Sample ID: NPDES 001

Lab Sample ID: 460-287694-1
Date Collected: 09/07/23 08:00
Matrix: Water
Date Received: 09/07/23 19:00

Method: SW846 EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	1.3	U	5.0	1.3	ug/L		09/12/23 07:55	10/07/23 19:16	1

Method: SW846 EPA 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	**2.0**	**J**	5.0	1.3	ug/L		09/14/23 09:50	11/06/23 13:55	1

Client Sample ID: Basin 1

Lab Sample ID: 460-287694-2
Date Collected: 09/07/23 09:30
Matrix: Water
Date Received: 09/07/23 19:00

Method: SW846 EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	1.3	U	5.0	1.3	ug/L		09/12/23 07:55	10/07/23 19:20	1

Method: SW846 EPA 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	1.3	U	5.0	1.3	ug/L		09/14/23 09:50	11/06/23 13:58	1

Client Sample ID: Clarifying Pond

Lab Sample ID: 460-287694-3
Date Collected: 09/07/23 10:45
Matrix: Water
Date Received: 09/07/23 19:00

Method: SW846 EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	1.3	U	5.0	1.3	ug/L		09/12/23 07:55	10/07/23 19:23	1

Method: SW846 EPA 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	**1.3**	**J**	5.0	1.3	ug/L		09/14/23 09:50	11/06/23 14:01	1

Lab Chronicle

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill-Anti Degradation

Job ID: 460-287694-2

Client Sample ID: NPDES 001

Lab Sample ID: 460-287694-1
Matrix: Water
Date Collected: 09/07/23 08:00
Date Received: 09/07/23 19:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Filtration	Filtration			446366	S1Z	EET PIT	09/13/23 10:02
Dissolved	Prep	3005A			446510	S1Z	EET PIT	09/14/23 09:50
Dissolved	Analysis	EPA 6020B		1	451123	MRG	EET PIT	11/06/23 13:55
Total Recoverable	Prep	3005A			446160	S1Z	EET PIT	09/12/23 07:55
Total Recoverable	Analysis	EPA 6020B		1	448660	MRG	EET PIT	10/07/23 19:16

Client Sample ID: Basin 1

Lab Sample ID: 460-287694-2
Matrix: Water
Date Collected: 09/07/23 09:30
Date Received: 09/07/23 19:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Filtration	Filtration			446366	S1Z	EET PIT	09/13/23 10:02
Dissolved	Prep	3005A			446510	S1Z	EET PIT	09/14/23 09:50
Dissolved	Analysis	EPA 6020B		1	451123	MRG	EET PIT	11/06/23 13:58
Total Recoverable	Prep	3005A			446160	S1Z	EET PIT	09/12/23 07:55
Total Recoverable	Analysis	EPA 6020B		1	448660	MRG	EET PIT	10/07/23 19:20

Client Sample ID: Clarifying Pond

Lab Sample ID: 460-287694-3
Matrix: Water
Date Collected: 09/07/23 10:45
Date Received: 09/07/23 19:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Filtration	Filtration			446366	S1Z	EET PIT	09/13/23 10:02
Dissolved	Prep	3005A			446510	S1Z	EET PIT	09/14/23 09:50
Dissolved	Analysis	EPA 6020B		1	451123	MRG	EET PIT	11/06/23 14:01
Total Recoverable	Prep	3005A			446160	S1Z	EET PIT	09/12/23 07:55
Total Recoverable	Analysis	EPA 6020B		1	448660	MRG	EET PIT	10/07/23 19:23

Laboratory References:

EET PIT = Eurofins Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Accreditation/Certification Summary

Client: Heidelberg Materials Northeast LLC
Job ID: 460-287694-2
Project/Site: Rock Hill-Anti Degradation

Laboratory: Eurofins Pittsburgh

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Arkansas DEQ	State	19-033-0	06-27-24
California	State	2891	04-30-24
Connecticut	State	PH-0688	09-30-24
Florida	NELAP	E871008	06-30-24
Georgia	State	PA 02-00416	04-30-24
Illinois	NELAP	004375	06-30-24
Kansas	NELAP	E-10350	01-31-24
Kentucky (UST)	State	162013	04-30-23 *
Kentucky (WW)	State	KY98043	12-31-23
Louisiana	NELAP	04041	06-30-22 *
Louisiana (All)	NELAP	04041	06-30-24
Maine	State	PA00164	03-06-24
Minnesota	NELAP	042-999-482	12-31-23
New Hampshire	NELAP	2030	04-04-24
New Jersey	NELAP	PA005	06-30-24
New York	NELAP	11182	04-01-24
North Carolina (WW/SW)	State	434	12-31-23
North Dakota	State	R-227	04-30-24
Oregon	NELAP	PA-2151	02-06-24
Pennsylvania	NELAP	02-00416	04-30-24
Rhode Island	State	LAO00362	12-31-22 *
South Carolina	State	89014	04-30-23 *
Texas	NELAP	T104704528	03-31-24
US Fish & Wildlife	US Federal Programs	058448	03-31-24
USDA	US Federal Programs	P330-16-00211	04-11-26
Utah	NELAP	PA001462019-8	05-31-24
Virginia	NELAP	10043	07-14-24
West Virginia DEP	State	142	01-31-24
Wisconsin	State	998027800	08-31-24

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Method Summary

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill-Anti Degradation

Job ID: 460-287694-2

Method	Method Description	Protocol	Laboratory
EPA 6020B	Metals (ICP/MS)	SW846	EET PIT
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	EET PIT
Filtration	Sample Filtration	None	EET PIT

Protocol References:

None = None

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET PIT = Eurofins Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Sample Summary

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill-Anti Degradation

Job ID: 460-287694-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
460-287694-1	NPDES 001	Water	09/07/23 08:00	09/07/23 19:00
460-287694-2	Basin 1	Water	09/07/23 09:30	09/07/23 19:00
460-287694-3	Clarifying Pond	Water	09/07/23 10:45	09/07/23 19:00

Eurofins Edison
777 New Durham Road
Edison, NJ 08817
Phone: 732-549-3900 Fax: 732-549-3679

Chain of Custody Record

450-KOP

eurofins

Client Information	Sampler: EG	Lab PM: Gilmore, Julie L	Carrier Tracking No(s):	COC No: 460-172306-111665.1
Client Contact: Andrew Gutshall	Phone:	E-Mail: Julie.Gilmore@et.eurofinsus.com	State of Origin:	Page: Page 1 of 2
Company: Heidelberg Materials Northeast LLC	PWSID:			Job #: 287694
Address: 7660 Imperial Way	Due Date Requested:			
City: Allentown	TAT Requested (days):			
State, Zip: PA, 18195	Compliance Project: Δ Yes Δ No			
Phone: 610-366-4819(Tel)	PO #: Purchase Order not required			
Email: andrew.gutshall@heidelbergmaterials.com	WO #:			
Project Name: Rock Hill Anti-Degradation	Project #: 46011424			
Site:	SSOW#:			

Analysis Requested

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water S=solid, O=waste/oil BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020B Dissolved Lithium	6020B Total Lithium	351.2 Local Method	6020B Dissolved Cd/Fe/Zn	6020B (MOD) Total Fe	350.1 410.4, 4500_P_E	120.1 9040C	350.1 4500_P_E, 6020B	2320B (MOD) Alkalinity	6020B, SM2340B	9060A TOC	2540D, SM5210B_Calc	4500_P_E_Ortho Dissolved Orthophosphate	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	D	S	N	D	S	N	N	N	D	S	N	N		
NPDES 001	9/7/23	0800	G	Water																10	1
E. N 1	9/7/23	0930	G	Water																10	2
Clarify Pond	9/7/23	0945	G	Water																20	3
				Water																	
				Water																	

SHOR HOLI

Possible Hazard Identification	Sample Disposal (A fee may be assesse
☐ Non-Hazard ☐ Flammable ☐ Ski ☐ Poison B ☐ Unknown ☐ Radiological	☐ Return To Client ☐ Disposal
Deliverable Requested: I II III IV Other (specify)	Special Instructions/QC Requirements:

460-287694 Chain of Custody

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	9/7/23			9/7/23 1322	EETN-KOP
Relinquished by:	Date/Time: 9/7/23 1735	Company EETN-KOP	Received by:	Date/Time: 9/7/23 1800	Company ETA
Relinquished by:	Date/Time: 9/7/23 1900	Company ETA	Received by:	Date/Time: 9/7/23 1900	Company Eurofins

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.	Cooler Temperature(s) °C and Other Remarks: 5.0/5.2 4.6/4.8

Ver: 06/08/2021

11/13/2023

Eurofins Edison
777 New Durham Road
Edison, NJ 08817
Phone: 732-549-3900 Fax: 732-549-3679

Chain of Custody Record

450-KOP

13 3 °C
12 0 KOP. 2
rec on ice

eurofins

mer

Client Information	Sampler	Lab PM: Gilmore, Julie L	Carrier Tracking No(s):	COC No: 460-172306-111665.2
Client Contact: Andrew Gutshall	Phone:	E-Mail: Julie.Gilmore@et.eurofinsus.com	State of Origin:	Page: Page 2 of 2
Company: Heidelberg Materials Northeast LLC	PWSID:			Job #: 269694
Address: 7660 Imperial Way	Due Date Requested:			
City: Allentown	TAT Requested (days):			
State, Zip: PA, 18195	Compliance Project: Δ Yes Δ No			
Phone: 610-366-4819(Tel)	PO #: Purchase Order not required			
Email: andrew.gutshall@heidelbergmaterials.com	WO #:			
Project Name: Rock Hill Anti-Degradation	Project #: 46011424			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:
A HCL, B NaOH, C Zn Acetate, D Nitric Acid, E NaHSO4, F MeOH, G Amchlor, H Ascorbic Acid, I Ice, J DI Water, K EDTA, L EDA, M Hexane, N None, O AsNaO2, P Na2O4S, Q Na2SO3, R Na2S2O3, S H2SO4, T TSP Dodecahydrate, U Acetone, V MCAA, W pH 4-5, Y Trizma, Z other (specify), Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	4500_P_E_Ortho Total Orthophosphate	2540C TDS	300_ORGFM_28D, 300_ORGFMS	245.1 Local Method	6020B Total Aluminum	Acidity	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	N	D	D			
NPDES 001	9/7/23	0900	G	Water					✓					1
Basin 1	9/7/23	0930	G	Water			✓	✓				✓		2
Clarifying Pond	9/7/23	1045	G	Water								✓		3
				Water										
				Water										

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I II III IV Other (specify)

Special Instructions/QC Requirements.

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	9/7/23			9/7/23 1722	EETN-KOP
	9/7/23 1735	EETN KOP		9/7/23 1800	ETA
	9/7/23 1900			9/7/23 1900	Eurofins

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.	Cooler Temperature(s) °C and Other Remarks: 5.0/5.2 4.6/4.8

Ver: 06/08/2021

Eurofins TestAmerica Edison
Receipt Temperature and pH Log

Job Number: 289694

Number of Coolers: 2 IR Gun # 10

Cooler Temperatures

	RAW	CORRECTED		RAW	CORRECTED		RAW	CORRECTED
Cooler #1:	5.0 °C	5.2 °C	Cooler #4:	°C	°C	Cooler #7:	°C	°C
Cooler #2:	4.6 °C	4.8 °C	Cooler #5:	°C	°C	Cooler #8:	°C	°C
Cooler #3:	°C	°C	Cooler #6:	°C	°C	Cooler #9:	°C	°C

TALS Sample Number	Ammonia (pH<2)	COD (pH<2)	Nitrate Nitrite (pH<2)	Metals* (pH<2)	Hardness (pH<2)	Pest (pH 5-9)	EPH or QAM (pH<2)	Phenols (pH<2)	Sulfide (pH>9)	TKN (pH<2)	TOC (pH<2)	Total Cyanide (pH>12)	Total Phos (pH<2)	Other	Other
1	<2	<2		<2						<2	<2		<2		
2	<2	<2		<2						<2	<2		<2		
3	<2	<2		<2						<2	<2		<2		

If pH adjustments are required record the information below*

Sample No(s). adjusted: _____

Preservative Name/Conc.: _____ Volume of Preservative used (ml): _____

Lot # of Preservative(s): _____ Expiration Date: _____

The appropriate Project Manager and Department Manager should be notified about the samples which were pH adjusted.

**Samples for Metal analysis which are out of compliance must be acidified at least 24 hours prior to analysis.*

Initials: PG Date: 9/7/23

XO AGCA

15238 PIT PA – US

TRK# 0201 6553 1009 9980

SATURDAY 12:00P
PRIORITY OVERNIGHT

FedEx Express

Uncorrected temp
Thermometer ID
CF D.D
Initials
PT-WI-SR-001 effective 4/18/19

0.3 0.22 °C

TO SHIPPING/RECEIVING
EUROFINS ENVIRONMENT TESTING NORTHE
301 ALPHA DRIVE
RIDC PARK
PITTSBURGH PA 15238
(412) 963-7058 REF: 8460-172611
PO: YE8

ORIGIN ID:LDJA (732) 549-3900
EUROFINS, EDISON
777 NEW DURHAM ROAD
EDISON, NJ 08817
UNITED STATES US

SHIP DATE: 08SEP23
ACTWGT: 27.05 LB
CAD: 6619092/CAFE3753

BILL SENDER

eurofins
Environ
TestAm

1g

Part # 158469-434 MTW EXP 01/24

460-287694 Waybill

Login Sample Receipt Checklist

Client: Heidelberg Materials Northeast LLC

Job Number: 460-287694-2

Login Number: 287694
List Number: 1
Creator: Thundathorn, Sukanan 1

List Source: Eurofins Edison

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Heidelberg Materials Northeast LLC

Job Number: 460-287694-2

Login Number: 287694
List Number: 4
Creator: Ryan, Shannon G

List Source: Eurofins Pittsburgh
List Creation: 09/09/23 04:24 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	False	Received project as a subcontract.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Lab Results

September 20, 2023

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Andrew Gutshall
Heidelberg Materials Northeast LLC
7660 Imperial Way
Allentown, Pennsylvania 18195

Generated 10/19/2023 8:11:37 AM

JOB DESCRIPTION

Rock Hill - Anti Degradation

JOB NUMBER

460-288640-1

Eurofins Edison
777 New Durham Road
Edison NJ 08817

See page two for job notes and contact information.

my EOL

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing Northeast, LLC Project Manager.

Authorization



Generated
10/19/2023 8:11:37 AM

Authorized for release by
Julie Gilmore, Project Manager I
Julie.Gilmore@et.eurofinsus.com
(484)685-0865

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Definitions/Glossary

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill - Anti Degradation

Job ID: 460-288640-1

Qualifiers

HPLC/IC

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

General Chemistry

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
H	Sample was prepped or analyzed beyond the specified holding time. This does not meet regulatory requirements.
H3	Sample was received and analyzed past holding time. This does not meet regulatory requirements.
HF	Parameter with a holding time of 15 minutes. Test performed by laboratory at client's request. Sample was analyzed outside of hold time.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 460-288640-1

Laboratory: Eurofins Edison

Narrative

Job Narrative
460-288640-1

Receipt
The samples were received on 9/20/2023 7:00 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 3 coolers at receipt time were 4.1º C, 5.5º C and 5.6º C.

GC Semi VOA
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Metals
Method Filtration: The following samples were not filtered within 15 minutes of sample collection as required by the method: Clarifying Pond (460-288640-1), Upgradient (460-288640-2), Basin 1 (460-288640-3), Basin 2 (460-288640-4) and Outfall 001 (460-288640-5). The sample(s) was filtered prior to analysis at the laboratory, and the results have been reported. This does not meet regulatory requirements.

Method FILTRATION: The following samples were not filtered and preserved within 15 minutes of sample collection in accordance with 40 CFR Part 136 Table II, Footnote 7, method 6020B. The samples were filtered prior to analysis at the laboratory.

Clarifying Pond (460-288640-1), Upgradient (460-288640-2), Basin 1 (460-288640-3), Basin 2 (460-288640-4) and Outfall 001 (460-288640-5)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

General Chemistry
Method SM 4500 P E: The following samples were not filtered within 15 minutes of sample collection as required by the method: Clarifying Pond (460-288640-1), Upgradient (460-288640-2), Basin 1 (460-288640-3), Basin 2 (460-288640-4), Outfall 001 (460-288640-5), (460-288640-E-5-A MS) and (460-288640-E-5-A MSD). The sample(s) was filtered prior to analysis at the laboratory, and the results have been reported.

Method SM 4500 P E: The following samples were not filtered within 15 minutes of sample collection as required by the method: Clarifying Pond (460-288640-1), Upgradient (460-288640-2), Basin 1 (460-288640-3), Basin 2 (460-288640-4) and Outfall 001 (460-288640-5). The sample(s) were not filtered prior to analysis at the laboratory as client requested to report without filter, and the results have been reported.

Method SM 4500 O C: This analysis is normally performed in the field and has a method-defined holding time of 15 minutes. The following sample has been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe: Clarifying Pond (460-288640-1).

Method SM 4500 O C: This analysis is normally performed in the field and has a method-defined holding time of 15 minutes. The following sample has been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe: Upgradient (460-288640-2).

Method SM 4500 O C: This analysis is normally performed in the field and has a method-defined holding time of 15 minutes. The following sample has been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe: Basin 1 (460-288640-3).

Method SM 4500 O C: This analysis is normally performed in the field and has a method-defined holding time of 15 minutes. The following sample has been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe: Basin 2 (460-288640-4).

Method SM 4500 O C: This analysis is normally performed in the field and has a method-defined holding time of 15 minutes. The following sample has been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe: Outfall 001 (460-288640-5).

Methods 9040C, SM 4500 H+ B: This analysis is normally performed in the field and has a method-defined holding time of 15 minutes. The following sample has been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute

Job ID: 460-288640-1 (Continued)

Laboratory: Eurofins Edison (Continued)

timeframe: (460-288531-D-1).

Methods 9040C, SM 4500 H+ B: This analysis is normally performed in the field and has a method-defined holding time of 15 minutes. The following samples has been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe: Clarifying Pond (460-288640-1), Upgradient (460-288640-2) and Basin 1 (460-288640-3).

Methods 9040C, SM 4500 H+ B: This analysis is normally performed in the field and has a method-defined holding time of 15 minutes. The following samples has been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe: Basin 2 (460-288640-4) and Outfall 001 (460-288640-5).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Client Sample ID: Clarifying Pond

Date Collected: 09/20/23 09:20
Date Received: 09/20/23 19:00

Lab Sample ID: 460-288640-1

Matrix: Water

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide	0.054	U	0.32	0.054	mg/L			09/21/23 23:15	1
Nitrate as N	**0.13**	**J**	0.16	0.070	mg/L			09/21/23 23:15	1
Chloride	**1.20**		0.32	0.039	mg/L			09/21/23 23:15	1
Nitrate Nitrite as N	**0.23**		0.16	0.070	mg/L			09/21/23 23:15	1
Nitrite as N	**0.11**	**J**	0.16	0.023	mg/L			09/21/23 23:15	1
Sulfate	**5.90**		0.48	0.095	mg/L			09/21/23 23:15	1

Method: SM-Online 2340B-2011 - Total Hardness (as CaCO3) by calculation - SM Online, 2011

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**64.7**		33.1	33.1	mg/L			10/06/23 06:52	1

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000043	U	0.00020	0.000043	mg/L		09/26/23 11:26	09/26/23 15:31	1

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**7.7**		4.0	0.91	ug/L		09/25/23 09:05	09/27/23 22:30	1
Boron	**46.4**	**J**	80.0	30.4	ug/L		09/25/23 09:05	09/27/23 22:30	1
Calcium	**16800**		500	53.6	ug/L		09/25/23 09:05	09/27/23 22:30	1
Copper	**5.6**		4.0	2.5	ug/L		09/25/23 09:05	09/27/23 22:30	1
Lead	**1.5**		1.2	0.84	ug/L		09/25/23 09:05	09/27/23 22:30	1
Magnesium	**5510**		200	46.9	ug/L		09/25/23 09:05	09/27/23 22:30	1
Manganese	**90.3**		8.0	1.5	ug/L		09/25/23 09:05	09/27/23 22:30	1
Nickel	**2.1**	**J**	4.0	0.91	ug/L		09/25/23 09:05	09/27/23 22:30	1
Potassium	**1350**		200	112	ug/L		09/25/23 09:05	09/27/23 22:30	1
Selenium	0.59	U	2.5	0.59	ug/L		09/25/23 09:05	09/27/23 22:30	1
Sodium	**3200**		500	219	ug/L		09/25/23 09:05	09/27/23 22:30	1
Strontium	**34.4**		4.0	0.50	ug/L		09/25/23 09:05	09/27/23 22:30	1
Zinc	6.5	U	16.0	6.5	ug/L		09/25/23 09:05	09/27/23 22:30	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**979**		100	35.0	ug/L		09/25/23 08:55	09/25/23 19:57	1
Iron	**1280**		50.0	20.0	ug/L		09/27/23 05:41	10/03/23 17:55	1

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	19.5	U	40.0	19.5	ug/L		09/22/23 21:31	09/22/23 22:31	1
Cadmium	0.15	U	0.50	0.15	ug/L		10/03/23 21:46	10/04/23 12:10	1
Arsenic	0.89	U	2.0	0.89	ug/L		09/22/23 21:31	09/22/23 22:31	1
Iron	**21.5**	**J**	50.0	20.0	ug/L		10/03/23 21:46	10/04/23 12:10	1
Calcium	**19900**		500	53.6	ug/L		09/22/23 21:31	09/22/23 22:31	1
Zinc	4.0	U	10.0	4.0	ug/L		10/03/23 21:46	10/04/23 12:10	1
Copper	2.5	U	4.0	2.5	ug/L		09/22/23 21:31	09/22/23 22:31	1
Iron	58.2	U	120	58.2	ug/L		09/22/23 21:31	09/22/23 22:31	1
Lead	0.84	U	1.2	0.84	ug/L		09/22/23 21:31	09/22/23 22:31	1
Magnesium	**6510**		200	46.9	ug/L		09/22/23 21:31	09/22/23 22:31	1
Manganese	**5.2**	**J**	8.0	1.5	ug/L		09/22/23 21:31	09/22/23 22:31	1
Nickel	0.91	U	4.0	0.91	ug/L		09/22/23 21:31	09/22/23 22:31	1

Client Sample ID: Clarifying Pond

Lab Sample ID: 460-288640-1

Date Collected: 09/20/23 09:20

Matrix: Water

Date Received: 09/20/23 19:00

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Resistivity (EPA 120.1)	**0.00704**		0.000100	0.000100	Mohm-cm			10/04/23 12:00	1
Specific Conductance (EPA 120.1)	**142**		1.00	1.00	umhos/cm			10/04/23 12:00	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-2011)	**91.1**		5.0	5.0	mg/L			09/28/23 10:21	1
Carbonate Alkalinity as CaCO3 (SM 2320B-2011)	5.0	U	5.0	5.0	mg/L			09/28/23 10:21	1
Alkalinity as CaCO3 to pH 4.5 (SM 2320B-2011)	**91.1**		5.0	5.0	mg/L			09/28/23 10:21	1
Total Dissolved Solids (SM 2540C-2015)	2.5	U	2.5	2.5	mg/L			09/27/23 11:40	1
Total Suspended Solids (SM 2540D-2015)	**35.8**		5.0	5.0	mg/L			09/27/23 07:54	1
Ammonia (EPA 350.1)	0.050	U	0.10	0.050	mg/L			09/29/23 14:25	1
Total Kjeldahl Nitrogen (EPA 351.2	**0.67**	**J**	1.0	0.50	mg/L		09/28/23 14:30	09/29/23 12:02	1
Chemical Oxygen Demand (EPA 410.4)	**10.9**		10.0	3.3	mg/L			10/08/23 16:06	1
Oxygen, Dissolved (SM 4500 O C-2016)	**5.6**	**H H3**	1.0	1.0	mg/L			09/22/23 11:35	1
Orthophosphate as P (SM 4500 P E-2011)	0.0050	U	0.030	0.0050	mg/L			09/22/23 09:15	1
Carbonaceous Biochemical Oxygen Demand 5 (SM 5210 B-2016)	1.0	U	1.0	1.0	mg/L			09/21/23 13:55	1
pH (SW846 9040C)	**7.8**	**HF**	0.1	0.1	SU			10/02/23 12:30	1
Temperature (SW846 9040C)	**19.8**	**HF**	0.1	0.1	Degrees C			10/02/23 12:30	1
Total Organic Carbon (SW846 9060A)	**1.3**		1.0	0.53	mg/L			10/03/23 16:23	1
Phosphorus as PO4 (SM4500 P E-2011)	**0.11**	**F1**	0.090	0.071	mg/L		10/14/23 10:00	10/14/23 12:00	1
Phosphorus as P (SM4500 P E-2011)	**0.034**		0.030	0.023	mg/L		10/14/23 10:00	10/14/23 12:00	1
Nitrogen, Total (EPA Total Nitrogen)	**0.90**		0.50	0.50	mg/L			10/02/23 06:08	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (EPA 350.1)	0.050	U	0.10	0.050	mg/L			09/29/23 14:34	1
Orthophosphate as P (SM 4500 P E-2011)	0.0050	U	0.030	0.0050	mg/L			09/22/23 09:15	1
Phosphorus as PO4 (SM4500 P E-2011)	**0.080**	**J**	0.090	0.071	mg/L		10/18/23 12:28	10/18/23 15:51	1
Phosphorus as P (SM4500 P E-2011)	**0.026**	**J**	0.030	0.023	mg/L		10/18/23 12:28	10/18/23 15:51	1

Client Sample ID: Upgradient

Lab Sample ID: 460-288640-2

Date Collected: 09/20/23 09:40

Matrix: Water

Date Received: 09/20/23 19:00

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide	0.054	U	0.32	0.054	mg/L			09/21/23 23:30	1
Nitrate as N	0.070	U	0.16	0.070	mg/L			09/21/23 23:30	1
Chloride	**3.18**		0.32	0.039	mg/L			09/21/23 23:30	1
Nitrate Nitrite as N	0.070	U	0.16	0.070	mg/L			09/21/23 23:30	1
Nitrite as N	0.023	U	0.16	0.023	mg/L			09/21/23 23:30	1

Client Sample ID: Upgradient

Date Collected: 09/20/23 09:40
Date Received: 09/20/23 19:00

Lab Sample ID: 460-288640-2

Matrix: Water

Method: EPA 300.0 - Anions, Ion Chromatography (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**23.2**		0.48	0.095	mg/L			09/21/23 23:30	1

Method: SM-Online 2340B-2011 - Total Hardness (as CaCO3) by calculation - SM Online, 2011

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**159**		33.1	33.1	mg/L			10/06/23 06:52	1

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000043	U	0.00020	0.000043	mg/L		09/26/23 11:26	09/26/23 15:40	1

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**21.1**		4.0	0.91	ug/L		09/25/23 09:05	09/27/23 22:33	1
Boron	**68.6**	**J**	80.0	30.4	ug/L		09/25/23 09:05	09/27/23 22:33	1
Calcium	**41400**		500	53.6	ug/L		09/25/23 09:05	09/27/23 22:33	1
Copper	2.5	U	4.0	2.5	ug/L		09/25/23 09:05	09/27/23 22:33	1
Lead	0.84	U	1.2	0.84	ug/L		09/25/23 09:05	09/27/23 22:33	1
Magnesium	**13500**		200	46.9	ug/L		09/25/23 09:05	09/27/23 22:33	1
Manganese	**428**		8.0	1.5	ug/L		09/25/23 09:05	09/27/23 22:33	1
Nickel	**1.8**	**J**	4.0	0.91	ug/L		09/25/23 09:05	09/27/23 22:33	1
Potassium	**1650**		200	112	ug/L		09/25/23 09:05	09/27/23 22:33	1
Selenium	0.59	U	2.5	0.59	ug/L		09/25/23 09:05	09/27/23 22:33	1
Sodium	**4530**		500	219	ug/L		09/25/23 09:05	09/27/23 22:33	1
Strontium	**164**		4.0	0.50	ug/L		09/25/23 09:05	09/27/23 22:33	1
Zinc	6.5	U	16.0	6.5	ug/L		09/25/23 09:05	09/27/23 22:33	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	35.0	U	100	35.0	ug/L		09/25/23 08:55	09/25/23 20:06	1
Iron	**627**		50.0	20.0	ug/L		09/27/23 05:41	10/03/23 18:12	1

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	19.5	U	40.0	19.5	ug/L		09/22/23 21:31	09/22/23 22:34	1
Cadmium	0.15	U	0.50	0.15	ug/L		09/26/23 00:13	10/02/23 22:46	1
Arsenic	0.89	U	2.0	0.89	ug/L		09/22/23 21:31	09/22/23 22:34	1
Iron	**46.3**	**J**	50.0	20.0	ug/L		09/26/23 00:13	10/02/23 22:46	1
Calcium	**42200**		500	53.6	ug/L		09/22/23 21:31	09/22/23 22:34	1
Zinc	**4.2**	**J**	10.0	4.0	ug/L		09/26/23 00:13	10/02/23 22:46	1
Copper	2.5	U	4.0	2.5	ug/L		09/22/23 21:31	09/22/23 22:34	1
Iron	58.2	U	120	58.2	ug/L		09/22/23 21:31	09/22/23 22:34	1
Lead	0.84	U	1.2	0.84	ug/L		09/22/23 21:31	09/22/23 22:34	1
Magnesium	**13700**		200	46.9	ug/L		09/22/23 21:31	09/22/23 22:34	1
Manganese	**373**		8.0	1.5	ug/L		09/22/23 21:31	09/22/23 22:34	1
Nickel	**1.2**	**J**	4.0	0.91	ug/L		09/22/23 21:31	09/22/23 22:34	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Resistivity (EPA 120.1)	**0.00298**		0.000100	0.000100	Mohm-cm			10/04/23 12:00	1
Specific Conductance (EPA 120.1)	**336**		1.00	1.00	umhos/cm			10/04/23 12:00	1

Client Sample ID: Upgradient

Date Collected: 09/20/23 09:40
Date Received: 09/20/23 19:00

Lab Sample ID: 460-288640-2
Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3 (SM 2320B-2011)	**167**		5.0	5.0	mg/L			09/28/23 10:28	1
Carbonate Alkalinity as CaCO3 (SM 2320B-2011)	5.0	U	5.0	5.0	mg/L			09/28/23 10:28	1
Alkalinity as CaCO3 to pH 4.5 (SM 2320B-2011)	**167**		5.0	5.0	mg/L			09/28/23 10:28	1
Total Dissolved Solids (SM 2540C-2015)	**255**		2.5	2.5	mg/L			09/27/23 11:40	1
Total Suspended Solids (SM 2540D-2015)	**25.0**		2.5	2.5	mg/L			09/27/23 08:21	1
Ammonia (EPA 350.1)	0.050	U	0.10	0.050	mg/L			09/29/23 14:26	1
Total Kjeldahl Nitrogen (EPA 351.2	**1.9**		1.0	0.50	mg/L		09/28/23 14:30	09/29/23 12:04	1
Chemical Oxygen Demand (EPA 410.4)	**14.8**		10.0	3.3	mg/L			10/08/23 16:06	1
Oxygen, Dissolved (SM 4500 O C-2016)	**6.0**	**H H3**	1.0	1.0	mg/L			09/22/23 11:40	1
Orthophosphate as P (SM 4500 P E-2011)	0.0050	U	0.030	0.0050	mg/L			09/22/23 09:15	1
Carbonaceous Biochemical Oxygen Demand 5 (SM 5210 B-2016)	**1.7**		1.0	1.0	mg/L			09/21/23 14:00	1
pH (SW846 9040C)	**7.6**	**HF**	0.1	0.1	SU			10/02/23 12:30	1
Temperature (SW846 9040C)	**19.9**	**HF**	0.1	0.1	Degrees C			10/02/23 12:30	1
Total Organic Carbon (SW846 9060A)	**4.0**		1.0	0.53	mg/L			10/03/23 16:48	1
Phosphorus as PO4 (SM4500 P E-2011)	**0.42**		0.090	0.071	mg/L		10/14/23 10:00	10/14/23 12:00	1
Phosphorus as P (SM4500 P E-2011)	**0.14**		0.030	0.023	mg/L		10/14/23 10:00	10/14/23 12:00	1
Nitrogen, Total (EPA Total Nitrogen)	**1.9**		0.50	0.50	mg/L			10/02/23 06:08	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (EPA 350.1)	0.050	U	0.10	0.050	mg/L			09/29/23 14:35	1
Orthophosphate as P (SM 4500 P E-2011)	0.0050	U	0.030	0.0050	mg/L			09/22/23 09:15	1
Phosphorus as PO4 (SM4500 P E-2011)	0.071	U	0.090	0.071	mg/L		10/18/23 12:28	10/18/23 15:51	1
Phosphorus as P (SM4500 P E-2011)	0.023	U	0.030	0.023	mg/L		10/18/23 12:28	10/18/23 15:51	1

Client Sample ID: Basin 1

Date Collected: 09/20/23 10:20
Date Received: 09/20/23 19:00

Lab Sample ID: 460-288640-3
Matrix: Water

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide	0.054	U	0.32	0.054	mg/L			09/21/23 23:45	1
Nitrate as N	0.070	U	0.16	0.070	mg/L			09/21/23 23:45	1
Chloride	**4.30**		0.32	0.039	mg/L			09/21/23 23:45	1
Nitrate Nitrite as N	0.070	U	0.16	0.070	mg/L			09/21/23 23:45	1
Nitrite as N	0.023	U	0.16	0.023	mg/L			09/21/23 23:45	1
Sulfate	**4.85**		0.48	0.095	mg/L			09/21/23 23:45	1

Client Sample ID: Basin 1

Date Collected: 09/20/23 10:20
Date Received: 09/20/23 19:00

Lab Sample ID: 460-288640-3

Matrix: Water

Method: SM-Online 2340B-2011 - Total Hardness (as CaCO3) by calculation - SM Online, 2011

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**100**		33.1	33.1	mg/L			10/06/23 06:52	1

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000043	U	0.00020	0.000043	mg/L		09/26/23 11:26	09/26/23 15:42	1

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**8.0**		4.0	0.91	ug/L		09/25/23 09:05	09/27/23 22:35	1
Boron	**60.9**	**J**	80.0	30.4	ug/L		09/25/23 09:05	09/27/23 22:35	1
Calcium	**23700**		500	53.6	ug/L		09/25/23 09:05	09/27/23 22:35	1
Copper	2.5	U	4.0	2.5	ug/L		09/25/23 09:05	09/27/23 22:35	1
Lead	0.84	U	1.2	0.84	ug/L		09/25/23 09:05	09/27/23 22:35	1
Magnesium	**9990**		200	46.9	ug/L		09/25/23 09:05	09/27/23 22:35	1
Manganese	**71.3**		8.0	1.5	ug/L		09/25/23 09:05	09/27/23 22:35	1
Nickel	0.91	U	4.0	0.91	ug/L		09/25/23 09:05	09/27/23 22:35	1
Potassium	**1350**		200	112	ug/L		09/25/23 09:05	09/27/23 22:35	1
Selenium	0.59	U	2.5	0.59	ug/L		09/25/23 09:05	09/27/23 22:35	1
Sodium	**4740**		500	219	ug/L		09/25/23 09:05	09/27/23 22:35	1
Strontium	**63.0**		4.0	0.50	ug/L		09/25/23 09:05	09/27/23 22:35	1
Zinc	**20.3**		16.0	6.5	ug/L		09/25/23 09:05	09/27/23 22:35	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**59.8**	**J**	100	35.0	ug/L		09/25/23 08:55	09/25/23 20:08	1
Iron	**311**		50.0	20.0	ug/L		09/27/23 05:41	10/03/23 17:57	1

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	19.5	U	40.0	19.5	ug/L		09/22/23 21:31	09/22/23 22:36	1
Cadmium	0.15	U	0.50	0.15	ug/L		09/26/23 00:13	10/02/23 22:28	1
Arsenic	0.89	U	2.0	0.89	ug/L		09/22/23 21:31	09/22/23 22:36	1
Iron	**88.5**		50.0	20.0	ug/L		09/26/23 00:13	10/02/23 22:28	1
Calcium	**24700**		500	53.6	ug/L		09/22/23 21:31	09/22/23 22:36	1
Zinc	**14.6**		10.0	4.0	ug/L		09/26/23 00:13	10/02/23 22:28	1
Copper	2.5	U	4.0	2.5	ug/L		09/22/23 21:31	09/22/23 22:36	1
Iron	58.2	U	120	58.2	ug/L		09/22/23 21:31	09/22/23 22:36	1
Lead	0.84	U	1.2	0.84	ug/L		09/22/23 21:31	09/22/23 22:36	1
Magnesium	**9970**		200	46.9	ug/L		09/22/23 21:31	09/22/23 22:36	1
Manganese	**60.6**		8.0	1.5	ug/L		09/22/23 21:31	09/22/23 22:36	1
Nickel	0.91	U	4.0	0.91	ug/L		09/22/23 21:31	09/22/23 22:36	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Resistivity (EPA 120.1)	**0.00485**		0.000100	0.000100	Mohm-cm			10/04/23 12:00	1
Specific Conductance (EPA 120.1)	**206**		1.00	1.00	umhos/cm			10/04/23 12:00	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-2011)	**119**		5.0	5.0	mg/L			09/28/23 10:35	1
Carbonate Alkalinity as CaCO3 (SM 2320B-2011)	5.0	U	5.0	5.0	mg/L			09/28/23 10:35	1

Client Sample ID: Basin 1

Date Collected: 09/20/23 10:20
Date Received: 09/20/23 19:00

Lab Sample ID: 460-288640-3
Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity as CaCO3 to pH 4.5 (SM 2320B-2011)	119		5.0	5.0	mg/L			09/28/23 10:35	1
Total Dissolved Solids (SM 2540C-2015)	142		2.5	2.5	mg/L			09/27/23 11:40	1
Total Suspended Solids (SM 2540D-2015)	103		2.5	2.5	mg/L			09/27/23 08:21	1
Ammonia (EPA 350.1)	0.050	U	0.10	0.050	mg/L			09/29/23 14:28	1
Total Kjeldahl Nitrogen (EPA 351.2)	0.50	U	1.0	0.50	mg/L		09/28/23 14:30	09/29/23 12:06	1
Chemical Oxygen Demand (EPA 410.4)	12.5		10.0	3.3	mg/L			10/08/23 16:06	1
Oxygen, Dissolved (SM 4500 O C-2016)	7.4	H H3	1.0	1.0	mg/L			09/22/23 11:45	1
Orthophosphate as P (SM 4500 P E-2011)	0.0050	U	0.030	0.0050	mg/L			09/22/23 09:15	1
Carbonaceous Biochemical Oxygen Demand 5 (SM 5210 B-2016)	1.2		1.0	1.0	mg/L			09/21/23 14:05	1
pH (SW846 9040C)	8.2	HF	0.1	0.1	SU			10/02/23 12:30	1
Temperature (SW846 9040C)	21.0	HF	0.1	0.1	Degrees C			10/02/23 12:30	1
Total Organic Carbon (SW846 9060A)	2.0		1.0	0.53	mg/L			10/03/23 17:12	1
Phosphorus as PO4 (SM4500 P E-2011)	0.20		0.090	0.071	mg/L		10/14/23 10:00	10/14/23 12:00	1
Phosphorus as P (SM4500 P E-2011)	0.065		0.030	0.023	mg/L		10/14/23 10:00	10/14/23 12:00	1
Nitrogen, Total (EPA Total Nitrogen)	0.50	U	0.50	0.50	mg/L			10/02/23 06:08	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (EPA 350.1)	0.050	U	0.10	0.050	mg/L			09/29/23 14:37	1
Orthophosphate as P (SM 4500 P E-2011)	0.0050	U	0.030	0.0050	mg/L			09/22/23 09:15	1
Phosphorus as PO4 (SM4500 P E-2011)	0.46		0.090	0.071	mg/L		10/18/23 12:28	10/18/23 15:51	1
Phosphorus as P (SM4500 P E-2011)	0.15		0.030	0.023	mg/L		10/18/23 12:28	10/18/23 15:51	1

Client Sample ID: Basin 2

Date Collected: 09/20/23 10:50
Date Received: 09/20/23 19:00

Lab Sample ID: 460-288640-4
Matrix: Water

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide	0.054	U	0.32	0.054	mg/L			09/22/23 00:00	1
Nitrate as N	0.070	U	0.16	0.070	mg/L			09/22/23 00:00	1
Chloride	2.13		0.32	0.039	mg/L			09/22/23 00:00	1
Nitrate Nitrite as N	0.070	U	0.16	0.070	mg/L			09/22/23 00:00	1
Nitrite as N	0.023	U	0.16	0.023	mg/L			09/22/23 00:00	1
Sulfate	6.64		0.48	0.095	mg/L			09/22/23 00:00	1

Method: SM-Online 2340B-2011 - Total Hardness (as CaCO3) by calculation - SM Online, 2011

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	94.8		33.1	33.1	mg/L			10/06/23 06:52	1

Client Sample ID: Basin 2

Date Collected: 09/20/23 10:50
Date Received: 09/20/23 19:00

Lab Sample ID: 460-288640-4

Matrix: Water

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000043	U	0.00020	0.000043	mg/L		09/26/23 11:26	09/26/23 15:43	1

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**4.4**		4.0	0.91	ug/L		09/25/23 09:05	09/27/23 22:42	1
Boron	**45.4**	**J**	80.0	30.4	ug/L		09/25/23 09:05	09/27/23 22:42	1
Calcium	**20700**		500	53.6	ug/L		09/25/23 09:05	09/27/23 22:42	1
Copper	2.5	U	4.0	2.5	ug/L		09/25/23 09:05	09/27/23 22:42	1
Lead	0.84	U	1.2	0.84	ug/L		09/25/23 09:05	09/27/23 22:42	1
Magnesium	**10500**		200	46.9	ug/L		09/25/23 09:05	09/27/23 22:42	1
Manganese	**51.1**		8.0	1.5	ug/L		09/25/23 09:05	09/27/23 22:42	1
Nickel	0.91	U	4.0	0.91	ug/L		09/25/23 09:05	09/27/23 22:42	1
Potassium	**1470**		200	112	ug/L		09/25/23 09:05	09/27/23 22:42	1
Selenium	0.59	U	2.5	0.59	ug/L		09/25/23 09:05	09/27/23 22:42	1
Sodium	**3360**		500	219	ug/L		09/25/23 09:05	09/27/23 22:42	1
Strontium	**52.0**		4.0	0.50	ug/L		09/25/23 09:05	09/27/23 22:42	1
Zinc	**10.6**	**J**	16.0	6.5	ug/L		09/25/23 09:05	09/27/23 22:42	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**54.4**	**J**	100	35.0	ug/L		09/25/23 08:55	09/25/23 20:11	1
Iron	**342**		50.0	20.0	ug/L		09/27/23 05:41	10/03/23 18:08	1

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	19.5	U	40.0	19.5	ug/L		09/22/23 21:31	09/22/23 22:38	1
Cadmium	0.15	U	0.50	0.15	ug/L		09/26/23 00:13	10/02/23 22:50	1
Arsenic	0.89	U	2.0	0.89	ug/L		09/22/23 21:31	09/22/23 22:38	1
Iron	**71.2**		50.0	20.0	ug/L		09/26/23 00:13	10/02/23 22:50	1
Calcium	**21100**		500	53.6	ug/L		09/22/23 21:31	09/22/23 22:38	1
Zinc	**6.9**	**J**	10.0	4.0	ug/L		09/26/23 00:13	10/02/23 22:50	1
Copper	2.5	U	4.0	2.5	ug/L		09/22/23 21:31	09/22/23 22:38	1
Iron	58.2	U	120	58.2	ug/L		09/22/23 21:31	09/22/23 22:38	1
Lead	0.84	U	1.2	0.84	ug/L		09/22/23 21:31	09/22/23 22:38	1
Magnesium	**10600**		200	46.9	ug/L		09/22/23 21:31	09/22/23 22:38	1
Manganese	**25.0**		8.0	1.5	ug/L		09/22/23 21:31	09/22/23 22:38	1
Nickel	0.91	U	4.0	0.91	ug/L		09/22/23 21:31	09/22/23 22:38	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Resistivity (EPA 120.1)	**0.00496**		0.000100	0.000100	Mohm-cm			10/04/23 12:00	1
Specific Conductance (EPA 120.1)	**202**		1.00	1.00	umhos/cm			10/04/23 12:00	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-2011)	**117**		5.0	5.0	mg/L			09/28/23 10:42	1
Carbonate Alkalinity as CaCO3 (SM 2320B-2011)	5.0	U	5.0	5.0	mg/L			09/28/23 10:42	1
Alkalinity as CaCO3 to pH 4.5 (SM 2320B-2011)	**117**		5.0	5.0	mg/L			09/28/23 10:42	1
Total Dissolved Solids (SM 2540C-2015)	**140**		2.5	2.5	mg/L			09/27/23 11:40	1
Total Suspended Solids (SM 2540D-2015)	**2.7**		2.5	2.5	mg/L			09/27/23 08:21	1

Client Sample ID: Basin 2

Date Collected: 09/20/23 10:50
Date Received: 09/20/23 19:00

Lab Sample ID: 460-288640-4
Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (EPA 350.1)	0.050	U	0.10	0.050	mg/L			09/29/23 14:29	1
Total Kjeldahl Nitrogen (EPA 351.2	0.64	J	1.0	0.50	mg/L		09/28/23 14:30	09/29/23 12:09	1
Chemical Oxygen Demand (EPA 410.4)	14.8		10.0	3.3	mg/L			10/08/23 16:06	1
Oxygen, Dissolved (SM 4500 O C-2016)	8.9	H H3	1.0	1.0	mg/L			09/22/23 11:50	1
Orthophosphate as P (SM 4500 P E-2011)	0.0050	U	0.030	0.0050	mg/L			09/22/23 09:15	1
Carbonaceous Biochemical Oxygen Demand 5 (SM 5210 B-2016)	1.0		1.0	1.0	mg/L			09/21/23 14:10	1
pH (SW846 9040C)	7.7	HF	0.1	0.1	SU			10/02/23 12:30	1
Temperature (SW846 9040C)	20.5	HF	0.1	0.1	Degrees C			10/02/23 12:30	1
Total Organic Carbon (SW846 9060A)	2.8		1.0	0.53	mg/L			10/03/23 17:37	1
Phosphorus as PO4 (SM4500 P E-2011)	0.13		0.090	0.071	mg/L		10/14/23 10:00	10/14/23 12:00	1
Phosphorus as P (SM4500 P E-2011)	0.041		0.030	0.023	mg/L		10/14/23 10:00	10/14/23 12:00	1
Nitrogen, Total (EPA Total Nitrogen)	0.64		0.50	0.50	mg/L			10/02/23 06:08	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (EPA 350.1)	0.050	U	0.10	0.050	mg/L			09/29/23 14:49	1
Orthophosphate as P (SM 4500 P E-2011)	0.0050	U	0.030	0.0050	mg/L			09/22/23 09:15	1
Phosphorus as PO4 (SM4500 P E-2011)	0.89		0.090	0.071	mg/L		10/18/23 12:28	10/18/23 15:51	1
Phosphorus as P (SM4500 P E-2011)	0.29		0.030	0.023	mg/L		10/18/23 12:28	10/18/23 15:51	1

Client Sample ID: Outfall 001

Date Collected: 09/20/23 11:40
Date Received: 09/20/23 19:00

Lab Sample ID: 460-288640-5
Matrix: Water

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide	0.054	U	0.32	0.054	mg/L			09/22/23 00:15	1
Nitrate as N	0.070	U	0.16	0.070	mg/L			09/22/23 00:15	1
Chloride	3.84		0.32	0.039	mg/L			09/22/23 00:15	1
Nitrate Nitrite as N	0.070	U	0.16	0.070	mg/L			09/22/23 00:15	1
Nitrite as N	0.023	U	0.16	0.023	mg/L			09/22/23 00:15	1
Sulfate	8.57		0.48	0.095	mg/L			09/22/23 00:15	1

Method: SM-Online 2340B-2011 - Total Hardness (as CaCO3) by calculation - SM Online, 2011

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	97.1		33.1	33.1	mg/L			10/06/23 06:52	1

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000043	U	0.00020	0.000043	mg/L		09/26/23 11:26	09/26/23 15:44	1

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill - Anti Degradation

Job ID: 460-288640-1

Client Sample ID: Outfall 001

Date Collected: 09/20/23 11:40
Date Received: 09/20/23 19:00

Lab Sample ID: 460-288640-5

Matrix: Water

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**4.9**		4.0	0.91	ug/L		09/25/23 09:05	09/27/23 22:44	1
Boron	**46.6**	**J**	80.0	30.4	ug/L		09/25/23 09:05	09/27/23 22:44	1
Calcium	**23600**		500	53.6	ug/L		09/25/23 09:05	09/27/23 22:44	1
Copper	2.5	U	4.0	2.5	ug/L		09/25/23 09:05	09/27/23 22:44	1
Lead	0.84	U	1.2	0.84	ug/L		09/25/23 09:05	09/27/23 22:44	1
Magnesium	**9270**		200	46.9	ug/L		09/25/23 09:05	09/27/23 22:44	1
Manganese	**20.0**		8.0	1.5	ug/L		09/25/23 09:05	09/27/23 22:44	1
Nickel	0.91	U	4.0	0.91	ug/L		09/25/23 09:05	09/27/23 22:44	1
Potassium	**1460**		200	112	ug/L		09/25/23 09:05	09/27/23 22:44	1
Selenium	0.59	U	2.5	0.59	ug/L		09/25/23 09:05	09/27/23 22:44	1
Sodium	**4330**		500	219	ug/L		09/25/23 09:05	09/27/23 22:44	1
Strontium	**73.6**		4.0	0.50	ug/L		09/25/23 09:05	09/27/23 22:44	1
Zinc	6.5	U	16.0	6.5	ug/L		09/25/23 09:05	09/27/23 22:44	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	35.0	U	100	35.0	ug/L		09/25/23 08:55	09/25/23 20:14	1
Iron	**176**		50.0	20.0	ug/L		09/27/23 05:41	10/03/23 18:05	1

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	19.5	U	40.0	19.5	ug/L		09/22/23 21:31	09/22/23 22:40	1
Cadmium	0.15	U	0.50	0.15	ug/L		09/26/23 00:13	10/02/23 22:48	1
Arsenic	0.89	U	2.0	0.89	ug/L		09/22/23 21:31	09/22/23 22:40	1
Iron	**47.2**	**J**	50.0	20.0	ug/L		09/26/23 00:13	10/02/23 22:48	1
Calcium	**24700**		500	53.6	ug/L		09/22/23 21:31	09/22/23 22:40	1
Zinc	4.0	U	10.0	4.0	ug/L		09/26/23 00:13	10/02/23 22:48	1
Copper	2.5	U	4.0	2.5	ug/L		09/22/23 21:31	09/22/23 22:40	1
Iron	58.2	U	120	58.2	ug/L		09/22/23 21:31	09/22/23 22:40	1
Lead	0.84	U	1.2	0.84	ug/L		09/22/23 21:31	09/22/23 22:40	1
Magnesium	**9840**		200	46.9	ug/L		09/22/23 21:31	09/22/23 22:40	1
Manganese	**2.0**	**J**	8.0	1.5	ug/L		09/22/23 21:31	09/22/23 22:40	1
Nickel	0.91	U	4.0	0.91	ug/L		09/22/23 21:31	09/22/23 22:40	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Resistivity (EPA 120.1)	**0.00458**		0.000100	0.000100	Mohm-cm			10/04/23 12:00	1
Specific Conductance (EPA 120.1)	**218**		1.00	1.00	umhos/cm			10/04/23 12:00	1
Acidity (SM 2310B-2011)	20.0	U	20.0	20.0	mg/L			09/29/23 12:33	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-2011)	**118**		5.0	5.0	mg/L			09/28/23 10:49	1
Carbonate Alkalinity as CaCO3 (SM 2320B-2011)	5.0	U	5.0	5.0	mg/L			09/28/23 10:49	1
Alkalinity as CaCO3 to pH 4.5 (SM 2320B-2011)	**118**		5.0	5.0	mg/L			09/28/23 10:49	1
Total Dissolved Solids (SM 2540C-2015)	**146**		2.5	2.5	mg/L			09/27/23 11:40	1
Total Suspended Solids (SM 2540D-2015)	2.5	U	2.5	2.5	mg/L			09/27/23 08:21	1
Ammonia (EPA 350.1)	0.050	U	0.10	0.050	mg/L			09/29/23 14:31	1
Total Kjeldahl Nitrogen (EPA 351.2)	0.50	U	1.0	0.50	mg/L		09/28/23 14:30	09/29/23 12:11	1

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill - Anti Degradation

Job ID: 460-288640-1

Client Sample ID: Outfall 001
Date Collected: 09/20/23 11:40
Date Received: 09/20/23 19:00

Lab Sample ID: 460-288640-5
Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand (EPA 410.4)	**7.6**	**J**	10.0	3.3	mg/L			10/08/23 16:06	1
Oxygen, Dissolved (SM 4500 O C-2016)	**7.3**	**H**	1.0	1.0	mg/L			09/22/23 11:55	1
Orthophosphate as P (SM 4500 P E-2011)	0.0050	U	0.030	0.0050	mg/L			09/22/23 09:15	1
Carbonaceous Biochemical Oxygen Demand 5 (SM 5210 B-2016)	1.0	U	1.0	1.0	mg/L			09/21/23 14:15	1
pH (SW846 9040C)	**8.1**	**HF**	0.1	0.1	SU			10/02/23 12:30	1
Temperature (SW846 9040C)	**20.9**	**HF**	0.1	0.1	Degrees C			10/02/23 12:30	1
Total Organic Carbon (SW846 9060A)	**2.0**		1.0	0.53	mg/L			10/03/23 15:05	1
Phosphorus as PO4 (SM4500 P E-2011)	**0.23**		0.090	0.071	mg/L		10/14/23 10:00	10/14/23 12:00	1
Phosphorus as P (SM4500 P E-2011)	**0.076**		0.030	0.023	mg/L		10/14/23 10:00	10/14/23 12:00	1
Nitrogen, Total (EPA Total Nitrogen)	0.50	U	0.50	0.50	mg/L			10/02/23 06:08	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (EPA 350.1)	0.050	U	0.10	0.050	mg/L			09/29/23 14:51	1
Orthophosphate as P (SM 4500 P E-2011)	0.0050	U	0.030	0.0050	mg/L			09/22/23 09:15	1
Phosphorus as PO4 (SM4500 P E-2011)	**0.51**		0.090	0.071	mg/L		10/18/23 12:28	10/18/23 15:51	1
Phosphorus as P (SM4500 P E-2011)	**0.17**		0.030	0.023	mg/L		10/18/23 12:28	10/18/23 15:51	1

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill - Anti Degradation

Job ID: 460-288640-1

Client Sample ID: Clarifying Pond

Date Collected: 09/20/23 09:20
Date Received: 09/20/23 19:00

Lab Sample ID: 460-288640-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		1	933569	OXG	EET EDI	09/21/23 23:15
Total/NA	Analysis	300.0		1	933570	OXG	EET EDI	09/21/23 23:15
Total/NA	Analysis	2340B-2011		1	936574	LBD	EET EDI	10/06/23 06:52
Total/NA	Prep	245.1			684972	NVK	EET BUF	09/26/23 11:26
Total/NA	Analysis	245.1		1	685107	NVK	EET BUF	09/26/23 15:31
Dissolved	Filtration	Filtration			423522	UDL9	ELLE	09/25/23 07:22
Dissolved	Prep	3005A			426979	UAMX	ELLE	10/03/23 21:46
Dissolved	Analysis	6020B		1	427491	UCIG	ELLE	10/04/23 12:10
Dissolved	Filtration	FILTRATION			933887	VAD	EET EDI	09/22/23 21:24
Dissolved	Prep	3010A			933889	VAD	EET EDI	09/22/23 21:31
Dissolved	Analysis	6020B		1	933845	LBD	EET EDI	09/22/23 22:31
Total Recoverable	Prep	3005A			424155	UAMX	ELLE	09/27/23 05:41
Total Recoverable	Analysis	6020B		1	426936	UCIG	ELLE	10/03/23 17:55
Total Recoverable	Prep	3005A			799424	RR	EET SAV	09/25/23 08:55
Total Recoverable	Analysis	6020B		1	799628	BWR	EET SAV	09/25/23 19:57
Total/NA	Prep	3010A			934230	JKF	EET EDI	09/25/23 09:05
Total/NA	Analysis	6020B		1	934831	DLE	EET EDI	09/27/23 22:30
Total/NA	Analysis	120.1		1	936149	HTV	EET EDI	10/04/23 12:00
Total/NA	Analysis	2320B-2011		1	935038	AXP	EET EDI	09/28/23 10:21
Total/NA	Analysis	2540C-2015		1	934731	PLS	EET EDI	09/27/23 11:40
Total/NA	Analysis	2540D-2015		1	934670	PLS	EET EDI	09/27/23 07:54
Dissolved	Filtration	FILTRATION			935264	AXP	EET EDI	09/29/23 13:23
Dissolved	Analysis	350.1		1	935285	AXP	EET EDI	09/29/23 14:34
Total/NA	Analysis	350.1		1	935285	AXP	EET EDI	09/29/23 14:25
Total/NA	Prep	351.2			425013	NLE3	ELLE	09/28/23 14:30 - 09/28/23 17:30 [1]
Total/NA	Analysis	351.2		1	425530	JCG7	ELLE	09/29/23 12:02
Total/NA	Analysis	410.4		1	936970	HTV	EET EDI	10/08/23 16:06
Total/NA	Analysis	4500 O C-2016		1	933822	RXA	EET EDI	09/22/23 11:35
Dissolved	Filtration	FILTRATION			933731	AXP	EET EDI	09/22/23 09:00
Dissolved	Analysis	4500 P E-2011		1	933701	AXP	EET EDI	09/22/23 09:15
Total/NA	Analysis	4500 P E-2011		1	933701	AXP	EET EDI	09/22/23 09:15
Total/NA	Analysis	5210 B-2016		1	933539	RXA	EET EDI	09/21/23 13:55
Total/NA	Analysis	9040C		1	935675	MNP	EET EDI	10/02/23 12:30
Total/NA	Analysis	9060A		1	936173	MMC	EET EDI	10/03/23 16:23
Dissolved	Filtration	FILTRATION			938993	RAK	EET EDI	10/18/23 12:18
Dissolved	Prep	SM 4500 P B			938994	RAK	EET EDI	10/18/23 12:28
Dissolved	Analysis	SM4500 P E-2011		1	939026	RAK	EET EDI	10/18/23 15:51
Total/NA	Prep	SM 4500 P B			938264	HTV	EET EDI	10/14/23 10:00
Total/NA	Analysis	SM4500 P E-2011		1	938265	HTV	EET EDI	10/14/23 12:00
Total/NA	Analysis	Total Nitrogen		1	934192	TJW	EET EDI	10/02/23 06:08

Client Sample ID: Upgradient

Date Collected: 09/20/23 09:40
Date Received: 09/20/23 19:00

Lab Sample ID: 460-288640-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		1	933569	OXG	EET EDI	09/21/23 23:30
Total/NA	Analysis	300.0		1	933570	OXG	EET EDI	09/21/23 23:30
Total/NA	Analysis	2340B-2011		1	936574	LBD	EET EDI	10/06/23 06:52
Total/NA	Prep	245.1			684972	NVK	EET BUF	09/26/23 11:26
Total/NA	Analysis	245.1		1	685107	NVK	EET BUF	09/26/23 15:40
Dissolved	Filtration	Filtration			423522	UDL9	ELLE	09/25/23 07:22
Dissolved	Prep	3005A			423669	UAMX	ELLE	09/26/23 00:13
Dissolved	Analysis	6020B		1	426465	LC3M	ELLE	10/02/23 22:46
Dissolved	Filtration	FILTRATION			933887	VAD	EET EDI	09/22/23 21:24
Dissolved	Prep	3010A			933889	VAD	EET EDI	09/22/23 21:31
Dissolved	Analysis	6020B		1	933845	LBD	EET EDI	09/22/23 22:34
Total Recoverable	Prep	3005A			424155	UAMX	ELLE	09/27/23 05:41
Total Recoverable	Analysis	6020B		1	426936	UCIG	ELLE	10/03/23 18:12
Total Recoverable	Prep	3005A			799424	RR	EET SAV	09/25/23 08:55
Total Recoverable	Analysis	6020B		1	799628	BWR	EET SAV	09/25/23 20:06
Total/NA	Prep	3010A			934230	JKF	EET EDI	09/25/23 09:05
Total/NA	Analysis	6020B		1	934831	DLE	EET EDI	09/27/23 22:33
Total/NA	Analysis	120.1		1	936149	HTV	EET EDI	10/04/23 12:00
Total/NA	Analysis	2320B-2011		1	935038	AXP	EET EDI	09/28/23 10:28
Total/NA	Analysis	2540C-2015		1	934731	PLS	EET EDI	09/27/23 11:40
Total/NA	Analysis	2540D-2015		1	934675	PLS	EET EDI	09/27/23 08:21
Dissolved	Filtration	FILTRATION			935264	AXP	EET EDI	09/29/23 13:23
Dissolved	Analysis	350.1		1	935285	AXP	EET EDI	09/29/23 14:35
Total/NA	Analysis	350.1		1	935285	AXP	EET EDI	09/29/23 14:26
Total/NA	Prep	351.2			425013	NLE3	ELLE	09/28/23 14:30 - 09/28/23 17:30 [1]
Total/NA	Analysis	351.2		1	425530	JCG7	ELLE	09/29/23 12:04
Total/NA	Analysis	410.4		1	936970	HTV	EET EDI	10/08/23 16:06
Total/NA	Analysis	4500 O C-2016		1	933822	RXA	EET EDI	09/22/23 11:40
Dissolved	Filtration	FILTRATION			933731	AXP	EET EDI	09/22/23 09:00
Dissolved	Analysis	4500 P E-2011		1	933701	AXP	EET EDI	09/22/23 09:15
Total/NA	Analysis	4500 P E-2011		1	933701	AXP	EET EDI	09/22/23 09:15
Total/NA	Analysis	5210 B-2016		1	933539	RXA	EET EDI	09/21/23 14:00
Total/NA	Analysis	9040C		1	935675	MNP	EET EDI	10/02/23 12:30
Total/NA	Analysis	9060A		1	936173	MMC	EET EDI	10/03/23 16:48
Dissolved	Filtration	FILTRATION			938993	RAK	EET EDI	10/18/23 12:18
Dissolved	Prep	SM 4500 P B			938994	RAK	EET EDI	10/18/23 12:28
Dissolved	Analysis	SM4500 P E-2011		1	939026	RAK	EET EDI	10/18/23 15:51
Total/NA	Prep	SM 4500 P B			938264	HTV	EET EDI	10/14/23 10:00
Total/NA	Analysis	SM4500 P E-2011		1	938265	HTV	EET EDI	10/14/23 12:00
Total/NA	Analysis	Total Nitrogen		1	934192	TJW	EET EDI	10/02/23 06:08

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill - Anti Degradation

Job ID: 460-288640-1

Client Sample ID: Basin 1

Date Collected: 09/20/23 10:20
Date Received: 09/20/23 19:00

Lab Sample ID: 460-288640-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		1	933569	OXG	EET EDI	09/21/23 23:45
Total/NA	Analysis	300.0		1	933570	OXG	EET EDI	09/21/23 23:45
Total/NA	Analysis	2340B-2011		1	936574	LBD	EET EDI	10/06/23 06:52
Total/NA	Prep	245.1			684972	NVK	EET BUF	09/26/23 11:26
Total/NA	Analysis	245.1		1	685107	NVK	EET BUF	09/26/23 15:42
Dissolved	Filtration	Filtration			423522	UDL9	ELLE	09/25/23 07:22
Dissolved	Prep	3005A			423669	UAMX	ELLE	09/26/23 00:13
Dissolved	Analysis	6020B		1	426465	LC3M	ELLE	10/02/23 22:28
Dissolved	Filtration	FILTRATION			933887	VAD	EET EDI	09/22/23 21:24
Dissolved	Prep	3010A			933889	VAD	EET EDI	09/22/23 21:31
Dissolved	Analysis	6020B		1	933845	LBD	EET EDI	09/22/23 22:36
Total Recoverable	Prep	3005A			424155	UAMX	ELLE	09/27/23 05:41
Total Recoverable	Analysis	6020B		1	426936	UCIG	ELLE	10/03/23 17:57
Total Recoverable	Prep	3005A			799424	RR	EET SAV	09/25/23 08:55
Total Recoverable	Analysis	6020B		1	799628	BWR	EET SAV	09/25/23 20:08
Total/NA	Prep	3010A			934230	JKF	EET EDI	09/25/23 09:05
Total/NA	Analysis	6020B		1	934831	DLE	EET EDI	09/27/23 22:35
Total/NA	Analysis	120.1		1	936149	HTV	EET EDI	10/04/23 12:00
Total/NA	Analysis	2320B-2011		1	935038	AXP	EET EDI	09/28/23 10:35
Total/NA	Analysis	2540C-2015		1	934731	PLS	EET EDI	09/27/23 11:40
Total/NA	Analysis	2540D-2015		1	934675	PLS	EET EDI	09/27/23 08:21
Dissolved	Filtration	FILTRATION			935264	AXP	EET EDI	09/29/23 13:23
Dissolved	Analysis	350.1		1	935285	AXP	EET EDI	09/29/23 14:37
Total/NA	Analysis	350.1		1	935285	AXP	EET EDI	09/29/23 14:28
Total/NA	Prep	351.2			425013	NLE3	ELLE	09/28/23 14:30 - 09/28/23 17:30 [1]
Total/NA	Analysis	351.2		1	425530	JCG7	ELLE	09/29/23 12:06
Total/NA	Analysis	410.4		1	936970	HTV	EET EDI	10/08/23 16:06
Total/NA	Analysis	4500 O C-2016		1	933822	RXA	EET EDI	09/22/23 11:45
Dissolved	Filtration	FILTRATION			933731	AXP	EET EDI	09/22/23 09:00
Dissolved	Analysis	4500 P E-2011		1	933701	AXP	EET EDI	09/22/23 09:15
Total/NA	Analysis	4500 P E-2011		1	933701	AXP	EET EDI	09/22/23 09:15
Total/NA	Analysis	5210 B-2016		1	933539	RXA	EET EDI	09/21/23 14:05
Total/NA	Analysis	9040C		1	935675	MNP	EET EDI	10/02/23 12:30
Total/NA	Analysis	9060A		1	936173	MMC	EET EDI	10/03/23 17:12
Dissolved	Filtration	FILTRATION			938993	RAK	EET EDI	10/18/23 12:18
Dissolved	Prep	SM 4500 P B			938994	RAK	EET EDI	10/18/23 12:28
Dissolved	Analysis	SM4500 P E-2011		1	939026	RAK	EET EDI	10/18/23 15:51
Total/NA	Prep	SM 4500 P B			938264	HTV	EET EDI	10/14/23 10:00
Total/NA	Analysis	SM4500 P E-2011		1	938265	HTV	EET EDI	10/14/23 12:00
Total/NA	Analysis	Total Nitrogen		1	934192	TJW	EET EDI	10/02/23 06:08

Lab Chronicle

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill - Anti Degradation

Job ID: 460-288640-1

Client Sample ID: Basin 2

Date Collected: 09/20/23 10:50
Date Received: 09/20/23 19:00

Lab Sample ID: 460-288640-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		1	933569	OXG	EET EDI	09/22/23 00:00
Total/NA	Analysis	300.0		1	933570	OXG	EET EDI	09/22/23 00:00
Total/NA	Analysis	2340B-2011		1	936574	LBD	EET EDI	10/06/23 06:52
Total/NA	Prep	245.1			684972	NVK	EET BUF	09/26/23 11:26
Total/NA	Analysis	245.1		1	685107	NVK	EET BUF	09/26/23 15:43
Dissolved	Filtration	Filtration			423522	UDL9	ELLE	09/25/23 07:22
Dissolved	Prep	3005A			423669	UAMX	ELLE	09/26/23 00:13
Dissolved	Analysis	6020B		1	426465	LC3M	ELLE	10/02/23 22:50
Dissolved	Filtration	FILTRATION			933887	VAD	EET EDI	09/22/23 21:24
Dissolved	Prep	3010A			933889	VAD	EET EDI	09/22/23 21:31
Dissolved	Analysis	6020B		1	933845	LBD	EET EDI	09/22/23 22:38
Total Recoverable	Prep	3005A			424155	UAMX	ELLE	09/27/23 05:41
Total Recoverable	Analysis	6020B		1	426936	UCIG	ELLE	10/03/23 18:08
Total Recoverable	Prep	3005A			799424	RR	EET SAV	09/25/23 08:55
Total Recoverable	Analysis	6020B		1	799628	BWR	EET SAV	09/25/23 20:11
Total/NA	Prep	3010A			934230	JKF	EET EDI	09/25/23 09:05
Total/NA	Analysis	6020B		1	934831	DLE	EET EDI	09/27/23 22:42
Total/NA	Analysis	120.1		1	936149	HTV	EET EDI	10/04/23 12:00
Total/NA	Analysis	2320B-2011		1	935038	AXP	EET EDI	09/28/23 10:42
Total/NA	Analysis	2540C-2015		1	934731	PLS	EET EDI	09/27/23 11:40
Total/NA	Analysis	2540D-2015		1	934675	PLS	EET EDI	09/27/23 08:21
Dissolved	Filtration	FILTRATION			935264	AXP	EET EDI	09/29/23 13:23
Dissolved	Analysis	350.1		1	935285	AXP	EET EDI	09/29/23 14:49
Total/NA	Analysis	350.1		1	935285	AXP	EET EDI	09/29/23 14:29
Total/NA	Prep	351.2			425013	NLE3	ELLE	09/28/23 14:30 - 09/28/23 17:30 [1]
Total/NA	Analysis	351.2		1	425530	JCG7	ELLE	09/29/23 12:09
Total/NA	Analysis	410.4		1	936970	HTV	EET EDI	10/08/23 16:06
Total/NA	Analysis	4500 O C-2016		1	933822	RXA	EET EDI	09/22/23 11:50
Dissolved	Filtration	FILTRATION			933731	AXP	EET EDI	09/22/23 09:00
Dissolved	Analysis	4500 P E-2011		1	933701	AXP	EET EDI	09/22/23 09:15
Total/NA	Analysis	4500 P E-2011		1	933701	AXP	EET EDI	09/22/23 09:15
Total/NA	Analysis	5210 B-2016		1	933539	RXA	EET EDI	09/21/23 14:10
Total/NA	Analysis	9040C		1	935675	MNP	EET EDI	10/02/23 12:30
Total/NA	Analysis	9060A		1	936173	MMC	EET EDI	10/03/23 17:37
Dissolved	Filtration	FILTRATION			938993	RAK	EET EDI	10/18/23 12:18
Dissolved	Prep	SM 4500 P B			938994	RAK	EET EDI	10/18/23 12:28
Dissolved	Analysis	SM4500 P E-2011		1	939026	RAK	EET EDI	10/18/23 15:51
Total/NA	Prep	SM 4500 P B			938264	HTV	EET EDI	10/14/23 10:00
Total/NA	Analysis	SM4500 P E-2011		1	938265	HTV	EET EDI	10/14/23 12:00
Total/NA	Analysis	Total Nitrogen		1	934192	TJW	EET EDI	10/02/23 06:08

Client Sample ID: Outfall 001

Date Collected: 09/20/23 11:40
Date Received: 09/20/23 19:00

Lab Sample ID: 460-288640-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		1	933569	OXG	EET EDI	09/22/23 00:15
Total/NA	Analysis	300.0		1	933570	OXG	EET EDI	09/22/23 00:15
Total/NA	Analysis	2340B-2011		1	936574	LBD	EET EDI	10/06/23 06:52
Total/NA	Prep	245.1			684972	NVK	EET BUF	09/26/23 11:26
Total/NA	Analysis	245.1		1	685107	NVK	EET BUF	09/26/23 15:44
Dissolved	Filtration	Filtration			423522	UDL9	ELLE	09/25/23 07:22
Dissolved	Prep	3005A			423669	UAMX	ELLE	09/26/23 00:13
Dissolved	Analysis	6020B		1	426465	LC3M	ELLE	10/02/23 22:48
Dissolved	Filtration	FILTRATION			933887	VAD	EET EDI	09/22/23 21:24
Dissolved	Prep	3010A			933889	VAD	EET EDI	09/22/23 21:31
Dissolved	Analysis	6020B		1	933845	LBD	EET EDI	09/22/23 22:40
Total Recoverable	Prep	3005A			424155	UAMX	ELLE	09/27/23 05:41
Total Recoverable	Analysis	6020B		1	426936	UCIG	ELLE	10/03/23 18:05
Total Recoverable	Prep	3005A			799424	RR	EET SAV	09/25/23 08:55
Total Recoverable	Analysis	6020B		1	799628	BWR	EET SAV	09/25/23 20:14
Total/NA	Prep	3010A			934230	JKF	EET EDI	09/25/23 09:05
Total/NA	Analysis	6020B		1	934831	DLE	EET EDI	09/27/23 22:44
Total/NA	Analysis	120.1		1	936149	HTV	EET EDI	10/04/23 12:00
Total/NA	Analysis	2310B-2011		1	935258	RAK	EET EDI	09/29/23 12:33
Total/NA	Analysis	2320B-2011		1	935038	AXP	EET EDI	09/28/23 10:49
Total/NA	Analysis	2540C-2015		1	934731	PLS	EET EDI	09/27/23 11:40
Total/NA	Analysis	2540D-2015		1	934675	PLS	EET EDI	09/27/23 08:21
Dissolved	Filtration	FILTRATION			935264	AXP	EET EDI	09/29/23 13:23
Dissolved	Analysis	350.1		1	935285	AXP	EET EDI	09/29/23 14:51
Total/NA	Analysis	350.1		1	935285	AXP	EET EDI	09/29/23 14:31
Total/NA	Prep	351.2			425013	NLE3	ELLE	09/28/23 14:30 - 09/28/23 17:30 [1]
Total/NA	Analysis	351.2		1	425530	JCG7	ELLE	09/29/23 12:11
Total/NA	Analysis	410.4		1	936970	HTV	EET EDI	10/08/23 16:06
Total/NA	Analysis	4500 O C-2016		1	933822	RXA	EET EDI	09/22/23 11:55
Dissolved	Filtration	FILTRATION			933731	AXP	EET EDI	09/22/23 09:00
Dissolved	Analysis	4500 P E-2011		1	933701	AXP	EET EDI	09/22/23 09:15
Total/NA	Analysis	4500 P E-2011		1	933701	AXP	EET EDI	09/22/23 09:15
Total/NA	Analysis	5210 B-2016		1	933539	RXA	EET EDI	09/21/23 14:15
Total/NA	Analysis	9040C		1	935675	MNP	EET EDI	10/02/23 12:30
Total/NA	Analysis	9060A		1	936173	MMC	EET EDI	10/03/23 15:05
Dissolved	Filtration	FILTRATION			938993	RAK	EET EDI	10/18/23 12:18
Dissolved	Prep	SM 4500 P B			938994	RAK	EET EDI	10/18/23 12:28
Dissolved	Analysis	SM4500 P E-2011		1	939026	RAK	EET EDI	10/18/23 15:51
Total/NA	Prep	SM 4500 P B			938264	HTV	EET EDI	10/14/23 10:00
Total/NA	Analysis	SM4500 P E-2011		1	938265	HTV	EET EDI	10/14/23 12:00
Total/NA	Analysis	Total Nitrogen		1	934192	TJW	EET EDI	10/02/23 06:08

[1] This procedure uses a method stipulated length of time for the process. Both start and end times are displayed.

Lab Chronicle

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill - Anti Degradation

Job ID: 460-288640-1

Laboratory References:

EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

EET EDI = Eurofins Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

EET SAV = Eurofins Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Microbac = Marietta, OH, 158 Starlite Drive, Marietta, OH 45750

Accreditation/Certification Summary

Client: Heidelberg Materials Northeast LLC
Job ID: 460-288640-1
Project/Site: Rock Hill - Anti Degradation

Laboratory: Eurofins Edison

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Connecticut	State	PH-0818	01-30-24
DE Haz. Subst. Cleanup Act (HSCA)	State	N/A	01-01-24
Georgia	State	12028 (NJ)	06-30-24
Massachusetts	State	M-NJ312	06-30-24
New Jersey	NELAP	12028	06-30-24
New York	NELAP	11452	04-01-24
Pennsylvania	NELAP	68-00522	03-01-24
Rhode Island	State	LAO00376	12-30-23
USDA	US Federal Programs	P330-20-00244	11-03-23

Laboratory: Eurofins Buffalo

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Arkansas DEQ	State	88-0686	07-06-23 *
Connecticut	State	PH-0568	03-31-24
Florida	NELAP	E87672	06-30-23 *
Georgia	State	10026 (NY)	03-31-24
Georgia	State Program	N/A	03-31-09 *
Illinois	NELAP	200003	09-30-23
Iowa	State	374	03-01-25
Iowa	State Program	374	03-01-09 *
Kansas	NELAP	E-10187	02-01-24
Kentucky (DW)	State	90029	01-01-24
Kentucky (UST)	State	108092	04-01-24
Kentucky (WW)	State	KY90029	12-31-23
Louisiana	NELAP	02031	06-30-23 *
Louisiana (All)	NELAP	02031	06-30-23 *
Maine	State	NY00044	12-04-24
Maryland	State	294	06-30-24
Massachusetts	State	M-NY044	07-01-24
Michigan	State	9937	04-01-24
Michigan	State Program	9937	04-01-09 *
New Hampshire	NELAP	2973	09-11-19 *
New Hampshire	NELAP	2337	11-17-23
New Jersey	NELAP	NY455	06-30-24
New York	NELAP	10026	03-31-24
Pennsylvania	NELAP	68-00281	08-31-24
Rhode Island	State	LAO00328	12-30-23
Texas	NELAP	T104704412-18-10	07-31-23 *
USDA	US Federal Programs	P330-18-00039	03-25-24
Virginia	NELAP	460185	09-14-23 *
Washington	State	C784	02-10-24
Wisconsin	State	998310390	08-31-24

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
A2LA	Dept. of Defense ELAP	0001.01	11-30-24
A2LA	ISO/IEC 17025	0001.01	11-30-24

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Accreditation/Certification Summary

Client: Heidelberg Materials Northeast LLC
Job ID: 460-288640-1
Project/Site: Rock Hill - Anti Degradation

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC (Continued)

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alabama	State	43200	01-31-24
Alaska	State	PA00009	06-30-24
Alaska (UST)	State	17-027	02-28-24
Arizona	State	AZ0780	03-12-24
Arkansas DEQ	State	88-00660	08-09-24
California	State	2792	11-30-23
Colorado	State	PA00009	06-30-24
Connecticut	State	PH-0746	06-30-25
DE Haz. Subst. Cleanup Act (HSCA)	State	019-006 (PA cert)	01-31-24
Delaware (DW)	State	N/A	01-31-24
Florida	NELAP	E87997	06-30-24
Georgia (DW)	State	C048	01-31-24
Hawaii	State	N/A	01-31-24
Illinois	NELAP	200027	01-31-24
Iowa	State	361	03-01-24
Kansas	NELAP	E-10151	10-31-23
Kentucky (DW)	State	KY90088	12-31-23
Kentucky (UST)	State	0001.01	11-30-24
Kentucky (WW)	State	KY90088	12-31-23
Louisiana (All)	NELAP	02055	06-30-24
Maine	State	2019012	03-12-25
Maryland	State	100	06-30-24
Massachusetts	State	M-PA009	06-30-24
Michigan	State	9930	01-31-24
Minnesota	NELAP	042-999-487	12-31-23
Mississippi	State	023	01-31-24
Missouri	State	450	01-31-25
Montana (DW)	State	0098	01-01-24
Nebraska	State	NE-OS-32-17	01-31-24
New Hampshire	NELAP	2730	01-10-24
New Jersey	NELAP	PA011	06-30-24
New York	NELAP	10670	04-01-24
North Carolina (DW)	State	42705	07-31-24
North Carolina (WW/SW)	State	521	12-31-23
North Dakota	State	R-205	01-31-24
Oklahoma	NELAP	9804	08-31-23 *
Oregon	NELAP	PA200001	09-11-24
PALA	Canada	1978	09-16-24
Pennsylvania	NELAP	36-00037	01-31-24
Rhode Island	State	LAO00338	12-31-23
South Carolina	State	89002	01-31-24
Tennessee	State	02838	01-31-24
Texas	NELAP	T104704194-23-46	08-31-24
USDA	US Federal Programs	525-22-298-19481	10-25-25
Vermont	State	VT - 36037	10-27-23
Virginia	NELAP	460182	06-14-25
Washington	State	C457	04-11-24
West Virginia (DW)	State	9906 C	12-31-23
West Virginia DEP	State	055	07-31-24
Wyoming	State	8TMS-L	01-31-24

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Accreditation/Certification Summary

Client: Heidelberg Materials Northeast LLC
Job ID: 460-288640-1
Project/Site: Rock Hill - Anti Degradation

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC (Continued)

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Wyoming (UST)	A2LA	0001.01	11-30-24

Laboratory: Eurofins Savannah

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
	AFCEE	SAVLAB	
Alabama	State	41450	06-30-24
ANAB	Dept. of Defense ELAP	L2463	09-22-24
Arkansas DEQ	State	19-015-0	02-01-24
California	State	2939	06-30-24
Florida	NELAP	E87052	06-30-24
Georgia	State	E87052	06-30-24
Georgia (DW)	State	803	06-30-24
Guam	State	19-007R	04-17-24
Hawaii	State	<cert No.>	06-30-24
Illinois	NELAP	200022	11-30-23
Indiana	State	C-GA-02	06-30-24
Iowa	State	353	07-01-25
Kentucky (UST)	State	NA	06-30-24
Louisiana	NELAP	30690	06-30-24
Louisiana (All)	NELAP	30690	06-30-24
Louisiana (DW)	State	LA009	12-31-23
Maine	State	GA00006	09-25-24
Maryland	State	250	12-31-23
Massachusetts	State	M-GA006	06-30-24
Michigan	State	9925	06-30-24
Mississippi	State	<cert No.>	06-30-24
Nebraska	State	NE-OS-7-04	06-30-24
New Jersey	NELAP	GA769	06-30-24
New Mexico	State	GA00006	06-30-24
North Carolina (DW)	State	13701	07-31-24
North Carolina (WW/SW)	State	269	12-31-23
Pennsylvania	NELAP	68-00474	06-30-24
Puerto Rico	State	GA00006	01-01-24
South Carolina	State	98001	06-30-23 *
Tennessee	State	TN02961	06-30-24
Texas	NELAP	T1047004185	11-30-23
Texas	TCEQ Water Supply	T104704185	06-30-24
USDA	US Federal Programs	P330-18-00313	09-03-24
Virginia	NELAP	460161	06-14-24
Wyoming	State	8TMS-L	06-30-24

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Method Summary

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill - Anti Degradation

Job ID: 460-288640-1

Method	Method Description	Protocol	Laboratory
300.0	Anions, Ion Chromatography	EPA	EET EDI
2340B-2011	Total Hardness (as CaCO3) by calculation - SM Online, 2011	SM-Online	EET EDI
245.1	Mercury (CVAA)	EPA	EET BUF
6020B	Metals (ICP/MS)	SW846	EET EDI
6020B	Metals (ICP/MS)	SW846	EET SAV
6020B	Metals (ICP/MS)	SW846	ELLE
120.1	Conductivity, Specific Conductance	EPA	EET EDI
2310B-2011	Acidity	SM	EET EDI
2320B-2011	Alkalinity, Total	SM	EET EDI
2540C-2015	Total Dissolved Solids (Dried at 180 °C)	SM	EET EDI
2540D-2015	Total Suspended Solids (Dried at 103-105°C)	SM	EET EDI
350.1	Nitrogen, Ammonia	EPA	EET EDI
351.2	Nitrogen, Total Kjeldahl	EPA	ELLE
410.4	COD	EPA	EET EDI
4500 O C-2016	Oxygen, Dissolved	SM	EET EDI
4500 P E-2011	Orthophosphate	SM	EET EDI
5210 B-2016	BOD, 5-Day	SM	EET EDI
9040C	pH	SW846	EET EDI
9060A	Organic Carbon, Total (TOC)	SW846	EET EDI
SM4500 P E-2011	Phosphorus	SM	EET EDI
Total Nitrogen	Nitrogen, Total	EPA	EET EDI
Subcontract	Osomotic Pressure	None	Microbac
245.1	Preparation, Mercury	EPA	EET BUF
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	EET SAV
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	ELLE
3010A	Preparation, Total Metals	SW846	EET EDI
351.2	Nitrogen, Total Kjeldahl	EPA	ELLE
FILTRATION	Sample Filtration	None	EET EDI
Filtration	Sample Filtration	None	ELLE
SM 4500 P B	Phosphorous, Total and Ortho	SM	EET EDI

Protocol References:

EPA = US Environmental Protection Agency
None = None
SM = "Standard Methods For The Examination Of Water And Wastewater"
SM-Online = Standard Methods Online
SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600
EET EDI = Eurofins Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900
EET SAV = Eurofins Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858
ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300
Microbac = Marietta, OH, 158 Starlite Drive, Marietta, OH 45750

Sample Summary

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill - Anti Degradation

Job ID: 460-288640-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
460-288640-1	Clarifying Pond	Water	09/20/23 09:20	09/20/23 19:00
460-288640-2	Upgradient	Water	09/20/23 09:40	09/20/23 19:00
460-288640-3	Basin 1	Water	09/20/23 10:20	09/20/23 19:00
460-288640-4	Basin 2	Water	09/20/23 10:50	09/20/23 19:00
460-288640-5	Outfall 001	Water	09/20/23 11:40	09/20/23 19:00

Microbac Laboratories Inc., - Marietta, OH

Client Project ID:

46011424

For:

Julie Gilmore

Eurofins TestAmerica Edison

777 New Durham RD

Edison, NJ 08817

Project State of Origin: Pennsylvania

Project Requested Certification:

Microbac Laboratories Inc., - Marietta, OH 68-01670 PA Department of Environmental Protection

All test results meet the requirements of the QAPP and other applicable contract terms and conditions. Any exceptions are attached to this cover page or addressed in the method narratives presented in the report. All results for soil samples are reported on a 'dry-weight' basis unless specified otherwise. Analytical results for water and wastes are reported on a 'as received' basis unless specified otherwise. A statement of uncertainty for each analysis is available upon request. The reported results are related only to the samples analyzed as received. This laboratory report may be released as a hardcopy and in computer-readable form submitted electronically or on diskette. This laboratory report shall not be reproduced, except in full, without the written approval of Microbac Laboratories, Inc.

Laboratory Project Manager:

Michelle Taylor

Project Manager

Michelle.Taylor@microbac.com

Authorized By:

Michelle Taylor

Project Manager

Issued: 09/29/2023

MICROBAC®

Laboratory Report Number: M3I1614

Client Project ID: 46011424

Cooler Receipt Log

Cooler ID: Default Cooler Temp: 1.1°C

Cooler Inspection Checklist

Ice Present or not required?	Yes
Shipping containers sealed or not required?	Yes
Custody seals intact or not required?	Yes
Chain of Custody (COC) Present?	Yes
COC includes customer information?	Yes
Relinquished and received signature on COC?	Yes
Sample collector identified on COC?	Yes
Sample type identified on COC?	Yes
Correct type of Containers Received	No
Correct number of containers listed on COC?	Yes
Containers Intact?	Yes
COC includes requested analyses?	Yes
Enough sample volume for indicated tests received?	Yes
Sample labels match COC (Name, Date & Time?)	Yes
Samples arrived within hold time?	Yes
Correct preservatives on COC or not required?	Yes
Chemical preservations checked or not required?	Yes
Preservation checks meet method requirements?	Yes
VOA vials have zero headspace, or not recd.?	Yes

Laboratory Report Number: M3I1614

Client Project ID: 46011424

Sample Notes

PADEP 391-2000-008

A4 **Sample was received with head space.**

Osmotic Pressure

M3I1614-01	Clarifying Pond (460-288640-1)	M3I1614-02	Upgradient (460-288640-2)
M3I1614-03	Basin 1 (460-288640-3)	M3I1614-04	Basin 2 (460-288640-4)
M3I1614-05	Outfall 001 (4650-288640-5)		

Laboratory Report Number: M3I1614

Client Project ID: 46011424

Microbac Laboratories Inc., - Marietta, OH

CERTIFICATE OF ANALYSIS

Client ID:	Clarifying Pond (460-288640-1)			**Collection Date:**	09/20/2023 09:20
Laboratory ID:	M3I1614-01			**Prep Date:**	09/27/2023 16:24
Matrix:	Aqueous			**Analyzed:**	09/27/2023 17:09
Batch / Sequence:	B3I1363 /	**Analytical Method:**	PADEP 391-2000-008	**Calibration:**	NA
Instrument:	OSMOMETER 5004	**Units:**	mOsm/kg	**File ID:**	OsmoticPressure_B3I1363_230927042535.xls
Analyst:	TSD	**Dilution:**	1		

Analyte	CAS Number	Result	MDL	RL	Flag	Qualifier
Osmotic Pressure		ND	6.00	10.0		A4

MICROBAC®

Laboratory Report Number: M3I1614

Client Project ID: 46011424

Microbac Laboratories Inc., - Marietta, OH

CERTIFICATE OF ANALYSIS

Client ID:	Upgradient (460-288640-2)			**Collection Date:**	09/20/2023 09:40
Laboratory ID:	M3I1614-02			**Prep Date:**	09/27/2023 16:24
Matrix:	Aqueous			**Analyzed:**	09/27/2023 17:09
Batch / Sequence:	B3I1363 /	**Analytical Method:**	PADEP 391-2000-008	**Calibration:**	NA
Instrument:	OSMOMETER 5004	**Units:**	mOsm/kg	**File ID:**	OsmoticPressure_B3I1363_230927042535.xls
Analyst:	TSD	**Dilution:**	1		

Analyte	CAS Number	Result	MDL	RL	Flag	Qualifier
Osmotic Pressure		**10.0**	6.00	10.0		A4

MICROBAC®

Laboratory Report Number: M3I1614

Client Project ID: 46011424

Microbac Laboratories Inc., - Marietta, OH

CERTIFICATE OF ANALYSIS

Client ID:	Basin 1 (460-288640-3)			**Collection Date:**	09/20/2023 10:20
Laboratory ID:	M3I1614-03			**Prep Date:**	09/27/2023 16:24
Matrix:	Aqueous			**Analyzed:**	09/27/2023 17:09
Batch / Sequence:	B3I1363 /	**Analytical Method:**	PADEP 391-2000-008	**Calibration:**	NA
Instrument:	OSMOMETER 5004	**Units:**	mOsm/kg	**File ID:**	OsmoticPressure_B3I1363_230927042535.xls
Analyst:	TSD	**Dilution:**	1		

Analyte	CAS Number	Result	MDL	RL	Flag	Qualifier
Osmotic Pressure		7.00	6.00	10.0		A4

MICROBAC®

Laboratory Report Number: M3I1614

Client Project ID: 46011424

Microbac Laboratories Inc., - Marietta, OH

CERTIFICATE OF ANALYSIS

Client ID:	Basin 2 (460-288640-4)			**Collection Date:**	09/20/2023 10:50
Laboratory ID:	M3I1614-04			**Prep Date:**	09/27/2023 16:24
Matrix:	Aqueous			**Analyzed:**	09/27/2023 17:09
Batch / Sequence:	B3I1363 /	**Analytical Method:**	PADEP 391-2000-008	**Calibration:**	NA
Instrument:	OSMOMETER 5004	**Units:**	mOsm/kg	**File ID:**	OsmoticPressure_B3I1363_230927042535.xls
Analyst:	TSD	**Dilution:**	1		

Analyte	CAS Number	Result	MDL	RL	Flag	Qualifier
Osmotic Pressure		9.00	6.00	10.0		A4

MICROBAC®

Laboratory Report Number: M3I1614

Client Project ID: 46011424

Microbac Laboratories Inc., - Marietta, OH

CERTIFICATE OF ANALYSIS

Client ID:	Outfall 001 (4650-288640-5)			**Collection Date:**	09/20/2023 11:40
Laboratory ID:	M3I1614-05			**Prep Date:**	09/27/2023 16:24
Matrix:	Aqueous			**Analyzed:**	09/27/2023 17:09
Batch / Sequence:	B3I1363 /	**Analytical Method:**	PADEP 391-2000-008	**Calibration:**	NA
Instrument:	OSMOMETER 5004	**Units:**	mOsm/kg	**File ID:**	OsmoticPressure_B3I1363_230927042535.xls
Analyst:	TSD	**Dilution:**	1		

Analyte	CAS Number	Result	MDL	RL	Flag	Qualifier
Osmotic Pressure		7.00	6.00	10.0		A4

Laboratory Report Number: M3I1614

Client Project ID: 46011424

Notes and Definitions

A4: Sample was received with head space.
MDL: Method Detection Limit
RL: Reporting Limit

MICROBAC®

Laboratory Report Number: M3I1614

Client Project ID: 46011424

METHOD BLANKS

Sample ID:	B3I1363-BLK1	**Prep Date:**	09/27/23 16:24	**Matrix:**	Aqueous
Instrument:	OSMOMETER 5004	**Analyzed:**	09/27/23 17:09	**Method:**	PADEP 391-2000-008
File ID:	OsmoticPressure_B3I1:	**Sequence:**		**Analyst:**	TSD
Batch:	B3I1363	**Units:**	mOsm/kg	**Calibration:**	

Analyte	Result	MDL	RL	Dilution	Flag	Q
Osmotic Pressure	6.00	6.00	10.0	1	U	

* - Detected in the associated method Blank at a concentration >= RL

MICROBAC®

Laboratory Report Number: M3I1614

Client Project ID: 46011424

BLANK SPIKE / DUPLICATE (BS/BSD)

Method:	PADEP 391-2000-008		**Blank Spike**	**Duplicate**
Batch:	B3I1363	**Spike ID:**	B3I1363-BS1	B3I1363-BSD1
Analyst:	TSD	**Prepared:**	09/27/23 16:24	09/27/23 16:24
Matrix:	Aqueous	**Analyzed:**	09/27/23 17:09	09/27/23 17:09
Units:	mOsm/kg	**File ID:**	OsmoticPressure_B3I1363_2309:	OsmoticPressure_B3I1363_2309:
Instrument:	OSMOMETER 5004	**Initial/Final:**	1mL/1mL	1mL/1mL
Calibration:				

Analyte	BS Spiked	BS Found	BS %Rec	BSD Spiked	BSD Found	BSD %Rec	%RPD	%Rec Limts	RPD Limit	Q
Osmotic Pressure	290	296	102	290	297	102	0.337	90 - 110	20	

* - Does not meet %Rec acceptance criteria.
- Does not meet RPD acceptance criteria.

Laboratory Report Number: M3I1614

Client Project ID: 46011424

DUPLICATE

Parent ID:	M3I1614-01	**Calibration:**				**Method:**	PADEP 391-2000-008
Instrument:	OSMOMETER 500	**File ID:**	OsmoticPressure_B	**Dil:**	1	**Matrix:**	Aqueous
Sample ID:	B3I1363-DUP1	**Batch:**	B3I1363			**Units:**	mOsm/kg

Analyte	Parent	Duplicate	RPD	RPD Limit	Q
Osmotic Pressure	ND	ND		20	

Laboratory Report Number: M3I1614

Client Project ID: 46011424

* - Exceeds RPD Limit
- Based on the low concentration of this analyte, Relative Percent Difference is not an appropriate evaluator of precision. The precision of the duplicate analysis is considered acceptable

Eurofins Edison
777 New Durham Road
Edison, NJ 08817
Phone: 732-549-3900 Fax: 732-549-3679

Chain of Custody Record

eurofins | Environment Testing

10/19/2023

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Gilmore, Julie L	Carrier Tracking No(s):	COC No: 460-69319.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Julie.Gilmore@et.eurofinsus.com	State of Origin: Pennsylvania	Page: Page 1 of 1
Company: Microbac Laboratories, Inc.		Accreditations Required (See note): NELAP - Pennsylvania		Job #: 460-288640-1
Address: 158 Starlite Drive, ,	Due Date Requested: 10/2/2023			
City: Marietta	TAT Requested (days):			
State, Zip: OH, 45750				
Phone: 800-373-4071(Tel)	PO #:			
Email:	WO #:			
Project Name: Rock Hill - Anti Degradation	Project #: 46011424			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)
Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	SUB (Osomotic Pressure)/ Osomotic Pressure	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
Clarifying Pond (460-288640-1)	9/20/23	09:20 Eastern		Water			X	1	
Upgradient (460-288640-2)	9/20/23	09:40 Eastern		Water			X	1	
Basin 1 (460-288640-3)	9/20/23	10:20 Eastern		Water			X	1	
Basin 2 (460-288640-4)	9/20/23	10:50 Eastern		Water			X	1	
Outfall 001 (460-288640-5)	9/20/23	11:40 Eastern		Water			X	1	

M 3 I 1 6 1 4

Eurofins TestAmerica Edison
Rec'd: 09/26/2023 11:10
By: Stephanie Murphy Temp: 1.1 (Signature)

Page 41 of 53

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Northeast, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Northeast, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Northeast, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Northeast, LLC.

Possible Hazard Identification	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 1	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	9/25/23 1900	EDF			
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by: Stephanie Murphy	9/26/2023 1110	

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks:

MICROBAC®

Work Order # M311619

COOLER TEMP >6° C LOG

SAMPLE ID	Bottle 1 °C	Bottle 2 °C	Bottle 3 °C	Bottle 4 °C	Bottle 5 °C	Bottle 6 °C

1/26/2023 SM

pH Lot # HC31834 G

pH Exceptions

SAMPLE ID	Bottle 1	Bottle 2	Bottle 3	Bottle 4	Bottle 5	Bottle 6

1/26/2023 SM

PRESERVATIVE EXCEPTIONS

✓ NONE

AS NOTED

1/26/2023 SM

Document Control # 1957
Last 04-10-2019

Issued to: Document Master File

Eurofins Edison
777 New Durham Road
Edison, NJ 08817
Phone: 732-549-3900 Fax: 732-549-3679

450-KOP

Chain of Custody Record

5.6 KOP 2
5.5
41

eurofins

Client Information	Sampler: CJS	Lab PM: Gilmore, Julie L	Carrier Tracking No(s):	COC No: 460-172755-111665.1
Client Contact: Andrew Gutshall	Phone: 215-766-1211	E-Mail: Julie.Gilmore@et.eurofinsus.com	State of Origin:	Page: Page 1 of 2
Company: Heidelberg Materials Northeast LLC	PWSID:			Job #: 288640
Address: 7660 Imperial Way	Due Date Requested:			
City: Allentown	TAT Requested (days): 10			
State, Zip: PA, 18195	Compliance Project: Δ Yes Δ No			
Phone: 610-366-4819(Tel)	PO #: Purchase Order not required			
Email: andrew.gutshall@heidelbergmaterials.com	WO #:			
Project Name: Rock Hill Anti-Degradation	Project #: 46011424			
Site: Rock Hill	SSOW#:			

Analysis Requested

Preservation Codes:
A HCL, B NaOH, C Zn Acetate, D Nitric, E NaHSO4, F MeOH, G Amchlor, H Ascorbic Acid, I Ice, J DI Water, K EDTA, L EDA, M Hexane, N None, O AsNaO2, Other: SHORT HOLD, other (specify)

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020B Dissolved Lithium	6020B Total Lithium	351.2 Local Method	6020B Dissolved Cd/Fe/Zn	6020B (MOD) Total Fe	350.1 410.4, 4500_P_E	120.1 9040C	350.1 4500_P_E, 6020B	2320B (MOD) Alkalinity	6020B, SM2340B	9060A TOC	2540D, SM5210B_Calc	4500_P_E_Ortho Dissolved Orthophosphate	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	D	S	N	D	S	N	N	N	D	S	N	N		
Clarifying Pond	9/20/23	0920	G	Water			X	X	X	X	X	X	X	X	X	X	X	X	X	21	1
Upgradient	〃	0940	G	Water			X	X	X	X	X	X	X	X	X	X	X	X	X	21	2
Basin 1	〃	1020	G	Water			X	X	X	X	X	X	X	X	X	X	X	X	X	21	3
Basin 2	〃	1050	G	Water			X	X	X	X	X	X	X	X	X	X	X	X	X	21	4
Outfall 001	〃	1140	G	Water			X	X	X	X	X	X	X	X	X	X	X	X	X	21	5

460-288640 Chain of Custody

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I II III IV Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		9/20/23 / 1330	EARTHRES		9/20/23 1330	EET-KOP
2		9-20-23 1711	EET-KOP		9/20/23 1715	ETA
3		9/20/23 1900	ETA		9/20/23 1900	ETA

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks:

Ver: 06/08/2021

10/19/2023

Eurofins Edison
777 New Durham Road
Edison, NJ 08817
Phone: 732-549-3900 Fax: 732-549-3679

450 Kus

Chain of Custody Record

5.6 °
5.5 °
4.1 °
ICOR-2

eurofins

Client Information	Sampler: CJS	Lab PM: Gilmore, Julie L	Carrier Tracking No(s):	COC No: 460-172755-111665.2
Client Contact: Andrew Gutshall	Phone: 215-766-1211	E-Mail: Julie.Gilmore@et.eurofinsus.com	State of Origin:	Page: Page 2 of 2
Company: Heidelberg Materials Northeast LLC	PWSID:			Job #: 266640
Address: 7660 Imperial Way	Due Date Requested:			
City: Allentown	TAT Requested (days): 10			
State, Zip: PA, 18195	Compliance Project: Δ Yes Δ No			
Phone: 610-366-4819(Tel)	PO #: Purchase Order not required			
Email: andrew.gutshall@heidelbergmaterials.com	WO #:			
Project Name: Rock Hill Anti-Degradation	Project #: 46011424			
Site: Rock Hill	SSOW#:			

Analysis Requested

Preservation Codes:
A HCL, B NaOH, C Zn Acetate, D Nitric Acid, E NaHSO4, F MeOH, G Amchlor, H Ascorbic Acid, I Ice, J DI Water, K EDTA, L EDA, M Hexane, N None, O AsNaO2, P Na2O4S, Q Na2SO3, R Na2S2O3, S H2SO4, T TSP Dodecahydrate, U Acetone, V MCAA, W pH 4-5, Y Trizma, Z other (specify)
Other

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	4500_P_E_Ortho Total Orthophosphate	2540C TDS	300_ORGFM_28D, 300_ORGFMS	245.1 Local Method	6020B Total Aluminum	Acidity	4500_O_C - Dissolved Oxygen							Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	N	D	D										
Clarifying Pond	9/20/23	0920	G	Water			X	X	X	X	X		X							21	2
Upgradient	〃	0940	G	Water			X	X	X	X	X		X							21	3
Basin 1	〃	1020	G	Water			X	X	X	X	X		X							21	4
Basin 2	〃	1050	G	Water			X	X	X	X	X		X							21	5
Outfall 001	〃	1140	G	Water			X	X	X	X	X	X	X							21	6

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I II, III IV Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		9/20/23 1330	EARTHRES		9/20/23 1330	EETNHCOP
2		9-20-23 1711	EETNHCOP		9/20/23 1900	ET
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.	Cooler Temperature(s) °C and Other Remarks:

Ver: 06/08/2021

Eurofins TestAmerica Edison
Receipt Temperature and pH Log

Job Number: 288640

Number of Coolers: 3

IR Gun # 2/KOP

Cooler Temperatures

	RAW	CORRECTED		RAW	CORRECTED		RAW	CORRECTED
Cooler #1:	5.6 °C	5.6°C	Cooler #4:	°C	°C	Cooler #7:	°C	°C
Cooler #2:	5.5 °C	5.5°C	Cooler #5:	°C	°C	Cooler #8:	°C	°C
Cooler #3:	4.1 °C	4.1°C	Cooler #6:	°C	°C	Cooler #9:	°C	°C

TALS Sample Number	Ammonia (pH<2)	COD (pH<2)	Nitrate Nitrite (pH<2)	Metals* (pH<2)	Hardness (pH<2)	Pest (pH 5-9)	EPH or QAM (pH<2)	Phenols (pH<2)	Sulfide (pH>9)	TKN (pH<2)	TOC (pH<2)	Total Cyanide (pH>12)	Total Phos (pH<2)	Other	Other
1	<2	<2		<2							<2		<2		
2	<2	<2		<2							<2		<2		
3	<2	<2		<2							<2		<2		
4	<2	<2		<2							<2		<2		
5	<2	<2		<2							<2		<2		

If pH adjustments are required record the information below*

Sample No(s). adjusted: _____

Preservative Name/Conc.. _____ Volume of Preservative used (ml)* _____

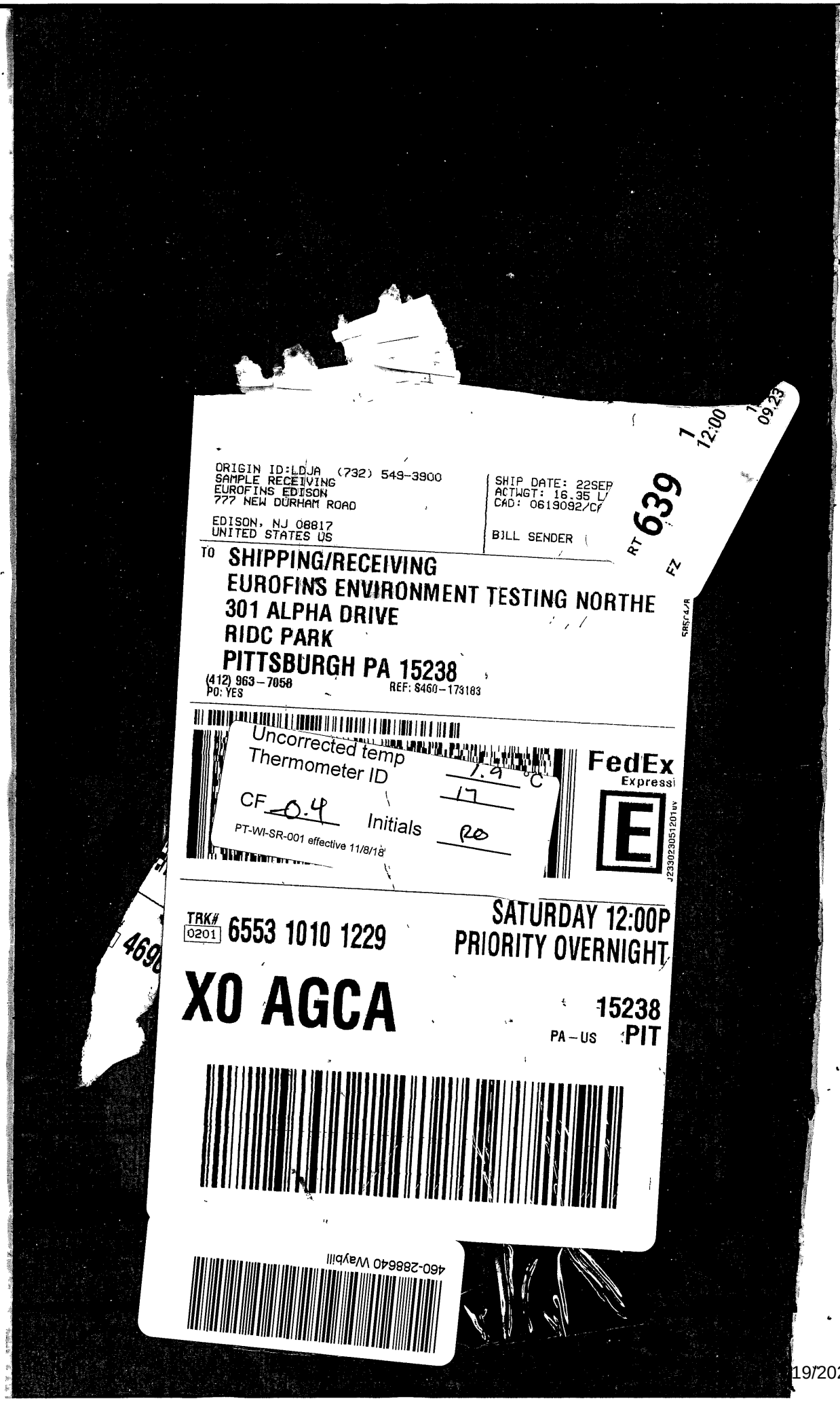
Lot # of Preservative(s): _____ Expiration Date: _____

The appropriate Project Manager and Department Manager should be notified about the samples which were pH adjusted.

** Samples for Metal analysis which are out of compliance must be acidified at least 24 hours prior to analysis.*

Initials: KOP Date: 9/20/23

Filled out form for KOP



ORIGIN ID:LDJA (732) 549-3900
SAMPLE RECEIVING
EUROFINS EDISON
777 NEW DURHAM ROAD

EDISON, NJ 08817
UNITED STATES US

SHIP DATE: 22SEP
ACTWGT: 16.35 L
CAD: 0619092/CF

BILL SENDER

RT 639 FZ

TO SHIPPING/RECEIVING
EUROFINS ENVIRONMENT TESTING NORTHE
301 ALPHA DRIVE
RIDC PARK
PITTSBURGH PA 15238
(412) 963-7058
PO: YES
REF: 8460-173183

Uncorrected temp 1.9 °C
Thermometer ID 17
CF -0.4 Initials RO
PT-WI-SR-001 effective 11/8/18

FedEx Express

TRK# 0201 6553 1010 1229

SATURDAY 12:00P
PRIORITY OVERNIGHT

XO AGCA

15238
PA-US PIT

460-288640 Waybill

Eurofins Edison
777 New Durham Road
Edison, NJ 08817
Phone: 732-549-3900 Fax: 732-549-3679

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Gilmore, Julie L	Carrier Tracking No(s):	COC No: 460-69308.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Julie.Gilmore@et.eurofinsus.com	State of Origin: Pennsylvania	Page: Page 1 of 1
Company: Eurofins Lancaster Laboratories Environm		Accreditations Required (See note): NELAP - Pennsylvania		Job #: 460-288640-1
Address: 2425 New Holland Pike, ,	Due Date Requested: 9/29/2023			
City: Lancaster	TAT Requested (days):			
State, Zip: PA, 17601				
Phone: 717-656-2300(Tel)	PO #:			
Email:	WO #:			
Project Name: Rock Hill - Anti Degradation	Project #: 46011424			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)
Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020B/3005A (MOD) Total Fe	6020B/Filtration_ME Dissolved Cd/Fe/Zn	351.2/351.2_Prep	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
Clarifying Pond (460-288640-1)	9/20/23	09:20 Eastern		Water			X	X	X	3	
Upgradient (460-288640-2)	9/20/23	09:40 Eastern		Water			X	X	X	3	
Basin 1 (460-288640-3)	9/20/23	10:20 Eastern		Water			X	X	X	3	
Basin 2 (460-288640-4)	9/20/23	10:50 Eastern		Water			X	X	X	3	
Outfall 001 (460-288640-5)	9/20/23	11:40 Eastern		Water			X	X	X	3	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Northeast, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Northeast, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Northeast, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Northeast, LLC.

Possible Hazard Identification: Unconfirmed	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month): ☐ Return To Client ☐ Disposal By Lab ☐ Archive For ____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 1	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
1		9/22/23 1652	FEDEX			
2	Relinquished by:	Date/Time: 9/22/23 1953	Company: ELL	Received by:	Date/Time: 9/22/23 1652	Company: ELL
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time: 9/22/23 19:53	Company: ELLE

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: not present

Cooler Temperature(s) °C and Other Remarks: 1.4/1.5

777 New Durham Road
Edison, NJ 08817
Phone: 732-549-3900 Fax: 732-549-3679

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Gilmore, Julie L	Carrier Tracking No(s):	COC No: 460-69317.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Julie.Gilmore@et.eurofinsus.com	State of Origin: Pennsylvania	Page: Page 1 of 1
Company: Eurofins Environment Testing Northeast,		Accreditations Required (See note): NELAP - Pennsylvania		Job #: 460-288640-1
Address: 10 Hazelwood Drive, ,	Due Date Requested: 9/29/2023			
City: Amherst	TAT Requested (days):			
State, Zip: NY, 14228-2298				
Phone: 716-691-2600(Tel) 716-691-7991(Fax)	PO #:			
Email:	WO #:			
Project Name: Rock Hill - Anti Degradation	Project #: 46011424			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	245.1/245.1_Prep	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
Clarifying Pond (460-288640-1)	9/20/23	09:20 Eastern		Water			X	1	
Upgradient (460-288640-2)	9/20/23	09:40 Eastern		Water			X	1	
Basin 1 (460-288640-3)	9/20/23	10:20 Eastern		Water			X	1	
Basin 2 (460-288640-4)	9/20/23	10:50 Eastern		Water			X	1	
Outfall 001 (460-288640-5)	9/20/23	11:40 Eastern		Water			X	1	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Northeast, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Northeast, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Northeast, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Northeast, LLC.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 1	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:
Relinquished by:	Date/Time: 9/22/23 1900	Company: ESE	Received by:	Date/Time: 9-23-23 1000	Company: TAB
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: ∆ Yes ∆ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 2.8 ICE

Eurofins Edison
777 New Durham Road
Edison, NJ 08817
Phone: 732-549-3900 Fax: 732-549-3679

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Gilmore, Julie L	Carrier Tracking No(s):	COC No: 460-69314.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Julie.Gilmore@et.eurofinsus.com	State of Origin: Pennsylvania	Page: Page 1 of 1
Company: Eurofins Environment Testing Southeast,		Accreditations Required (See note): NELAP - Pennsylvania		Job #: 460-288640-1
Address: 5102 LaRoche Avenue, ,	Due Date Requested: 10/2/2023			
City: Savannah	TAT Requested (days):			
State, Zip: GA, 31404				
Phone: 912-354-7858(Tel) 912-352-0165(Fax)	PO #:			
Email:	WO #:			
Project Name: Rock Hill - Anti Degradation	Project #: 46011424			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020B/3005A Total Aluminum	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
Clarifying Pond (460-288640-1)	9/20/23	09:20 Eastern		Water			X	1	
Upgradient (460-288640-2)	9/20/23	09:40 Eastern		Water			X	1	
Basin 1 (460-288640-3)	9/20/23	10:20 Eastern		Water			X	1	
Basin 2 (460-288640-4)	9/20/23	10:50 Eastern		Water			X	1	
Outfall 001 (460-288640-5)	9/20/23	11:40 Eastern		Water			X	1	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Northeast, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Northeast, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Northeast, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Northeast, LLC.

Possible Hazard Identification	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 1	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
		9/22/23 1900	EETL			
	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	Relinquished by:	Date/Time:	Company	Received by: C. Mun	9/23/23 1010	ECONP

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 3.9/4.0

Login Sample Receipt Checklist

Client: Heidelberg Materials Northeast LLC

Job Number: 460-288640-1

Login Number: 288640
List Number: 1
Creator: Thundathorn, Sukanan 1

List Source: Eurofins Edison

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Heidelberg Materials Northeast LLC

Job Number: 460-288640-1

Login Number: 288640
List Number: 5
Creator: Yeager, Brian A

List Source: Eurofins Buffalo
List Creation: 09/25/23 10:29 AM

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	2.8 ICE
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	True	

Login Sample Receipt Checklist

Client: Heidelberg Materials Northeast LLC

Job Number: 460-288640-1

Login Number: 288640
List Number: 2
Creator: Wrye, Shaun

List Source: Eurofins Lancaster Laboratories Environment Testing, LLC
List Creation: 09/22/23 10:33 PM

Question	Answer	Comment
The cooler's custody seal is intact.	N/A	Not present.
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature acceptable,where thermal pres is required(</=6C, not frozen).	True	
Cooler Temperature is recorded.	True	
WV:Container Temp acceptable,where thermal pres is required (</=6C, not frozen).	N/A	
WV: Container Temperature is recorded.	N/A	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the containers received and the COC.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
There is sufficient vol. for all requested analyses.	True	
Is the Field Sampler's name present on COC?	False	Received project as a subcontract.
Sample custody seals are intact.	N/A	Not present.
VOA sample vials do not have headspace >6mm in diameter (none, if from WV)?	N/A	

Login Sample Receipt Checklist

Client: Heidelberg Materials Northeast LLC

Job Number: 460-288640-1

Login Number: 288640
List Number: 3
Creator: Watters, David

List Source: Eurofins Savannah
List Creation: 09/23/23 12:45 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Andrew Gutshall
Heidelberg Materials Northeast LLC
7660 Imperial Way
Allentown, Pennsylvania 18195

Generated 11/2/2023 9:03:50 AM

JOB DESCRIPTION

Rock Hill - Anti Degradation

JOB NUMBER

460-288640-2

Eurofins Edison
777 New Durham Road
Edison NJ 08817

See page two for job notes and contact information.

my EOL

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing Northeast, LLC Project Manager.

Authorization



Generated
11/2/2023 9:03:50 AM

Authorized for release by
Julie Gilmore, Project Manager I
Julie.Gilmore@et.eurofinsus.com
(484)685-0865

Table of Contents

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Definitions/Glossary

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill - Anti Degradation

Job ID: 460-288640-2

Qualifiers

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 460-288640-2

Laboratory: Eurofins Edison

Narrative

Job Narrative
460-288640-2

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

The method detection limit (MDL) is the lowest value detectable by the laboratory for a given analyte as determined by the MDL procedure detailed in EPA 40 CFR 136. Reported MDL values are adjusted for any dilutions and percent moisture (as applicable). The lab is unable to report values below the MDL.

Receipt
The samples were received on 9/20/2023 7:00 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 3 coolers at receipt time were 4.1°C, 5.5°C and 5.6°C

Metals
Method 6020B: The following samples were not filtered within 15 minutes of sample collection as required by the method: Clarifying Pond (460-288640-1), Upgradient (460-288640-2), Basin 1 (460-288640-3), Basin 2 (460-288640-4) and Outfall 001 (460-288640-5). The samples were filtered prior to analysis at the laboratory, and the results have been reported.

Method 6020B: The following samples were diluted due to the nature of the sample matrix with the high levels of boron and its affect in the instrumentation: (LCS 180-448062/2-B ^5), (LCS 180-448083/2-A ^5), (460-288640-J-5-C MS ^5), (460-288640-J-5-D MSD ^5) and (460-288640-J-5-B PDS ^5). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Client Sample ID: Clarifying Pond

Lab Sample ID: 460-288640-1

Date Collected: 09/20/23 09:20

Matrix: Water

Date Received: 09/20/23 19:00

Method: SW846 EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	1.3	U	5.0	1.3	ug/L		09/29/23 07:28	10/30/23 15:51	1

Method: SW846 EPA 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	1.3	U	5.0	1.3	ug/L		10/03/23 07:40	10/24/23 20:37	1

Client Sample ID: Upgradient

Lab Sample ID: 460-288640-2

Date Collected: 09/20/23 09:40

Matrix: Water

Date Received: 09/20/23 19:00

Method: SW846 EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	**2.9**	**J**	5.0	1.3	ug/L		09/29/23 07:28	10/30/23 15:55	1

Method: SW846 EPA 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	**1.9**	**J**	5.0	1.3	ug/L		10/03/23 07:40	10/24/23 20:41	1

Client Sample ID: Basin 1

Lab Sample ID: 460-288640-3

Date Collected: 09/20/23 10:20

Matrix: Water

Date Received: 09/20/23 19:00

Method: SW846 EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	1.3	U	5.0	1.3	ug/L		09/29/23 07:28	10/30/23 15:58	1

Method: SW846 EPA 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	1.3	U	5.0	1.3	ug/L		10/03/23 07:40	10/24/23 20:45	1

Client Sample ID: Basin 2

Lab Sample ID: 460-288640-4

Date Collected: 09/20/23 10:50

Matrix: Water

Date Received: 09/20/23 19:00

Method: SW846 EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	1.3	U	5.0	1.3	ug/L		09/29/23 07:28	10/30/23 16:02	1

Method: SW846 EPA 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	1.3	U	5.0	1.3	ug/L		10/03/23 07:40	10/24/23 20:49	1

Client Sample ID: Outfall 001

Lab Sample ID: 460-288640-5

Date Collected: 09/20/23 11:40

Matrix: Water

Date Received: 09/20/23 19:00

Method: SW846 EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	1.3	U	5.0	1.3	ug/L		09/29/23 07:28	10/30/23 16:05	1

Method: SW846 EPA 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	1.3	U	5.0	1.3	ug/L		10/03/23 07:40	10/24/23 20:58	1

Lab Chronicle

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill - Anti Degradation

Job ID: 460-288640-2

Client Sample ID: Clarifying Pond
Date Collected: 09/20/23 09:20
Date Received: 09/20/23 19:00

Lab Sample ID: 460-288640-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Filtration	Filtration			448062	S1Z	EET PIT	10/02/23 09:08
Dissolved	Prep	3005A			448083	S1Z	EET PIT	10/03/23 07:40
Dissolved	Analysis	EPA 6020B		1	450139	S1Z	EET PIT	10/24/23 20:37
Total Recoverable	Prep	3005A			447823	SJM	EET PIT	09/29/23 07:28
Total Recoverable	Analysis	EPA 6020B		1	450586	LWM	EET PIT	10/30/23 15:51

Client Sample ID: Upgradient
Date Collected: 09/20/23 09:40
Date Received: 09/20/23 19:00

Lab Sample ID: 460-288640-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Filtration	Filtration			448062	S1Z	EET PIT	10/02/23 09:08
Dissolved	Prep	3005A			448083	S1Z	EET PIT	10/03/23 07:40
Dissolved	Analysis	EPA 6020B		1	450139	S1Z	EET PIT	10/24/23 20:41
Total Recoverable	Prep	3005A			447823	SJM	EET PIT	09/29/23 07:28
Total Recoverable	Analysis	EPA 6020B		1	450586	LWM	EET PIT	10/30/23 15:55

Client Sample ID: Basin 1
Date Collected: 09/20/23 10:20
Date Received: 09/20/23 19:00

Lab Sample ID: 460-288640-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Filtration	Filtration			448062	S1Z	EET PIT	10/02/23 09:08
Dissolved	Prep	3005A			448083	S1Z	EET PIT	10/03/23 07:40
Dissolved	Analysis	EPA 6020B		1	450139	S1Z	EET PIT	10/24/23 20:45
Total Recoverable	Prep	3005A			447823	SJM	EET PIT	09/29/23 07:28
Total Recoverable	Analysis	EPA 6020B		1	450586	LWM	EET PIT	10/30/23 15:58

Client Sample ID: Basin 2
Date Collected: 09/20/23 10:50
Date Received: 09/20/23 19:00

Lab Sample ID: 460-288640-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Filtration	Filtration			448062	S1Z	EET PIT	10/02/23 09:08
Dissolved	Prep	3005A			448083	S1Z	EET PIT	10/03/23 07:40
Dissolved	Analysis	EPA 6020B		1	450139	S1Z	EET PIT	10/24/23 20:49
Total Recoverable	Prep	3005A			447823	SJM	EET PIT	09/29/23 07:28
Total Recoverable	Analysis	EPA 6020B		1	450586	LWM	EET PIT	10/30/23 16:02

Lab Chronicle

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill - Anti Degradation

Job ID: 460-288640-2

Client Sample ID: Outfall 001

Date Collected: 09/20/23 11:40
Date Received: 09/20/23 19:00

Lab Sample ID: 460-288640-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Filtration	Filtration			448062	S1Z	EET PIT	10/02/23 09:08
Dissolved	Prep	3005A			448083	S1Z	EET PIT	10/03/23 07:40
Dissolved	Analysis	EPA 6020B		1	450139	S1Z	EET PIT	10/24/23 20:58
Total Recoverable	Prep	3005A			447823	SJM	EET PIT	09/29/23 07:28
Total Recoverable	Analysis	EPA 6020B		1	450586	LWM	EET PIT	10/30/23 16:05

Laboratory References:

EET PIT = Eurofins Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Accreditation/Certification Summary

Client: Heidelberg Materials Northeast LLC
Job ID: 460-288640-2
Project/Site: Rock Hill - Anti Degradation

Laboratory: Eurofins Pittsburgh

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Arkansas DEQ	State	19-033-0	06-27-24
California	State	2891	04-30-24
Connecticut	State	PH-0688	09-30-24
Florida	NELAP	E871008	06-30-24
Georgia	State	PA 02-00416	04-30-24
Illinois	NELAP	004375	06-30-24
Kansas	NELAP	E-10350	01-31-24
Kentucky (UST)	State	162013	04-30-23 *
Kentucky (WW)	State	KY98043	12-31-23
Louisiana	NELAP	04041	06-30-22 *
Louisiana (All)	NELAP	04041	06-30-24
Maine	State	PA00164	03-06-24
Minnesota	NELAP	042-999-482	12-31-23
New Hampshire	NELAP	2030	04-04-24
New Jersey	NELAP	PA005	06-30-24
New York	NELAP	11182	04-01-24
North Carolina (WW/SW)	State	434	12-31-23
North Dakota	State	R-227	04-30-24
Oregon	NELAP	PA-2151	02-06-24
Pennsylvania	NELAP	02-00416	04-30-24
Rhode Island	State	LAO00362	12-31-22 *
South Carolina	State	89014	04-30-23 *
Texas	NELAP	T104704528	03-31-24
US Fish & Wildlife	US Federal Programs	058448	03-31-24
USDA	US Federal Programs	P330-16-00211	04-11-26
Utah	NELAP	PA001462019-8	05-31-24
Virginia	NELAP	10043	07-14-24
West Virginia DEP	State	142	01-31-24
Wisconsin	State	998027800	08-31-24

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Method Summary

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill - Anti Degradation

Job ID: 460-288640-2

Method	Method Description	Protocol	Laboratory
EPA 6020B	Metals (ICP/MS)	SW846	EET PIT
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	EET PIT
Filtration	Sample Filtration	None	EET PIT

Protocol References:

None = None

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET PIT = Eurofins Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Sample Summary

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill - Anti Degradation

Job ID: 460-288640-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
460-288640-1	Clarifying Pond	Water	09/20/23 09:20	09/20/23 19:00
460-288640-2	Upgradient	Water	09/20/23 09:40	09/20/23 19:00
460-288640-3	Basin 1	Water	09/20/23 10:20	09/20/23 19:00
460-288640-4	Basin 2	Water	09/20/23 10:50	09/20/23 19:00
460-288640-5	Outfall 001	Water	09/20/23 11:40	09/20/23 19:00

Eurofins Edison
777 New Durham Road
Edison, NJ 08817
Phone: 732-549-3900 Fax: 732-549-3679

450-KOP

Chain of Custody Record

5.6 KOP 2
5.5
41

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Client Information	Sampler: CJS	Lab PM: Gilmore, Julie L	Carrier Tracking No(s):	COC No: 460-172755-111665.1
Client Contact: Andrew Gutshall	Phone: 215-766-1211	E-Mail: Julie.Gilmore@et.eurofinsus.com	State of Origin:	Page: Page 1 of 2
Company: Heidelberg Materials Northeast LLC	PWSID:			Job #: 288640
Address: 7660 Imperial Way	Due Date Requested:			
City: Allentown	TAT Requested (days): 10			
State, Zip: PA, 18195	Compliance Project: Δ Yes Δ No			
Phone: 610-366-4819(Tel)	PO #: Purchase Order not required			
Email: andrew.gutshall@heidelbergmaterials.com	WO #:			
Project Name: Rock Hill Anti-Degradation	Project #: 46011424			
Site: Rock Hill	SSOW#:			

Analysis Requested

Preservation Codes:
A HCL, B NaOH, C Zn Acetate, D Nitric, E NaHSO4, F MeOH, G Amchlor, H Ascorbic Acid, I Ice, J DI Water, K EDTA, L EDA, M Hexane, N None, O AsNaO2, Other: SHORT HOLD, other (specify)

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020B Dissolved Lithium	6020B Total Lithium	351.2 Local Method	6020B Dissolved Cd/Fe/Zn	6020B (MOD) Total Fe	350.1 410.4, 4500_P_E	120.1 9040C	350.1 4500_P_E, 6020B	2320B (MOD) Alkalinity	6020B, SM2340B	9060A TOC	2540D, SM5210B_Calc	4500_P_E_Ortho Dissolved Orthophosphate	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	D	S	N	D	S	N	N	N	D	S	N	N		
Clarifying Pond	9/20/23	0920	G	Water			X	X	X	X	X	X	X	X	X	X	X	X	X	21	1
Upgradient	〃	0940	G	Water			X	X	X	X	X	X	X	X	X	X	X	X	X	21	2
Basin 1	〃	1020	G	Water			X	X	X	X	X	X	X	X	X	X	X	X	X	21	3
Basin 2	〃	1050	G	Water			X	X	X	X	X	X	X	X	X	X	X	X	X	21	4
Outfall 001	〃	1140	G	Water			X	X	X	X	X	X	X	X	X	X	X	X	X	21	5

460-288640 Chain of Custody

Possible Hazard Identification
X Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I II III IV Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		9/20/23 / 1330	EARTHRES		9/20/23 1330	EET-KOP
2		9-20-23 1711	EET-KOP		9/20/23 1715	ETA
3		9/20/23 1900	ETA		9/20/23 1900	ETA

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks:

Ver: 06/08/2021

Eurofins Edison
777 New Durham Road
Edison, NJ 08817
Phone: 732-549-3900 Fax: 732-549-3679

450 Kus

Chain of Custody Record

5.6 °
5.5 °
4.1 °
ICOR-2

eurofins

Client Information	Sampler: CJS	Lab PM: Gilmore, Julie L	Carrier Tracking No(s):	COC No: 460-172755-111665.2
Client Contact: Andrew Gutshall	Phone: 215-766-1211	E-Mail: Julie.Gilmore@et.eurofinsus.com	State of Origin:	Page: Page 2 of 2
Company: Heidelberg Materials Northeast LLC	PWSID:			Job #: 266640
Address: 7660 Imperial Way	Due Date Requested:			
City: Allentown	TAT Requested (days): 10			
State, Zip: PA, 18195	Compliance Project: Δ Yes Δ No			
Phone: 610-366-4819(Tel)	PO #: Purchase Order not required			
Email: andrew.gutshall@heidelbergmaterials.com	WO #:			
Project Name: Rock Hill Anti-Degradation	Project #: 46011424			
Site: Rock Hill	SSOW#:			

Analysis Requested

Preservation Codes:
A HCL, B NaOH, C Zn Acetate, D Nitric Acid, E NaHSO4, F MeOH, G Amchlor, H Ascorbic Acid, I Ice, J DI Water, K EDTA, L EDA, M Hexane, N None, O AsNaO2, P Na2O4S, Q Na2SO3, R Na2S2O3, S H2SO4, T TSP Dodecahydrate, U Acetone, V MCAA, W pH 4-5, Y Trizma, Z other (specify)
Other

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	4500_P_E_Ortho Total Orthophosphate	2540C TDS	300_ORGFM_28D, 300_ORGFMS	245.1 Local Method	6020B Total Aluminum	Acidity	4500_O_C - Dissolved Oxygen	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	N	D	D				
Clarifying Pond	9/20/23	0920	G	Water			X	X	X	X	X		X	2	1
Upgradient	〃	0940	G	Water			X	X	X	X	X		X	2	2
Basin 1	〃	1020	G	Water			X	X	X	X	X		X	2	3
Basin 2	〃	1050	G	Water			X	X	X	X	X		X	2	4
Outfall 001	〃	1140	G	Water			X	X	X	X	X	X	X	2	5

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I II, III IV Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		9/20/23 1330	EARTHRES		9/20/23 1330	ETNHCOP
2		9-20-23 1711	ETNHCOP		9/20/23 1900	ETK
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.

Cooler Temperature(s) °C and Other Remarks:

Ver: 06/08/2021

Eurofins TestAmerica Edison
Receipt Temperature and pH Log

Job Number: 288640

Number of Coolers: 3

IR Gun # 2/KOP

Cooler Temperatures

	RAW	CORRECTED		RAW	CORRECTED		RAW	CORRECTED
Cooler #1:	5.6 °C	5.6°C	Cooler #4:	°C	°C	Cooler #7:	°C	°C
Cooler #2:	5.5 °C	5.5°C	Cooler #5:	°C	°C	Cooler #8:	°C	°C
Cooler #3:	4.1 °C	4.1°C	Cooler #6:	°C	°C	Cooler #9:	°C	°C

TALS Sample Number	Ammonia (pH<2)	COD (pH<2)	Nitrate Nitrite (pH<2)	Metals* (pH<2)	Hardness (pH<2)	Pest (pH 5-9)	EPH or QAM (pH<2)	Phenols (pH<2)	Sulfide (pH>9)	TKN (pH<2)	TOC (pH<2)	Total Cyanide (pH>12)	Total Phos (pH<2)	Other	Other
1	<2	<2		<2							<2		<2		
2	<2	<2		<2							<2		<2		
3	<2	<2		<2							<2		<2		
4	<2	<2		<2							<2		<2		
5	<2	<2		<2							<2		<2		

If pH adjustments are required record the information below.

Sample No(s). adjusted: _____

Preservative Name/Conc.. _____ Volume of Preservative used (ml): _____

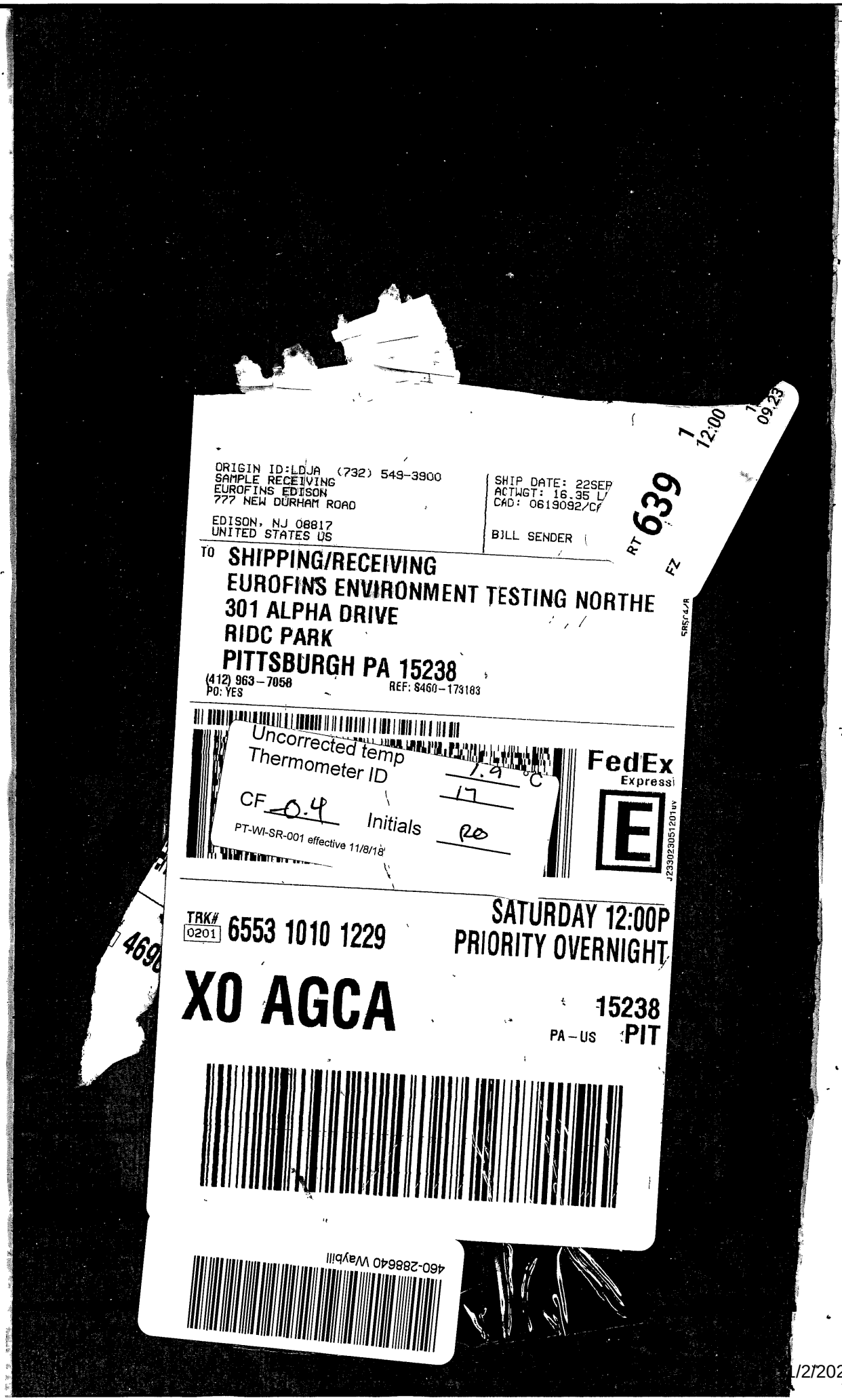
Lot # of Preservative(s): _____ Expiration Date: _____

The appropriate Project Manager and Department Manager should be notified about the samples which were pH adjusted.

** Samples for Metal analysis which are out of compliance must be acidified at least 24 hours prior to analysis.*

Initials: KOP Date: 9/20/23

Filled out form for KOP



ORIGIN ID:LDJA (732) 549-3900
SAMPLE RECEIVING
EUROFINS EDISON
777 NEW DURHAM ROAD

EDISON, NJ 08817
UNITED STATES US

SHIP DATE: 22SEP
ACTWGT: 16.35 L
CAD: 0619092/CF

BILL SENDER

RT 639 FZ

1 12:00 09.23

TO SHIPPING/RECEIVING
EUROFINS ENVIRONMENT TESTING NORTHE
301 ALPHA DRIVE
RIDC PARK
PITTSBURGH PA 15238
(412) 963-7058
PO: YES
REF: 8460-173183

Uncorrected temp 1.9 °C
Thermometer ID 17
CF -0.4 Initials RO
PT-WI-SR-001 effective 11/8/18

FedEx Express

TRK# 0201 6553 1010 1229

SATURDAY 12:00P
PRIORITY OVERNIGHT

XO AGCA

15238
PA-US PIT

460-2886 40 Waybill

1/2/2023

Eurofins Edison
777 New Durham Road
Edison, NJ 08817
Phone: 732-549-3900 Fax: 732-549-3679

net to be

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler	Lab PM: Gilmore, Julie L	Carrier Tracking No(s)	COC No: 460-69316 1
Client Contact: Shipping/Receiving	Phone	E-Mail: Julie.Gilmore@et.eurofinsus.com	State of Origin: Pennsylvania	Page: Page 1 of 1
Company: Eurofins Environment Testing Northeast,		Accreditations Required (See note): NELAP - Pennsylvania		Job #: 460-288640-2
Address: 301 Alpha Drive, RIDC Park,	Due Date Requested: 10/25/2023			
City: Pittsburgh	TAT Requested (days):			
State, Zip: PA, 15238				
Phone: 412-963-7058(Tel) 412-963-2468(Fax)	PO #:			
Email	WO #:			
Project Name: Rock Hill - Anti Degradation	Project #: 46011424			
Site	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020B/Filtration_ME Dissolved Lithium	6020B/3005A (MOD) Total Lithium	Total Number of containers	Special Instructions/Note:
			Preservation Code:							
Clarifying Pond (460-288640-1)	9/20/23	09.20 Eastern		Water			X	X	2	
Upgradient (460-288640-2)	9/20/23	09 40 Eastern		Water			X	X	2	
Basin 1 (460-288640-3)	9/20/23	10 20 Eastern		Water			X	X	2	
Basin 2 (460-288640-4)	9/20/23	10.50 Eastern		Water			X	X	2	
Outfall 001 (460-288640-5)	9/20/23	11:40 Eastern		Water			X	X	2	

460-288640 Chain of Custody

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Northeast, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Northeast, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Northeast, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Northeast, LLC.

Possible Hazard Identification: Unconfirmed	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month): ☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) — Primary Deliverable Rank: 1	Special Instructions/QC Requirements.

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
	9/22/23 1900	FEDEX		9/23/23 0955	ET NE
Relinquished by	Date/Time	Company	Received by	Date/Time	Company
Relinquished by	Date/Time	Company	Received by	Date/Time.	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:
		20

11/2/2023

Login Sample Receipt Checklist

Client: Heidelberg Materials Northeast LLC

Job Number: 460-288640-2

Login Number: 288640
List Number: 1
Creator: Thundathorn, Sukanan 1

List Source: Eurofins Edison

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Heidelberg Materials Northeast LLC

Job Number: 460-288640-2

Login Number: 288640
List Number: 4
Creator: Watson, Debbie

List Source: Eurofins Pittsburgh
List Creation: 09/23/23 06:28 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Lab Results

October 4, 2023

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Andrew Gutshall
Heidelberg Materials Northeast LLC
7660 Imperial Way
Allentown, Pennsylvania 18195

Generated 10/30/2023 6:09:34 AM

JOB DESCRIPTION

Rock Hill-Anti-Degradation

JOB NUMBER

460-289607-1

Eurofins Edison
777 New Durham Road
Edison NJ 08817

See page two for job notes and contact information.

my EOL

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing Northeast, LLC Project Manager.

Authorization



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Qualifiers

HPLC/IC

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Metals

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

General Chemistry

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
H	Sample was prepped or analyzed beyond the specified holding time. This does not meet regulatory requirements.
H3	Sample was received and analyzed past holding time. This does not meet regulatory requirements.
HF	Parameter with a holding time of 15 minutes. Test performed by laboratory at client's request. Sample was analyzed outside of hold time.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 460-289607-1

Laboratory: Eurofins Edison

Narrative

Job Narrative
460-289607-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

The method detection limit (MDL) is the lowest value detectable by the laboratory for a given analyte as determined by the MDL procedure detailed in EPA 40 CFR 136. Reported MDL values are adjusted for any dilutions and percent moisture (as applicable). The lab is unable to report values below the MDL.

Receipt
The samples were received on 10/4/2023 7:00 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 3 coolers at receipt time were 2.3°C, 2.6°C and 3.2°C

Subcontract Work
Method Osomotic Pressure: This method was subcontracted to Microbac Laboratories, Inc. The subcontract laboratory certification is different from that of the facility issuing the final report. The subcontract report is appended in its entirety.

HPLC/IC
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Metals
Method 6020B: The method blank for preparation batch 460-936770 and analytical batch 460-937139 contained calcium above the method detection limit. This target analyte concentration was less than half the reporting limit (1/2RL) in the method blank; therefore, re-extraction and re-analysis of samples was not performed.

Method 6020B: The following samples for metals were received unpreserved and were preserved upon receipt to the laboratory: Clariflihs Pond (460-289607-5). Regulatory documents require a 24-hour waiting period from the time of the addition of the acid preservative to the time of digestion. The sample was preserved on 10/13/23 at 08:00 AM with concentrated nitric acid.

Method 6020B: The following samples were not filtered within 15 minutes of sample collection as required by the method: NPDES 001 (460-289607-1), Basin 2 (460-289607-2), Basin 1 (460-289607-3), UP gradient (460-289607-4) and Clariflihs Pond (460-289607-5). The sample(s) was filtered prior to analysis at the laboratory, and the results have been reported. This does not meet regulatory requirements.

Method 6020B: The following samples were not filtered and preserved within 15 minutes of sample collection in accordance with 40 CFR Part 136 Table II, Footnote 7, method 6020B. The samples were filtered prior to analysis at the laboratory.

NPDES 001 (460-289607-1), Basin 2 (460-289607-2), Basin 1 (460-289607-3), UP gradient (460-289607-4) and Clariflihs Pond (460-289607-5)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

General Chemistry
Method 4500_O_C: This analysis is normally performed in the field and has a method-defined holding time of 15 minutes. The following

Job ID: 460-289607-1 (Continued)

Laboratory: Eurofins Edison (Continued)

sample has been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe: NPDES 001 (460-289607-1).

Method 4500_O_C: This analysis is normally performed in the field and has a method-defined holding time of 15 minutes. The following sample has been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe: Basin 2 (460-289607-2).

Method 4500_O_C: This analysis is normally performed in the field and has a method-defined holding time of 15 minutes. The following sample has been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe: Basin 1 (460-289607-3).

Method 4500_O_C: This analysis is normally performed in the field and has a method-defined holding time of 15 minutes. The following sample has been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe: UP gradient (460-289607-4).

Method 4500_O_C: This analysis is normally performed in the field and has a method-defined holding time of 15 minutes. The following sample has been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe: Clariflihs Pond (460-289607-5).

Method 9040C: This analysis is normally performed in the field and has a method-defined holding time of 15 minutes. The following samples has been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe: NPDES 001 (460-289607-1), Basin 2 (460-289607-2), Basin 1 (460-289607-3) and UP gradient (460-289607-4).

Method 9040C: This analysis is normally performed in the field and has a method-defined holding time of 15 minutes. The following sample has been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe: Clariflihs Pond (460-289607-5).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Client Sample ID: NPDES 001
Date Collected: 10/04/23 08:15
Date Received: 10/04/23 19:00

Lab Sample ID: 460-289607-1
Matrix: Water

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide	**0.062**	**J**	0.32	0.054	mg/L			10/05/23 19:11	1
Nitrate as N	0.070	U	0.16	0.070	mg/L			10/05/23 19:11	1
Chloride	**2.93**		0.32	0.039	mg/L			10/05/23 19:11	1
Nitrate Nitrite as N	0.070	U	0.16	0.070	mg/L			10/05/23 19:11	1
Nitrite as N	0.023	U	0.16	0.023	mg/L			10/05/23 19:11	1
Sulfate	**8.60**		0.48	0.095	mg/L			10/05/23 19:11	1

Method: SM-Online 2340B-2011 - Total Hardness (as CaCO3) by calculation - SM Online, 2011

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**102**		33.1	33.1	mg/L			10/23/23 09:50	1

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000043	U	0.00020	0.000043	mg/L		10/10/23 11:15	10/11/23 10:30	1

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**6.0**		4.0	0.91	ug/L		10/06/23 22:20	10/09/23 16:16	1
Boron	**84.9**		80.0	30.4	ug/L		10/06/23 22:20	10/09/23 16:16	1
Calcium	**25300**	**B**	500	53.6	ug/L		10/06/23 22:20	10/09/23 16:16	1
Copper	2.5	U	4.0	2.5	ug/L		10/06/23 22:20	10/09/23 16:16	1
Lead	0.84	U	1.2	0.84	ug/L		10/06/23 22:20	10/09/23 16:16	1
Magnesium	**9430**		200	46.9	ug/L		10/06/23 22:20	10/09/23 16:16	1
Manganese	**20.1**		8.0	1.5	ug/L		10/06/23 22:20	10/09/23 16:16	1
Nickel	0.91	U	4.0	0.91	ug/L		10/06/23 22:20	10/09/23 16:16	1
Potassium	**1510**		200	112	ug/L		10/06/23 22:20	10/09/23 16:16	1
Selenium	0.59	U	2.5	0.59	ug/L		10/06/23 22:20	10/09/23 16:16	1
Sodium	**4130**		500	219	ug/L		10/06/23 22:20	10/09/23 16:16	1
Strontium	**76.4**		4.0	0.50	ug/L		10/06/23 22:20	10/09/23 16:16	1
Zinc	6.5	U	16.0	6.5	ug/L		10/06/23 22:20	10/09/23 16:16	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	35.0	U	100	35.0	ug/L		10/09/23 04:53	10/09/23 22:55	1
Iron	**140**		50.0	20.0	ug/L		10/10/23 20:00	10/11/23 15:43	1

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	19.5	U	40.0	19.5	ug/L		10/06/23 23:51	10/07/23 02:41	1
Cadmium	0.15	U	0.50	0.15	ug/L		10/12/23 02:36	10/17/23 17:25	1
Arsenic	0.89	U	2.0	0.89	ug/L		10/06/23 23:51	10/07/23 02:41	1
Iron	**41.0**	**J**	50.0	20.0	ug/L		10/12/23 02:36	10/17/23 17:25	1
Calcium	**25300**		500	53.6	ug/L		10/06/23 23:51	10/07/23 02:41	1
Zinc	4.0	U	10.0	4.0	ug/L		10/12/23 02:36	10/17/23 17:25	1
Copper	2.5	U	4.0	2.5	ug/L		10/06/23 23:51	10/07/23 02:41	1
Iron	58.2	U	120	58.2	ug/L		10/06/23 23:51	10/07/23 02:41	1
Lead	0.84	U	1.2	0.84	ug/L		10/06/23 23:51	10/07/23 02:41	1
Magnesium	**9780**		200	46.9	ug/L		10/06/23 23:51	10/07/23 02:41	1
Manganese	**3.8**	**J**	8.0	1.5	ug/L		10/06/23 23:51	10/07/23 02:41	1
Nickel	0.91	U	4.0	0.91	ug/L		10/06/23 23:51	10/07/23 02:41	1

Client Sample ID: NPDES 001

Date Collected: 10/04/23 08:15
Date Received: 10/04/23 19:00

Lab Sample ID: 460-289607-1

Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Resistivity (EPA 120.1)	**0.00453**		0.000100	0.000100	Mohm-cm			10/11/23 16:43	1
Specific Conductance (EPA 120.1)	**221**		1.00	1.00	umhos/cm			10/11/23 16:43	1
Acidity (SM 2310B-2011)	20.0	U	20.0	20.0	mg/L			10/18/23 17:04	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-2011)	**128**		5.0	5.0	mg/L			10/11/23 12:35	1
Carbonate Alkalinity as CaCO3 (SM 2320B-2011)	5.0	U	5.0	5.0	mg/L			10/11/23 12:35	1
Alkalinity as CaCO3 to pH 4.5 (SM 2320B-2011)	**128**		5.0	5.0	mg/L			10/11/23 12:35	1
Total Dissolved Solids (SM 2540C-2015)	**155**		2.5	2.5	mg/L			10/11/23 11:49	1
Total Suspended Solids (SM 2540D-2015)	2.5	U	2.5	2.5	mg/L			10/11/23 08:36	1
Ammonia (EPA 350.1)	0.050	U	0.10	0.050	mg/L			10/12/23 13:08	1
Total Kjeldahl Nitrogen (EPA 351.2)	0.50	U	1.0	0.50	mg/L		10/12/23 13:45	10/13/23 12:05	1
Chemical Oxygen Demand (EPA 410.4)	**10.9**		10.0	3.3	mg/L			10/16/23 16:08	1
Oxygen, Dissolved (SM 4500 O C-2016)	**6.1**	**H H3**	1.0	1.0	mg/L			10/06/23 15:05	1
Orthophosphate as P (SM 4500 P E-2011)	**0.0071**	**J**	0.030	0.0050	mg/L			10/06/23 08:05	1
Carbonaceous Biochemical Oxygen Demand 5 (SM 5210 B-2016)	1.0	U	1.0	1.0	mg/L			10/05/23 15:45	1
pH (SW846 9040C)	**7.5**	**HF**	0.1	0.1	SU			10/10/23 12:52	1
Temperature (SW846 9040C)	**21.4**	**HF**	0.1	0.1	Degrees C			10/10/23 12:52	1
Total Organic Carbon (SW846 9060A)	**1.9**		1.0	0.53	mg/L			10/05/23 23:26	1
Phosphorus as PO4 (SM4500 P E-2011)	0.071	U	0.090	0.071	mg/L		10/27/23 12:17	10/27/23 14:58	1
Phosphorus as P (SM4500 P E-2011)	0.023	U	0.030	0.023	mg/L		10/27/23 12:17	10/27/23 14:58	1
Nitrogen, Total (EPA Total Nitrogen)	0.50	U	0.50	0.50	mg/L			10/16/23 08:48	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (EPA 350.1)	0.050	U	0.10	0.050	mg/L			10/12/23 13:17	1
Orthophosphate as P (SM 4500 P E-2011)	**0.0057**	**J**	0.030	0.0050	mg/L			10/06/23 08:05	1
Phosphorus as PO4 (SM4500 P E-2011)	0.071	U F1	0.090	0.071	mg/L		10/27/23 12:17	10/27/23 14:58	1
Phosphorus as P (SM4500 P E-2011)	0.023	U F1	0.030	0.023	mg/L		10/27/23 12:17	10/27/23 14:58	1

Client Sample ID: Basin 2

Date Collected: 10/04/23 08:45
Date Received: 10/04/23 19:00

Lab Sample ID: 460-289607-2

Matrix: Water

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide	**0.070**	**J**	0.32	0.054	mg/L			10/05/23 23:26	1
Nitrate as N	0.070	U	0.16	0.070	mg/L			10/05/23 23:26	1
Chloride	**1.63**		0.32	0.039	mg/L			10/05/23 23:26	1
Nitrate Nitrite as N	0.070	U	0.16	0.070	mg/L			10/05/23 23:26	1
Nitrite as N	0.023	U	0.16	0.023	mg/L			10/05/23 23:26	1
Sulfate	**7.19**		0.48	0.095	mg/L			10/05/23 23:26	1

Client Sample ID: Basin 2

Date Collected: 10/04/23 08:45
Date Received: 10/04/23 19:00

Lab Sample ID: 460-289607-2

Matrix: Water

Method: SM-Online 2340B-2011 - Total Hardness (as CaCO3) by calculation - SM Online, 2011

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**92.4**		33.1	33.1	mg/L			10/23/23 09:50	1

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000043	U	0.00020	0.000043	mg/L		10/10/23 11:15	10/11/23 10:31	1

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**3.6**	**J**	4.0	0.91	ug/L		10/06/23 22:20	10/09/23 16:18	1
Boron	**66.1**	**J**	80.0	30.4	ug/L		10/06/23 22:20	10/09/23 16:18	1
Calcium	**21100**	**B**	500	53.6	ug/L		10/06/23 22:20	10/09/23 16:18	1
Copper	**2.5**	**J**	4.0	2.5	ug/L		10/06/23 22:20	10/09/23 16:18	1
Lead	0.84	U	1.2	0.84	ug/L		10/06/23 22:20	10/09/23 16:18	1
Magnesium	**9660**		200	46.9	ug/L		10/06/23 22:20	10/09/23 16:18	1
Manganese	**52.6**		8.0	1.5	ug/L		10/06/23 22:20	10/09/23 16:18	1
Nickel	0.91	U	4.0	0.91	ug/L		10/06/23 22:20	10/09/23 16:18	1
Potassium	**1720**		200	112	ug/L		10/06/23 22:20	10/09/23 16:18	1
Selenium	0.59	U	2.5	0.59	ug/L		10/06/23 22:20	10/09/23 16:18	1
Sodium	**3060**		500	219	ug/L		10/06/23 22:20	10/09/23 16:18	1
Strontium	**54.0**		4.0	0.50	ug/L		10/06/23 22:20	10/09/23 16:18	1
Zinc	**13.4**	**J**	16.0	6.5	ug/L		10/06/23 22:20	10/09/23 16:18	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**68.6**	**J**	100	35.0	ug/L		10/09/23 04:53	10/09/23 22:51	1
Iron	**469**		50.0	20.0	ug/L		10/10/23 20:00	10/11/23 15:45	1

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	19.5	U	40.0	19.5	ug/L		10/06/23 23:51	10/07/23 02:43	1
Cadmium	0.15	U	0.50	0.15	ug/L		10/12/23 02:36	10/17/23 17:23	1
Arsenic	0.89	U	2.0	0.89	ug/L		10/06/23 23:51	10/07/23 02:43	1
Iron	**29.3**	**J**	50.0	20.0	ug/L		10/12/23 02:36	10/17/23 17:23	1
Calcium	**22400**		500	53.6	ug/L		10/06/23 23:51	10/07/23 02:43	1
Zinc	4.0	U	10.0	4.0	ug/L		10/12/23 02:36	10/17/23 17:23	1
Copper	2.5	U	4.0	2.5	ug/L		10/06/23 23:51	10/07/23 02:43	1
Iron	58.2	U	120	58.2	ug/L		10/06/23 23:51	10/07/23 02:43	1
Lead	0.84	U	1.2	0.84	ug/L		10/06/23 23:51	10/07/23 02:43	1
Magnesium	**10400**		200	46.9	ug/L		10/06/23 23:51	10/07/23 02:43	1
Manganese	**5.8**	**J**	8.0	1.5	ug/L		10/06/23 23:51	10/07/23 02:43	1
Nickel	0.91	U	4.0	0.91	ug/L		10/06/23 23:51	10/07/23 02:43	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Resistivity (EPA 120.1)	**0.00490**		0.000100	0.000100	Mohm-cm			10/11/23 16:43	1
Specific Conductance (EPA 120.1)	**204**		1.00	1.00	umhos/cm			10/11/23 16:43	1
Acidity (SM 2310B-2011)	20.0	U	20.0	20.0	mg/L			10/18/23 17:04	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-2011)	**116**		5.0	5.0	mg/L			10/11/23 12:42	1
Carbonate Alkalinity as CaCO3 (SM 2320B-2011)	5.0	U	5.0	5.0	mg/L			10/11/23 12:42	1

Client Sample ID: Basin 2

Date Collected: 10/04/23 08:45
Date Received: 10/04/23 19:00

Lab Sample ID: 460-289607-2

Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity as CaCO3 to pH 4.5 (SM 2320B-2011)	116		5.0	5.0	mg/L			10/11/23 12:42	1
Total Dissolved Solids (SM 2540C-2015)	133		2.5	2.5	mg/L			10/11/23 11:49	1
Total Suspended Solids (SM 2540D-2015)	4.4		2.5	2.5	mg/L			10/11/23 08:36	1
Ammonia (EPA 350.1)	0.050	U	0.10	0.050	mg/L			10/12/23 13:09	1
Total Kjeldahl Nitrogen (EPA 351.2)	0.56	J	1.0	0.50	mg/L		10/12/23 14:30	10/13/23 12:51	1
Chemical Oxygen Demand (EPA 410.4)	13.8		10.0	3.3	mg/L			10/16/23 16:08	1
Oxygen, Dissolved (SM 4500 O C-2016)	10.2	H H3	1.0	1.0	mg/L			10/06/23 15:10	1
Orthophosphate as P (SM 4500 P E-2011)	0.0071	J	0.030	0.0050	mg/L			10/06/23 08:05	1
Carbonaceous Biochemical Oxygen Demand 5 (SM 5210 B-2016)	1.0		1.0	1.0	mg/L			10/05/23 15:50	1
pH (SW846 9040C)	8.0	HF	0.1	0.1	SU			10/10/23 12:54	1
Temperature (SW846 9040C)	21.6	HF	0.1	0.1	Degrees C			10/10/23 12:54	1
Total Organic Carbon (SW846 9060A)	2.6		1.0	0.53	mg/L			10/05/23 23:51	1
Phosphorus as PO4 (SM4500 P E-2011)	0.50		0.090	0.071	mg/L		10/27/23 12:17	10/27/23 14:58	1
Phosphorus as P (SM4500 P E-2011)	0.16		0.030	0.023	mg/L		10/27/23 12:17	10/27/23 14:58	1
Nitrogen, Total (EPA Total Nitrogen)	0.56		0.50	0.50	mg/L			10/16/23 08:48	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (EPA 350.1)	0.050	U	0.10	0.050	mg/L			10/12/23 13:18	1
Orthophosphate as P (SM 4500 P E-2011)	0.0057	J	0.030	0.0050	mg/L			10/06/23 08:05	1
Phosphorus as PO4 (SM4500 P E-2011)	0.084	J	0.090	0.071	mg/L		10/27/23 12:17	10/27/23 14:58	1
Phosphorus as P (SM4500 P E-2011)	0.028	J	0.030	0.023	mg/L		10/27/23 12:17	10/27/23 14:58	1

Client Sample ID: Basin 1

Date Collected: 10/04/23 09:00
Date Received: 10/04/23 19:00

Lab Sample ID: 460-289607-3

Matrix: Water

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide	0.062	J	0.32	0.054	mg/L			10/05/23 23:41	1
Nitrate as N	0.070	U	0.16	0.070	mg/L			10/05/23 23:41	1
Chloride	4.54		0.32	0.039	mg/L			10/05/23 23:41	1
Nitrate Nitrite as N	0.070	U	0.16	0.070	mg/L			10/05/23 23:41	1
Nitrite as N	0.023	U	0.16	0.023	mg/L			10/05/23 23:41	1
Sulfate	5.74		0.48	0.095	mg/L			10/05/23 23:41	1

Method: SM-Online 2340B-2011 - Total Hardness (as CaCO3) by calculation - SM Online, 2011

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	105		33.1	33.1	mg/L			10/23/23 09:50	1

Client Sample ID: Basin 1
Date Collected: 10/04/23 09:00
Date Received: 10/04/23 19:00

Lab Sample ID: 460-289607-3
Matrix: Water

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000043	U	0.00020	0.000043	mg/L		10/10/23 11:15	10/11/23 10:33	1

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**6.1**		4.0	0.91	ug/L		10/06/23 22:20	10/09/23 16:21	1
Boron	**79.5**	**J**	80.0	30.4	ug/L		10/06/23 22:20	10/09/23 16:21	1
Calcium	**24700**	**B**	500	53.6	ug/L		10/06/23 22:20	10/09/23 16:21	1
Copper	2.5	U	4.0	2.5	ug/L		10/06/23 22:20	10/09/23 16:21	1
Lead	0.84	U	1.2	0.84	ug/L		10/06/23 22:20	10/09/23 16:21	1
Magnesium	**10500**		200	46.9	ug/L		10/06/23 22:20	10/09/23 16:21	1
Manganese	**35.7**		8.0	1.5	ug/L		10/06/23 22:20	10/09/23 16:21	1
Nickel	0.91	U	4.0	0.91	ug/L		10/06/23 22:20	10/09/23 16:21	1
Potassium	**1450**		200	112	ug/L		10/06/23 22:20	10/09/23 16:21	1
Selenium	0.59	U	2.5	0.59	ug/L		10/06/23 22:20	10/09/23 16:21	1
Sodium	**4750**		500	219	ug/L		10/06/23 22:20	10/09/23 16:21	1
Strontium	**70.1**		4.0	0.50	ug/L		10/06/23 22:20	10/09/23 16:21	1
Zinc	**26.4**		16.0	6.5	ug/L		10/06/23 22:20	10/09/23 16:21	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	35.0	U	100	35.0	ug/L		10/09/23 04:53	10/09/23 22:59	1
Iron	**227**		50.0	20.0	ug/L		10/10/23 20:00	10/11/23 15:53	1

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	19.5	U	40.0	19.5	ug/L		10/06/23 23:51	10/07/23 02:46	1
Cadmium	0.15	U	0.50	0.15	ug/L		10/12/23 02:36	10/17/23 17:31	1
Arsenic	0.89	U	2.0	0.89	ug/L		10/06/23 23:51	10/07/23 02:46	1
Iron	**47.5**	**J**	50.0	20.0	ug/L		10/12/23 02:36	10/17/23 17:31	1
Calcium	**26300**		500	53.6	ug/L		10/06/23 23:51	10/07/23 02:46	1
Zinc	**18.8**		10.0	4.0	ug/L		10/12/23 02:36	10/17/23 17:31	1
Copper	2.5	U	4.0	2.5	ug/L		10/06/23 23:51	10/07/23 02:46	1
Iron	58.2	U	120	58.2	ug/L		10/06/23 23:51	10/07/23 02:46	1
Lead	0.84	U	1.2	0.84	ug/L		10/06/23 23:51	10/07/23 02:46	1
Magnesium	**11400**		200	46.9	ug/L		10/06/23 23:51	10/07/23 02:46	1
Manganese	**21.5**		8.0	1.5	ug/L		10/06/23 23:51	10/07/23 02:46	1
Nickel	0.91	U	4.0	0.91	ug/L		10/06/23 23:51	10/07/23 02:46	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Resistivity (EPA 120.1)	**0.00416**		0.000100	0.000100	Mohm-cm			10/11/23 16:43	1
Specific Conductance (EPA 120.1)	**240**		1.00	1.00	umhos/cm			10/11/23 16:43	1
Acidity (SM 2310B-2011)	20.0	U	20.0	20.0	mg/L			10/18/23 17:04	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-2011)	**133**		5.0	5.0	mg/L			10/11/23 12:49	1
Carbonate Alkalinity as CaCO3 (SM 2320B-2011)	5.0	U	5.0	5.0	mg/L			10/11/23 12:49	1
Alkalinity as CaCO3 to pH 4.5 (SM 2320B-2011)	**133**		5.0	5.0	mg/L			10/11/23 12:49	1
Total Dissolved Solids (SM 2540C-2015)	**187**		2.5	2.5	mg/L			10/11/23 11:49	1

Client Sample ID: Basin 1
Lab Sample ID: 460-289607-3

Date Collected: 10/04/23 09:00
Matrix: Water
Date Received: 10/04/23 19:00

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (SM 2540D-2015)	2.5	U	2.5	2.5	mg/L			10/11/23 08:36	1
Ammonia (EPA 350.1)	0.050	U	0.10	0.050	mg/L			10/12/23 13:11	1
Total Kjeldahl Nitrogen (EPA 351.2)	0.50	U	1.0	0.50	mg/L		10/12/23 14:30	10/13/23 12:53	1
Chemical Oxygen Demand (EPA 410.4)	**11.2**		10.0	3.3	mg/L			10/16/23 16:08	1
Oxygen, Dissolved (SM 4500 O C-2016)	**8.1**	**H H3**	1.0	1.0	mg/L			10/06/23 15:15	1
Orthophosphate as P (SM 4500 P E-2011)	**0.0084**	**J**	0.030	0.0050	mg/L			10/06/23 08:05	1
Carbonaceous Biochemical Oxygen Demand 5 (SM 5210 B-2016)	1.0	U	1.0	1.0	mg/L			10/05/23 15:55	1
pH (SW846 9040C)	**7.9**	**HF**	0.1	0.1	SU			10/10/23 12:56	1
Temperature (SW846 9040C)	**21.9**	**HF**	0.1	0.1	Degrees C			10/10/23 12:56	1
Total Organic Carbon (SW846 9060A)	**2.0**		1.0	0.53	mg/L			10/06/23 00:16	1
Phosphorus as PO4 (SM4500 P E-2011)	0.071	U	0.090	0.071	mg/L		10/27/23 12:17	10/27/23 14:58	1
Phosphorus as P (SM4500 P E-2011)	0.023	U	0.030	0.023	mg/L		10/27/23 12:17	10/27/23 14:58	1
Nitrogen, Total (EPA Total Nitrogen)	0.50	U	0.50	0.50	mg/L			10/16/23 08:48	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (EPA 350.1)	0.050	U	0.10	0.050	mg/L			10/12/23 13:20	1
Orthophosphate as P (SM 4500 P E-2011)	**0.0057**	**J**	0.030	0.0050	mg/L			10/06/23 08:05	1
Phosphorus as PO4 (SM4500 P E-2011)	0.071	U	0.090	0.071	mg/L		10/27/23 12:17	10/27/23 14:58	1
Phosphorus as P (SM4500 P E-2011)	0.023	U	0.030	0.023	mg/L		10/27/23 12:17	10/27/23 14:58	1

Client Sample ID: UP gradient
Lab Sample ID: 460-289607-4

Date Collected: 10/04/23 09:15
Matrix: Water
Date Received: 10/04/23 19:00

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide	**0.073**	**J**	0.32	0.054	mg/L			10/05/23 23:56	1
Nitrate as N	0.070	U	0.16	0.070	mg/L			10/05/23 23:56	1
Chloride	**2.21**		0.32	0.039	mg/L			10/05/23 23:56	1
Nitrate Nitrite as N	0.070	U	0.16	0.070	mg/L			10/05/23 23:56	1
Nitrite as N	0.023	U	0.16	0.023	mg/L			10/05/23 23:56	1
Sulfate	**15.5**		0.48	0.095	mg/L			10/05/23 23:56	1

Method: SM-Online 2340B-2011 - Total Hardness (as CaCO3) by calculation - SM Online, 2011

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**168**		33.1	33.1	mg/L			10/23/23 09:50	1

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000043	U	0.00020	0.000043	mg/L		10/10/23 11:15	10/11/23 10:34	1

Client Sample ID: UP gradient

Date Collected: 10/04/23 09:15
Date Received: 10/04/23 19:00

Lab Sample ID: 460-289607-4

Matrix: Water

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**20.5**		4.0	0.91	ug/L		10/06/23 22:20	10/09/23 16:30	1
Boron	**66.5**	**J**	80.0	30.4	ug/L		10/06/23 22:20	10/09/23 19:18	1
Calcium	**43800**	**B**	500	53.6	ug/L		10/06/23 22:20	10/09/23 16:30	1
Copper	2.5	U	4.0	2.5	ug/L		10/06/23 22:20	10/09/23 16:30	1
Lead	0.84	U	1.2	0.84	ug/L		10/06/23 22:20	10/09/23 16:30	1
Magnesium	**14300**		200	46.9	ug/L		10/06/23 22:20	10/09/23 16:30	1
Manganese	**648**		8.0	1.5	ug/L		10/06/23 22:20	10/09/23 16:30	1
Nickel	**2.5**	**J**	4.0	0.91	ug/L		10/06/23 22:20	10/09/23 16:30	1
Potassium	**1570**		200	112	ug/L		10/06/23 22:20	10/09/23 16:30	1
Selenium	0.59	U	2.5	0.59	ug/L		10/06/23 22:20	10/09/23 16:30	1
Sodium	**4590**		500	219	ug/L		10/06/23 22:20	10/09/23 16:30	1
Strontium	**168**		4.0	0.50	ug/L		10/06/23 22:20	10/09/23 16:30	1
Zinc	6.5	U	16.0	6.5	ug/L		10/06/23 22:20	10/09/23 16:30	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	35.0	U	100	35.0	ug/L		10/09/23 04:53	10/09/23 22:35	1
Iron	**333**		50.0	20.0	ug/L		10/10/23 20:23	10/18/23 00:24	1

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	19.5	U	40.0	19.5	ug/L		10/06/23 23:51	10/07/23 02:48	1
Cadmium	0.15	U	0.50	0.15	ug/L		10/12/23 02:36	10/17/23 17:29	1
Arsenic	0.89	U	2.0	0.89	ug/L		10/06/23 23:51	10/07/23 02:48	1
Iron	**52.5**		50.0	20.0	ug/L		10/12/23 02:36	10/17/23 17:29	1
Calcium	**43400**		500	53.6	ug/L		10/06/23 23:51	10/07/23 02:48	1
Zinc	**4.0**	**J**	10.0	4.0	ug/L		10/12/23 02:36	10/17/23 17:29	1
Copper	2.5	U	4.0	2.5	ug/L		10/06/23 23:51	10/07/23 02:48	1
Iron	58.2	U	120	58.2	ug/L		10/06/23 23:51	10/07/23 02:48	1
Lead	0.84	U	1.2	0.84	ug/L		10/06/23 23:51	10/07/23 02:48	1
Magnesium	**14500**		200	46.9	ug/L		10/06/23 23:51	10/07/23 02:48	1
Manganese	**587**		8.0	1.5	ug/L		10/06/23 23:51	10/07/23 02:48	1
Nickel	**1.3**	**J**	4.0	0.91	ug/L		10/06/23 23:51	10/07/23 02:48	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Resistivity (EPA 120.1)	**0.00295**		0.000100	0.000100	Mohm-cm			10/11/23 16:43	1
Specific Conductance (EPA 120.1)	**339**		1.00	1.00	umhos/cm			10/11/23 16:43	1
Acidity (SM 2310B-2011)	20.0	U	20.0	20.0	mg/L			10/18/23 17:04	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-2011)	**172**		5.0	5.0	mg/L			10/12/23 10:05	1
Carbonate Alkalinity as CaCO3 (SM 2320B-2011)	5.0	U	5.0	5.0	mg/L			10/12/23 10:05	1
Alkalinity as CaCO3 to pH 4.5 (SM 2320B-2011)	**172**		5.0	5.0	mg/L			10/12/23 10:05	1
Total Dissolved Solids (SM 2540C-2015)	**213**		2.5	2.5	mg/L			10/11/23 11:49	1
Total Suspended Solids (SM 2540D-2015)	**3.3**		2.5	2.5	mg/L			10/11/23 08:36	1
Ammonia (EPA 350.1)	0.050	U	0.10	0.050	mg/L			10/12/23 13:12	1
Total Kjeldahl Nitrogen (EPA 351.2)	0.50	U	1.0	0.50	mg/L		10/12/23 14:30	10/13/23 12:55	1

Client Sample ID: UP gradient

Lab Sample ID: 460-289607-4

Date Collected: 10/04/23 09:15
Matrix: Water
Date Received: 10/04/23 19:00

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand (EPA 410.4)	17.8		10.0	3.3	mg/L			10/16/23 16:08	1
Oxygen, Dissolved (SM 4500 O C-2016)	5.9	H H3	1.0	1.0	mg/L			10/06/23 15:20	1
Orthophosphate as P (SM 4500 P E-2011)	0.0098	J	0.030	0.0050	mg/L			10/06/23 08:05	1
Carbonaceous Biochemical Oxygen Demand 5 (SM 5210 B-2016)	1.0	U	1.0	1.0	mg/L			10/05/23 16:00	1
pH (SW846 9040C)	7.6	HF	0.1	0.1	SU			10/10/23 12:58	1
Temperature (SW846 9040C)	22.0	HF	0.1	0.1	Degrees C			10/10/23 12:58	1
Total Organic Carbon (SW846 9060A)	4.3		1.0	0.53	mg/L			10/06/23 00:41	1
Phosphorus as PO4 (SM4500 P E-2011)	0.12		0.090	0.071	mg/L		10/27/23 12:17	10/27/23 14:58	1
Phosphorus as P (SM4500 P E-2011)	0.039		0.030	0.023	mg/L		10/27/23 12:17	10/27/23 14:58	1
Nitrogen, Total (EPA Total Nitrogen)	0.50	U	0.50	0.50	mg/L			10/16/23 08:48	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (EPA 350.1)	0.050	U	0.10	0.050	mg/L			10/12/23 13:32	1
Orthophosphate as P (SM 4500 P E-2011)	0.0071	J	0.030	0.0050	mg/L			10/06/23 08:20	1
Phosphorus as PO4 (SM4500 P E-2011)	0.14		0.090	0.071	mg/L		10/27/23 12:17	10/27/23 14:58	1
Phosphorus as P (SM4500 P E-2011)	0.044		0.030	0.023	mg/L		10/27/23 12:17	10/27/23 14:58	1

Client Sample ID: Clariflihs Pond

Lab Sample ID: 460-289607-5

Date Collected: 10/04/23 09:30
Matrix: Water
Date Received: 10/04/23 19:00

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide	0.054	U	0.32	0.054	mg/L			10/06/23 00:11	1
Nitrate as N	0.15	J	0.16	0.070	mg/L			10/06/23 00:11	1
Chloride	1.23		0.32	0.039	mg/L			10/06/23 00:11	1
Nitrate Nitrite as N	0.22		0.16	0.070	mg/L			10/06/23 00:11	1
Nitrite as N	0.065	J	0.16	0.023	mg/L			10/06/23 00:11	1
Sulfate	7.38		0.48	0.095	mg/L			10/06/23 00:11	1

Method: SM-Online 2340B-2011 - Total Hardness (as CaCO3) by calculation - SM Online, 2011

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	76.9		33.1	33.1	mg/L			10/23/23 09:50	1

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000043	U	0.00020	0.000043	mg/L		10/10/23 11:15	10/11/23 10:35	1

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	4.7		4.0	0.91	ug/L		10/14/23 20:10	10/16/23 12:02	1
Boron	77.1	J	80.0	30.4	ug/L		10/14/23 20:10	10/16/23 12:02	1

Client Sample ID: Clariflihs Pond

Lab Sample ID: 460-289607-5

Date Collected: 10/04/23 09:30

Matrix: Water

Date Received: 10/04/23 19:00

Method: SW846 6020B - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	**20200**		500	53.6	ug/L		10/14/23 20:10	10/16/23 12:02	1
Copper	**2.7**	**J**	4.0	2.5	ug/L		10/14/23 20:10	10/16/23 12:02	1
Lead	0.84	U	1.2	0.84	ug/L		10/14/23 20:10	10/16/23 12:02	1
Magnesium	**6420**		200	46.9	ug/L		10/14/23 20:10	10/16/23 12:02	1
Manganese	**32.2**		8.0	1.5	ug/L		10/14/23 20:10	10/16/23 12:02	1
Nickel	**1.3**	**J**	4.0	0.91	ug/L		10/14/23 20:10	10/16/23 12:02	1
Potassium	**1480**		200	112	ug/L		10/14/23 20:10	10/16/23 12:02	1
Selenium	0.59	U	2.5	0.59	ug/L		10/14/23 20:10	10/16/23 12:02	1
Sodium	**3310**		500	219	ug/L		10/14/23 20:10	10/16/23 12:02	1
Strontium	**42.5**		4.0	0.50	ug/L		10/14/23 20:10	10/16/23 12:02	1
Zinc	6.5	U	16.0	6.5	ug/L		10/14/23 20:10	10/16/23 12:02	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**486**		100	35.0	ug/L		10/09/23 04:53	10/09/23 22:47	1
Iron	**691**		50.0	20.0	ug/L		10/10/23 20:00	10/11/23 15:54	1

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	19.5	U	40.0	19.5	ug/L		10/06/23 23:51	10/07/23 02:53	1
Cadmium	0.15	U	0.50	0.15	ug/L		10/12/23 02:36	10/17/23 17:27	1
Arsenic	0.89	U	2.0	0.89	ug/L		10/06/23 23:51	10/07/23 02:53	1
Iron	**20.4**	**J**	50.0	20.0	ug/L		10/12/23 02:36	10/17/23 17:27	1
Calcium	**21300**		500	53.6	ug/L		10/06/23 23:51	10/07/23 02:53	1
Zinc	4.0	U	10.0	4.0	ug/L		10/12/23 02:36	10/17/23 17:27	1
Copper	2.5	U	4.0	2.5	ug/L		10/06/23 23:51	10/07/23 02:53	1
Iron	58.2	U	120	58.2	ug/L		10/06/23 23:51	10/07/23 02:53	1
Lead	0.84	U	1.2	0.84	ug/L		10/06/23 23:51	10/07/23 02:53	1
Magnesium	**6680**		200	46.9	ug/L		10/06/23 23:51	10/07/23 02:53	1
Manganese	**37.9**		8.0	1.5	ug/L		10/06/23 23:51	10/07/23 02:53	1
Nickel	0.91	U	4.0	0.91	ug/L		10/06/23 23:51	10/07/23 02:53	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Resistivity (EPA 120.1)	**0.00590**		0.000100	0.000100	Mohm-cm			10/11/23 16:43	1
Specific Conductance (EPA 120.1)	**169**		1.00	1.00	umhos/cm			10/11/23 16:43	1
Acidity (SM 2310B-2011)	20.0	U	20.0	20.0	mg/L			10/18/23 17:04	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-2011)	**97.5**		5.0	5.0	mg/L			10/12/23 10:13	1
Carbonate Alkalinity as CaCO3 (SM 2320B-2011)	5.0	U	5.0	5.0	mg/L			10/12/23 10:13	1
Alkalinity as CaCO3 to pH 4.5 (SM 2320B-2011)	**97.5**		5.0	5.0	mg/L			10/12/23 10:13	1
Total Dissolved Solids (SM 2540C-2015)	**70.0**		2.5	2.5	mg/L			10/11/23 11:49	1
Total Suspended Solids (SM 2540D-2015)	**17.4**		2.5	2.5	mg/L			10/11/23 09:26	1
Ammonia (EPA 350.1)	0.050	U	0.10	0.050	mg/L			10/12/23 13:14	1
Total Kjeldahl Nitrogen (EPA 351.2)	0.50	U	1.0	0.50	mg/L		10/12/23 14:30	10/13/23 15:40	1
Chemical Oxygen Demand (EPA 410.4)	**12.8**		10.0	3.3	mg/L			10/16/23 16:08	1

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill-Anti-Degradation

Job ID: 460-289607-1

Client Sample ID: Clariflihs Pond
Date Collected: 10/04/23 09:30
Date Received: 10/04/23 19:00

Lab Sample ID: 460-289607-5
Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oxygen, Dissolved (SM 4500 O C-2016)	**6.3**	**H H3**	1.0	1.0	mg/L			10/06/23 15:25	1
Orthophosphate as P (SM 4500 P E-2011)	0.0050	U	0.030	0.0050	mg/L			10/06/23 08:20	1
Carbonaceous Biochemical Oxygen Demand 5 (SM 5210 B-2016)	1.0	U	1.0	1.0	mg/L			10/05/23 16:05	1
pH (SW846 9040C)	**7.7**	**HF**	0.1	0.1	SU			10/10/23 13:03	1
Temperature (SW846 9040C)	**22.5**	**HF**	0.1	0.1	Degrees C			10/10/23 13:03	1
Total Organic Carbon (SW846 9060A)	**1.4**		1.0	0.53	mg/L			10/06/23 01:06	1
Phosphorus as PO4 (SM4500 P E-2011)	**0.14**		0.090	0.071	mg/L		10/27/23 12:17	10/27/23 14:58	1
Phosphorus as P (SM4500 P E-2011)	**0.044**		0.030	0.023	mg/L		10/27/23 12:17	10/27/23 14:58	1
Nitrogen, Total (EPA Total Nitrogen)	0.50	U	0.50	0.50	mg/L			10/16/23 08:48	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (EPA 350.1)	0.050	U	0.10	0.050	mg/L			10/12/23 13:34	1
Orthophosphate as P (SM 4500 P E-2011)	0.0050	U	0.030	0.0050	mg/L			10/06/23 08:20	1
Phosphorus as PO4 (SM4500 P E-2011)	0.071	U	0.090	0.071	mg/L		10/27/23 12:17	10/27/23 14:58	1
Phosphorus as P (SM4500 P E-2011)	0.023	U	0.030	0.023	mg/L		10/27/23 12:17	10/27/23 14:58	1

Client Sample ID: NPDES 001
Date Collected: 10/04/23 08:15
Date Received: 10/04/23 19:00

Lab Sample ID: 460-289607-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		1	936374	OXG	EET EDI	10/05/23 19:11
Total/NA	Analysis	300.0		1	936375	OXG	EET EDI	10/05/23 19:11
Total/NA	Analysis	2340B-2011		1	939965	LBD	EET EDI	10/23/23 09:50
Total/NA	Prep	245.1			686772	NVK	EET BUF	10/10/23 11:15
Total/NA	Analysis	245.1		1	686953	NVK	EET BUF	10/11/23 10:30
Dissolved	Filtration	Filtration			429372	UDL9	ELLE	10/10/23 07:45
Dissolved	Prep	3005A			430327	UAMX	ELLE	10/12/23 02:36
Dissolved	Analysis	6020B		1	432444	UCIG	ELLE	10/17/23 17:25
Dissolved	Filtration	FILTRATION			936767	VAD	EET EDI	10/06/23 23:48
Dissolved	Prep	3010A			936769	VAD	EET EDI	10/06/23 23:51
Dissolved	Analysis	6020B		1	936695	CDC	EET EDI	10/07/23 02:41
Total Recoverable	Prep	3005A			429728	UAMX	ELLE	10/10/23 20:00
Total Recoverable	Analysis	6020B		1	430287	UCIG	ELLE	10/11/23 15:43
Total Recoverable	Prep	3005A			801584	RR	EET SAV	10/09/23 04:53
Total Recoverable	Analysis	6020B		1	801871	BWR	EET SAV	10/09/23 22:55
Total/NA	Prep	3010A			936770	GAE	EET EDI	10/06/23 22:20
Total/NA	Analysis	6020B		1	937139	YZH	EET EDI	10/09/23 16:16
Total/NA	Analysis	120.1		1	937604	MMC	EET EDI	10/11/23 16:43
Total/NA	Analysis	2310B-2011		1	939038	RAK	EET EDI	10/18/23 17:04
Total/NA	Analysis	2320B-2011		1	937593	AXP	EET EDI	10/11/23 12:35
Total/NA	Analysis	2540C-2015		1	937557	PLS	EET EDI	10/11/23 11:49
Total/NA	Analysis	2540D-2015		1	937506	PLS	EET EDI	10/11/23 08:36
Dissolved	Filtration	FILTRATION			937822	AXP	EET EDI	10/12/23 12:47
Dissolved	Analysis	350.1		1	937832	AXP	EET EDI	10/12/23 13:17
Total/NA	Analysis	350.1		1	937832	AXP	EET EDI	10/12/23 13:08
Total/NA	Prep	351.2			430589	NLE3	ELLE	10/12/23 13:45 - 10/12/23 16:45 [1]
Total/NA	Analysis	351.2		1	431100	JCG7	ELLE	10/13/23 12:05
Total/NA	Analysis	410.4		1	938559	HTV	EET EDI	10/16/23 16:08
Total/NA	Analysis	4500 O C-2016		1	936701	RXA	EET EDI	10/06/23 15:05
Dissolved	Filtration	FILTRATION			936583	AXP	EET EDI	10/06/23 07:36
Dissolved	Analysis	4500 P E-2011		1	936579	AXP	EET EDI	10/06/23 08:05
Total/NA	Analysis	4500 P E-2011		1	936579	AXP	EET EDI	10/06/23 08:05
Total/NA	Analysis	5210 B-2016		1	936456	RXA	EET EDI	10/05/23 15:45
Total/NA	Analysis	9040C		1	937283	MNP	EET EDI	10/10/23 12:52
Total/NA	Analysis	9060A		1	936606	MMC	EET EDI	10/05/23 23:26
Dissolved	Filtration	FILTRATION			941007	RAK	EET EDI	10/27/23 12:09
Dissolved	Prep	SM 4500 P B			941011	RAK	EET EDI	10/27/23 12:17
Dissolved	Analysis	SM4500 P E-2011		1	941047	RAK	EET EDI	10/27/23 14:58
Total/NA	Prep	SM 4500 P B			941011	RAK	EET EDI	10/27/23 12:17
Total/NA	Analysis	SM4500 P E-2011		1	941047	RAK	EET EDI	10/27/23 14:58
Total/NA	Analysis	Total Nitrogen		1	938473	TJW	EET EDI	10/16/23 08:48

Client Sample ID: Basin 2
Date Collected: 10/04/23 08:45
Date Received: 10/04/23 19:00

Lab Sample ID: 460-289607-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		1	936412	OXG	EET EDI	10/05/23 23:26
Total/NA	Analysis	300.0		1	936414	OXG	EET EDI	10/05/23 23:26
Total/NA	Analysis	2340B-2011		1	939965	LBD	EET EDI	10/23/23 09:50
Total/NA	Prep	245.1			686772	NVK	EET BUF	10/10/23 11:15
Total/NA	Analysis	245.1		1	686953	NVK	EET BUF	10/11/23 10:31
Dissolved	Filtration	Filtration			429372	UDL9	ELLE	10/10/23 07:45
Dissolved	Prep	3005A			430327	UAMX	ELLE	10/12/23 02:36
Dissolved	Analysis	6020B		1	432444	UCIG	ELLE	10/17/23 17:23
Dissolved	Filtration	FILTRATION			936767	VAD	EET EDI	10/06/23 23:48
Dissolved	Prep	3010A			936769	VAD	EET EDI	10/06/23 23:51
Dissolved	Analysis	6020B		1	936695	CDC	EET EDI	10/07/23 02:43
Total Recoverable	Prep	3005A			429728	UAMX	ELLE	10/10/23 20:00
Total Recoverable	Analysis	6020B		1	430287	UCIG	ELLE	10/11/23 15:45
Total Recoverable	Prep	3005A			801584	RR	EET SAV	10/09/23 04:53
Total Recoverable	Analysis	6020B		1	801871	BWR	EET SAV	10/09/23 22:51
Total/NA	Prep	3010A			936770	GAE	EET EDI	10/06/23 22:20
Total/NA	Analysis	6020B		1	937139	YZH	EET EDI	10/09/23 16:18
Total/NA	Analysis	120.1		1	937604	MMC	EET EDI	10/11/23 16:43
Total/NA	Analysis	2310B-2011		1	939038	RAK	EET EDI	10/18/23 17:04
Total/NA	Analysis	2320B-2011		1	937593	AXP	EET EDI	10/11/23 12:42
Total/NA	Analysis	2540C-2015		1	937557	PLS	EET EDI	10/11/23 11:49
Total/NA	Analysis	2540D-2015		1	937506	PLS	EET EDI	10/11/23 08:36
Dissolved	Filtration	FILTRATION			937822	AXP	EET EDI	10/12/23 12:47
Dissolved	Analysis	350.1		1	937832	AXP	EET EDI	10/12/23 13:18
Total/NA	Analysis	350.1		1	937832	AXP	EET EDI	10/12/23 13:09
Total/NA	Prep	351.2			430612	NLE3	ELLE	10/12/23 14:30 - 10/12/23 17:30 [1]
Total/NA	Analysis	351.2		1	431100	JCG7	ELLE	10/13/23 12:51
Total/NA	Analysis	410.4		1	938559	HTV	EET EDI	10/16/23 16:08
Total/NA	Analysis	4500 O C-2016		1	936701	RXA	EET EDI	10/06/23 15:10
Dissolved	Filtration	FILTRATION			936583	AXP	EET EDI	10/06/23 07:36
Dissolved	Analysis	4500 P E-2011		1	936579	AXP	EET EDI	10/06/23 08:05
Total/NA	Analysis	4500 P E-2011		1	936579	AXP	EET EDI	10/06/23 08:05
Total/NA	Analysis	5210 B-2016		1	936456	RXA	EET EDI	10/05/23 15:50
Total/NA	Analysis	9040C		1	937283	MNP	EET EDI	10/10/23 12:54
Total/NA	Analysis	9060A		1	936606	MMC	EET EDI	10/05/23 23:51
Dissolved	Filtration	FILTRATION			941007	RAK	EET EDI	10/27/23 12:09
Dissolved	Prep	SM 4500 P B			941011	RAK	EET EDI	10/27/23 12:17
Dissolved	Analysis	SM4500 P E-2011		1	941047	RAK	EET EDI	10/27/23 14:58
Total/NA	Prep	SM 4500 P B			941011	RAK	EET EDI	10/27/23 12:17
Total/NA	Analysis	SM4500 P E-2011		1	941047	RAK	EET EDI	10/27/23 14:58
Total/NA	Analysis	Total Nitrogen		1	938473	TJW	EET EDI	10/16/23 08:48

Client Sample ID: Basin 1
Date Collected: 10/04/23 09:00
Date Received: 10/04/23 19:00

Lab Sample ID: 460-289607-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		1	936412	OXG	EET EDI	10/05/23 23:41
Total/NA	Analysis	300.0		1	936414	OXG	EET EDI	10/05/23 23:41
Total/NA	Analysis	2340B-2011		1	939965	LBD	EET EDI	10/23/23 09:50
Total/NA	Prep	245.1			686772	NVK	EET BUF	10/10/23 11:15
Total/NA	Analysis	245.1		1	686953	NVK	EET BUF	10/11/23 10:33
Dissolved	Filtration	Filtration			429372	UDL9	ELLE	10/10/23 07:45
Dissolved	Prep	3005A			430327	UAMX	ELLE	10/12/23 02:36
Dissolved	Analysis	6020B		1	432444	UCIG	ELLE	10/17/23 17:31
Dissolved	Filtration	FILTRATION			936767	VAD	EET EDI	10/06/23 23:48
Dissolved	Prep	3010A			936769	VAD	EET EDI	10/06/23 23:51
Dissolved	Analysis	6020B		1	936695	CDC	EET EDI	10/07/23 02:46
Total Recoverable	Prep	3005A			429728	UAMX	ELLE	10/10/23 20:00
Total Recoverable	Analysis	6020B		1	430287	UCIG	ELLE	10/11/23 15:53
Total Recoverable	Prep	3005A			801584	RR	EET SAV	10/09/23 04:53
Total Recoverable	Analysis	6020B		1	801871	BWR	EET SAV	10/09/23 22:59
Total/NA	Prep	3010A			936770	GAE	EET EDI	10/06/23 22:20
Total/NA	Analysis	6020B		1	937139	YZH	EET EDI	10/09/23 16:21
Total/NA	Analysis	120.1		1	937604	MMC	EET EDI	10/11/23 16:43
Total/NA	Analysis	2310B-2011		1	939038	RAK	EET EDI	10/18/23 17:04
Total/NA	Analysis	2320B-2011		1	937593	AXP	EET EDI	10/11/23 12:49
Total/NA	Analysis	2540C-2015		1	937557	PLS	EET EDI	10/11/23 11:49
Total/NA	Analysis	2540D-2015		1	937506	PLS	EET EDI	10/11/23 08:36
Dissolved	Filtration	FILTRATION			937822	AXP	EET EDI	10/12/23 12:47
Dissolved	Analysis	350.1		1	937832	AXP	EET EDI	10/12/23 13:20
Total/NA	Analysis	350.1		1	937832	AXP	EET EDI	10/12/23 13:11
Total/NA	Prep	351.2			430612	NLE3	ELLE	10/12/23 14:30 - 10/12/23 17:30 [1]
Total/NA	Analysis	351.2		1	431100	JCG7	ELLE	10/13/23 12:53
Total/NA	Analysis	410.4		1	938559	HTV	EET EDI	10/16/23 16:08
Total/NA	Analysis	4500 O C-2016		1	936701	RXA	EET EDI	10/06/23 15:15
Dissolved	Filtration	FILTRATION			936583	AXP	EET EDI	10/06/23 07:36
Dissolved	Analysis	4500 P E-2011		1	936579	AXP	EET EDI	10/06/23 08:05
Total/NA	Analysis	4500 P E-2011		1	936579	AXP	EET EDI	10/06/23 08:05
Total/NA	Analysis	5210 B-2016		1	936456	RXA	EET EDI	10/05/23 15:55
Total/NA	Analysis	9040C		1	937283	MNP	EET EDI	10/10/23 12:56
Total/NA	Analysis	9060A		1	936606	MMC	EET EDI	10/06/23 00:16
Dissolved	Filtration	FILTRATION			941007	RAK	EET EDI	10/27/23 12:09
Dissolved	Prep	SM 4500 P B			941011	RAK	EET EDI	10/27/23 12:17
Dissolved	Analysis	SM4500 P E-2011		1	941047	RAK	EET EDI	10/27/23 14:58
Total/NA	Prep	SM 4500 P B			941011	RAK	EET EDI	10/27/23 12:17
Total/NA	Analysis	SM4500 P E-2011		1	941047	RAK	EET EDI	10/27/23 14:58
Total/NA	Analysis	Total Nitrogen		1	938473	TJW	EET EDI	10/16/23 08:48

Lab Chronicle

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill-Anti-Degradation

Job ID: 460-289607-1

Client Sample ID: UP gradient

Date Collected: 10/04/23 09:15
Date Received: 10/04/23 19:00

Lab Sample ID: 460-289607-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		1	936412	OXG	EET EDI	10/05/23 23:56
Total/NA	Analysis	300.0		1	936414	OXG	EET EDI	10/05/23 23:56
Total/NA	Analysis	2340B-2011		1	939965	LBD	EET EDI	10/23/23 09:50
Total/NA	Prep	245.1			686772	NVK	EET BUF	10/10/23 11:15
Total/NA	Analysis	245.1		1	686953	NVK	EET BUF	10/11/23 10:34
Dissolved	Filtration	Filtration			429372	UDL9	ELLE	10/10/23 07:45
Dissolved	Prep	3005A			430327	UAMX	ELLE	10/12/23 02:36
Dissolved	Analysis	6020B		1	432444	UCIG	ELLE	10/17/23 17:29
Dissolved	Filtration	FILTRATION			936767	VAD	EET EDI	10/06/23 23:48
Dissolved	Prep	3010A			936769	VAD	EET EDI	10/06/23 23:51
Dissolved	Analysis	6020B		1	936695	CDC	EET EDI	10/07/23 02:48
Total Recoverable	Prep	3005A			429737	UAMX	ELLE	10/10/23 20:23
Total Recoverable	Analysis	6020B		1	432499	LC3M	ELLE	10/18/23 00:24
Total Recoverable	Prep	3005A			801584	RR	EET SAV	10/09/23 04:53
Total Recoverable	Analysis	6020B		1	801871	BWR	EET SAV	10/09/23 22:35
Total/NA	Prep	3010A			936770	GAE	EET EDI	10/06/23 22:20
Total/NA	Analysis	6020B		1	937139	YZH	EET EDI	10/09/23 16:30
Total/NA	Prep	3010A			936770	GAE	EET EDI	10/06/23 22:20
Total/NA	Analysis	6020B		1	937139	YZH	EET EDI	10/09/23 19:18
Total/NA	Analysis	120.1		1	937604	MMC	EET EDI	10/11/23 16:43
Total/NA	Analysis	2310B-2011		1	939038	RAK	EET EDI	10/18/23 17:04
Total/NA	Analysis	2320B-2011		1	937834	AXP	EET EDI	10/12/23 10:05
Total/NA	Analysis	2540C-2015		1	937557	PLS	EET EDI	10/11/23 11:49
Total/NA	Analysis	2540D-2015		1	937506	PLS	EET EDI	10/11/23 08:36
Dissolved	Filtration	FILTRATION			937822	AXP	EET EDI	10/12/23 12:47
Dissolved	Analysis	350.1		1	937832	AXP	EET EDI	10/12/23 13:32
Total/NA	Analysis	350.1		1	937832	AXP	EET EDI	10/12/23 13:12
Total/NA	Prep	351.2			430612	NLE3	ELLE	10/12/23 14:30 - 10/12/23 17:30 [1]
Total/NA	Analysis	351.2		1	431100	JCG7	ELLE	10/13/23 12:55
Total/NA	Analysis	410.4		1	938559	HTV	EET EDI	10/16/23 16:08
Total/NA	Analysis	4500 O C-2016		1	936701	RXA	EET EDI	10/06/23 15:20
Dissolved	Filtration	FILTRATION			936583	AXP	EET EDI	10/06/23 07:36
Dissolved	Analysis	4500 P E-2011		1	936579	AXP	EET EDI	10/06/23 08:20
Total/NA	Analysis	4500 P E-2011		1	936579	AXP	EET EDI	10/06/23 08:05
Total/NA	Analysis	5210 B-2016		1	936456	RXA	EET EDI	10/05/23 16:00
Total/NA	Analysis	9040C		1	937283	MNP	EET EDI	10/10/23 12:58
Total/NA	Analysis	9060A		1	936606	MMC	EET EDI	10/06/23 00:41
Dissolved	Filtration	FILTRATION			941007	RAK	EET EDI	10/27/23 12:09
Dissolved	Prep	SM 4500 P B			941011	RAK	EET EDI	10/27/23 12:17
Dissolved	Analysis	SM4500 P E-2011		1	941047	RAK	EET EDI	10/27/23 14:58
Total/NA	Prep	SM 4500 P B			941011	RAK	EET EDI	10/27/23 12:17
Total/NA	Analysis	SM4500 P E-2011		1	941047	RAK	EET EDI	10/27/23 14:58
Total/NA	Analysis	Total Nitrogen		1	938473	TJW	EET EDI	10/16/23 08:48

Eurofins Edison

Lab Chronicle

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill-Anti-Degradation

Job ID: 460-289607-1

Client Sample ID: Clariflihs Pond

Date Collected: 10/04/23 09:30
Date Received: 10/04/23 19:00

Lab Sample ID: 460-289607-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		1	936412	OXG	EET EDI	10/06/23 00:11
Total/NA	Analysis	300.0		1	936414	OXG	EET EDI	10/06/23 00:11
Total/NA	Analysis	2340B-2011		1	939965	LBD	EET EDI	10/23/23 09:50
Total/NA	Prep	245.1			686772	NVK	EET BUF	10/10/23 11:15
Total/NA	Analysis	245.1		1	686953	NVK	EET BUF	10/11/23 10:35
Dissolved	Filtration	Filtration			429372	UDL9	ELLE	10/10/23 07:45
Dissolved	Prep	3005A			430327	UAMX	ELLE	10/12/23 02:36
Dissolved	Analysis	6020B		1	432444	UCIG	ELLE	10/17/23 17:27
Dissolved	Filtration	FILTRATION			936767	VAD	EET EDI	10/06/23 23:48
Dissolved	Prep	3010A			936769	VAD	EET EDI	10/06/23 23:51
Dissolved	Analysis	6020B		1	936695	CDC	EET EDI	10/07/23 02:53
Total Recoverable	Prep	3005A			429728	UAMX	ELLE	10/10/23 20:00
Total Recoverable	Analysis	6020B		1	430287	UCIG	ELLE	10/11/23 15:54
Total Recoverable	Prep	3005A			801584	RR	EET SAV	10/09/23 04:53
Total Recoverable	Analysis	6020B		1	801871	BWR	EET SAV	10/09/23 22:47
Total/NA	Prep	3010A			938316	GAE	EET EDI	10/14/23 20:10
Total/NA	Analysis	6020B		1	938547	CDC	EET EDI	10/16/23 12:02
Total/NA	Analysis	120.1		1	937604	MMC	EET EDI	10/11/23 16:43
Total/NA	Analysis	2310B-2011		1	939038	RAK	EET EDI	10/18/23 17:04
Total/NA	Analysis	2320B-2011		1	937834	AXP	EET EDI	10/12/23 10:13
Total/NA	Analysis	2540C-2015		1	937557	PLS	EET EDI	10/11/23 11:49
Total/NA	Analysis	2540D-2015		1	937524	PLS	EET EDI	10/11/23 09:26
Dissolved	Filtration	FILTRATION			937822	AXP	EET EDI	10/12/23 12:47
Dissolved	Analysis	350.1		1	937832	AXP	EET EDI	10/12/23 13:34
Total/NA	Analysis	350.1		1	937832	AXP	EET EDI	10/12/23 13:14
Total/NA	Prep	351.2			430612	NLE3	ELLE	10/12/23 14:30 - 10/12/23 17:30 [1]
Total/NA	Analysis	351.2		1	431155	JCG7	ELLE	10/13/23 15:40
Total/NA	Analysis	410.4		1	938559	HTV	EET EDI	10/16/23 16:08
Total/NA	Analysis	4500 O C-2016		1	936701	RXA	EET EDI	10/06/23 15:25
Dissolved	Filtration	FILTRATION			936583	AXP	EET EDI	10/06/23 07:36
Dissolved	Analysis	4500 P E-2011		1	936579	AXP	EET EDI	10/06/23 08:20
Total/NA	Analysis	4500 P E-2011		1	936579	AXP	EET EDI	10/06/23 08:20
Total/NA	Analysis	5210 B-2016		1	936456	RXA	EET EDI	10/05/23 16:05
Total/NA	Analysis	9040C		1	937283	MNP	EET EDI	10/10/23 13:03
Total/NA	Analysis	9060A		1	936606	MMC	EET EDI	10/06/23 01:06
Dissolved	Filtration	FILTRATION			941007	RAK	EET EDI	10/27/23 12:09
Dissolved	Prep	SM 4500 P B			941011	RAK	EET EDI	10/27/23 12:17
Dissolved	Analysis	SM4500 P E-2011		1	941047	RAK	EET EDI	10/27/23 14:58
Total/NA	Prep	SM 4500 P B			941011	RAK	EET EDI	10/27/23 12:17
Total/NA	Analysis	SM4500 P E-2011		1	941047	RAK	EET EDI	10/27/23 14:58
Total/NA	Analysis	Total Nitrogen		1	938473	TJW	EET EDI	10/16/23 08:48

[1] This procedure uses a method stipulated length of time for the process. Both start and end times are displayed.

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill-Anti-Degradation

Job ID: 460-289607-1

Laboratory References:

EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

EET EDI = Eurofins Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

EET SAV = Eurofins Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Microbac = Marietta, OH, 158 Starlite Drive, Marietta, OH 45750

Accreditation/Certification Summary

Client: Heidelberg Materials Northeast LLC
Job ID: 460-289607-1
Project/Site: Rock Hill-Anti-Degradation

Laboratory: Eurofins Edison

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Connecticut	State	PH-0818	01-30-24
DE Haz. Subst. Cleanup Act (HSCA)	State	N/A	01-01-24
Georgia	State	12028 (NJ)	06-30-24
Massachusetts	State	M-NJ312	06-30-24
New Jersey	NELAP	12028	06-30-24
New York	NELAP	11452	04-01-24
Pennsylvania	NELAP	68-00522	03-01-24
Rhode Island	State	LAO00376	12-30-23
USDA	US Federal Programs	P330-20-00244	11-03-23

Laboratory: Eurofins Buffalo

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Arkansas DEQ	State	88-0686	07-06-23 *
Connecticut	State	PH-0568	03-31-24
Florida	NELAP	E87672	06-30-23 *
Georgia	State	10026 (NY)	03-31-24
Georgia	State Program	N/A	03-31-09 *
Illinois	NELAP	200003	09-30-23 *
Iowa	State	374	03-01-25
Iowa	State Program	374	03-01-09 *
Kansas	NELAP	E-10187	02-01-24
Kentucky (DW)	State	90029	01-01-24
Kentucky (UST)	State	108092	04-01-24
Kentucky (WW)	State	KY90029	12-31-23
Louisiana	NELAP	02031	06-30-23 *
Louisiana (All)	NELAP	02031	06-30-23 *
Maine	State	NY00044	12-04-24
Maryland	State	294	06-30-24
Massachusetts	State	M-NY044	07-01-24
Michigan	State	9937	04-01-24
Michigan	State Program	9937	04-01-09 *
New Hampshire	NELAP	2973	09-11-19 *
New Hampshire	NELAP	2337	11-17-23
New Jersey	NELAP	NY455	06-30-24
New York	NELAP	10026	03-31-24
Pennsylvania	NELAP	68-00281	08-31-24
Rhode Island	State	LAO00328	12-30-23
Texas	NELAP	T104704412-18-10	07-31-23 *
USDA	US Federal Programs	P330-18-00039	03-25-24
Virginia	NELAP	460185	09-14-23 *
Washington	State	C784	02-10-24
Wisconsin	State	998310390	08-31-24

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
A2LA	Dept. of Defense ELAP	0001.01	11-30-24
A2LA	ISO/IEC 17025	0001.01	11-30-24

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Accreditation/Certification Summary

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill-Anti-Degradation

Job ID: 460-289607-1

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC (Continued)

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alabama	State	43200	01-31-24
Alaska	State	PA00009	10-19-23
Alaska (UST)	State	17-027	02-28-24
Arizona	State	AZ0780	03-12-24
Arkansas DEQ	State	88-00660	08-09-24
California	State	2792	11-30-23
Colorado	State	PA00009	06-30-24
Connecticut	State	PH-0746	06-30-25
DE Haz. Subst. Cleanup Act (HSCA)	State	019-006 (PA cert)	01-31-24
Delaware (DW)	State	N/A	01-31-24
Florida	NELAP	E87997	06-30-24
Georgia (DW)	State	C048	01-31-24
Hawaii	State	N/A	01-31-24
Illinois	NELAP	200027	01-31-24
Iowa	State	361	03-01-24
Kansas	NELAP	E-10151	10-31-23
Kentucky (DW)	State	KY90088	12-31-23
Kentucky (UST)	State	0001.01	11-30-24
Kentucky (WW)	State	KY90088	12-31-23
Louisiana (All)	NELAP	02055	06-30-24
Maine	State	2019012	03-12-25
Maryland	State	100	06-30-24
Massachusetts	State	M-PA009	06-30-24
Michigan	State	9930	01-31-24
Minnesota	NELAP	042-999-487	12-31-23
Mississippi	State	023	01-31-24
Missouri	State	450	01-31-25
Montana (DW)	State	0098	01-01-24
Nebraska	State	NE-OS-32-17	01-31-24
New Hampshire	NELAP	2730	01-10-24
New Jersey	NELAP	PA011	06-30-24
New York	NELAP	10670	04-01-24
North Carolina (DW)	State	42705	07-31-24
North Carolina (WW/SW)	State	521	12-31-23
North Dakota	State	R-205	01-31-24
Oklahoma	NELAP	9804	08-31-24
Oregon	NELAP	PA200001	09-11-24
PALA	Canada	1978	09-16-24
Pennsylvania	NELAP	36-00037	01-31-24
Rhode Island	State	LAO00338	12-31-23
South Carolina	State	89002	01-31-24
Tennessee	State	02838	01-31-24
Texas	NELAP	T104704194-23-46	08-31-24
USDA	US Federal Programs	525-22-298-19481	10-25-25
Vermont	State	VT - 36037	10-27-23
Virginia	NELAP	460182	06-14-25
Washington	State	C457	04-11-24
West Virginia (DW)	State	9906 C	12-31-23
West Virginia DEP	State	055	07-31-24
Wyoming	State	8TMS-L	01-31-24

Accreditation/Certification Summary

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill-Anti-Degradation

Job ID: 460-289607-1

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC (Continued)

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Wyoming (UST)	A2LA	0001.01	11-30-24

Laboratory: Eurofins Savannah

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
	AFCEE	SAVLAB	
Alabama	State	41450	06-30-24
ANAB	Dept. of Defense ELAP	L2463	10-26-23
Arkansas DEQ	State	19-015-0	02-01-24
California	State	2939	06-30-24
Florida	NELAP	E87052	06-30-24
Georgia	State	E87052	06-30-24
Georgia (DW)	State	803	06-30-24
Guam	State	19-007R	04-17-24
Hawaii	State	<cert No.>	06-30-24
Illinois	NELAP	200022	11-30-23
Indiana	State	C-GA-02	06-30-24
Iowa	State	353	07-01-25
Kentucky (UST)	State	NA	06-30-24
Louisiana	NELAP	30690	06-30-24
Louisiana (All)	NELAP	30690	06-30-24
Louisiana (DW)	State	LA009	12-31-23
Maine	State	GA00006	09-25-24
Maryland	State	250	12-31-23
Massachusetts	State	M-GA006	06-30-24
Michigan	State	9925	06-30-24
Mississippi	State	<cert No.>	06-30-24
Nebraska	State	NE-OS-7-04	06-30-24
New Jersey	NELAP	GA769	06-30-24
New Mexico	State	GA00006	06-30-24
North Carolina (DW)	State	13701	07-31-24
North Carolina (WW/SW)	State	269	12-31-23
Pennsylvania	NELAP	68-00474	06-30-24
Puerto Rico	State	GA00006	01-01-24
South Carolina	State	98001	06-24-24
Tennessee	State	TN02961	06-30-24
Texas	NELAP	T1047004185	11-30-23
Texas	TCEQ Water Supply	T104704185	06-30-24
USDA	US Federal Programs	P330-18-00313	09-03-24
Virginia	NELAP	460161	06-14-24
Wyoming	State	8TMS-L	06-30-24

Method Summary

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill-Anti-Degradation

Job ID: 460-289607-1

Method	Method Description	Protocol	Laboratory
300.0	Anions, Ion Chromatography	EPA	EET EDI
2340B-2011	Total Hardness (as CaCO3) by calculation - SM Online, 2011	SM-Online	EET EDI
245.1	Mercury (CVAA)	EPA	EET BUF
6020B	Metals (ICP/MS)	SW846	EET EDI
6020B	Metals (ICP/MS)	SW846	EET SAV
6020B	Metals (ICP/MS)	SW846	ELLE
120.1	Conductivity, Specific Conductance	EPA	EET EDI
2310B-2011	Acidity	SM	EET EDI
2320B-2011	Alkalinity, Total	SM	EET EDI
2540C-2015	Total Dissolved Solids (Dried at 180 °C)	SM	EET EDI
2540D-2015	Total Suspended Solids (Dried at 103-105°C)	SM	EET EDI
350.1	Nitrogen, Ammonia	EPA	EET EDI
351.2	Nitrogen, Total Kjeldahl	EPA	ELLE
410.4	COD	EPA	EET EDI
4500 O C-2016	Oxygen, Dissolved	SM	EET EDI
4500 P E-2011	Orthophosphate	SM	EET EDI
5210 B-2016	BOD, 5-Day	SM	EET EDI
9040C	pH	SW846	EET EDI
9060A	Organic Carbon, Total (TOC)	SW846	EET EDI
SM4500 P E-2011	Phosphorus	SM	EET EDI
Total Nitrogen	Nitrogen, Total	EPA	EET EDI
Subcontract	Osomotic Pressure	None	Microbac
245.1	Preparation, Mercury	EPA	EET BUF
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	EET SAV
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	ELLE
3010A	Preparation, Total Metals	SW846	EET EDI
351.2	Nitrogen, Total Kjeldahl	EPA	ELLE
FILTRATION	Sample Filtration	None	EET EDI
Filtration	Sample Filtration	None	ELLE
SM 4500 P B	Phosphorous, Total and Ortho	SM	EET EDI

Protocol References:

EPA = US Environmental Protection Agency
None = None
SM = "Standard Methods For The Examination Of Water And Wastewater"
SM-Online = Standard Methods Online
SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600
EET EDI = Eurofins Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900
EET SAV = Eurofins Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858
ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300
Microbac = Marietta, OH, 158 Starlite Drive, Marietta, OH 45750

Sample Summary

Client: Heidelberg Materials Northeast LLC
Job ID: 460-289607-1
Project/Site: Rock Hill-Anti-Degradation

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
460-289607-1	NPDES 001	Water	10/04/23 08:15	10/04/23 19:00
460-289607-2	Basin 2	Water	10/04/23 08:45	10/04/23 19:00
460-289607-3	Basin 1	Water	10/04/23 09:00	10/04/23 19:00
460-289607-4	UP gradient	Water	10/04/23 09:15	10/04/23 19:00
460-289607-5	Clariflihs Pond	Water	10/04/23 09:30	10/04/23 19:00

Microbac Laboratories Inc., - Marietta, OH

Client Project ID:

46011424

For:

Julie Gilmore

Eurofins TestAmerica Edison

777 New Durham RD

Edison, NJ 08817

Project State of Origin: Pennsylvania

Project Requested Certification:

Microbac Laboratories Inc., - Marietta, OH	68-01670	PA Department of Environmental Protection

All test results meet the requirements of the QAPP and other applicable contract terms and conditions. Any exceptions are attached to this cover page or addressed in the method narratives presented in the report. All results for soil samples are reported on a 'dry-weight' basis unless specified otherwise. Analytical results for water and wastes are reported on a 'as received' basis unless specified otherwise. A statement of uncertainty for each analysis is available upon request. The reported results are related only to the samples analyzed as received. This laboratory report may be released as a hardcopy and in computer-readable form submitted electronically or on diskette. This laboratory report shall not be reproduced, except in full, without the written approval of Microbac Laboratories, Inc.

Laboratory Project Manager:

Michelle Taylor

Project Manager

Michelle.Taylor@microbac.com

Authorized By:

Michelle Taylor

Project Manager

Issued: 10/13/2023

MICROBAC®

Laboratory Report Number: M3J0633

Client Project ID: 46011424

Cooler Receipt Log

Cooler ID: Default Cooler Temp: 1.7°C

Cooler Inspection Checklist

Ice Present or not required?	Yes
Shipping containers sealed or not required?	Yes
Custody seals intact or not required?	Yes
Chain of Custody (COC) Present?	Yes
COC includes customer information?	Yes
Relinquished and received signature on COC?	Yes
Sample collector identified on COC?	Yes
Sample type identified on COC?	Yes
Correct type of Containers Received	No
Correct number of containers listed on COC?	Yes
Containers Intact?	Yes
COC includes requested analyses?	Yes
Enough sample volume for indicated tests received?	Yes
Sample labels match COC (Name, Date & Time?)	Yes
Samples arrived within hold time?	Yes
Correct preservatives on COC or not required?	Yes
Chemical preservations checked or not required?	Yes
Preservation checks meet method requirements?	Yes
VOA vials have zero headspace, or not recd.?	Yes

MICROBAC®

Laboratory Report Number: M3J0633

Client Project ID: 46011424

Microbac Laboratories Inc., - Marietta, OH

CERTIFICATE OF ANALYSIS

Client ID:	NPDES 001 (460-289607-1)			**Collection Date:**	10/04/2023 08:15
Laboratory ID:	M3J0633-01			**Prep Date:**	10/11/2023 14:34
Matrix:	Aqueous			**Analyzed:**	10/11/2023 16:33
Batch / Sequence:	B3J0641 /	**Analytical Method:**	PADEP 391-2000-008	**Calibration:**	NA
Instrument:	OSMOMETER 5004	**Units:**	mOsm/kg	**File ID:**	OsmoticPressure_B3J0641_231011031905.xls
Analyst:	APH	**Dilution:**	1		

Analyte	CAS Number	Result	MDL	RL	Flag	Qualifier
Osmotic Pressure		**10.0**	6.00	10.0		

Laboratory Report Number: M3J0633

Client Project ID: 46011424

Microbac Laboratories Inc., - Marietta, OH

CERTIFICATE OF ANALYSIS

Client ID:	Basin 2 (460-289607-2)			**Collection Date:**	10/04/2023 08:45
Laboratory ID:	M3J0633-02			**Prep Date:**	10/11/2023 14:34
Matrix:	Aqueous			**Analyzed:**	10/11/2023 16:33
Batch / Sequence:	B3J0641 /	**Analytical Method:**	PADEP 391-2000-008	**Calibration:**	NA
Instrument:	OSMOMETER 5004	**Units:**	mOsm/kg	**File ID:**	OsmoticPressure_B3J0641_231011031905.xls
Analyst:	APH	**Dilution:**	1		

Analyte	CAS Number	Result	MDL	RL	Flag	Qualifier
Osmotic Pressure		9.00	6.00	10.0		

MICROBAC®

Laboratory Report Number: M3J0633

Client Project ID: 46011424

Microbac Laboratories Inc., - Marietta, OH

CERTIFICATE OF ANALYSIS

Client ID:	Basin 1 (460-289607-3)			**Collection Date:**	10/04/2023 09:00
Laboratory ID:	M3J0633-03			**Prep Date:**	10/11/2023 14:34
Matrix:	Aqueous			**Analyzed:**	10/11/2023 16:33
Batch / Sequence:	B3J0641 /	**Analytical Method:**	PADEP 391-2000-008	**Calibration:**	NA
Instrument:	OSMOMETER 5004	**Units:**	mOsm/kg	**File ID:**	OsmoticPressure_B3J0641_231011031905.xls
Analyst:	APH	**Dilution:**	1		

Analyte	CAS Number	Result	MDL	RL	Flag	Qualifier
Osmotic Pressure		**11.0**	6.00	10.0		

MICROBAC®

Laboratory Report Number: M3J0633

Client Project ID: 46011424

Microbac Laboratories Inc., - Marietta, OH

CERTIFICATE OF ANALYSIS

Client ID:	UP gradient (460-289607-4)			**Collection Date:**	10/04/2023 09:15
Laboratory ID:	M3J0633-04			**Prep Date:**	10/11/2023 14:34
Matrix:	Aqueous			**Analyzed:**	10/11/2023 16:33
Batch / Sequence:	B3J0641 /	**Analytical Method:**	PADEP 391-2000-008	**Calibration:**	NA
Instrument:	OSMOMETER 5004	**Units:**	mOsm/kg	**File ID:**	OsmoticPressure_B3J0641_231011031905.xls
Analyst:	APH	**Dilution:**	1		

Analyte	CAS Number	Result	MDL	RL	Flag	Qualifier
Osmotic Pressure		**12.0**	6.00	10.0		

MICROBAC®

Laboratory Report Number: M3J0633

Client Project ID: 46011424

Microbac Laboratories Inc., - Marietta, OH

CERTIFICATE OF ANALYSIS

Client ID:	Clarifihs Pond (460-289607-5)			**Collection Date:**	10/04/2023 09:30
Laboratory ID:	M3J0633-05			**Prep Date:**	10/11/2023 14:34
Matrix:	Aqueous			**Analyzed:**	10/11/2023 16:33
Batch / Sequence:	B3J0641 /	**Analytical Method:**	PADEP 391-2000-008	**Calibration:**	NA
Instrument:	OSMOMETER 5004	**Units:**	mOsm/kg	**File ID:**	OsmoticPressure_B3J0641_231011031905.xls
Analyst:	APH	**Dilution:**	1		

Analyte	CAS Number	Result	MDL	RL	Flag	Qualifier
Osmotic Pressure		**10.0**	6.00	10.0		

Laboratory Report Number: M3J0633

Client Project ID: 46011424

Notes and Definitions

:
DL: Detection Limit
LOD: Limit of Detection
LOQ: Limit of Quantitation
MDL: Method Detection Limit
RL: Reporting Limit

MICROBAC®

Laboratory Report Number: M3J0633

Client Project ID: 46011424

METHOD BLANKS

Sample ID:	B3J0641-BLK1	**Prep Date:**	10/11/23 14:34	**Matrix:**	Aqueous
Instrument:	OSMOMETER 5004	**Analyzed:**	10/11/23 16:33	**Method:**	PADEP 391-2000-008
File ID:	OsmoticPressure_B3J0	**Sequence:**		**Analyst:**	APH
Batch:	B3J0641	**Units:**	mOsm/kg	**Calibration:**	

Analyte	Result	MDL	RL	Dilution	Flag	Q
Osmotic Pressure	6.00	6.00	10.0	1	U	

* - Detected in the associated method Blank at a concentration >= RL

MICROBAC®

Laboratory Report Number: M3J0633

Client Project ID: 46011424

BLANK SPIKE / DUPLICATE (BS/BSD)

Method:	PADEP 391-2000-008		**Blank Spike**	**Duplicate**
Batch:	B3J0641	**Spike ID:**	B3J0641-BS1	B3J0641-BSD1
Analyst:	APH	**Prepared:**	10/11/23 14:34	10/11/23 14:34
Matrix:	Aqueous	**Analyzed:**	10/11/23 16:33	10/11/23 16:33
Units:	mOsm/kg	**File ID:**	OsmoticPressure_B3J0641_2310	OsmoticPressure_B3J0641_2310
Instrument:	OSMOMETER 5004	**Initial/Final:**	1mL/1mL	1mL/1mL
Calibration:				

Analyte	BS Spiked	BS Found	BS %Rec	BSD Spiked	BSD Found	BSD %Rec	%RPD	%Rec Limts	RPD Limit	Q
Osmotic Pressure	290	296	102	290	296	102	0.00	90 - 110	20	

* - Does not meet %Rec acceptance criteria.
- Does not meet RPD acceptance criteria.

Eurofins Edison
777 New Durham Road
Edison, NJ 08817
Phone: 732-549-3900 Fax: 732-549-3679

Chain of Custody Record

eurofins | Environment Testing

10/30/2023

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Gilmore, Julie L	Carrier Tracking No(s):	COC No: 460-69462.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Julie.Gilmore@et.eurofinsus.com	State of Origin: Pennsylvania	Page: Page 1 of 1
Company: Microbac Laboratories, Inc.		Accreditations Required (See note): NELAP - Pennsylvania		Job #: 460-289607-1
Address: 158 Starlite Drive, ,	Due Date Requested: 10/16/2023			
City: Marietta	TAT Requested (days):			
State, Zip: OH, 45750				
Phone: 800-373-4071(Tel)	PO #:			
Email:	WO #:			
Project Name: Rock Hill-Anti-Degradation	Project #: 46011424			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	SUB (Osomotic Pressure)/ Osomotic Pressure	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
NPDES 001 (460-289607-1)	10/4/23	08:15 Eastern		Water			X	1	
Basin 2 (460-289607-2)	10/4/23	08:45 Eastern		Water			X	1	
Basin 1 (460-289607-3)	10/4/23	09:00 Eastern		Water			X	1	
UP gradient (460-289607-4)	10/4/23	09:15 Eastern		Water			X	1	
Clarifiihs Pond (460-289607-5)	10/4/23	09:30 Eastern		Water			X	1	

M 3 J 0 6 3

Eurofins TestAmerica Edison
Rec'd: 10/10/2023 10:45
By: Stephanie Murphy Temp: 1.7 (Signature)

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Northeast, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Northeast, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Northeast, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Northeast, LLC.

Possible Hazard Identification	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 1	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:		
Relinquished by:	Date/Time: 10/9/23 1900	Company FEDEX	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by: Stephanie Murphy	Date/Time: 10/10/2023 1045	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

MICROBAC®

Work Order # M3J0633

COOLER TEMP >6° C LOG

SAMPLE ID	Bottle 1 °C	Bottle 2 °C	Bottle 3 °C	Bottle 4 °C	Bottle 5 °C	Bottle 6 °C

10/10/2023 SM

pH Lot # N/A

pH Exceptions

SAMPLE ID	Bottle 1	Bottle 2	Bottle 3	Bottle 4	Bottle 5	Bottle 6

10/10/2023 SM

PRESERVATIVE EXCEPTIONS

✓ NONE

AS NOTED

10/10/2023 SM

Document Control # 1957
Last 04-10-2019

Issued to: Document Master File

Eurofins Edison
777 New Durham Road
Edison, NJ 08817
Phone: 732-549-3900 Fax: 732-549-3679

450-KOP

Chain of Custody Record

32 KOP L
26
22

eurofins

Client Information	Sampler: GTG	Lab PM: Gilmore, Julie L	Carrier Tracking No(s):	COC No: 460-173514-111665.1
Client Contact: Andrew Gutshall	Phone:	E-Mail: Julie.Gilmore@et.eurofinsus.com	State of Origin:	Page: Page 1 of 2
Company: Heidelberg Materials Northeast LLC	PWSID:			Job #: 269607

Address: 7660 Imperial Way	Due Date Requested:	
City: Allentown	TAT Requested (days):	
State, Zip: PA, 18195	Compliance Project: Δ Yes Δ No	
Phone: 610-366-4819(Tel)	PO #: Purchase Order not required	
Email: andrew.gutshall@heidelbergmaterials.com	WO #:	
Project Name: Rock Hill Anti-Degradation	Project #: 46011424	
Site:	SSOW#:	

Analysis Requested

Preservation Codes:

A HCL, B NaOH, C Zn Acetate, D Nitric Acid, E NaHSO4, F MeOH, G Amchlor, H Ascorbic Acid, I Ice, J DI Water, K EDTA, L EDA, M Hexane, N None, O AsNaO2, P Na2O4S, Q Na2SO3, R Na2S2O3, S H2SO4, T TSP Dodecahydrate, U Acetone, V MCAA, W pH 4-5, Y Trizma, Z other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water S=solid, O=waste/oi BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020B Dissolved Lithium N	6020B Total Lithium D	351.2 Local Method S	6020B Dissolved Cd/Fe/Zn N	6020B (MOD) Total Fe D	350.1 410.4, 4500_P_E S	120.1 9040C N	350.1 4500_P_E, 6020B N	2320B (MOD) Alkalinity N	6020B, SM2340B D	9060A TOC S	2540D, SM5210B_Calc N	4500_P_E_Ortho Dissolved Orthophosphate N	Total Number of containers	Special Instructions/Note:
			Preservation Code:																		
VPDES 001	10/4/23	0815	G	Water																	1
Basin 2	10/4/23	0845	G	Water																	2
Basin 1	10/4/23	0900	G	Water																	3
Upgradient	10/4/23	0915	G	Water																	4
Cliffbs Pond	10/4/23	0930	G	Water																	5

SHORT HOLD

460-289607 Chain of Custody

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological	☐ Return To Client ☐ Disposal By Lab ☐ Archive For ____ Months
Deliverable Requested: I II III IV Other (specify)	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		10/4/23 1045			10/4/23 1105	EETN-KOP
2		10-4-23	EETN KOP		10/4/23 1830	ETN
3		10/4/23 1900	ETN		10/4/23 1900	ETN

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.	Cooler Temperature(s) °C and Other Remarks:

Ver: 06/08/2021

10/30/2023

Eurofins Edison
777 New Durham Road
Edison, NJ 08817
Phone: 732-549-3900 Fax: 732-549-3679

450-KOP

Chain of Custody Record

3.2 - KOP-2
2.6 "
2.2 "

eurofins | Environment Testing

Client Information	Sampler: ERG	Lab PM: Gilmore, Julie L	Carrier Tracking No(s):	COC No: 460-173514-111665.2
Client Contact: Andrew Gutshall	Phone:	E-Mail: Julie.Gilmore@et.eurofinsus.com	State of Origin:	Page: Page 2 of 2
Company: Heidelberg Materials Northeast LLC	PWSID:			Job #: 269609
Address: 7660 Imperial Way	Due Date Requested:			
City: Allentown	TAT Requested (days):			
State, Zip: PA, 18195	Compliance Project: Δ Yes Δ No			
Phone: 610-366-4819(Tel)	PO #: Purchase Order not required			
Email: andrew.gutshall@heidelbergmaterials.com	WO #:			
Project Name: Rock Hill Anti-Degradation	Project #: 46011424			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:
A HCL, B NaOH, C Zn Acetate, D Nitric Acid, E NaHSO4, F MeOH, G Amchlor, H Ascorbic Acid, I Ice, J DI Water, K EDTA, L EDA, M Hexane, N None, O AsNaO2, P Na2O4S, Q Na2SO3, R Na2S2O3, S H2SO4, T TSP Dodecahydrate, U Acetone, V MCAA, W pH 4-5, Y Trizma, Z other (specify)
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water S=solid, O=waste/oil BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	4500_P_E_Ortho Total Orthophosphate	2540C TDS	300_ORGFM_28D, 300_ORGFMS	245.1 Local Method	6020B Total Aluminum	Total Number of containers	Special Instructions/Note.
			Preservation Code:				N	N	N	D	D		
NPDES 001	10/4/23	0815	G	Water									
Basin 2	10/4/23	0845	G	Water									
Basin 1	10/4/23	0900	G	Water									
UP gradient	10/4/23	0915	G	Water									
Clarifiers Pond	10/4/23	0930	G	Water									

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested I II III IV Other (specify)

Special Instructions/QC Requirements.

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		10/4/23 1015			10/4/23 1105	EETN-KOP
2		10-4-23	EETN KOP		10/4/23 1830	ETA
3		10/4/23 1900	ETA		10/4/23 1900	

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks:

Ver: 06/08/2021

Eurofins TestAmerica Edison
Receipt Temperature and pH Log

Job Number: 269607

Number of Coolers: 3 IR Gun # Kol2

Cooler Temperatures

	RAW	CORRECTED		RAW	CORRECTED		RAW	CORRECTED
Cooler #1	3.2°C	3.2 °C	Cooler #4:	°C	°C	Cooler #7	°C	°C
Cooler #2:	2.6 °C	2.6 °C	Cooler #5:	°C	°C	Cooler #8:	°C	°C
Cooler #3:	2.2°C	2.2°C	Cooler #6:	°C	°C	Cooler #9:	°C	°C

TALS Sample Number	Ammonia (pH<2)	COD (pH<2)	Nitrate Nitrite (pH<2)	Metals* (pH<2)	Hardness (pH<2)	Pest (pH 5-9)	EPH or QAM (pH<2)	Phenols (pH<2)	Sulfide (pH>9)	TKN (pH<2)	TOC (pH<2)	Total Cyanide (pH>12)	Total Phos (pH<2)	Other	Other
1	Y2	Y2		Y2	Y2						Y2		Y2		
2	Y2	Y2		Y2	Y2						Y2		Y2		
3	Y2	Y2		Y2	Y2						Y2		Y2		
4	Y2	Y2		Y2	Y2						Y2		Y2		
5	Y2	Y2		Y2	Y2						Y2		Y2		

If pH adjustments are required record the information below.

Sample No(s). adjusted. _____

Preservative Name/Conc. _____ Volume of Preservative used (ml) _____

Lot # of Preservative(s) _____ Expiration Date. _____

The appropriate Project Manager and Department Manager should be notified about the samples which were pH adjusted.

** Samples for Metal analysis which are out of compliance must be acidified at least 24 hours prior to analysis.*

Initials. _____ Date: 10/4/23

Part # 159469-494 MTW EXP 01/24

ORIGIN ID:LDJA (732) 549-3900
SAMPLE RECEIVING
EUROFINS EDISON
777 NEW DURHAM ROAD

EDISON, NJ 08817
UNITED STATES US

SHIP DATE: 06OCT23
ACTWGT: 42.40 LB
CAD: 0619092/CAFE3753

BILL SENDER

TO SHIPPING/RECEIVING
EUROFINS ENVIRONMENT TESTING NORTHE
301 ALPHA DRIVE
RIDC PARK
PITTSBURGH PA 15238
(412) 963-7058 REF: 8460-173797
PO: YES

FedEx Express

1 of 2

TRK# 0201 6553 1010 2350

MASTER

XO AGCA

SATURDAY 12:00P
PRIORITY OVERNIGHT

15238
PA-US PIT

Uncorrected temp 1.8 °C
Thermometer ID 22
CF -0.4 Initials KR
PT-WI-SR-001 effective 11/8/18

J2330230512011uv

FedEx Express

SDR

FedEx® Saturday Delivery

151966 10/04 MWI

ORIGIN ID:LDJA (732) 549-3900
SAMPLE RECEIVING
EUROFINS EDISON
777 NEW DURHAM ROAD

EDISON, NJ 08817
UNITED STATES US

SHIP DATE: 06OCT23
ACTWGT: 17.15 LB
CAD: 0619092/CAFE3753

BILL SENDER

TO SHIPPING/RECEIVING
EUROFINS ENVIRONMENT TESTING NORTHE
301 ALPHA DRIVE
RIDC PARK
PITTSBURGH PA 15238
(412) 963-7058 REF: 8460-173797
PO: YES

Uncorrected temp 3.6 °C
Thermometer ID 22
CF -0.4 Initials KR
PT-WI-SR-001 effective 11/8/18

FedEx Express

J2330230512011uv

2 of 2

MPS# 0263 6553 1010 2361

Mstr# 6553 1010 2350

XO AGC

460-289607 Waybill

PA-US PIT

2 of 2

Eurofins Edison
777 New Durham Road
Edison, NJ 08817
Phone: 732-549-3900 Fax: 732-549-3679

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Gilmore, Julie L	Carrier Tracking No(s):	COC No: 460-69441.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Julie.Gilmore@et.eurofinsus.com	State of Origin: Pennsylvania	Page: Page 1 of 1
Company: Eurofins Lancaster Laboratories Environm		Accreditations Required (See note): NELAP - Pennsylvania		Job #: 460-289607-1
Address: 2425 New Holland Pike, ,	Due Date Requested: 10/13/2023			
City: Lancaster	TAT Requested (days):			
State, Zip: PA, 17601				
Phone: 717-656-2300(Tel)	PO #:			
Email:	WO #:			
Project Name: Rock Hill-Anti-Degradation	Project #: 46011424			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify), Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020B/3005A (MOD) Total Fe	6020B/Filtration_ME Dissolved Cd/Fe/Zn	351.2/351.2_Prep	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
NPDES 001 (460-289607-1)	10/4/23	08:15 Eastern		Water			X	X	X	3	
Basin 2 (460-289607-2)	10/4/23	08:45 Eastern		Water			X	X	X	3	
Basin 1 (460-289607-3)	10/4/23	09:00 Eastern		Water			X	X	X	3	
UP gradient (460-289607-4)	10/4/23	09:15 Eastern		Water			X	X	X	3	
Clariflihs Pond (460-289607-5)	10/4/23	09:30 Eastern		Water			X	X	X	3	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Northeast, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Northeast, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Northeast, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Northeast, LLC.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 1	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Date/Time	Company		Date/Time	Company
Relinquished by:	10/6/23 1643	EST EL	Received by: Brad	10/6/23 1643	EL
Relinquished by:	10/6/23 2028	EL	Received by:		
Relinquished by:			Received by:	10/6/23 2028	EL

Custody Seals Intact: ∆ Yes ∆ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 0.7 — 4.4 / 0.8 — 4.5

Eurofins Edison
777 New Durham Road
Edison, NJ 08817
Phone: 732-549-3900 Fax: 732-549-3679

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Gilmore, Julie L	Carrier Tracking No(s):	COC No: 460-69447.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Julie.Gilmore@et.eurofinsus.com	State of Origin: Pennsylvania	Page: Page 1 of 1
Company: Eurofins Environment Testing Northeast,		Accreditations Required (See note): NELAP - Pennsylvania		Job #: 460-289607-1
Address: 10 Hazelwood Drive, ,	Due Date Requested: 10/13/2023			
City: Amherst	TAT Requested (days):			
State, Zip: NY, 14228-2298				
Phone: 716-691-2600(Tel) 716-691-7991(Fax)	PO #:			
Email:	WO #:			
Project Name: Rock Hill-Anti-Degradation	Project #: 46011424			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)
Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	245.1/245.1_Prep	Total Number of containers	Special Instructions/Note:
		Preservation Code:							
NPDES 001 (460-289607-1)	10/4/23	08:15 Eastern		Water			X	1	
Basin 2 (460-289607-2)	10/4/23	08:45 Eastern		Water			X	1	
Basin 1 (460-289607-3)	10/4/23	09:00 Eastern		Water			X	1	
UP gradient (460-289607-4)	10/4/23	09:15 Eastern		Water			X	1	
Clariflihs Pond (460-289607-5)	10/4/23	09:30 Eastern		Water			X	1	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Northeast, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Northeast, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Northeast, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Northeast, LLC.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 1	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		10/6/23 1900	ET			
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time: 10/7/23 1000	Company TA
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
				Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 2.8 # 1 ice

10/30/2023

Eurofins Edison
777 New Durham Road
Edison, NJ 08817
Phone: 732-549-3900 Fax: 732-549-3679

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Gilmore, Julie L	Carrier Tracking No(s):	COC No: 460-69448.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Julie.Gilmore@et.eurofinsus.com	State of Origin: Pennsylvania	Page: Page 1 of 1
Company: Eurofins Environment Testing Southeast,		Accreditations Required (See note): NELAP Pennsylvania		Job #: 460-289607 1
Address: 5102 LaRoche Avenue,	Due Date Requested: 10/16/2023			
City: Savannah	TAT Requested (days):			
State, Zip: GA, 31404				
Phone: 912-354-7858(Tel) 912-352-0165(Fax)	PO #:			
Email:	WO #:			
Project Name: Rock Hill-Anti-Degradation	Project #: 46011424			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A HCL, B NaOH, C Zn Acetate, D Nitric Acid, E NaHSO4, F MeOH, G Amchlor, H Ascorbic Acid, I Ice, J DI Water, K EDTA, L EDA, M Hexane, N None, O AsNaO2, P Na2O4S, Q Na2SO3, R Na2S2O3, S H2SO4, T TSP Dodecahydrate, U Acetone, V MCAA, W pH 4-5, Y Trizma, Z other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020B/3005A Total Aluminum	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
NPDES 001 (460-289607 1)	10/4/23	08:15 Eastern		Water			X	1	
Basin 2 (460-289607-2)	10/4/23	08:45 Eastern		Water			X	1	
Basin 1 (460-289607-3)	10/4/23	09:00 Eastern		Water			X	1	
UP gradient (460-289607-4)	10/4/23	09:15 Eastern		Water			X	1	
Clarifiihs Pond (460-289607-5)	10/4/23	09:30 Eastern		Water			X	1	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Northeast, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Northeast, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Northeast, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Northeast, LLC.

Possible Hazard Identification	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III IV Other (specify) Primary Deliverable Rank: 1	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		10/6/23 1900	EETNE		10/7/23 0949	
2						
3						

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.	Cooler Temperature(s) °C and Other Remarks: 1.8-2.1

Login Sample Receipt Checklist

Client: Heidelberg Materials Northeast LLC

Job Number: 460-289607-1

Login Number: 289607

List Source: Eurofins Edison

List Number: 1

Creator: Thundathorn, Sukanan 1

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Heidelberg Materials Northeast LLC

Job Number: 460-289607-1

Login Number: 289607
List Number: 5
Creator: Kolb, Chris M

List Source: Eurofins Buffalo
List Creation: 10/09/23 10:51 AM

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	2.8 ir gun #1 ice
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	True	

Login Sample Receipt Checklist

Client: Heidelberg Materials Northeast LLC

Job Number: 460-289607-1

Login Number: 289607
List Number: 2
Creator: Wrye, Shaun

List Source: Eurofins Lancaster Laboratories Environment Testing, LLC
List Creation: 10/06/23 10:50 PM

Question	Answer	Comment
The cooler's custody seal is intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature acceptable,where thermal pres is required(</=6C, not frozen).	True	
Cooler Temperature is recorded.	True	
WV:Container Temp acceptable,where thermal pres is required (</=6C, not frozen).	N/A	
WV: Container Temperature is recorded.	N/A	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the containers received and the COC.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
There is sufficient vol. for all requested analyses.	True	
Is the Field Sampler's name present on COC?	False	Received project as a subcontract.
Sample custody seals are intact.	N/A	
VOA sample vials do not have headspace >6mm in diameter (none, if from WV)?	N/A	

Login Sample Receipt Checklist

Client: Heidelberg Materials Northeast LLC

Job Number: 460-289607-1

Login Number: 289607
List Number: 3
Creator: Watters, David

List Source: Eurofins Savannah
List Creation: 10/07/23 12:13 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

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ANALYTICAL REPORT

PREPARED FOR

Attn: Andrew Gutshall
Heidelberg Materials Northeast LLC
7660 Imperial Way
Allentown, Pennsylvania 18195

Generated 11/9/2023 9:23:11 PM

JOB DESCRIPTION

Rock Hill-Anti-Degradation

JOB NUMBER

460-289607-2

Eurofins Edison
777 New Durham Road
Edison NJ 08817

See page two for job notes and contact information.

my EOL

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing Northeast, LLC Project Manager.

Authorization



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11/9/2023 9:23:11 PM

Authorized for release by
Julie Gilmore, Project Manager I
Julie.Gilmore@et.eurofinsus.com
(484)685-0865

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Definitions/Glossary

Client: Heidelberg Materials Northeast LLC
Job ID: 460-289607-2
Project/Site: Rock Hill-Anti-Degradation

Qualifiers

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 460-289607-2

Laboratory: Eurofins Edison

Narrative

Job Narrative
460-289607-2

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

The method detection limit (MDL) is the lowest value detectable by the laboratory for a given analyte as determined by the MDL procedure detailed in EPA 40 CFR 136. Reported MDL values are adjusted for any dilutions and percent moisture (as applicable). The lab is unable to report values below the MDL.

Receipt
The samples were received on 10/4/2023 7:00 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 3 coolers at receipt time were 2.3°C, 2.6°C and 3.2°C

Metals
Method 6020B: The following samples were diluted due to the nature of the sample matrix with the high levels of boron and its affect in the instrumentation: (LCS 180-448683/2-B ^5) and (LCS 180-448685/2-A ^5). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Client Sample ID: NPDES 001

Lab Sample ID: 460-289607-1

Date Collected: 10/04/23 08:15

Matrix: Water

Date Received: 10/04/23 19:00

Method: SW846 EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	1.3	U	5.0	1.3	ug/L		10/10/23 07:14	10/24/23 19:46	1

Method: SW846 EPA 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	**1.9**	**J**	5.0	1.3	ug/L		10/10/23 07:14	11/08/23 19:37	1

Client Sample ID: Basin 2

Lab Sample ID: 460-289607-2

Date Collected: 10/04/23 08:45

Matrix: Water

Date Received: 10/04/23 19:00

Method: SW846 EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	1.3	U	5.0	1.3	ug/L		10/10/23 07:14	10/24/23 19:50	1

Method: SW846 EPA 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	**1.6**	**J**	5.0	1.3	ug/L		10/10/23 07:14	11/08/23 19:42	1

Client Sample ID: Basin 1

Lab Sample ID: 460-289607-3

Date Collected: 10/04/23 09:00

Matrix: Water

Date Received: 10/04/23 19:00

Method: SW846 EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	1.3	U	5.0	1.3	ug/L		10/10/23 07:14	10/24/23 19:54	1

Method: SW846 EPA 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	**1.7**	**J**	5.0	1.3	ug/L		10/10/23 07:14	11/08/23 19:45	1

Client Sample ID: UP gradient

Lab Sample ID: 460-289607-4

Date Collected: 10/04/23 09:15

Matrix: Water

Date Received: 10/04/23 19:00

Method: SW846 EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	**2.1**	**J**	5.0	1.3	ug/L		10/10/23 07:14	10/24/23 19:58	1

Method: SW846 EPA 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	**4.2**	**J**	5.0	1.3	ug/L		10/10/23 07:14	11/08/23 19:48	1

Client Sample ID: Clariflihs Pond

Lab Sample ID: 460-289607-5

Date Collected: 10/04/23 09:30

Matrix: Water

Date Received: 10/04/23 19:00

Method: SW846 EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	1.3	U	5.0	1.3	ug/L		10/10/23 07:14	10/24/23 20:03	1

Method: SW846 EPA 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	1.3	U	5.0	1.3	ug/L		10/10/23 07:14	11/08/23 19:51	1

Lab Chronicle

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill-Anti-Degradation

Job ID: 460-289607-2

Client Sample ID: NPDES 001

Lab Sample ID: 460-289607-1

Date Collected: 10/04/23 08:15
Matrix: Water
Date Received: 10/04/23 19:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Filtration	Filtration			448683	SJM	EET PIT	10/09/23 11:31
Dissolved	Prep	3005A			448685	SJM	EET PIT	10/10/23 07:14
Dissolved	Analysis	EPA 6020B		1	451440	MRG	EET PIT	11/08/23 19:37
Total Recoverable	Prep	3005A			448685	SJM	EET PIT	10/10/23 07:14
Total Recoverable	Analysis	EPA 6020B		1	450139	S1Z	EET PIT	10/24/23 19:46

Client Sample ID: Basin 2

Lab Sample ID: 460-289607-2

Date Collected: 10/04/23 08:45
Matrix: Water
Date Received: 10/04/23 19:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Filtration	Filtration			448683	SJM	EET PIT	10/09/23 11:31
Dissolved	Prep	3005A			448685	SJM	EET PIT	10/10/23 07:14
Dissolved	Analysis	EPA 6020B		1	451440	MRG	EET PIT	11/08/23 19:42
Total Recoverable	Prep	3005A			448685	SJM	EET PIT	10/10/23 07:14
Total Recoverable	Analysis	EPA 6020B		1	450139	S1Z	EET PIT	10/24/23 19:50

Client Sample ID: Basin 1

Lab Sample ID: 460-289607-3

Date Collected: 10/04/23 09:00
Matrix: Water
Date Received: 10/04/23 19:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Filtration	Filtration			448683	SJM	EET PIT	10/09/23 11:31
Dissolved	Prep	3005A			448685	SJM	EET PIT	10/10/23 07:14
Dissolved	Analysis	EPA 6020B		1	451440	MRG	EET PIT	11/08/23 19:45
Total Recoverable	Prep	3005A			448685	SJM	EET PIT	10/10/23 07:14
Total Recoverable	Analysis	EPA 6020B		1	450139	S1Z	EET PIT	10/24/23 19:54

Client Sample ID: UP gradient

Lab Sample ID: 460-289607-4

Date Collected: 10/04/23 09:15
Matrix: Water
Date Received: 10/04/23 19:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Filtration	Filtration			448683	SJM	EET PIT	10/09/23 11:31
Dissolved	Prep	3005A			448685	SJM	EET PIT	10/10/23 07:14
Dissolved	Analysis	EPA 6020B		1	451440	MRG	EET PIT	11/08/23 19:48
Total Recoverable	Prep	3005A			448685	SJM	EET PIT	10/10/23 07:14
Total Recoverable	Analysis	EPA 6020B		1	450139	S1Z	EET PIT	10/24/23 19:58

Lab Chronicle

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill-Anti-Degradation

Job ID: 460-289607-2

Client Sample ID: Clariflihs Pond

Date Collected: 10/04/23 09:30
Date Received: 10/04/23 19:00

Lab Sample ID: 460-289607-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Filtration	Filtration			448683	SJM	EET PIT	10/09/23 11:31
Dissolved	Prep	3005A			448685	SJM	EET PIT	10/10/23 07:14
Dissolved	Analysis	EPA 6020B		1	451440	MRG	EET PIT	11/08/23 19:51
Total Recoverable	Prep	3005A			448685	SJM	EET PIT	10/10/23 07:14
Total Recoverable	Analysis	EPA 6020B		1	450139	S1Z	EET PIT	10/24/23 20:03

Laboratory References:

EET PIT = Eurofins Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Accreditation/Certification Summary

Client: Heidelberg Materials Northeast LLC
Job ID: 460-289607-2
Project/Site: Rock Hill-Anti-Degradation

Laboratory: Eurofins Pittsburgh

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Arkansas DEQ	State	19-033-0	06-27-24
California	State	2891	04-30-24
Connecticut	State	PH-0688	09-30-24
Florida	NELAP	E871008	06-30-24
Georgia	State	PA 02-00416	04-30-24
Illinois	NELAP	004375	06-30-24
Kansas	NELAP	E-10350	01-31-24
Kentucky (UST)	State	162013	04-30-23 *
Kentucky (WW)	State	KY98043	12-31-23
Louisiana	NELAP	04041	06-30-22 *
Louisiana (All)	NELAP	04041	06-30-24
Maine	State	PA00164	03-06-24
Minnesota	NELAP	042-999-482	12-31-23
New Hampshire	NELAP	2030	04-04-24
New Jersey	NELAP	PA005	06-30-24
New York	NELAP	11182	04-01-24
North Carolina (WW/SW)	State	434	12-31-23
North Dakota	State	R-227	04-30-24
Oregon	NELAP	PA-2151	02-06-24
Pennsylvania	NELAP	02-00416	04-30-24
Rhode Island	State	LAO00362	12-31-22 *
South Carolina	State	89014	04-30-23 *
Texas	NELAP	T104704528	03-31-24
US Fish & Wildlife	US Federal Programs	058448	03-31-24
USDA	US Federal Programs	P330-16-00211	04-11-26
Utah	NELAP	PA001462019-8	05-31-24
Virginia	NELAP	10043	07-14-24
West Virginia DEP	State	142	01-31-24
Wisconsin	State	998027800	08-31-24

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Method Summary

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill-Anti-Degradation

Job ID: 460-289607-2

Method	Method Description	Protocol	Laboratory
EPA 6020B	Metals (ICP/MS)	SW846	EET PIT
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	EET PIT
Filtration	Sample Filtration	None	EET PIT

Protocol References:

None = None

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET PIT = Eurofins Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Sample Summary

Client: Heidelberg Materials Northeast LLC
Job ID: 460-289607-2
Project/Site: Rock Hill-Anti-Degradation

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
460-289607-1	NPDES 001	Water	10/04/23 08:15	10/04/23 19:00
460-289607-2	Basin 2	Water	10/04/23 08:45	10/04/23 19:00
460-289607-3	Basin 1	Water	10/04/23 09:00	10/04/23 19:00
460-289607-4	UP gradient	Water	10/04/23 09:15	10/04/23 19:00
460-289607-5	Clariflihs Pond	Water	10/04/23 09:30	10/04/23 19:00

Eurofins Edison
777 New Durham Road
Edison, NJ 08817
Phone: 732-549-3900 Fax: 732-549-3679

450-KOP

Chain of Custody Record

3 2 KOP L
2 6
2 2

eurofins

Client Information	Sampler: EZG	Lab PM: Gilmore, Julie L	Carrier Tracking No(s):	COC No: 460-173514-111665.1
Client Contact: Andrew Gutshall	Phone:	E-Mail: Julie.Gilmore@et.eurofinsus.com	State of Origin:	Page: Page 1 of 2
Company: Heidelberg Materials Northeast LLC	PWSID:			Job #: 269607
Address: 7660 Imperial Way	Due Date Requested:			
City: Allentown	TAT Requested (days):			
State, Zip: PA, 18195	Compliance Project: Δ Yes Δ No			
Phone: 610-366-4819(Tel)	PO #: Purchase Order not required			
Email: andrew.gutshall@heidelbergmaterials.com	WO #:			
Project Name: Rock Hill Anti-Degradation	Project #: 46011424			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A HCL, B NaOH, C Zn Acetate, D Nitric Acid, E NaHSO4, F MeOH, G Amchlor, H Ascorbic Acid, I Ice, J DI Water, K EDTA, L EDA, M Hexane, N None, O AsNaO2, P Na2O4S, Q Na2SO3, R Na2S2O3, S H2SO4, T TSP Dodecahydrate, U Acetone, V MCAA, W pH 4-5, Y Trizma, Z other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water S=solid, O=waste/oi BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020B Dissolved Lithium N	6020B Total Lithium D	351.2 Local Method S	6020B Dissolved Cd/Fe/Zn N	6020B (MOD) Total Fe D	350.1 410.4, 4500_P_E S	120.1 9040C N	350.1 4500_P_E, 6020B N	2320B (MOD) Alkalinity N	6020B, SM2340B D	9060A TOC S	2540D, SM5210B_Calc N	4500_P_E_Ortho Dissolved Orthophosphate N	Total Number of containers	Special Instructions/Note:
			Preservation Code:																		
VPDES 001	10/4/23	0815	G	Water			/	/	/		/			/	/	/	/	/	/		1
Basin 2	10/4/23	0845	G	Water			/	/	/	/	/	/	/	/	/	/			/		2
Basin 1	10/4/23	0900	G	Water			/	/	/	/	/	/	/	/	/	/	/		/		3
UP gradient	10/4/23	0915	G	Water			/	/	/	/	/	/	/	/	/	/		/	/		4
Cliffbs Pond	10/4/23	0930	G	Water			/	/	/	/	/	/	/	/	/				/		5

SHORT HOLD

460-289607 Chain of Custody

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I II III IV Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		10/4/23 1045			10/4/23 1105	EETN-KOP
2		10-4-23	EETN KOP		10/4/23 1830	ETN
3		10/4/23 1900	ETN		10/4/23 1900	ETN

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks:

Ver: 06/08/2021

Eurofins Edison
777 New Durham Road
Edison, NJ 08817
Phone: 732-549-3900 Fax: 732-549-3679

450-KOP

Chain of Custody Record

3.2 - KOP-2
2.6 "
2.2 "

eurofins | Environment Testing

Client Information	Sampler: ERG	Lab PM: Gilmore, Julie L	Carrier Tracking No(s):	COC No: 460-173514-111665.2
Client Contact: Andrew Gutshall	Phone:	E-Mail: Julie.Gilmore@et.eurofinsus.com	State of Origin:	Page: Page 2 of 2
Company: Heidelberg Materials Northeast LLC	PWSID:			Job #: 269609
Address: 7660 Imperial Way	Due Date Requested:			
City: Allentown	TAT Requested (days):			
State, Zip: PA, 18195	Compliance Project: Δ Yes Δ No			
Phone: 610-366-4819(Tel)	PO #: Purchase Order not required			
Email: andrew.gutshall@heidelbergmaterials.com	WO #:			
Project Name: Rock Hill Anti-Degradation	Project #: 46011424			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:
A HCL, B NaOH, C Zn Acetate, D Nitric Acid, E NaHSO4, F MeOH, G Amchlor, H Ascorbic Acid, I Ice, J DI Water, K EDTA, L EDA, M Hexane, N None, O AsNaO2, P Na2O4S, Q Na2SO3, R Na2S2O3, S H2SO4, T TSP Dodecahydrate, U Acetone, V MCAA, W pH 4-5, Y Trizma, Z other (specify)
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water S=solid, O=waste/oil BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	4500_P_E_Ortho Total Orthophosphate	2540C TDS	300_ORGFM_28D, 300_ORGFMS	245.1 Local Method	6020B Total Aluminum	Total Number of containers	Special Instructions/Note.
			Preservation Code:				N	N	N	D	D		
NPDES 001	10/4/23	0815	G	Water									
Basin 2	10/4/23	0845	G	Water									
Basin 1	10/4/23	0900	G	Water									
UP gradient	10/4/23	0915	G	Water									
Clarifiers Pond	10/4/23	0930	G	Water									

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested I II III IV Other (specify)

Special Instructions/QC Requirements.

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		10/4/23 1015			10/4/23 1105	EETN-KOP
2		10-4-23	EETN KOP		10/4/23 1830	ETA
3		10/4/23 1900	ETA		10/4/23 1900	

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.	Cooler Temperature(s) °C and Other Remarks:

Ver: 06/08/2021

Eurofins TestAmerica Edison
Receipt Temperature and pH Log

Job Number: 269607

Number of Coolers: 3 IR Gun # Kol2

Cooler Temperatures

	RAW	CORRECTED		RAW	CORRECTED		RAW	CORRECTED
Cooler #1	3.2°C	3.2 °C	Cooler #4:	°C	°C	Cooler #7	°C	°C
Cooler #2:	2.6 °C	2.6 °C	Cooler #5:	°C	°C	Cooler #8:	°C	°C
Cooler #3:	2.2°C	2.2°C	Cooler #6:	°C	°C	Cooler #9:	°C	°C

TALS Sample Number	Ammonia (pH<2)	COD (pH<2)	Nitrate Nitrite (pH<2)	Metals* (pH<2)	Hardness (pH<2)	Pest (pH 5-9)	EPH or QAM (pH<2)	Phenols (pH<2)	Sulfide (pH>9)	TKN (pH<2)	TOC (pH<2)	Total Cyanide (pH>12)	Total Phos (pH<2)	Other	Other
1	C2	C2		C2	C2						C2		C2		
2	C2	C2		C2	C2						C2		C2		
3	C2	C2		C2	C2						C2		C2		
4	C2	C2		C2	C2						C2		C2		
5	C2	C2		C2	C2						C2		C2		

If pH adjustments are required record the information below:

Sample No(s). adjusted. _____

Preservative Name/Conc. _____ Volume of Preservative used (ml) _____

Lot # of Preservative(s) _____ Expiration Date. _____

The appropriate Project Manager and Department Manager should be notified about the samples which were pH adjusted.

** Samples for Metal analysis which are out of compliance must be acidified at least 24 hours prior to analysis.*

Initials. _____ Date: 10/4/23

Part # 159469-434 MTW EXP 01/24

ORIGIN ID:LDJA (732) 549-3900
SAMPLE RECEIVING
EUROFINS EDISON
777 NEW DURHAM ROAD

EDISON, NJ 08817
UNITED STATES US

SHIP DATE: 06OCT23
ACTWGT: 42.40 LB
CAD: 0619092/CAFE3753

BILL SENDER

TO SHIPPING/RECEIVING
EUROFINS ENVIRONMENT TESTING NORTHE
301 ALPHA DRIVE
RIDC PARK
PITTSBURGH PA 15238
(412) 963-7058 REF: 8460-173797
PO: YES

FedEx Express

J23302305120tuv

1 of 2
TRK# 0201 6553 1010 2350
MASTER

SATURDAY 12:00P
PRIORITY OVERNIGHT

XO AGCA

15238
PA-US PIT

Uncorrected temp 1.8 °C
Thermometer ID 22
CF -0.4 Initials KR
PT-WI-SR-001 effective 11/8/18

SDR

FedEx® Saturday Delivery

151966 10/04 MWI

ORIGIN ID:LDJA (732) 549-3900
SAMPLE RECEIVING
EUROFINS EDISON
777 NEW DURHAM ROAD

EDISON, NJ 08817
UNITED STATES US

SHIP DATE: 06OCT23
ACTWGT: 17.15 LB
CAD: 0619092/CAFE3753

BILL SENDER

TO SHIPPING/RECEIVING
EUROFINS ENVIRONMENT TESTING NORTHE
301 ALPHA DRIVE
RIDC PARK
PITTSBURGH PA 15238
(412) 963-7058 REF: 8460-173797
PO: YES

Uncorrected temp 3.6 °C
Thermometer ID 22
CF -0.4 Initials KR
PT-WI-SR-001 effective 11/8/18

FedEx Express

J23302305120tuv

2 of 2
MPS# 0263 6553 1010 2361
Mstr# 6553 1010 2350

XO AGC

460-289607 Waybill

PA-US PIT

Eurofins Edison
777 New Durham Road
Edison, NJ 08817
Phone 732-549-3900 Fax: 732-549-3679

mt/ICC

Chain of Custody Record

460-289607 Chain of Custody

Eurofins | Environment Testing

444 1

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Gilmore, Julie L	Page 1 of 1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Julie.Gilmore@et.eurofinsus	
Company: Eurofins Environment Testing Northeast,		Accreditations Required (See note): NELAP - Pennsylvania	Job #: 460-289607-2
Address: 301 Alpha Drive, RIDC Park,	Due Date Requested: 10/17/2023		
City: Pittsburgh	TAT Requested (days):		
State, Zip: PA, 15238			
Phone: 412-963-7058(Tel) 412-963-2468(Fax)	PO #:		
Email:	WO #:		
Project Name: Rock Hill-Anti-Degradation	Project #: 46011424		
Site:	SSOW#:		

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Tnzma, Z - other (specify)

Other:

Analysis Requested

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020B/Filtration_ME Dissolved Lithium	6020B/3005A (MOD) Total Lithium	Total Number of containers	Special Instructions/Note:
			Preservation Code:							
NPDES 001 (460-289607-1)	10/4/23	08 15 Eastern		Water			X	X	2	
Basin 2 (460-289607-2)	10/4/23	08 45 Eastern		Water			X	X	2	
Basin 1 (460-289607-3)	10/4/23	09 00 Eastern		Water			X	X	2	
UP gradient (460-289607-4)	10/4/23	09.15 Eastern		Water			X	X	2	
Clanflihs Pond (460-289607-5)	10/4/23	09 30 Eastern		Water			X	X	2	

Note Since laboratory accreditations are subject to change, Eurofins Environment Testing Northeast, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories This sample shipment is forwarded under chain-of-custody If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Northeast, LLC laboratory or other instructions will be provided Any changes to accreditation status should be brought to Eurofins Environment Testing Northeast, LLC attention immediately If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Northeast, LLC

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested I, II, III, IV, Other (specify) Primary Deliverable Rank. 1	Special Instructions/QC Requirements

Empty Kit Relinquished by:	Date	Time:	Method of Shipment:

	Date/Time	Company	Received by	Date/Time	Company
Relinquished by	10/6/23 1900	EET		10/7/23 1037	EPHANE
Relinquished by:	Date/Time	Company	Received by:	Date/Time	Company
Relinquished by:	Date/Time	Company	Received by:	Date/Time	Company

Custody Seals Intact. Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks

11/9/2023

Login Sample Receipt Checklist

Client: Heidelberg Materials Northeast LLC

Job Number: 460-289607-2

Login Number: 289607

List Source: Eurofins Edison

List Number: 1

Creator: Thundathorn, Sukanan 1

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Heidelberg Materials Northeast LLC

Job Number: 460-289607-2

Login Number: 289607
List Number: 4
Creator: Watson, Debbie

List Source: Eurofins Pittsburgh
List Creation: 10/07/23 02:20 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Lab Results

October 19, 2023

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Andrew Gutshall
Heidelberg Materials Northeast LLC
7660 Imperial Way
Allentown, Pennsylvania 18195

Generated 11/13/2023 3:38:29 PM

JOB DESCRIPTION

Rock Hill - Anti Degradation

JOB NUMBER

460-290748-1

Eurofins Edison
777 New Durham Road
Edison NJ 08817

See page two for job notes and contact information.

my EOL

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing Northeast, LLC Project Manager.

Authorization



Generated
11/13/2023 3:38:29 PM

Authorized for release by
Julie Gilmore, Project Manager I
Julie.Gilmore@et.eurofinsus.com
(484)685-0865

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Qualifiers

HPLC/IC

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

General Chemistry

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
F1	MS and/or MSD recovery exceeds control limits.
H	Sample was prepped or analyzed beyond the specified holding time. This does not meet regulatory requirements.
H3	Sample was received and analyzed past holding time. This does not meet regulatory requirements.
HF	Parameter with a holding time of 15 minutes. Test performed by laboratory at client's request. Sample was analyzed outside of hold time.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 460-290748-1

Laboratory: Eurofins Edison

Narrative

Job Narrative
460-290748-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

The method detection limit (MDL) is the lowest value detectable by the laboratory for a given analyte as determined by the MDL procedure detailed in EPA 40 CFR 136. Reported MDL values are adjusted for any dilutions and percent moisture (as applicable). The lab is unable to report values below the MDL.

Receipt
The samples were received on 10/19/2023 7:00 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 2.4°C and 2.6°C

Receipt Exceptions
No TAT recorded on COC.

Subcontract Work
Method Osomotic Pressure: This method was subcontracted to Microbac Laboratories, Inc. The subcontract laboratory certification is different from that of the facility issuing the final report. The subcontract report is appended in its entirety.

HPLC/IC
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Metals
Method 6020B: The following samples were not filtered within 15 minutes of sample collection as required by the method: NPDES 001 (460-290748-1), Basin 1 (460-290748-2), Upstream (460-290748-3) and Clarifying Pond (460-290748-4). The sample(s) was filtered prior to analysis at the laboratory, and the results have been reported. This does not meet regulatory requirements.

Method 6020B: The following samples were not filtered within 15 minutes of sample collection as required by the method: NPDES 001 (460-290748-1), Basin 1 (460-290748-2), Upstream (460-290748-3), Clarifying Pond (460-290748-4), (460-290748-B-2 MS) and (460-290748-B-2 MSD). The sample(s) was filtered prior to analysis at the laboratory, and the results have been reported.

Method 6020B: The following samples were not filtered and preserved within 15 minutes of sample collection in accordance with 40 CFR Part 136 Table II, Footnote 7, method 6020B. The samples were filtered prior to analysis at the laboratory.

NPDES 001 (460-290748-1) and Basin 1 (460-290748-2)

Method 6020B: The following samples were not filtered and preserved within 15 minutes of sample collection in accordance with 40 CFR Part 136 Table II, Footnote 7, method 6020B. The samples were filtered prior to analysis at the laboratory.

Upstream (460-290748-3) and Clarifying Pond (460-290748-4)

Job ID: 460-290748-1 (Continued)

Laboratory: Eurofins Edison (Continued)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

General Chemistry

Method 4500_O_C: This analysis is normally performed in the field and has a method-defined holding time of 15 minutes. The following sample has been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe: NPDES 001 (460-290748-1).

Method 4500_O_C: This analysis is normally performed in the field and has a method-defined holding time of 15 minutes. The following sample has been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe: Basin 1 (460-290748-2).

Method 4500_O_C: This analysis is normally performed in the field and has a method-defined holding time of 15 minutes. The following sample has been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe: Upstream (460-290748-3).

Method 4500_O_C: This analysis is normally performed in the field and has a method-defined holding time of 15 minutes. The following sample has been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe: Clarifying Pond (460-290748-4).

Method 9040C: This analysis is normally performed in the field and has a method-defined holding time of 15 minutes. The following samples has been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe: Basin 1 (460-290748-2) and Clarifying Pond (460-290748-4).

Method 9040C: This analysis is normally performed in the field and has a method-defined holding time of 15 minutes. The following samples has been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe: NPDES 001 (460-290748-1) and Upstream (460-290748-3).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Client Sample ID: NPDES 001
Date Collected: 10/19/23 08:30
Date Received: 10/19/23 19:00

Lab Sample ID: 460-290748-1
Matrix: Water

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide	0.054	U	0.32	0.054	mg/L			10/20/23 11:18	1
Nitrate as N	**0.080**	**J**	0.16	0.070	mg/L			10/20/23 11:18	1
Chloride	**2.97**		0.32	0.039	mg/L			10/20/23 11:18	1
Nitrate Nitrite as N	**0.13**	**J**	0.16	0.070	mg/L			10/20/23 11:18	1
Nitrite as N	**0.048**	**J**	0.16	0.023	mg/L			10/20/23 11:18	1
Sulfate	**8.85**		0.48	0.095	mg/L			10/20/23 11:18	1

Method: SM-Online 2340B-2011 - Total Hardness (as CaCO3) by calculation - SM Online, 2011

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**94.2**		33.1	33.1	mg/L			11/09/23 07:20	1

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000043	U	0.00020	0.000043	mg/L		10/25/23 11:26	10/25/23 14:33	1

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**4.4**		4.0	0.91	ug/L		10/24/23 08:20	10/29/23 17:08	1
Boron	**65.0**	**J**	80.0	30.4	ug/L		10/24/23 08:20	10/29/23 17:08	1
Calcium	**22200**		500	53.6	ug/L		10/24/23 08:20	10/29/23 17:08	1
Copper	2.5	U	4.0	2.5	ug/L		10/24/23 08:20	10/29/23 17:08	1
Lead	0.84	U	1.2	0.84	ug/L		10/24/23 08:20	10/29/23 17:08	1
Magnesium	**9370**		200	46.9	ug/L		10/24/23 08:20	10/29/23 17:08	1
Manganese	**14.5**		8.0	1.5	ug/L		10/24/23 08:20	10/29/23 17:08	1
Nickel	0.91	U	4.0	0.91	ug/L		10/24/23 08:20	10/29/23 17:08	1
Potassium	**1340**		200	112	ug/L		10/24/23 08:20	10/29/23 17:08	1
Selenium	0.59	U	2.5	0.59	ug/L		10/24/23 08:20	10/29/23 17:08	1
Sodium	**4180**		500	219	ug/L		10/24/23 08:20	10/29/23 17:08	1
Strontium	**58.3**		4.0	0.50	ug/L		10/24/23 08:20	10/29/23 17:08	1
Zinc	6.5	U	16.0	6.5	ug/L		10/24/23 08:20	10/29/23 17:08	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	35.0	U	100	35.0	ug/L		10/25/23 06:36	10/26/23 17:29	1
Iron	**119**		50.0	20.0	ug/L		10/26/23 21:34	11/02/23 10:12	1
Lithium	4.9	U	5.0	4.9	ug/L		10/26/23 14:00	11/07/23 22:09	5

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	19.5	U	40.0	19.5	ug/L		10/25/23 01:22	10/25/23 19:59	1
Cadmium	0.15	U	0.50	0.15	ug/L		10/30/23 05:46	10/31/23 18:50	1
Lithium	4.9	U	5.0	4.9	ug/L		10/31/23 12:30	11/03/23 20:12	5
Arsenic	0.89	U	2.0	0.89	ug/L		10/25/23 01:22	10/25/23 19:59	1
Iron	**30.3**	**J**	50.0	20.0	ug/L		10/30/23 05:46	10/31/23 18:50	1
Calcium	**30000**		500	53.6	ug/L		10/25/23 01:22	10/25/23 19:59	1
Zinc	4.0	U	10.0	4.0	ug/L		10/30/23 05:46	10/31/23 18:50	1
Copper	2.5	U	4.0	2.5	ug/L		10/25/23 01:22	10/25/23 19:59	1
Iron	58.2	U	120	58.2	ug/L		10/25/23 01:22	10/25/23 19:59	1
Lead	0.84	U	1.2	0.84	ug/L		10/25/23 01:22	10/25/23 19:59	1
Magnesium	**11200**		200	46.9	ug/L		10/25/23 01:22	10/25/23 19:59	1
Manganese	**103**		8.0	1.5	ug/L		10/25/23 01:22	10/25/23 19:59	1

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill - Anti Degradation

Job ID: 460-290748-1

Client Sample ID: NPDES 001
Date Collected: 10/19/23 08:30
Date Received: 10/19/23 19:00

Lab Sample ID: 460-290748-1
Matrix: Water

Method: SW846 6020B - Metals (ICP/MS) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nickel	0.91	U	4.0	0.91	ug/L		10/25/23 01:22	10/25/23 19:59	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Resistivity (EPA 120.1)	**0.00497**		0.000100	0.000100	Mohm-cm			10/30/23 13:00	1
Specific Conductance (EPA 120.1)	**201**		1.00	1.00	umhos/cm			10/30/23 13:00	1
Acidity (SM 2310B-2011)	20.0	U	20.0	20.0	mg/L			11/01/23 09:00	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-2011)	**87.5**		5.0	5.0	mg/L			10/30/23 09:56	1
Carbonate Alkalinity as CaCO3 (SM 2320B-2011)	5.0	U	5.0	5.0	mg/L			10/30/23 09:56	1
Alkalinity as CaCO3 to pH 4.5 (SM 2320B-2011)	**87.5**		5.0	5.0	mg/L			10/30/23 09:56	1
Total Dissolved Solids (SM 2540C-2015)	**143**		2.5	2.5	mg/L			10/24/23 07:16	1
Total Suspended Solids (SM 2540D-2015)	2.5	U	2.5	2.5	mg/L			10/23/23 11:28	1
Ammonia (EPA 350.1)	0.050	U	0.10	0.050	mg/L			10/27/23 12:17	1
Total Kjeldahl Nitrogen (EPA 351.2)	**0.50**	**J**	1.0	0.50	mg/L		10/25/23 15:50	10/26/23 11:27	1
Chemical Oxygen Demand (EPA 410.4)	**7.6**	**J**	10.0	3.3	mg/L			10/30/23 12:45	1
Oxygen, Dissolved (SM 4500 O C-2016)	**8.1**	**H H3**	1.0	1.0	mg/L			10/20/23 13:05	1
Orthophosphate as P (SM 4500 P E-2011)	0.0050	U	0.030	0.0050	mg/L			10/20/23 23:50	1
Carbonaceous Biochemical Oxygen Demand 5 (SM 5210 B-2016)	1.0	U	1.0	1.0	mg/L			10/20/23 14:55	1
pH (SW846 9040C)	**7.9**	**HF**	0.1	0.1	SU			10/25/23 12:41	1
Temperature (SW846 9040C)	**21.1**	**HF**	0.1	0.1	Degrees C			10/25/23 12:41	1
Total Organic Carbon (SW846 9060A)	**2.0**	**B**	1.0	0.53	mg/L			10/23/23 16:09	1
Phosphorus as PO4 (SM4500 P E-2011)	**0.19**		0.090	0.071	mg/L		11/02/23 11:17	11/02/23 15:14	1
Phosphorus as P (SM4500 P E-2011)	**0.060**		0.030	0.023	mg/L		11/02/23 11:17	11/02/23 15:14	1
Nitrogen, Total (EPA Total Nitrogen)	**0.63**		0.50	0.50	mg/L			10/29/23 18:00	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (EPA 350.1)	0.050	U	0.10	0.050	mg/L			10/27/23 12:35	1
Orthophosphate as P (SM 4500 P E-2011)	0.0050	U	0.030	0.0050	mg/L			10/20/23 23:50	1
Phosphorus as PO4 (SM4500 P E-2011)	**0.20**	**F1**	0.090	0.071	mg/L		11/02/23 11:17	11/02/23 15:14	1
Phosphorus as P (SM4500 P E-2011)	**0.066**	**F1**	0.030	0.023	mg/L		11/02/23 11:17	11/02/23 15:14	1

Client Sample ID: Basin 1
Date Collected: 10/19/23 09:15
Date Received: 10/19/23 19:00

Lab Sample ID: 460-290748-2
Matrix: Water

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide	0.054	U	0.32	0.054	mg/L			10/20/23 11:34	1
Nitrate as N	**0.077**	**J**	0.16	0.070	mg/L			10/20/23 11:34	1
Chloride	**4.31**		0.32	0.039	mg/L			10/20/23 11:34	1
Nitrate Nitrite as N	**0.077**	**J**	0.16	0.070	mg/L			10/20/23 11:34	1
Nitrite as N	0.023	U	0.16	0.023	mg/L			10/20/23 11:34	1
Sulfate	**6.86**		0.48	0.095	mg/L			10/20/23 11:34	1

Method: SM-Online 2340B-2011 - Total Hardness (as CaCO3) by calculation - SM Online, 2011

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**119**		33.1	33.1	mg/L			11/09/23 07:20	1

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000043	U	0.00020	0.000043	mg/L		10/25/23 11:26	10/25/23 14:38	1

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**5.4**		4.0	0.91	ug/L		10/24/23 08:20	10/29/23 17:11	1
Boron	**84.4**		80.0	30.4	ug/L		10/24/23 08:20	10/29/23 17:11	1
Calcium	**26800**		500	53.6	ug/L		10/24/23 08:20	10/29/23 17:11	1
Copper	2.5	U	4.0	2.5	ug/L		10/24/23 08:20	10/29/23 17:11	1
Lead	0.84	U	1.2	0.84	ug/L		10/24/23 08:20	10/29/23 17:11	1
Magnesium	**12700**		200	46.9	ug/L		10/24/23 08:20	10/29/23 17:11	1
Manganese	**28.4**		8.0	1.5	ug/L		10/24/23 08:20	10/29/23 17:11	1
Nickel	0.91	U	4.0	0.91	ug/L		10/24/23 08:20	10/29/23 17:11	1
Potassium	**1280**		200	112	ug/L		10/24/23 08:20	10/29/23 17:11	1
Selenium	0.59	U	2.5	0.59	ug/L		10/24/23 08:20	10/29/23 17:11	1
Sodium	**5670**		500	219	ug/L		10/24/23 08:20	10/29/23 17:11	1
Strontium	**74.9**		4.0	0.50	ug/L		10/24/23 08:20	10/29/23 17:11	1
Zinc	**37.8**		16.0	6.5	ug/L		10/24/23 08:20	10/29/23 17:11	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**65.1**	**J**	100	35.0	ug/L		10/25/23 06:36	10/26/23 17:33	1
Iron	**181**		50.0	20.0	ug/L		10/26/23 20:37	11/02/23 19:27	1
Lithium	4.9	U	5.0	4.9	ug/L		10/26/23 14:00	11/07/23 22:12	5

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	19.5	U	40.0	19.5	ug/L		10/25/23 01:22	10/25/23 20:01	1
Cadmium	0.15	U	0.50	0.15	ug/L		10/30/23 05:46	10/31/23 18:48	1
Lithium	4.9	U	5.0	4.9	ug/L		10/31/23 12:30	11/03/23 20:40	5
Arsenic	0.89	U	2.0	0.89	ug/L		10/25/23 01:22	10/25/23 20:01	1
Iron	**51.0**		50.0	20.0	ug/L		10/30/23 05:46	10/31/23 18:48	1
Calcium	**27500**		500	53.6	ug/L		10/25/23 01:22	10/25/23 20:01	1
Zinc	**29.6**		10.0	4.0	ug/L		10/30/23 05:46	10/31/23 18:48	1
Copper	2.5	U	4.0	2.5	ug/L		10/25/23 01:22	10/25/23 20:01	1
Iron	58.2	U	120	58.2	ug/L		10/25/23 01:22	10/25/23 20:01	1
Lead	0.84	U	1.2	0.84	ug/L		10/25/23 01:22	10/25/23 20:01	1
Magnesium	**13200**		200	46.9	ug/L		10/25/23 01:22	10/25/23 20:01	1
Manganese	**19.4**		8.0	1.5	ug/L		10/25/23 01:22	10/25/23 20:01	1

Client Sample ID: Basin 1

Lab Sample ID: 460-290748-2

Date Collected: 10/19/23 09:15

Matrix: Water

Date Received: 10/19/23 19:00

Method: SW846 6020B - Metals (ICP/MS) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nickel	0.91	U	4.0	0.91	ug/L		10/25/23 01:22	10/25/23 20:01	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Resistivity (EPA 120.1)	**0.00398**		0.000100	0.000100	Mohm-cm			10/30/23 13:00	1
Specific Conductance (EPA 120.1)	**251**		1.00	1.00	umhos/cm			10/30/23 13:00	1
Acidity (SM 2310B-2011)	20.0	U	20.0	20.0	mg/L			11/01/23 09:00	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-2011)	**107**		5.0	5.0	mg/L			10/30/23 10:02	1
Carbonate Alkalinity as CaCO3 (SM 2320B-2011)	5.0	U	5.0	5.0	mg/L			10/30/23 10:02	1
Alkalinity as CaCO3 to pH 4.5 (SM 2320B-2011)	**107**		5.0	5.0	mg/L			10/30/23 10:02	1
Total Dissolved Solids (SM 2540C-2015)	**162**		2.5	2.5	mg/L			10/24/23 07:16	1
Total Suspended Solids (SM 2540D-2015)	2.5	U	2.5	2.5	mg/L			10/23/23 11:28	1
Ammonia (EPA 350.1)	0.050	U	0.10	0.050	mg/L			10/27/23 12:18	1
Total Kjeldahl Nitrogen (EPA 351.2)	**4.0**		1.0	0.50	mg/L		10/26/23 10:15	10/27/23 14:04	1
Chemical Oxygen Demand (EPA 410.4)	**11.5**		10.0	3.3	mg/L			10/30/23 12:45	1
Oxygen, Dissolved (SM 4500 O C-2016)	**9.6**	**H H3**	1.0	1.0	mg/L			10/20/23 13:10	1
Orthophosphate as P (SM 4500 P E-2011)	0.0050	U	0.030	0.0050	mg/L			10/20/23 23:50	1
Carbonaceous Biochemical Oxygen Demand 5 (SM 5210 B-2016)	1.0	U	1.0	1.0	mg/L			10/20/23 15:00	1
pH (SW846 9040C)	**8.0**	**HF**	0.1	0.1	SU			10/24/23 13:49	1
Temperature (SW846 9040C)	**20.5**	**HF**	0.1	0.1	Degrees C			10/24/23 13:49	1
Total Organic Carbon (SW846 9060A)	**2.2**	**B**	1.0	0.53	mg/L			10/23/23 18:43	1
Phosphorus as PO4 (SM4500 P E-2011)	**0.096**		0.090	0.071	mg/L		11/02/23 11:17	11/02/23 15:14	1
Phosphorus as P (SM4500 P E-2011)	**0.031**		0.030	0.023	mg/L		11/02/23 11:17	11/02/23 15:14	1
Nitrogen, Total (EPA Total Nitrogen)	**4.1**		0.50	0.50	mg/L			10/29/23 18:00	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (EPA 350.1)	0.050	U	0.10	0.050	mg/L			10/27/23 12:37	1
Orthophosphate as P (SM 4500 P E-2011)	0.0050	U	0.030	0.0050	mg/L			10/20/23 23:50	1
Phosphorus as PO4 (SM4500 P E-2011)	0.071	U	0.090	0.071	mg/L		11/02/23 11:17	11/02/23 15:14	1
Phosphorus as P (SM4500 P E-2011)	0.023	U	0.030	0.023	mg/L		11/02/23 11:17	11/02/23 15:14	1

Client Sample ID: Upstream

Lab Sample ID: 460-290748-3

Date Collected: 10/19/23 09:40

Matrix: Water

Date Received: 10/19/23 19:00

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide	**0.072**	**J**	0.32	0.054	mg/L			10/20/23 11:49	1

Client Sample ID: Upstream

Date Collected: 10/19/23 09:40
Date Received: 10/19/23 19:00

Lab Sample ID: 460-290748-3

Matrix: Water

Method: EPA 300.0 - Anions, Ion Chromatography (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	0.070	U	0.16	0.070	mg/L			10/20/23 11:49	1
Chloride	**3.32**		0.32	0.039	mg/L			10/20/23 11:49	1
Nitrate Nitrite as N	0.070	U	0.16	0.070	mg/L			10/20/23 11:49	1
Nitrite as N	0.023	U	0.16	0.023	mg/L			10/20/23 11:49	1
Sulfate	**21.9**		0.48	0.095	mg/L			10/20/23 11:49	1

Method: SM-Online 2340B-2011 - Total Hardness (as CaCO3) by calculation - SM Online, 2011

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**153**		33.1	33.1	mg/L			11/09/23 07:20	1

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000043	U	0.00020	0.000043	mg/L		10/25/23 11:26	10/25/23 14:39	1

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**16.8**		4.0	0.91	ug/L		10/24/23 08:20	10/29/23 17:13	1
Boron	**68.9**	**J**	80.0	30.4	ug/L		10/24/23 08:20	10/29/23 17:13	1
Calcium	**38700**		500	53.6	ug/L		10/24/23 08:20	10/29/23 17:13	1
Copper	2.5	U	4.0	2.5	ug/L		10/24/23 08:20	10/29/23 17:13	1
Lead	0.84	U	1.2	0.84	ug/L		10/24/23 08:20	10/29/23 17:13	1
Magnesium	**13600**		200	46.9	ug/L		10/24/23 08:20	10/29/23 17:13	1
Manganese	**341**		8.0	1.5	ug/L		10/24/23 08:20	10/29/23 17:13	1
Nickel	**1.6**	**J**	4.0	0.91	ug/L		10/24/23 08:20	10/29/23 17:13	1
Potassium	**1250**		200	112	ug/L		10/24/23 08:20	10/29/23 17:13	1
Selenium	0.59	U	2.5	0.59	ug/L		10/24/23 08:20	10/29/23 17:13	1
Sodium	**4020**		500	219	ug/L		10/24/23 08:20	10/29/23 17:13	1
Strontium	**151**		4.0	0.50	ug/L		10/24/23 08:20	10/29/23 17:13	1
Zinc	6.5	U	16.0	6.5	ug/L		10/24/23 08:20	10/29/23 17:13	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**82.5**	**J**	100	35.0	ug/L		10/25/23 06:36	10/26/23 17:37	1
Iron	**351**		50.0	20.0	ug/L		10/26/23 20:37	11/02/23 19:24	1
Lithium	4.9	U	5.0	4.9	ug/L		10/26/23 14:00	11/07/23 22:15	5

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	19.5	U	40.0	19.5	ug/L		10/25/23 02:31	10/25/23 21:09	1
Cadmium	0.15	U	0.50	0.15	ug/L		10/30/23 05:46	10/31/23 19:00	1
Lithium	4.9	U	5.0	4.9	ug/L		10/31/23 12:30	11/03/23 20:50	5
Arsenic	0.89	U	2.0	0.89	ug/L		10/25/23 02:31	10/25/23 21:09	1
Iron	**60.7**		50.0	20.0	ug/L		10/30/23 05:46	10/31/23 19:00	1
Calcium	**39800**		500	53.6	ug/L		10/25/23 02:31	10/25/23 21:09	1
Zinc	**4.1**	**J**	10.0	4.0	ug/L		10/30/23 05:46	10/31/23 19:00	1
Copper	2.5	U	4.0	2.5	ug/L		10/25/23 02:31	10/25/23 21:09	1
Iron	**76.8**	**J**	120	58.2	ug/L		10/25/23 02:31	10/25/23 21:09	1
Lead	0.84	U	1.2	0.84	ug/L		10/25/23 02:31	10/25/23 21:09	1
Magnesium	**14500**		200	46.9	ug/L		10/25/23 02:31	10/25/23 21:09	1
Manganese	**332**		8.0	1.5	ug/L		10/25/23 02:31	10/25/23 21:09	1
Nickel	**1.9**	**J**	4.0	0.91	ug/L		10/25/23 02:31	10/25/23 21:09	1

Client Sample ID: Upstream
Lab Sample ID: 460-290748-3

Date Collected: 10/19/23 09:40
Matrix: Water
Date Received: 10/19/23 19:00

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Resistivity (EPA 120.1)	**0.00329**		0.000100	0.000100	Mohm-cm			10/30/23 13:00	1
Specific Conductance (EPA 120.1)	**304**		1.00	1.00	umhos/cm			10/30/23 13:00	1
Acidity (SM 2310B-2011)	20.0	U	20.0	20.0	mg/L			11/01/23 09:00	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-2011)	**132**		5.0	5.0	mg/L			10/30/23 10:08	1
Carbonate Alkalinity as CaCO3 (SM 2320B-2011)	5.0	U	5.0	5.0	mg/L			10/30/23 10:08	1
Alkalinity as CaCO3 to pH 4.5 (SM 2320B-2011)	**132**		5.0	5.0	mg/L			10/30/23 10:08	1
Total Dissolved Solids (SM 2540C-2015)	**292**		2.5	2.5	mg/L			10/24/23 07:16	1
Total Suspended Solids (SM 2540D-2015)	**8.5**		2.5	2.5	mg/L			10/23/23 11:28	1
Ammonia (EPA 350.1)	0.050	U	0.10	0.050	mg/L			10/27/23 12:30	1
Total Kjeldahl Nitrogen (EPA 351.2)	**2.1**		1.0	0.50	mg/L		10/26/23 10:15	10/27/23 14:06	1
Chemical Oxygen Demand (EPA 410.4)	**13.2**		10.0	3.3	mg/L			10/30/23 12:45	1
Oxygen, Dissolved (SM 4500 O C-2016)	**6.9**	**H H3**	1.0	1.0	mg/L			10/20/23 13:15	1
Orthophosphate as P (SM 4500 P E-2011)	0.0050	U	0.030	0.0050	mg/L			10/20/23 23:50	1
Carbonaceous Biochemical Oxygen Demand 5 (SM 5210 B-2016)	1.0	U	1.0	1.0	mg/L			10/20/23 15:05	1
pH (SW846 9040C)	**7.9**	**HF**	0.1	0.1	SU			10/25/23 12:43	1
Temperature (SW846 9040C)	**21.0**	**HF**	0.1	0.1	Degrees C			10/25/23 12:43	1
Total Organic Carbon (SW846 9060A)	**4.8**	**B**	1.0	0.53	mg/L			10/23/23 19:59	1
Phosphorus as PO4 (SM4500 P E-2011)	**0.90**		0.090	0.071	mg/L		11/02/23 11:17	11/02/23 15:14	1
Phosphorus as P (SM4500 P E-2011)	**0.29**		0.030	0.023	mg/L		11/02/23 11:17	11/02/23 15:14	1
Nitrogen, Total (EPA Total Nitrogen)	**2.1**		0.50	0.50	mg/L			10/29/23 18:00	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (EPA 350.1)	0.050	U	0.10	0.050	mg/L			10/27/23 12:38	1
Orthophosphate as P (SM 4500 P E-2011)	0.0050	U	0.030	0.0050	mg/L			10/20/23 23:50	1
Phosphorus as PO4 (SM4500 P E-2011)	0.071	U	0.090	0.071	mg/L		11/02/23 11:17	11/02/23 15:14	1
Phosphorus as P (SM4500 P E-2011)	0.023	U	0.030	0.023	mg/L		11/02/23 11:17	11/02/23 15:14	1

Client Sample ID: Clarifying Pond
Lab Sample ID: 460-290748-4

Date Collected: 10/19/23 10:15
Matrix: Water
Date Received: 10/19/23 19:00

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide	0.054	U	0.32	0.054	mg/L			10/20/23 12:04	1
Nitrate as N	**0.20**		0.16	0.070	mg/L			10/20/23 12:04	1
Chloride	**1.28**		0.32	0.039	mg/L			10/20/23 12:04	1
Nitrate Nitrite as N	**0.25**		0.16	0.070	mg/L			10/20/23 12:04	1
Nitrite as N	**0.047**	**J**	0.16	0.023	mg/L			10/20/23 12:04	1

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill - Anti Degradation

Job ID: 460-290748-1

Client Sample ID: Clarifying Pond
Date Collected: 10/19/23 10:15
Date Received: 10/19/23 19:00

Lab Sample ID: 460-290748-4
Matrix: Water

Method: EPA 300.0 - Anions, Ion Chromatography (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**6.92**		0.48	0.095	mg/L			10/20/23 12:04	1

Method: SM-Online 2340B-2011 - Total Hardness (as CaCO3) by calculation - SM Online, 2011

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**62.7**		33.1	33.1	mg/L			11/09/23 07:20	1

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000043	U	0.00020	0.000043	mg/L		10/25/23 11:26	10/25/23 14:41	1

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**2.9**	**J**	4.0	0.91	ug/L		10/24/23 08:20	10/29/23 16:10	1
Boron	**63.1**	**J**	80.0	30.4	ug/L		10/24/23 08:20	10/29/23 16:10	1
Calcium	**16400**		500	53.6	ug/L		10/24/23 08:20	10/29/23 16:10	1
Copper	2.5	U	4.0	2.5	ug/L		10/24/23 08:20	10/29/23 16:10	1
Lead	0.84	U	1.2	0.84	ug/L		10/24/23 08:20	10/29/23 16:10	1
Magnesium	**5250**		200	46.9	ug/L		10/24/23 08:20	10/29/23 16:10	1
Manganese	**14.9**		8.0	1.5	ug/L		10/24/23 08:20	10/29/23 16:10	1
Nickel	0.91	U	4.0	0.91	ug/L		10/24/23 08:20	10/29/23 16:10	1
Potassium	**1270**		200	112	ug/L		10/24/23 08:20	10/29/23 16:10	1
Selenium	0.59	U	2.5	0.59	ug/L		10/24/23 08:20	10/29/23 16:10	1
Sodium	**3260**		500	219	ug/L		10/24/23 08:20	10/29/23 16:10	1
Strontium	**27.3**		4.0	0.50	ug/L		10/24/23 08:20	10/29/23 16:10	1
Zinc	6.5	U	16.0	6.5	ug/L		10/24/23 08:20	10/29/23 16:10	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**180**		100	35.0	ug/L		10/25/23 06:36	10/25/23 21:26	1
Iron	**292**		50.0	20.0	ug/L		10/26/23 20:37	11/02/23 19:31	1
Lithium	4.9	U	5.0	4.9	ug/L		10/26/23 14:00	11/07/23 22:18	5

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	19.5	U	40.0	19.5	ug/L		10/25/23 02:31	10/25/23 21:14	1
Cadmium	0.15	U	0.50	0.15	ug/L		10/30/23 05:46	10/31/23 18:58	1
Lithium	4.9	U	5.0	4.9	ug/L		10/31/23 12:30	11/03/23 20:53	5
Arsenic	0.89	U	2.0	0.89	ug/L		10/25/23 02:31	10/25/23 21:14	1
Iron	20.0	U	50.0	20.0	ug/L		10/30/23 05:46	10/31/23 18:58	1
Calcium	**17700**		500	53.6	ug/L		10/25/23 02:31	10/25/23 21:14	1
Zinc	4.0	U	10.0	4.0	ug/L		10/30/23 05:46	10/31/23 18:58	1
Copper	2.5	U	4.0	2.5	ug/L		10/25/23 02:31	10/25/23 21:14	1
Iron	58.2	U	120	58.2	ug/L		10/25/23 02:31	10/25/23 21:14	1
Lead	0.84	U	1.2	0.84	ug/L		10/25/23 02:31	10/25/23 21:14	1
Magnesium	**5550**		200	46.9	ug/L		10/25/23 02:31	10/25/23 21:14	1
Manganese	**11.9**		8.0	1.5	ug/L		10/25/23 02:31	10/25/23 21:14	1
Nickel	0.91	U	4.0	0.91	ug/L		10/25/23 02:31	10/25/23 21:14	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Resistivity (EPA 120.1)	**0.00719**		0.000100	0.000100	Mohm-cm			10/30/23 13:00	1

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill - Anti Degradation

Job ID: 460-290748-1

Client Sample ID: Clarifying Pond
Date Collected: 10/19/23 10:15
Date Received: 10/19/23 19:00

Lab Sample ID: 460-290748-4
Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance (EPA 120.1)	**139**		1.00	1.00	umhos/cm			10/30/23 13:00	1
Acidity (SM 2310B-2011)	20.0	U	20.0	20.0	mg/L			11/01/23 09:00	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-2011)	**59.4**		5.0	5.0	mg/L			10/30/23 10:15	1
Carbonate Alkalinity as CaCO3 (SM 2320B-2011)	5.0	U	5.0	5.0	mg/L			10/30/23 10:15	1
Alkalinity as CaCO3 to pH 4.5 (SM 2320B-2011)	**59.4**		5.0	5.0	mg/L			10/30/23 10:15	1
Total Dissolved Solids (SM 2540C-2015)	**119**		2.5	2.5	mg/L			10/24/23 07:16	1
Total Suspended Solids (SM 2540D-2015)	**3.3**		2.5	2.5	mg/L			10/23/23 11:28	1
Ammonia (EPA 350.1)	0.050	U	0.10	0.050	mg/L			10/27/23 12:32	1
Total Kjeldahl Nitrogen (EPA 351.2)	**1.1**		1.0	0.50	mg/L		10/26/23 10:15	10/27/23 14:08	1
Chemical Oxygen Demand (EPA 410.4)	**5.6**	**J**	10.0	3.3	mg/L			10/30/23 12:45	1
Oxygen, Dissolved (SM 4500 O C-2016)	**7.1**	**H H3**	1.0	1.0	mg/L			10/20/23 13:20	1
Orthophosphate as P (SM 4500 P E-2011)	0.0050	U	0.030	0.0050	mg/L			10/20/23 23:50	1
Carbonaceous Biochemical Oxygen Demand 5 (SM 5210 B-2016)	1.0	U	1.0	1.0	mg/L			10/20/23 15:10	1
pH (SW846 9040C)	**7.7**	**HF**	0.1	0.1	SU			10/24/23 13:46	1
Temperature (SW846 9040C)	**20.7**	**HF**	0.1	0.1	Degrees C			10/24/23 13:46	1
Total Organic Carbon (SW846 9060A)	**1.4**	**B**	1.0	0.53	mg/L			10/23/23 20:23	1
Phosphorus as PO4 (SM4500 P E-2011)	**0.82**		0.090	0.071	mg/L		11/02/23 11:17	11/02/23 15:14	1
Phosphorus as P (SM4500 P E-2011)	**0.27**		0.030	0.023	mg/L		11/02/23 11:17	11/02/23 15:14	1
Nitrogen, Total (EPA Total Nitrogen)	**1.1**		0.50	0.50	mg/L			10/29/23 18:00	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (EPA 350.1)	0.050	U	0.10	0.050	mg/L			10/27/23 12:40	1
Orthophosphate as P (SM 4500 P E-2011)	0.0050	U	0.030	0.0050	mg/L			10/20/23 23:50	1
Phosphorus as PO4 (SM4500 P E-2011)	**0.12**		0.090	0.071	mg/L		11/02/23 11:17	11/02/23 15:14	1
Phosphorus as P (SM4500 P E-2011)	**0.038**		0.030	0.023	mg/L		11/02/23 11:17	11/02/23 15:14	1

Lab Chronicle

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill - Anti Degradation

Job ID: 460-290748-1

Client Sample ID: NPDES 001

Date Collected: 10/19/23 08:30
Date Received: 10/19/23 19:00

Lab Sample ID: 460-290748-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		1	939297	OXG	EET EDI	10/20/23 11:18
Total/NA	Analysis	300.0		1	939299	OXG	EET EDI	10/20/23 11:18
Total/NA	Analysis	2340B-2011		1	943641	LBD	EET EDI	11/09/23 07:20
Total/NA	Prep	245.1			688984	NVK	EET BUF	10/25/23 11:26
Total/NA	Analysis	245.1		1	689100	NVK	EET BUF	10/25/23 14:33
Dissolved	Filtration	FILTRATION			647574	MS	EET PEN	10/27/23 13:33
Dissolved	Prep	3005A			648045	MS	EET PEN	10/31/23 12:30 - 10/31/23 13:39 [1]
Dissolved	Analysis	6020B		5	648798	NTH	EET PEN	11/03/23 20:12
Dissolved	Filtration	Filtration			435334	UDL9	ELLE	10/25/23 06:51
Dissolved	Prep	3005A			437040	UAMX	ELLE	10/30/23 05:46
Dissolved	Analysis	6020B		1	438052	LC3M	ELLE	10/31/23 18:50
Dissolved	Filtration	FILTRATION			940348	VAD	EET EDI	10/25/23 01:01
Dissolved	Prep	3010A			940350	VAD	EET EDI	10/25/23 01:22
Dissolved	Analysis	6020B		1	940654	VAD	EET EDI	10/25/23 19:59
Total Recoverable	Prep	3005A			647383	MS	EET PEN	10/26/23 14:00 - 10/26/23 16:29 [1]
Total Recoverable	Analysis	6020B		5	649181	NTH	EET PEN	11/07/23 22:09
Total Recoverable	Prep	3005A			436301	UAMX	ELLE	10/26/23 21:34
Total Recoverable	Analysis	6020B		1	438843	F7JF	ELLE	11/02/23 10:12
Total Recoverable	Prep	3005A			804417	RR	EET SAV	10/25/23 06:36
Total Recoverable	Analysis	6020B		1	804906	BWR	EET SAV	10/26/23 17:29
Total/NA	Prep	3010A			940170	JKF	EET EDI	10/24/23 08:20
Total/NA	Analysis	6020B		1	941396	CDC	EET EDI	10/29/23 17:08
Total/NA	Analysis	120.1		1	941544	HTV	EET EDI	10/30/23 13:00
Total/NA	Analysis	2310B-2011		1	941980	IAA	EET EDI	11/01/23 09:00
Total/NA	Analysis	2320B-2011		1	941517	AXP	EET EDI	10/30/23 09:56
Total/NA	Analysis	2540C-2015		1	940153	PLS	EET EDI	10/24/23 07:16
Total/NA	Analysis	2540D-2015		1	939992	AMN	EET EDI	10/23/23 11:28
Dissolved	Filtration	FILTRATION			941000	AXP	EET EDI	10/27/23 11:36
Dissolved	Analysis	350.1		1	941027	AXP	EET EDI	10/27/23 12:35
Total/NA	Analysis	350.1		1	941027	AXP	EET EDI	10/27/23 12:17
Total/NA	Prep	351.2			435632	NLE3	ELLE	10/25/23 15:50 - 10/25/23 18:50 [1]
Total/NA	Analysis	351.2		1	436207	JCG7	ELLE	10/26/23 11:27
Total/NA	Analysis	410.4		1	941530	HTV	EET EDI	10/30/23 12:45
Total/NA	Analysis	4500 O C-2016		1	939554	RXA	EET EDI	10/20/23 13:05
Dissolved	Filtration	FILTRATION			939683	VBG	EET EDI	10/20/23 21:20
Dissolved	Analysis	4500 P E-2011		1	939684	VBG	EET EDI	10/20/23 23:50
Total/NA	Analysis	4500 P E-2011		1	939684	VBG	EET EDI	10/20/23 23:50
Total/NA	Analysis	5210 B-2016		1	939575	RXA	EET EDI	10/20/23 14:55
Total/NA	Analysis	9040C		1	940453	MNP	EET EDI	10/25/23 12:41
Total/NA	Analysis	9060A		1	940223	MMC	EET EDI	10/23/23 16:09
Dissolved	Filtration	FILTRATION			942269	RAK	EET EDI	11/02/23 11:12
Dissolved	Prep	SM 4500 P B			942270	RAK	EET EDI	11/02/23 11:17
Dissolved	Analysis	SM4500 P E-2011		1	942311	RAK	EET EDI	11/02/23 15:14

Lab Chronicle

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill - Anti Degradation

Job ID: 460-290748-1

Client Sample ID: NPDES 001

Lab Sample ID: 460-290748-1

Date Collected: 10/19/23 08:30

Matrix: Water

Date Received: 10/19/23 19:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	SM 4500 P B			942270	RAK	EET EDI	11/02/23 11:17
Total/NA	Analysis	SM4500 P E-2011		1	942311	RAK	EET EDI	11/02/23 15:14
Total/NA	Analysis	Total Nitrogen		1	940412	TJW	EET EDI	10/29/23 18:00

Client Sample ID: Basin 1

Lab Sample ID: 460-290748-2

Date Collected: 10/19/23 09:15

Matrix: Water

Date Received: 10/19/23 19:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		1	939297	OXG	EET EDI	10/20/23 11:34
Total/NA	Analysis	300.0		1	939299	OXG	EET EDI	10/20/23 11:34
Total/NA	Analysis	2340B-2011		1	943641	LBD	EET EDI	11/09/23 07:20
Total/NA	Prep	245.1			688984	NVK	EET BUF	10/25/23 11:26
Total/NA	Analysis	245.1		1	689100	NVK	EET BUF	10/25/23 14:38
Dissolved	Filtration	FILTRATION			647574	MS	EET PEN	10/27/23 13:33
Dissolved	Prep	3005A			648045	MS	EET PEN	10/31/23 12:30 - 10/31/23 13:39 [1]
Dissolved	Analysis	6020B		5	648798	NTH	EET PEN	11/03/23 20:40
Dissolved	Filtration	Filtration			435334	UDL9	ELLE	10/25/23 06:51
Dissolved	Prep	3005A			437040	UAMX	ELLE	10/30/23 05:46
Dissolved	Analysis	6020B		1	438052	LC3M	ELLE	10/31/23 18:48
Dissolved	Filtration	FILTRATION			940348	VAD	EET EDI	10/25/23 01:01
Dissolved	Prep	3010A			940350	VAD	EET EDI	10/25/23 01:22
Dissolved	Analysis	6020B		1	940654	VAD	EET EDI	10/25/23 20:01
Total Recoverable	Prep	3005A			647383	MS	EET PEN	10/26/23 14:00 - 10/26/23 16:29 [1]
Total Recoverable	Analysis	6020B		5	649181	NTH	EET PEN	11/07/23 22:12
Total Recoverable	Prep	3005A			436287	UAMX	ELLE	10/26/23 20:37
Total Recoverable	Analysis	6020B		1	439049	UCIG	ELLE	11/02/23 19:27
Total Recoverable	Prep	3005A			804417	RR	EET SAV	10/25/23 06:36
Total Recoverable	Analysis	6020B		1	804906	BWR	EET SAV	10/26/23 17:33
Total/NA	Prep	3010A			940170	JKF	EET EDI	10/24/23 08:20
Total/NA	Analysis	6020B		1	941396	CDC	EET EDI	10/29/23 17:11
Total/NA	Analysis	120.1		1	941544	HTV	EET EDI	10/30/23 13:00
Total/NA	Analysis	2310B-2011		1	941980	IAA	EET EDI	11/01/23 09:00
Total/NA	Analysis	2320B-2011		1	941517	AXP	EET EDI	10/30/23 10:02
Total/NA	Analysis	2540C-2015		1	940153	PLS	EET EDI	10/24/23 07:16
Total/NA	Analysis	2540D-2015		1	939992	AMN	EET EDI	10/23/23 11:28
Dissolved	Filtration	FILTRATION			941000	AXP	EET EDI	10/27/23 11:36
Dissolved	Analysis	350.1		1	941027	AXP	EET EDI	10/27/23 12:37
Total/NA	Analysis	350.1		1	941027	AXP	EET EDI	10/27/23 12:18
Total/NA	Prep	351.2			435996	NLE3	ELLE	10/26/23 10:15 - 10/26/23 13:15 [1]
Total/NA	Analysis	351.2		1	436693	JCG7	ELLE	10/27/23 14:04
Total/NA	Analysis	410.4		1	941530	HTV	EET EDI	10/30/23 12:45
Total/NA	Analysis	4500 O C-2016		1	939554	RXA	EET EDI	10/20/23 13:10

Client Sample ID: Basin 1

Lab Sample ID: 460-290748-2

Date Collected: 10/19/23 09:15

Matrix: Water

Date Received: 10/19/23 19:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Filtration	FILTRATION			939683	VBG	EET EDI	10/20/23 21:20
Dissolved	Analysis	4500 P E-2011		1	939684	VBG	EET EDI	10/20/23 23:50
Total/NA	Analysis	4500 P E-2011		1	939684	VBG	EET EDI	10/20/23 23:50
Total/NA	Analysis	5210 B-2016		1	939575	RXA	EET EDI	10/20/23 15:00
Total/NA	Analysis	9040C		1	940192	MNP	EET EDI	10/24/23 13:49
Total/NA	Analysis	9060A		1	940223	MMC	EET EDI	10/23/23 18:43
Dissolved	Filtration	FILTRATION			942269	RAK	EET EDI	11/02/23 11:12
Dissolved	Prep	SM 4500 P B			942270	RAK	EET EDI	11/02/23 11:17
Dissolved	Analysis	SM4500 P E-2011		1	942311	RAK	EET EDI	11/02/23 15:14
Total/NA	Prep	SM 4500 P B			942270	RAK	EET EDI	11/02/23 11:17
Total/NA	Analysis	SM4500 P E-2011		1	942311	RAK	EET EDI	11/02/23 15:14
Total/NA	Analysis	Total Nitrogen		1	940412	TJW	EET EDI	10/29/23 18:00

Client Sample ID: Upstream

Lab Sample ID: 460-290748-3

Date Collected: 10/19/23 09:40

Matrix: Water

Date Received: 10/19/23 19:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		1	939297	OXG	EET EDI	10/20/23 11:49
Total/NA	Analysis	300.0		1	939299	OXG	EET EDI	10/20/23 11:49
Total/NA	Analysis	2340B-2011		1	943641	LBD	EET EDI	11/09/23 07:20
Total/NA	Prep	245.1			688984	NVK	EET BUF	10/25/23 11:26
Total/NA	Analysis	245.1		1	689100	NVK	EET BUF	10/25/23 14:39
Dissolved	Filtration	FILTRATION			647574	MS	EET PEN	10/27/23 13:33
Dissolved	Prep	3005A			648045	MS	EET PEN	10/31/23 12:30 - 10/31/23 13:39 [1]
Dissolved	Analysis	6020B		5	648798	NTH	EET PEN	11/03/23 20:50
Dissolved	Filtration	Filtration			435334	UDL9	ELLE	10/25/23 06:51
Dissolved	Prep	3005A			437040	UAMX	ELLE	10/30/23 05:46
Dissolved	Analysis	6020B		1	438052	LC3M	ELLE	10/31/23 19:00
Dissolved	Filtration	FILTRATION			940351	VAD	EET EDI	10/25/23 01:27
Dissolved	Prep	3010A			940368	VAD	EET EDI	10/25/23 02:31
Dissolved	Analysis	6020B		1	940654	VAD	EET EDI	10/25/23 21:09
Total Recoverable	Prep	3005A			647383	MS	EET PEN	10/26/23 14:00 - 10/26/23 16:29 [1]
Total Recoverable	Analysis	6020B		5	649181	NTH	EET PEN	11/07/23 22:15
Total Recoverable	Prep	3005A			436287	UAMX	ELLE	10/26/23 20:37
Total Recoverable	Analysis	6020B		1	439049	UCIG	ELLE	11/02/23 19:24
Total Recoverable	Prep	3005A			804417	RR	EET SAV	10/25/23 06:36
Total Recoverable	Analysis	6020B		1	804906	BWR	EET SAV	10/26/23 17:37
Total/NA	Prep	3010A			940170	JKF	EET EDI	10/24/23 08:20
Total/NA	Analysis	6020B		1	941396	CDC	EET EDI	10/29/23 17:13
Total/NA	Analysis	120.1		1	941544	HTV	EET EDI	10/30/23 13:00
Total/NA	Analysis	2310B-2011		1	941980	IAA	EET EDI	11/01/23 09:00
Total/NA	Analysis	2320B-2011		1	941517	AXP	EET EDI	10/30/23 10:08
Total/NA	Analysis	2540C-2015		1	940153	PLS	EET EDI	10/24/23 07:16

Client Sample ID: Upstream

Lab Sample ID: 460-290748-3

Date Collected: 10/19/23 09:40

Matrix: Water

Date Received: 10/19/23 19:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	2540D-2015		1	939992	AMN	EET EDI	10/23/23 11:28
Dissolved	Filtration	FILTRATION			941000	AXP	EET EDI	10/27/23 11:36
Dissolved	Analysis	350.1		1	941027	AXP	EET EDI	10/27/23 12:38
Total/NA	Analysis	350.1		1	941027	AXP	EET EDI	10/27/23 12:30
Total/NA	Prep	351.2			435996	NLE3	ELLE	10/26/23 10:15 - 10/26/23 13:15 [1]
Total/NA	Analysis	351.2		1	436693	JCG7	ELLE	10/27/23 14:06
Total/NA	Analysis	410.4		1	941530	HTV	EET EDI	10/30/23 12:45
Total/NA	Analysis	4500 O C-2016		1	939554	RXA	EET EDI	10/20/23 13:15
Dissolved	Filtration	FILTRATION			939683	VBG	EET EDI	10/20/23 21:20
Dissolved	Analysis	4500 P E-2011		1	939684	VBG	EET EDI	10/20/23 23:50
Total/NA	Analysis	4500 P E-2011		1	939684	VBG	EET EDI	10/20/23 23:50
Total/NA	Analysis	5210 B-2016		1	939575	RXA	EET EDI	10/20/23 15:05
Total/NA	Analysis	9040C		1	940453	MNP	EET EDI	10/25/23 12:43
Total/NA	Analysis	9060A		1	940223	MMC	EET EDI	10/23/23 19:59
Dissolved	Filtration	FILTRATION			942269	RAK	EET EDI	11/02/23 11:12
Dissolved	Prep	SM 4500 P B			942270	RAK	EET EDI	11/02/23 11:17
Dissolved	Analysis	SM4500 P E-2011		1	942311	RAK	EET EDI	11/02/23 15:14
Total/NA	Prep	SM 4500 P B			942270	RAK	EET EDI	11/02/23 11:17
Total/NA	Analysis	SM4500 P E-2011		1	942311	RAK	EET EDI	11/02/23 15:14
Total/NA	Analysis	Total Nitrogen		1	940412	TJW	EET EDI	10/29/23 18:00

Client Sample ID: Clarifying Pond

Lab Sample ID: 460-290748-4

Date Collected: 10/19/23 10:15

Matrix: Water

Date Received: 10/19/23 19:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		1	939297	OXG	EET EDI	10/20/23 12:04
Total/NA	Analysis	300.0		1	939299	OXG	EET EDI	10/20/23 12:04
Total/NA	Analysis	2340B-2011		1	943641	LBD	EET EDI	11/09/23 07:20
Total/NA	Prep	245.1			688984	NVK	EET BUF	10/25/23 11:26
Total/NA	Analysis	245.1		1	689100	NVK	EET BUF	10/25/23 14:41
Dissolved	Filtration	FILTRATION			647574	MS	EET PEN	10/27/23 13:33
Dissolved	Prep	3005A			648045	MS	EET PEN	10/31/23 12:30 - 10/31/23 13:39 [1]
Dissolved	Analysis	6020B		5	648798	NTH	EET PEN	11/03/23 20:53
Dissolved	Filtration	Filtration			435334	UDL9	ELLE	10/25/23 06:51
Dissolved	Prep	3005A			437040	UAMX	ELLE	10/30/23 05:46
Dissolved	Analysis	6020B		1	438052	LC3M	ELLE	10/31/23 18:58
Dissolved	Filtration	FILTRATION			940351	VAD	EET EDI	10/25/23 01:27
Dissolved	Prep	3010A			940368	VAD	EET EDI	10/25/23 02:31
Dissolved	Analysis	6020B		1	940654	VAD	EET EDI	10/25/23 21:14
Total Recoverable	Prep	3005A			647383	MS	EET PEN	10/26/23 14:00 - 10/26/23 16:29 [1]
Total Recoverable	Analysis	6020B		5	649181	NTH	EET PEN	11/07/23 22:18
Total Recoverable	Prep	3005A			436287	UAMX	ELLE	10/26/23 20:37
Total Recoverable	Analysis	6020B		1	439049	UCIG	ELLE	11/02/23 19:31

Lab Chronicle

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill - Anti Degradation

Job ID: 460-290748-1

Client Sample ID: Clarifying Pond

Date Collected: 10/19/23 10:15
Date Received: 10/19/23 19:00

Lab Sample ID: 460-290748-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			804419	RR	EET SAV	10/25/23 06:36
Total Recoverable	Analysis	6020B		1	804717	BWR	EET SAV	10/25/23 21:26
Total/NA	Prep	3010A			940170	JKF	EET EDI	10/24/23 08:20
Total/NA	Analysis	6020B		1	941396	CDC	EET EDI	10/29/23 16:10
Total/NA	Analysis	120.1		1	941544	HTV	EET EDI	10/30/23 13:00
Total/NA	Analysis	2310B-2011		1	941980	IAA	EET EDI	11/01/23 09:00
Total/NA	Analysis	2320B-2011		1	941517	AXP	EET EDI	10/30/23 10:15
Total/NA	Analysis	2540C-2015		1	940153	PLS	EET EDI	10/24/23 07:16
Total/NA	Analysis	2540D-2015		1	939992	AMN	EET EDI	10/23/23 11:28
Dissolved	Filtration	FILTRATION			941000	AXP	EET EDI	10/27/23 11:36
Dissolved	Analysis	350.1		1	941027	AXP	EET EDI	10/27/23 12:40
Total/NA	Analysis	350.1		1	941027	AXP	EET EDI	10/27/23 12:32
Total/NA	Prep	351.2			435996	NLE3	ELLE	10/26/23 10:15 - 10/26/23 13:15 [1]
Total/NA	Analysis	351.2		1	436693	JCG7	ELLE	10/27/23 14:08
Total/NA	Analysis	410.4		1	941530	HTV	EET EDI	10/30/23 12:45
Total/NA	Analysis	4500 O C-2016		1	939554	RXA	EET EDI	10/20/23 13:20
Dissolved	Filtration	FILTRATION			939683	VBG	EET EDI	10/20/23 21:20
Dissolved	Analysis	4500 P E-2011		1	939684	VBG	EET EDI	10/20/23 23:50
Total/NA	Analysis	4500 P E-2011		1	939684	VBG	EET EDI	10/20/23 23:50
Total/NA	Analysis	5210 B-2016		1	939575	RXA	EET EDI	10/20/23 15:10
Total/NA	Analysis	9040C		1	940192	MNP	EET EDI	10/24/23 13:46
Total/NA	Analysis	9060A		1	940223	MMC	EET EDI	10/23/23 20:23
Dissolved	Filtration	FILTRATION			942269	RAK	EET EDI	11/02/23 11:12
Dissolved	Prep	SM 4500 P B			942270	RAK	EET EDI	11/02/23 11:17
Dissolved	Analysis	SM4500 P E-2011		1	942311	RAK	EET EDI	11/02/23 15:14
Total/NA	Prep	SM 4500 P B			942270	RAK	EET EDI	11/02/23 11:17
Total/NA	Analysis	SM4500 P E-2011		1	942311	RAK	EET EDI	11/02/23 15:14
Total/NA	Analysis	Total Nitrogen		1	940412	TJW	EET EDI	10/29/23 18:00

[1] This procedure uses a method stipulated length of time for the process. Both start and end times are displayed.

Laboratory References:

EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

EET EDI = Eurofins Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

EET PEN = Eurofins Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

EET SAV = Eurofins Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Microbac = Marietta, OH, 158 Starlite Drive, Marietta, OH 45750

Accreditation/Certification Summary

Client: Heidelberg Materials Northeast LLC
Job ID: 460-290748-1
Project/Site: Rock Hill - Anti Degradation

Laboratory: Eurofins Edison

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Connecticut	State	PH-0818	01-30-24
DE Haz. Subst. Cleanup Act (HSCA)	State	N/A	01-01-24
Georgia	State	12028 (NJ)	06-30-24
Massachusetts	State	M-NJ312	06-30-24
New Jersey	NELAP	12028	06-30-24
New York	NELAP	11452	04-01-24
Pennsylvania	NELAP	68-00522	02-29-24
Rhode Island	State	LAO00376	12-30-23

Laboratory: Eurofins Buffalo

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Arkansas DEQ	State	88-0686	07-06-23 *
Connecticut	State	PH-0568	03-31-24
Florida	NELAP	E87672	06-30-23 *
Georgia	State	10026 (NY)	03-31-24
Georgia	State Program	N/A	03-31-09 *
Illinois	NELAP	200003	09-30-23 *
Iowa	State	374	03-01-25
Iowa	State Program	374	03-01-09 *
Kansas	NELAP	E-10187	02-01-24
Kentucky (DW)	State	90029	01-01-24
Kentucky (UST)	State	108092	04-01-24
Kentucky (WW)	State	KY90029	12-31-23
Louisiana	NELAP	02031	06-30-23 *
Louisiana (All)	NELAP	02031	06-30-23 *
Maine	State	NY00044	12-04-24
Maryland	State	294	06-30-24
Massachusetts	State	M-NY044	07-01-24
Michigan	State	9937	04-01-24
Michigan	State Program	9937	04-01-09 *
New Hampshire	NELAP	2973	09-11-19 *
New Hampshire	NELAP	2337	11-17-23
New Jersey	NELAP	NY455	06-30-24
New York	NELAP	10026	03-31-24
Pennsylvania	NELAP	68-00281	08-31-24
Rhode Island	State	LAO00328	12-30-23
Texas	NELAP	T104704412-18-10	07-31-23 *
USDA	US Federal Programs	P330-18-00039	03-25-24
Virginia	NELAP	460185	09-14-23 *
Washington	State	C784	02-10-24
Wisconsin	State	998310390	08-31-24

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
A2LA	Dept. of Defense ELAP	0001.01	11-30-24
A2LA	ISO/IEC 17025	0001.01	11-30-24
Alabama	State	43200	01-31-24

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Client: Heidelberg Materials Northeast LLC
Job ID: 460-290748-1
Project/Site: Rock Hill - Anti Degradation

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC (Continued)

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alaska	State	PA00009	06-30-24
Alaska (UST)	State	17-027	02-28-24
Arizona	State	AZ0780	03-12-24
Arkansas DEQ	State	88-00660	08-09-24
California	State	2792	11-30-23
Colorado	State	PA00009	06-30-24
Connecticut	State	PH-0746	06-30-25
DE Haz. Subst. Cleanup Act (HSCA)	State	019-006 (PA cert)	01-31-24
Delaware (DW)	State	N/A	01-31-24
Florida	NELAP	E87997	06-30-24
Georgia (DW)	State	C048	01-31-24
Hawaii	State	N/A	01-31-24
Illinois	NELAP	200027	01-31-24
Iowa	State	361	03-01-24
Kansas	NELAP	E-10151	10-31-24
Kentucky (DW)	State	KY90088	12-31-23
Kentucky (UST)	State	0001.01	11-30-24
Kentucky (WW)	State	KY90088	12-31-23
Louisiana (All)	NELAP	02055	06-30-24
Maine	State	2019012	03-12-25
Maryland	State	100	06-30-24
Massachusetts	State	M-PA009	06-30-24
Michigan	State	9930	01-31-24
Minnesota	NELAP	042-999-487	12-31-23
Mississippi	State	023	01-31-24
Missouri	State	450	01-31-25
Montana (DW)	State	0098	01-01-24
Nebraska	State	NE-OS-32-17	01-31-24
New Hampshire	NELAP	2730	01-10-24
New Jersey	NELAP	PA011	06-30-24
New York	NELAP	10670	04-01-24
North Carolina (DW)	State	42705	07-31-24
North Carolina (WW/SW)	State	521	12-31-23
North Dakota	State	R-205	01-31-24
Oklahoma	NELAP	9804	08-31-24
Oregon	NELAP	PA200001	09-11-24
PALA	Canada	1978	09-16-24
Pennsylvania	NELAP	36-00037	01-31-24
Rhode Island	State	LAO00338	12-31-23
South Carolina	State	89002	01-31-24
Tennessee	State	02838	01-31-24
Texas	NELAP	T104704194-23-46	08-31-24
USDA	US Federal Programs	525-22-298-19481	10-25-25
Vermont	State	VT - 36037	10-28-24
Virginia	NELAP	460182	06-14-25
Washington	State	C457	04-11-24
West Virginia (DW)	State	9906 C	12-31-23
West Virginia DEP	State	055	07-31-24
Wyoming	State	8TMS-L	01-31-24
Wyoming (UST)	A2LA	0001.01	11-30-24

Accreditation/Certification Summary

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill - Anti Degradation

Job ID: 460-290748-1

Laboratory: Eurofins Pensacola

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alabama	State	40150	06-30-24
ANAB	ISO/IEC 17025	L2471	02-22-26
Arkansas DEQ	State	88-00689	08-01-24
California	State	2510	06-30-24
Florida	NELAP	E81010	06-30-24
Georgia	State	E81010(FL)	06-30-24
Illinois	NELAP	200041	10-09-24
Kansas	NELAP	E-10253	10-31-24
Kentucky (UST)	State	53	06-30-24
Louisiana (All)	NELAP	30976	06-30-24
Louisiana (DW)	State	LA017	12-31-23
North Carolina (WW/SW)	State	314	12-31-23
Oklahoma	NELAP	9810	08-31-24
Pennsylvania	NELAP	68-00467	01-31-24
South Carolina	State	96026	06-30-24
Tennessee	State	TN02907	06-30-24
Texas	NELAP	T104704286	09-30-24
US Fish & Wildlife	US Federal Programs	A22340	06-30-24
USDA	US Federal Programs	FLGNV23001	01-08-26
USDA	US Federal Programs	P330-21-00056	05-17-24
Virginia	NELAP	460166	06-14-24
West Virginia DEP	State	136	03-31-24
West Virginia DEP	State	136	03-31-24

Laboratory: Eurofins Savannah

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
	AFCEE	SAVLAB	
Alabama	State	41450	06-30-24
ANAB	Dept. of Defense ELAP	L2463	10-26-23
Arkansas DEQ	State	19-015-0	02-01-24
California	State	2939	06-30-24
Florida	NELAP	E87052	11-09-23
Georgia	State	E87052	06-30-24
Georgia (DW)	State	803	06-30-24
Guam	State	19-007R	04-17-24
Hawaii	State	<cert No.>	06-30-24
Illinois	NELAP	200022	11-30-23
Indiana	State	C-GA-02	06-30-24
Iowa	State	353	07-01-25
Kentucky (UST)	State	NA	06-30-24
Louisiana	NELAP	30690	06-30-24
Louisiana (All)	NELAP	30690	06-30-24
Louisiana (DW)	State	LA009	12-31-23
Maine	State	GA00006	09-25-24
Maryland	State	250	12-31-23
Massachusetts	State	M-GA006	06-30-24
Michigan	State	9925	06-30-24
Mississippi	State	<cert No.>	06-30-24

Accreditation/Certification Summary

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill - Anti Degradation

Job ID: 460-290748-1

Laboratory: Eurofins Savannah (Continued)

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Nebraska	State	NE-OS-7-04	06-30-24
New Jersey	NELAP	GA769	06-30-24
New Mexico	State	GA00006	06-30-24
North Carolina (DW)	State	13701	07-31-24
North Carolina (WW/SW)	State	269	12-31-23
Pennsylvania	NELAP	68-00474	06-30-24
Puerto Rico	State	GA00006	01-01-24
South Carolina	State	98001	06-30-24
Tennessee	State	TN02961	06-30-24
Texas	NELAP	T1047004185	11-30-23
Texas	TCEQ Water Supply	T104704185	06-30-24
USDA	US Federal Programs	P330-18-00313	09-03-24
Virginia	NELAP	460161	06-14-24
Wyoming	State	8TMS-L	06-30-24

Method Summary

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill - Anti Degradation

Job ID: 460-290748-1

Method	Method Description	Protocol	Laboratory
300.0	Anions, Ion Chromatography	EPA	EET EDI
2340B-2011	Total Hardness (as CaCO3) by calculation - SM Online, 2011	SM-Online	EET EDI
245.1	Mercury (CVAA)	EPA	EET BUF
6020B	Metals (ICP/MS)	SW846	EET EDI
6020B	Metals (ICP/MS)	SW846	EET PEN
6020B	Metals (ICP/MS)	SW846	EET SAV
6020B	Metals (ICP/MS)	SW846	ELLE
120.1	Conductivity, Specific Conductance	EPA	EET EDI
2310B-2011	Acidity	SM	EET EDI
2320B-2011	Alkalinity, Total	SM	EET EDI
2540C-2015	Total Dissolved Solids (Dried at 180 °C)	SM	EET EDI
2540D-2015	Total Suspended Solids (Dried at 103-105°C)	SM	EET EDI
350.1	Nitrogen, Ammonia	EPA	EET EDI
351.2	Nitrogen, Total Kjeldahl	EPA	ELLE
410.4	COD	EPA	EET EDI
4500 O C-2016	Oxygen, Dissolved	SM	EET EDI
4500 P E-2011	Orthophosphate	SM	EET EDI
5210 B-2016	BOD, 5-Day	SM	EET EDI
9040C	pH	SW846	EET EDI
9060A	Organic Carbon, Total (TOC)	SW846	EET EDI
SM4500 P E-2011	Phosphorus	SM	EET EDI
Total Nitrogen	Nitrogen, Total	EPA	EET EDI
Subcontract	Osomotic Pressure	None	Microbac
245.1	Preparation, Mercury	EPA	EET BUF
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	EET PEN
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	EET SAV
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	ELLE
3010A	Preparation, Total Metals	SW846	EET EDI
351.2	Nitrogen, Total Kjeldahl	EPA	ELLE
FILTRATION	Sample Filtration	None	EET EDI
FILTRATION	Sample Filtration	None	EET PEN
Filtration	Sample Filtration	None	ELLE
SM 4500 P B	Phosphorous, Total and Ortho	SM	EET EDI

Protocol References:

EPA = US Environmental Protection Agency
None = None
SM = "Standard Methods For The Examination Of Water And Wastewater"
SM-Online = Standard Methods Online
SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600
EET EDI = Eurofins Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900
EET PEN = Eurofins Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001
EET SAV = Eurofins Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858
ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300
Microbac = Marietta, OH, 158 Starlite Drive, Marietta, OH 45750

Sample Summary

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill - Anti Degradation

Job ID: 460-290748-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
460-290748-1	NPDES 001	Water	10/19/23 08:30	10/19/23 19:00
460-290748-2	Basin 1	Water	10/19/23 09:15	10/19/23 19:00
460-290748-3	Upstream	Water	10/19/23 09:40	10/19/23 19:00
460-290748-4	Clarifying Pond	Water	10/19/23 10:15	10/19/23 19:00

Microbac Laboratories Inc., - Marietta, OH

Client Project ID:

46011424

For:

Julie Gilmore

Eurofins TestAmerica Edison

777 New Durham RD

Edison, NJ 08817

Project State of Origin: Pennsylvania

Project Requested Certification:

Microbac Laboratories Inc., - Marietta, OH	68-01670	PA Department of Environmental Protection

All test results meet the requirements of the QAPP and other applicable contract terms and conditions. Any exceptions are attached to this cover page or addressed in the method narratives presented in the report. All results for soil samples are reported on a 'dry-weight' basis unless specified otherwise. Analytical results for water and wastes are reported on a 'as received' basis unless specified otherwise. A statement of uncertainty for each analysis is available upon request. The reported results are related only to the samples analyzed as received. This laboratory report may be released as a hardcopy and in computer-readable form submitted electronically or on diskette. This laboratory report shall not be reproduced, except in full, without the written approval of Microbac Laboratories, Inc.

Laboratory Project Manager:

Michelle Taylor

Project Manager

Michelle.Taylor@microbac.com

Authorized By:

Michelle Taylor

Project Manager

Issued: 11/02/2023

MICROBAC®

Laboratory Report Number: M3J1633

Client Project ID: 46011424

Cooler Receipt Log

Cooler ID: Default Cooler Temp: 4.8°C

Cooler Inspection Checklist

Ice Present or not required?	Yes
Shipping containers sealed or not required?	Yes
Custody seals intact or not required?	Yes
Chain of Custody (COC) Present?	Yes
COC includes customer information?	Yes
Relinquished and received signature on COC?	Yes
Sample collector identified on COC?	Yes
Sample type identified on COC?	Yes
Correct type of Containers Received	No
Correct number of containers listed on COC?	Yes
Containers Intact?	Yes
COC includes requested analyses?	Yes
Enough sample volume for indicated tests received?	Yes
Sample labels match COC (Name, Date & Time?)	Yes
Samples arrived within hold time?	Yes
Correct preservatives on COC or not required?	Yes
Chemical preservations checked or not required?	Yes
Preservation checks meet method requirements?	Yes
VOA vials have zero headspace, or not recd.?	Yes

Laboratory Report Number: M3J1633

Client Project ID: 46011424

Sample Notes

PADEP 391-2000-008

A4 **Sample was received with head space.**

Osmotic Pressure

M3J1633-01	NPDES 001 (460-290748-01)	M3J1633-02	Basin 1 (460-290748-02)
M3J1633-03	Upstream (460-290748-3)	M3J1633-04	Clarifying Pond (460-290748-4)

MICROBAC®

Laboratory Report Number: M3J1633

Client Project ID: 46011424

Microbac Laboratories Inc., - Marietta, OH

CERTIFICATE OF ANALYSIS

Client ID:	NPDES 001 (460-290748-01)			**Collection Date:**	10/19/2023 08:30
Laboratory ID:	M3J1633-01			**Prep Date:**	10/26/2023 17:20
Matrix:	Aqueous			**Analyzed:**	10/26/2023 17:20
Batch / Sequence:	B3J1518 /	**Analytical Method:**	PADEP 391-2000-008	**Calibration:**	NA
Instrument:	OSMOMETER 5004	**Units:**	mOsm/kg	**File ID:**	OsmoticPressure_B3J1518_231026052304.xls
Analyst:	TSD	**Dilution:**	1		

Analyte	CAS Number	Result	MDL	RL	Flag	Qualifier
Osmotic Pressure		7.00	6.00	10.0		A4

MICROBAC®

Laboratory Report Number: M3J1633

Client Project ID: 46011424

Microbac Laboratories Inc., - Marietta, OH

CERTIFICATE OF ANALYSIS

Client ID:	Basin 1 (460-290748-02)			**Collection Date:**	10/19/2023 09:15
Laboratory ID:	M3J1633-02			**Prep Date:**	10/26/2023 17:20
Matrix:	Aqueous			**Analyzed:**	10/26/2023 17:20
Batch / Sequence:	B3J1518 /	**Analytical Method:**	PADEP 391-2000-008	**Calibration:**	NA
Instrument:	OSMOMETER 5004	**Units:**	mOsm/kg	**File ID:**	OsmoticPressure_B3J1518_231026052304.xls
Analyst:	TSD	**Dilution:**	1		

Analyte	CAS Number	Result	MDL	RL	Flag	Qualifier
Osmotic Pressure		9.00	6.00	10.0		A4

MICROBAC®

Laboratory Report Number: M3J1633

Client Project ID: 46011424

Microbac Laboratories Inc., - Marietta, OH

CERTIFICATE OF ANALYSIS

Client ID:	Upstream (460-290748-3)			**Collection Date:**	10/19/2023 09:40
Laboratory ID:	M3J1633-03			**Prep Date:**	10/26/2023 17:20
Matrix:	Aqueous			**Analyzed:**	10/26/2023 17:20
Batch / Sequence:	B3J1518 /	**Analytical Method:**	PADEP 391-2000-008	**Calibration:**	NA
Instrument:	OSMOMETER 5004	**Units:**	mOsm/kg	**File ID:**	OsmoticPressure_B3J1518_231026052304.xls
Analyst:	TSD	**Dilution:**	1		

Analyte	CAS Number	Result	MDL	RL	Flag	Qualifier
Osmotic Pressure		9.00	6.00	10.0		A4

MICROBAC®

Laboratory Report Number: M3J1633

Client Project ID: 46011424

Microbac Laboratories Inc., - Marietta, OH

CERTIFICATE OF ANALYSIS

Client ID:	Clarifying Pond (460-290748-4)			**Collection Date:**	10/19/2023 10:15
Laboratory ID:	M3J1633-04			**Prep Date:**	10/26/2023 17:20
Matrix:	Aqueous			**Analyzed:**	10/26/2023 17:20
Batch / Sequence:	B3J1518 /	**Analytical Method:**	PADEP 391-2000-008	**Calibration:**	NA
Instrument:	OSMOMETER 5004	**Units:**	mOsm/kg	**File ID:**	OsmoticPressure_B3J1518_231026052304.xls
Analyst:	TSD	**Dilution:**	1		

Analyte	CAS Number	Result	MDL	RL	Flag	Qualifier
Osmotic Pressure		ND	6.00	10.0		A4

Laboratory Report Number: M3J1633

Client Project ID: 46011424

Notes and Definitions

A4: Sample was received with head space.
MDL: Method Detection Limit
RL: Reporting Limit

Laboratory Report Number: M3J1633

Client Project ID: 46011424

METHOD BLANKS

Sample ID:	B3J1518-BLK1	**Prep Date:**	10/26/23 17:20	**Matrix:**	Aqueous
Instrument:	OSMOMETER 5004	**Analyzed:**	10/26/23 17:20	**Method:**	PADEP 391-2000-008
File ID:	OsmoticPressure_B3J1	**Sequence:**		**Analyst:**	TSD
Batch:	B3J1518	**Units:**	mOsm/kg	**Calibration:**	

Analyte	Result	MDL	RL	Dilution	Flag	Q
Osmotic Pressure	6.00	6.00	10.0	1	U	

* - Detected in the associated method Blank at a concentration >= RL

Laboratory Report Number: M3J1633

Client Project ID: 46011424

BLANK SPIKE / DUPLICATE (BS/BSD)

Method:	PADEP 391-2000-008		**Blank Spike**	**Duplicate**
Batch:	B3J1518	**Spike ID:**	B3J1518-BS1	B3J1518-BSD1
Analyst:	TSD	**Prepared:**	10/26/23 17:20	10/26/23 17:20
Matrix:	Aqueous	**Analyzed:**	10/26/23 17:20	10/26/23 17:20
Units:	mOsm/kg	**File ID:**	OsmoticPressure_B3J1518_2310	OsmoticPressure_B3J1518_2310
Instrument:	OSMOMETER 5004	**Initial/Final:**	1mL/1mL	1mL/1mL
Calibration:				

Analyte	BS Spiked	BS Found	BS %Rec	BSD Spiked	BSD Found	BSD %Rec	%RPD	%Rec Limts	RPD Limit	Q
Osmotic Pressure	290	289	99.7	290	294	101	1.72	90 - 110	20	

* - Does not meet %Rec acceptance criteria.
- Does not meet RPD acceptance criteria.

Laboratory Report Number: M3J1633

Client Project ID: 46011424

DUPLICATE

Parent ID:	M3J1633-01	**Calibration:**				**Method:**	PADEP 391-2000-008
Instrument:	OSMOMETER 500	**File ID:**	OsmoticPressure_B	**Dil:**	1	**Matrix:**	Aqueous
Sample ID:	B3J1518-DUP1	**Batch:**	B3J1518			**Units:**	mOsm/kg

Analyte	Parent	Duplicate	RPD	RPD Limit	Q
Osmotic Pressure	7.00	ND		20	

Laboratory Report Number: M3J1633

Client Project ID: 46011424

* - Exceeds RPD Limit
- Based on the low concentration of this analyte, Relative Percent Difference is not an appropriate evaluator of precision. The precision of the duplicate analysis is considered acceptable

Eurofins Edison
777 New Durham Road
Edison, NJ 08817
Phone: 732-549-3900 Fax: 732-549-3679

Chain of Custody Record

eurofins | Environment Testing

11/13/2023

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Gilmore, Julie L	Carrier Tracking No(s):	COC No: 460-69583.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Julie.Gilmore@et.eurofinsus.com	State of Origin: Pennsylvania	Page: Page 1 of 1
Company: Microbac Laboratories, Inc.		Accreditations Required (See note): NELAP - Pennsylvania		Job #: 460-290748-1
Address: 158 Starlite Drive, ,	Due Date Requested: 10/31/2023			
City: Marietta	TAT Requested (days):			
State, Zip: OH, 45750	PO #:			
Phone: 800-373-4071(Tel)	WO #:			
Email:	Project #: 46011424			
Project Name: Rock Hill - Anti Degradation	SSOW#:			
Site:				

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	SUB (Osomotic Pressure)/ Osomotic Pressure	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
NPDES 001 (460-290748-1)	10/19/23	08:30 Eastern		Water			X	1	
Basin 1 (460-290748-2)	10/19/23	09:15 Eastern		Water			X	1	
Upstream (460-290748-3)	10/19/23	09:40 Eastern		Water			X	1	
Clarifying Pond (460-290748-4)	10/19/23	10:15 Eastern		Water			X	1	

M 3 J 1 6 3 3

Eurofins TestAmerica Edison
Rec'd: 10/25/2023 13:45
By: Erin Porter Temp: 4.8 (Signature)

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Northeast, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Northeast, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Northeast, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Northeast, LLC.

Possible Hazard Identification	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 1	Special Instructions/QC Requirements:
Empty Kit Relinquished by:	Date: Time: Method of Shipment:

Relinquished by:	Date/Time: 10/24/23 1900	Company EETND	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time: 10-25-23 13:45	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks:

MICROBAC®

Work Order # 1HJ51637

COOLER TEMP >6° C LOG

SAMPLE ID	Bottle 1 °C	Bottle 2 °C	Bottle 3 °C	Bottle 4 °C	Bottle 5 °C	Bottle 6 °C

10/25/2023 SM

pH Lot # HC325M5

pH Exceptions

SAMPLE ID	Bottle 1	Bottle 2	Bottle 3	Bottle 4	Bottle 5	Bottle 6

10/25/2023 SM

PRESERVATIVE EXCEPTIONS

✓ NONE

__ AS NOTED

10/25/2023 SM

Document Control # 1957
Last 04-10-2019

Issued to: Document Master File

Eurofins Edison
777 New Durham Road
Edison, NJ 08817
Phone: 732-549-3900 Fax: 732-549-3679

Chain of Custody Record

2.4 c
2 6 + KOP L

eurofins

Client Information	Sampler: EZG	Lab PM: Gilmore, Julie L	Carrier Tracking No(s):	COC No: 460-174155-111665.1
Client Contact: Andrew Gutshall	Phone:	E-Mail: Julie.Gilmore@et.eurofinsus.com	State of Origin:	Page: Page 1 of 2
Company: Heidelberg Materials Northeast LLC	PWSID:			Job #: 290748
Address: 7660 Imperial Way	Due Date Requested:			
City: Allentown	TAT Requested (days):			
State, Zip: PA, 18195	Compliance Project: Δ Yes Δ No			
Phone: 610-366-4819(Tel)	PO #: Purchase Order not required			
Email: andrew.gutshall@heidelbergmaterials.com	WO #:			
Project Name: Rock Hill Anti-Degradation	Project #: 46011424			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A	HCL	M	Hexane
B	NaOH	N	None
C	Zn Acetate	O	AsNaO2
D	Nitric Acid	P	Na2O4S
E	NaHSO4	Q	Na2SO3
F	MeOH	R	Na2S2O3
G	Amchlor	S	H2SO4
H	Ascorbic Acid	T	TSP Dodecahydrate
I	Ice	U	Acetone
J	DI Water	V	MCAA
K	EDTA	W	pH 4-5
L	EDA	Y	Trizma
		Z	other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020B Dissolved Lithium	6020B Total Lithium	351.2 Local Method	6020B Dissolved Cd/Fe/Zn	6020B (MOD) Total Fe	350.1 410.4, 4500_P_E	120.1 9040C	350.1 4500_P_E, 6020B	2320B (MOD) Alkalinity	6020B, SM2340B	9060A TOC	2540D, SM5210B_Calc	4500_P_E_Ortho Dissolved Orthophosphate	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	D	S	N	D	S	N	N	N	D	S	N	N		
VPOES 001	9/19/23	0830	G	Water																	1
Basin 1	9/19/23	0915	G	Water																	2
upstream	9/19/23	0940	G	Water																	3
Clarifying Pond	9/19/23	1015	G	Water																	4
				Water																	

460-290748 Chain of Custody

SHORT HOLD

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III IV Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		10/19/23 1440	EZG		10/19/23 1200	EETN-KOP
2		10-19-23 1725	EETN KOP		10/19	ETA
3		10/19 1900	ETA		10/19/23 1900	ETA

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks:

Ver: 06/08/2021

Eurofins Edison
777 New Durham Road
Edison, NJ 08817
Phone: 732-549-3900 Fax: 732-549-3679

Chain of Custody Record

2-4 ·
2-6 · 1 of 2

eurofins

Client Information	Sampler: ERG	Lab PM: Gilmore, Julie L	Carrier Tracking No(s):	COC No: 460-174155-111665.2
Client Contact: Andrew Gutshall	Phone:	E-Mail: Julie.Gilmore@et.eurofinsus.com	State of Origin:	Page: Page 2 of 2
Company: Heidelberg Materials Northeast LLC	PWSID:			Job #: 290748
Address: 7660 Imperial Way	Due Date Requested:			
City: Allentown	TAT Requested (days):			
State, Zip: PA, 18195	Compliance Project: Δ Yes Δ No			
Phone: 610-366-4819(Tel)	PO #: Purchase Order not required			
Email: andrew.gutshall@heidelbergmaterials.com	WO #:			
Project Name: Rock Hill Anti-Degradation	Project #: 46011424			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A HCL, B NaOH, C Zn Acetate, D Nitric Acid, E NaHSO4, F MeOH, G Amchlor, H Ascorbic Acid, I Ice, J DI Water, K EDTA, L EDA, M Hexane, N None, O AsNaO2, P Na2O4S, Q Na2SO3, R Na2S2O3, S H2SO4, T TSP Dodecahydrate, U Acetone, V MCAA, W pH 4-5, Y Trizma, Z other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	4500_P_E_Ortho Total Orthophosphate	2540C TDS	300_ORGFM_28D, 300_ORGFMS	245.1 Local Method	6020B Total Aluminum	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	N	D	D		
NPDES 001	10/19/23	0830	G	Water									1
Basin 1	10/19/23	0945	G	Water									2
Upstream	10/19/23	0940	G	Water									3
Curtis Pond	10/19/23	1015	G	Water									4
				Water									

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I II III, IV Other (specify)

Special Instructions/QC Requirements.

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Date/Time:	Company		Date/Time:	Company
Relinquished by:	10/19/23 1140	ERG	Received by:	10/19/23 1200	EEN-KOP
Relinquished by:	10-19-23 1705	EEN-KOP	Received by:	10/19	ETA
Relinquished by:	10/19 1900	ETA	Received by:	10/19/23 1900	ETA

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.	Cooler Temperature(s) °C and Other Remarks:

Ver 06/08/2021

TestAmerica Edison
Receipt Temperature and pH Log

Job Number: 290748

Number of Coolers: 2 IR Gun # 2

Cooler Temperatures

	RAW	CORRECTED		RAW	CORRECTED		RAW	CORRECTED
Cooler #1:	2.4 °C	2.4 °C	Cooler #4:	°C	°C	Cooler #7:	°C	°C
Cooler #2:	2.6 °C	2.6 °C	Cooler #5:	°C	°C	Cooler #8:	°C	°C
Cooler #3:	°C	°C	Cooler #6:	°C	°C	Cooler #9:	°C	°C

TALS Sample Number	Ammonia (pH<2)	COD (pH<2)	Nitrate Nitrite (pH<2)	Metals* (pH<2)	Hardness (pH<2)	Pest (pH 5-9)	EPH or QAM (pH<2)	Phenols (pH<2)	Sulfide (pH>9)	TKN (pH<2)	TOC (pH<2)	Total Cyanide (pH>12)	Total Phos (pH<2)	Other	Other
1	<2			<2						<2	<2		<2		
2	<2			<2						<2	<2		<2		
3	<2			<2						<2	<2		<2		
4	<2			<2						<2	<2		<2		

If pH adjustments are required record the information below

Sample No(s). adjusted: _____

Preservative Name/Conc.: _____ Volume of Preservative used (ml): _____

Lot # of Preservative(s): _____ Expiration Date: _____

The appropriate Project Manager and Department Manager should be notified about the samples which were pH adjusted.

** Samples for Metal analysis which are out of compliance must be acidified at least 24 hours prior to analysis.*

Initials: KD Date: 10/9

Eurofins Edison
777 New Durham Road
Edison, NJ 08817
Phone: 732-549-3900 Fax: 732-549-3679

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler	Lab PM: Gilmore, Julie L	Carrier Tracking No(s)	COC No: 460-69576.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Julie.Gilmore@et.eurofinsus.com	State of Origin: Pennsylvania	Page: Page 1 of 1
Company: Eurofins Environment Testing Southeast,		Accreditations Required (See note): NELAP - Pennsylvania		Job #: 460-290748-1
Address: 3355 McLemore Drive, ,	Due Date Requested: 10/30/2023			
City: Pensacola	TAT Requested (days):			
State, Zip: FL, 32514				
Phone: 850-474-1001(Tel) 850-478-2671(Fax)	PO #:			
Email	WO #:			
Project Name: Rock Hill - Anti Degradation	Project #: 46011424			
Site:	SSOW#:			

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)
Other:

Analysis Requested

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020B/3010A Total Lithium	6020B/FILTRATION Dissolved Lithium	Total Number of containers	Special Instructions/Note:
			Preservation Code:							
NPDES 001 (460-290748-1)	10/19/23	08:30 Eastern		Water			X	X	2	
Basin 1 (460-290748-2)	10/19/23	09:15 Eastern		Water			X	X	2	
Upstream (460-290748-3)	10/19/23	09:40 Eastern		Water			X	X	2	
Clarifying Pond (460-290748-4)	10/19/23	10:15 Eastern		Water			X	X	2	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Northeast, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Northeast, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Northeast, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Northeast, LLC.

Possible Hazard Identification: Unconfirmed	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month): ☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 1	Special Instructions/QC Requirements:

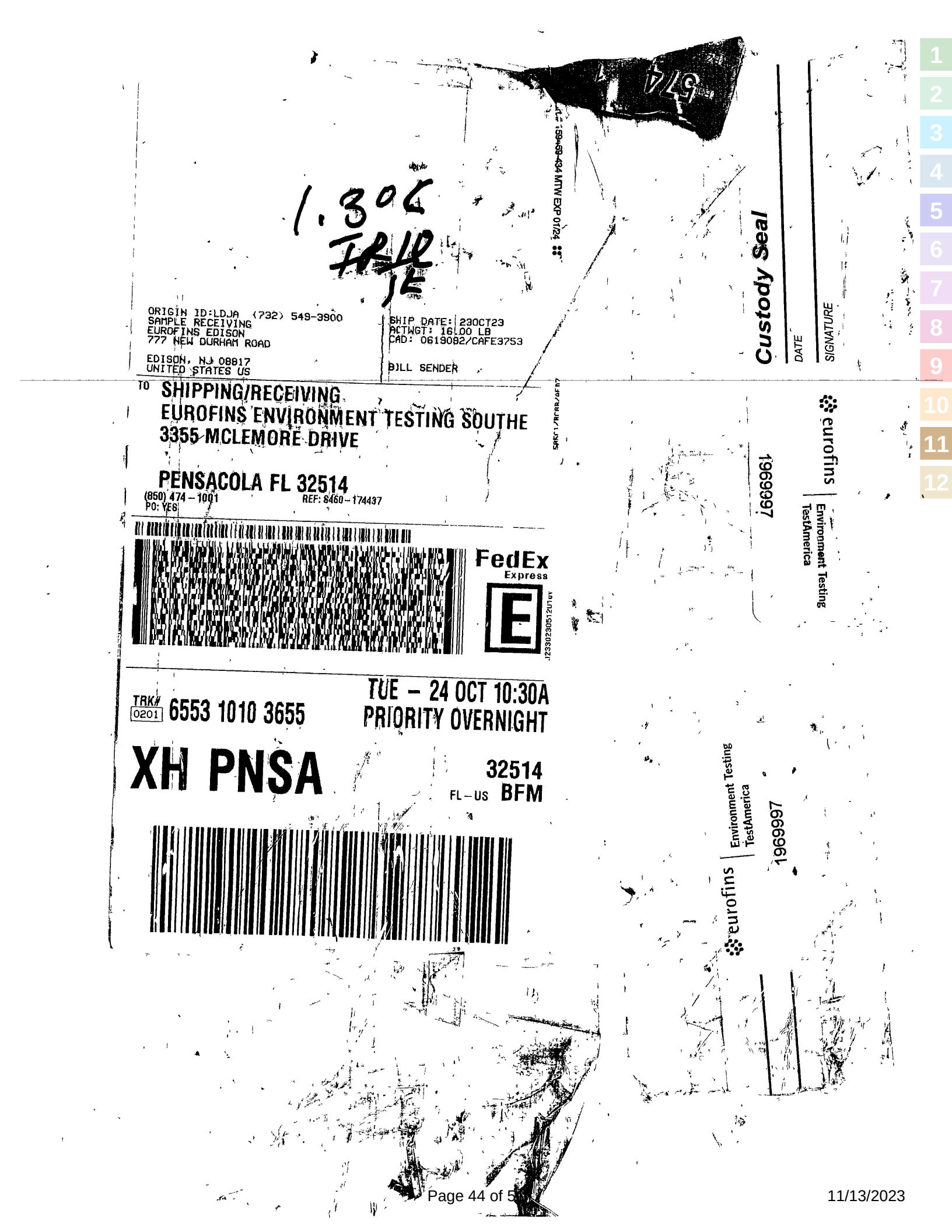
Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
1	[signature]	10/23/23 1900	ET-Edi	BP	10/24/23 914	
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks: 1.3°C IR 10

Page 43 of 51

11/13/2023


1.30C
FRI
1E
ORIGIN ID:LDJA (732) 549-3900
SAMPLE RECEIVING
EUROFINS EDISON
777 NEW DURHAM ROAD
EDISON, NJ 08817
UNITED STATES US
SHIP DATE: 23OCT23
ACTWGT: 16.00 LB
CAD: 0619082/CAFE3753
BILL SENDER
TO SHIPPING/RECEIVING
EUROFINS ENVIRONMENT TESTING SOUTHE
3355 MCLEMORE DRIVE
PENSACOLA FL 32514
(850) 474-1001
PO: YES
REF: 8460-174437
FedEx Express
TRK# 0201 6553 1010 3655
TUE - 24 OCT 10:30A
PRIORITY OVERNIGHT
XH PNSA
32514
FL-US BFM
Custody Seal
DATE
SIGNATURE
eurofins | Environment Testing TestAmerica
1969997
eurofins | Environment Testing TestAmerica
1969997

11/13/2023

777 New Durham Road
Edison, NJ 08817
Phone: 732-549-3900 Fax: 732-549-3679

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Gilmore, Julie L	Carrier Tracking No(s):	COC No: 460-69575.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Julie.Gilmore@et.eurofinsus.com	State of Origin: Pennsylvania	Page: Page 1 of 1
Company: Eurofins Environment Testing Northeast,		Accreditations Required (See note): NELAP - Pennsylvania		Job #: 460-290748-1
Address: 10 Hazelwood Drive, ,	Due Date Requested: 10/30/2023			
City: Amherst	TAT Requested (days):			
State, Zip: NY, 14228-2298				
Phone: 716-691-2600(Tel) 716-691-7991(Fax)	PO #:			
Email:	WO #:			
Project Name: Rock Hill - Anti Degradation	Project #: 46011424			
Site:	SSOW#:			

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)

Other:

Analysis Requested

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	245.1/245.1_Prep	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
NPDES 001 (460-290748-1)	10/19/23	08:30 Eastern		Water			X	1	
Basin 1 (460-290748-2)	10/19/23	09:15 Eastern		Water			X	1	
Upstream (460-290748-3)	10/19/23	09:40 Eastern		Water			X	1	
Clarifying Pond (460-290748-4)	10/19/23	10:15 Eastern		Water			X	1	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Northeast, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Northeast, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Northeast, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Northeast, LLC.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 1	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		10/23/23 1900	ELE		10-24-23 1100	TAB
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 2, IR

Eurofins Edison
777 New Durham Road
Edison, NJ 08817
Phone: 732-549-3900 Fax: 732-549-3679

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Gilmore, Julie L	Carrier Tracking No(s):	COC No: 460-69571.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Julie.Gilmore@et.eurofinsus.com	State of Origin: Pennsylvania	Page: Page 1 of 1
Company: Eurofins Environment Testing Southeast,		Accreditations Required (See note): NELAP - Pennsylvania		Job #: 460-290748-1
Address: 5102 LaRoche Avenue, ,	Due Date Requested: 10/31/2023			
City: Savannah	TAT Requested (days):			
State, Zip: GA, 31404				
Phone: 912-354-7858(Tel) 912-352-0165(Fax)	PO #:			
Email:	WO #:			
Project Name: Rock Hill - Anti Degradation	Project #: 46011424			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)
Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020B/3005A Total Aluminum	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
NPDES 001 (460-290748-1)	10/19/23	08:30 Eastern		Water			X	1	
Basin 1 (460-290748-2)	10/19/23	09:15 Eastern		Water			X	1	
Upstream (460-290748-3)	10/19/23	09:40 Eastern		Water			X	1	
Clarifying Pond (460-290748-4)	10/19/23	10:15 Eastern		Water			X	1	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Northeast, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Northeast, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Northeast, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Northeast, LLC.

Possible Hazard Identification	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 1	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		10/23/23 1900	FEDEX	TH	10-24-23	
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time: 10:02	Company
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 4.0 - 4.9

11/13/2023

Login Sample Receipt Checklist

Client: Heidelberg Materials Northeast LLC

Job Number: 460-290748-1

Login Number: 290748

List Source: Eurofins Edison

List Number: 1

Creator: Thundathorn, Sukanan 1

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	False	Refer to Job Narrative for details.
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Heidelberg Materials Northeast LLC

Job Number: 460-290748-1

Login Number: 290748
List Number: 4
Creator: Yeager, Brian A

List Source: Eurofins Buffalo
List Creation: 10/24/23 03:02 PM

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	2.1 ICE
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	True	

Login Sample Receipt Checklist

Client: Heidelberg Materials Northeast LLC

Job Number: 460-290748-1

Login Number: 290748
List Number: 2
Creator: Wrye, Shaun

List Source: Eurofins Lancaster Laboratories Environment Testing, LLC
List Creation: 10/23/23 10:20 PM

Question	Answer	Comment
The cooler's custody seal is intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature acceptable,where thermal pres is required(</=6C, not frozen).	True	
Cooler Temperature is recorded.	True	
WV:Container Temp acceptable,where thermal pres is required (</=6C, not frozen).	N/A	
WV: Container Temperature is recorded.	N/A	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the containers received and the COC.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
There is sufficient vol. for all requested analyses.	True	
Is the Field Sampler's name present on COC?	False	Received project as a subcontract.
Sample custody seals are intact.	N/A	
VOA sample vials do not have headspace >6mm in diameter (none, if from WV)?	N/A	

Login Sample Receipt Checklist

Client: Heidelberg Materials Northeast LLC

Job Number: 460-290748-1

Login Number: 290748
List Number: 5
Creator: Pardonner, Brett

List Source: Eurofins Pensacola
List Creation: 10/24/23 03:43 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	1.3°C IR10
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Heidelberg Materials Northeast LLC

Job Number: 460-290748-1

Login Number: 290748
List Number: 3
Creator: Harley, Tynisha

List Source: Eurofins Savannah
List Creation: 10/24/23 12:44 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Lab Results

October 31, 2023

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Andrew Gutshall
Heidelberg Materials Northeast LLC
7660 Imperial Way
Allentown, Pennsylvania 18195

Generated 11/19/2023 1:17:58 PM

JOB DESCRIPTION

Rock Hill-Anti-Degradation

JOB NUMBER

460-291569-1

Eurofins Edison
777 New Durham Road
Edison NJ 08817

See page two for job notes and contact information.

my EOL

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing Northeast, LLC Project Manager.

Authorization



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11/19/2023 1:17:58 PM

Authorized for release by
Julie Gilmore, Project Manager I
Julie.Gilmore@et.eurofinsus.com
(484)685-0865

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Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill-Anti-Degradation

Job ID: 460-291569-1

Qualifiers

HPLC/IC

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

General Chemistry

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
H	Sample was prepped or analyzed beyond the specified holding time. This does not meet regulatory requirements.
H3	Sample was received and analyzed past holding time. This does not meet regulatory requirements.
HF	Parameter with a holding time of 15 minutes. Test performed by laboratory at client's request. Sample was analyzed outside of hold time.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 460-291569-1

Laboratory: Eurofins Edison

Narrative

Job Narrative
460-291569-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

The method detection limit (MDL) is the lowest value detectable by the laboratory for a given analyte as determined by the MDL procedure detailed in EPA 40 CFR 136. Reported MDL values are adjusted for any dilutions and percent moisture (as applicable). The lab is unable to report values below the MDL.

Receipt
The samples were received on 10/31/2023 7:00 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 5.1°C and 5.3°C

Subcontract Work
Method Osomotic Pressure: This method was subcontracted to Microbac Laboratories, Inc. The subcontract laboratory certification is different from that of the facility issuing the final report. The subcontract report is appended in its entirety.

HPLC/IC
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Metals
Method 6020B: The following samples were not filtered within 15 minutes of sample collection as required by the method: NPDES 001 (460-291569-1), Upstream (460-291569-2) and Clarifying Pond (460-291569-3). The sample(s) was filtered prior to analysis at the laboratory, and the results have been reported. This does not meet regulatory requirements.

Method 6020B: The following samples were not filtered within 15 minutes of sample collection as required by the method: NPDES 001 (460-291569-1), Upstream (460-291569-2), Clarifying Pond (460-291569-3), (460-291569-C-3 MS) and (460-291569-C-3 MSD). The sample(s) was filtered prior to analysis at the laboratory, and the results have been reported.

Method 6020B: The following samples were not filtered and preserved within 15 samples of sample collection in accordance with 40 CFR Part 136 Table II, Footnote 7, method 6020B. The samples were filtered prior to analysis at the laboratory.

NPDES 001 (460-291569-1), Upstream (460-291569-2) and Clarifying Pond (460-291569-3)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

General Chemistry
Method 1664A_NP: Analysis for Hexane Extractable Material (HEM) was performed for the following sample: NPDES 001 (460-291569-1). Since the HEM result(s) was below the reporting limit (RL), the result(s) for Silica Gel Treated - Hexane Extractable Material (SGT-HEM) was reported as a non-detect. All HEM quality control criteria were met.

Method 4500_O_C: This analysis is normally performed in the field and has a method-defined holding time of 15 minutes. The following sample has been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe: NPDES 001 (460-291569-1).

Job ID: 460-291569-1 (Continued)

Laboratory: Eurofins Edison (Continued)

Method 4500_O_C: This analysis is normally performed in the field and has a method-defined holding time of 15 minutes. The following sample has been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe: Upstream (460-291569-2).

Method 4500_O_C: This analysis is normally performed in the field and has a method-defined holding time of 15 minutes. The following sample has been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe: Clarifying Pond (460-291569-3).

Method 9040C: This analysis is normally performed in the field and has a method-defined holding time of 15 minutes. The following samples has been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe: NPDES 001 (460-291569-1), Upstream (460-291569-2) and Clarifying Pond (460-291569-3).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Client Sample ID: NPDES 001
Lab Sample ID: 460-291569-1

Date Collected: 10/31/23 08:30
Matrix: Water

Date Received: 10/31/23 19:00

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide	0.054	U	0.32	0.054	mg/L			11/01/23 18:29	1
Nitrate as N	**0.076**	**J**	0.16	0.070	mg/L			11/01/23 18:29	1
Chloride	**4.06**		0.32	0.039	mg/L			11/01/23 18:29	1
Nitrate Nitrite as N	**0.076**	**J**	0.16	0.070	mg/L			11/01/23 18:29	1
Nitrite as N	0.023	U	0.16	0.023	mg/L			11/01/23 18:29	1
Sulfate	**9.41**		0.48	0.095	mg/L			11/01/23 18:29	1

Method: SM-Online 2340B-2011 - Total Hardness (as CaCO3) by calculation - SM Online, 2011

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**92.8**		33.1	33.1	mg/L			11/14/23 07:45	1

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.0014**		0.00020	0.000043	mg/L		11/07/23 11:05	11/07/23 14:31	1

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**4.7**		4.0	0.91	ug/L		11/10/23 08:52	11/10/23 23:07	1
Boron	**61.1**	**J**	80.0	30.4	ug/L		11/10/23 08:52	11/10/23 23:07	1
Calcium	**22500**		500	53.6	ug/L		11/10/23 08:52	11/10/23 23:07	1
Copper	2.5	U	4.0	2.5	ug/L		11/10/23 08:52	11/10/23 23:07	1
Lead	0.84	U	1.2	0.84	ug/L		11/10/23 08:52	11/10/23 23:07	1
Magnesium	**8920**		200	46.9	ug/L		11/10/23 08:52	11/10/23 23:07	1
Manganese	**18.9**		8.0	1.5	ug/L		11/10/23 08:52	11/10/23 23:07	1
Nickel	0.91	U	4.0	0.91	ug/L		11/10/23 08:52	11/10/23 23:07	1
Potassium	**1970**		200	112	ug/L		11/10/23 08:52	11/10/23 23:07	1
Selenium	0.59	U	2.5	0.59	ug/L		11/10/23 08:52	11/10/23 23:07	1
Sodium	**3880**		500	219	ug/L		11/10/23 08:52	11/10/23 23:07	1
Strontium	**54.1**		4.0	0.50	ug/L		11/10/23 08:52	11/10/23 23:07	1
Zinc	6.5	U	16.0	6.5	ug/L		11/10/23 08:52	11/10/23 23:07	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	35.0	U	100	35.0	ug/L		11/06/23 05:49	11/06/23 20:10	1
Iron	**111**		50.0	20.0	ug/L		11/03/23 21:15	11/13/23 19:51	1
Lithium	4.9	U	5.0	4.9	ug/L		11/06/23 10:39	11/08/23 20:12	5

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	19.5	U	40.0	19.5	ug/L		11/03/23 21:31	11/03/23 23:13	1
Cadmium	0.15	U	0.50	0.15	ug/L		11/09/23 03:44	11/13/23 09:11	1
Lithium	4.9	U	5.0	4.9	ug/L		11/06/23 13:26	11/15/23 17:07	5
Arsenic	0.89	U	2.0	0.89	ug/L		11/03/23 21:31	11/03/23 23:13	1
Iron	**30.0**	**J**	50.0	20.0	ug/L		11/09/23 03:44	11/13/23 09:11	1
Calcium	**21800**		500	53.6	ug/L		11/03/23 21:31	11/03/23 23:13	1
Zinc	4.0	U	10.0	4.0	ug/L		11/09/23 03:44	11/13/23 09:11	1
Copper	2.5	U	4.0	2.5	ug/L		11/03/23 21:31	11/03/23 23:13	1
Iron	58.2	U	120	58.2	ug/L		11/03/23 21:31	11/03/23 23:13	1
Lead	0.84	U	1.2	0.84	ug/L		11/03/23 21:31	11/03/23 23:13	1
Magnesium	**8720**		200	46.9	ug/L		11/03/23 21:31	11/03/23 23:13	1
Manganese	1.5	U	8.0	1.5	ug/L		11/03/23 21:31	11/03/23 23:13	1

Client Sample ID: NPDES 001
Date Collected: 10/31/23 08:30
Date Received: 10/31/23 19:00

Lab Sample ID: 460-291569-1
Matrix: Water

Method: SW846 6020B - Metals (ICP/MS) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nickel	0.91	U	4.0	0.91	ug/L		11/03/23 21:31	11/03/23 23:13	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Resistivity (EPA 120.1)	**0.00525**		0.000100	0.000100	Mohm-cm			11/02/23 14:45	1
Specific Conductance (EPA 120.1)	**190**		1.00	1.00	umhos/cm			11/02/23 14:45	1
HEM (1664A)	5.0	U	5.0	5.0	mg/L			11/09/23 10:51	1
SGT-HEM (1664A)	5.0	U	5.0	5.0	mg/L			11/09/23 10:51	1
Acidity (SM 2310B-2011)	20.0	U	20.0	20.0	mg/L			11/13/23 15:18	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-2011)	**84.2**		5.0	5.0	mg/L			11/06/23 14:12	1
Carbonate Alkalinity as CaCO3 (SM 2320B-2011)	5.0	U	5.0	5.0	mg/L			11/06/23 14:12	1
Alkalinity as CaCO3 to pH 4.5 (SM 2320B-2011)	**84.2**		5.0	5.0	mg/L			11/06/23 14:12	1
Total Dissolved Solids (SM 2540C-2015)	**156**		2.5	2.5	mg/L			11/02/23 08:46	1
Total Suspended Solids (SM 2540D-2015)	2.5	U	2.5	2.5	mg/L			11/02/23 07:29	1
Ammonia (EPA 350.1)	0.050	U	0.10	0.050	mg/L			11/09/23 09:42	1
Total Kjeldahl Nitrogen (EPA 351.2)	0.50	U	1.0	0.50	mg/L		11/03/23 12:00	11/06/23 14:40	1
Chemical Oxygen Demand (EPA 410.4)	**107**		10.0	3.3	mg/L			11/09/23 11:51	1
Oxygen, Dissolved (SM 4500 O C-2016)	**6.7**	**H H3**	1.0	1.0	mg/L			11/04/23 11:45	1
Orthophosphate as P (SM 4500 P E-2011)	0.0050	U	0.030	0.0050	mg/L			11/02/23 01:55	1
Carbonaceous Biochemical Oxygen Demand 5 (SM 5210 B-2016)	1.0	U	1.0	1.0	mg/L			11/01/23 14:50	1
pH (SW846 9040C)	**7.7**	**HF**	0.1	0.1	SU			11/02/23 09:55	1
Temperature (SW846 9040C)	**18.9**	**HF**	0.1	0.1	Degrees C			11/02/23 09:55	1
Total Organic Carbon (SW846 9060A)	**2.1**		1.0	0.53	mg/L			11/02/23 15:38	1
Phosphorus as PO4 (SM4500 P E-2011)	0.071	U	0.090	0.071	mg/L		11/09/23 09:30	11/09/23 15:27	1
Phosphorus as P (SM4500 P E-2011)	0.023	U	0.030	0.023	mg/L		11/09/23 09:30	11/09/23 15:27	1
Nitrogen, Total (EPA Total Nitrogen)	0.50	U	0.50	0.50	mg/L			11/10/23 08:20	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (EPA 350.1)	0.050	U	0.10	0.050	mg/L			11/09/23 09:59	1
Orthophosphate as P (SM 4500 P E-2011)	0.0050	U	0.030	0.0050	mg/L			11/02/23 01:55	1
Phosphorus as PO4 (SM4500 P E-2011)	**0.12**	**F1**	0.090	0.071	mg/L		11/09/23 09:30	11/09/23 15:27	1
Phosphorus as P (SM4500 P E-2011)	**0.038**		0.030	0.023	mg/L		11/09/23 09:30	11/09/23 15:27	1

Client Sample ID: Upstream

Date Collected: 10/31/23 10:00
Date Received: 10/31/23 19:00

Lab Sample ID: 460-291569-2

Matrix: Water

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide	**0.11**	**J**	0.32	0.054	mg/L			11/01/23 18:44	1
Nitrate as N	0.070	U	0.16	0.070	mg/L			11/01/23 18:44	1
Chloride	**4.14**		0.32	0.039	mg/L			11/01/23 18:44	1
Nitrate Nitrite as N	0.070	U	0.16	0.070	mg/L			11/01/23 18:44	1
Nitrite as N	0.023	U	0.16	0.023	mg/L			11/01/23 18:44	1
Sulfate	**22.3**		0.48	0.095	mg/L			11/01/23 18:44	1

Method: SM-Online 2340B-2011 - Total Hardness (as CaCO3) by calculation - SM Online, 2011

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**161**		33.1	33.1	mg/L			11/14/23 07:45	1

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.00015**	**J**	0.00020	0.000043	mg/L		11/07/23 11:05	11/07/23 14:32	1

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**16.6**		4.0	0.91	ug/L		11/10/23 08:52	11/10/23 23:10	1
Boron	**65.8**	**J**	80.0	30.4	ug/L		11/10/23 08:52	11/10/23 23:10	1
Calcium	**40000**		500	53.6	ug/L		11/10/23 08:52	11/10/23 23:10	1
Copper	2.5	U	4.0	2.5	ug/L		11/10/23 08:52	11/10/23 23:10	1
Lead	0.84	U	1.2	0.84	ug/L		11/10/23 08:52	11/10/23 23:10	1
Magnesium	**14700**		200	46.9	ug/L		11/10/23 08:52	11/10/23 23:10	1
Manganese	**415**		8.0	1.5	ug/L		11/10/23 08:52	11/10/23 23:10	1
Nickel	**2.0**	**J**	4.0	0.91	ug/L		11/10/23 08:52	11/10/23 23:10	1
Potassium	**1320**		200	112	ug/L		11/10/23 08:52	11/10/23 23:10	1
Selenium	0.59	U	2.5	0.59	ug/L		11/10/23 08:52	11/10/23 23:10	1
Sodium	**3720**		500	219	ug/L		11/10/23 08:52	11/10/23 23:10	1
Strontium	**147**		4.0	0.50	ug/L		11/10/23 08:52	11/10/23 23:10	1
Zinc	6.5	U	16.0	6.5	ug/L		11/10/23 08:52	11/10/23 23:10	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	35.0	U	100	35.0	ug/L		11/06/23 05:49	11/06/23 20:13	1
Iron	**499**		50.0	20.0	ug/L		11/03/23 21:15	11/13/23 19:49	1
Lithium	4.9	U	5.0	4.9	ug/L		11/06/23 10:39	11/08/23 20:21	5

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	19.5	U	40.0	19.5	ug/L		11/03/23 21:31	11/03/23 23:15	1
Cadmium	0.15	U	0.50	0.15	ug/L		11/09/23 03:44	11/13/23 09:13	1
Lithium	4.9	U	5.0	4.9	ug/L		11/06/23 13:26	11/15/23 17:16	5
Arsenic	0.89	U	2.0	0.89	ug/L		11/03/23 21:31	11/03/23 23:15	1
Iron	**48.2**	**J**	50.0	20.0	ug/L		11/09/23 03:44	11/13/23 09:13	1
Calcium	**39500**		500	53.6	ug/L		11/03/23 21:31	11/03/23 23:15	1
Zinc	**4.5**	**J**	10.0	4.0	ug/L		11/09/23 03:44	11/13/23 09:13	1
Copper	2.5	U	4.0	2.5	ug/L		11/03/23 21:31	11/03/23 23:15	1
Iron	58.2	U	120	58.2	ug/L		11/03/23 21:31	11/03/23 23:15	1
Lead	0.84	U	1.2	0.84	ug/L		11/03/23 21:31	11/03/23 23:15	1
Magnesium	**14400**		200	46.9	ug/L		11/03/23 21:31	11/03/23 23:15	1
Manganese	**380**		8.0	1.5	ug/L		11/03/23 21:31	11/03/23 23:15	1

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill-Anti-Degradation

Job ID: 460-291569-1

Client Sample ID: Upstream
Date Collected: 10/31/23 10:00
Date Received: 10/31/23 19:00

Lab Sample ID: 460-291569-2
Matrix: Water

Method: SW846 6020B - Metals (ICP/MS) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nickel	1.3	J	4.0	0.91	ug/L		11/03/23 21:31	11/03/23 23:15	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Resistivity (EPA 120.1)	0.00318		0.000100	0.000100	Mohm-cm			11/02/23 14:45	1
Specific Conductance (EPA 120.1)	315		1.00	1.00	umhos/cm			11/02/23 14:45	1
Acidity (SM 2310B-2011)	20.0	U	20.0	20.0	mg/L			11/13/23 15:18	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-2011)	134		5.0	5.0	mg/L			11/06/23 14:18	1
Carbonate Alkalinity as CaCO3 (SM 2320B-2011)	5.0	U	5.0	5.0	mg/L			11/06/23 14:18	1
Alkalinity as CaCO3 to pH 4.5 (SM 2320B-2011)	134		5.0	5.0	mg/L			11/06/23 14:18	1
Total Dissolved Solids (SM 2540C-2015)	219		2.5	2.5	mg/L			11/02/23 08:46	1
Total Suspended Solids (SM 2540D-2015)	8.5		2.5	2.5	mg/L			11/02/23 07:29	1
Ammonia (EPA 350.1)	0.050	U	0.10	0.050	mg/L			11/09/23 09:43	1
Total Kjeldahl Nitrogen (EPA 351.2)	0.65	J	1.0	0.50	mg/L		11/03/23 12:00	11/06/23 14:07	1
Chemical Oxygen Demand (EPA 410.4)	10.2		10.0	3.3	mg/L			11/09/23 11:51	1
Oxygen, Dissolved (SM 4500 O C-2016)	6.9	H H3	1.0	1.0	mg/L			11/04/23 11:50	1
Orthophosphate as P (SM 4500 P E-2011)	0.0050	U	0.030	0.0050	mg/L			11/02/23 01:55	1
Carbonaceous Biochemical Oxygen Demand 5 (SM 5210 B-2016)	1.0	U	1.0	1.0	mg/L			11/01/23 14:55	1
pH (SW846 9040C)	7.3	HF	0.1	0.1	SU			11/02/23 09:57	1
Temperature (SW846 9040C)	18.8	HF	0.1	0.1	Degrees C			11/02/23 09:57	1
Total Organic Carbon (SW846 9060A)	4.1		1.0	0.53	mg/L			11/02/23 16:54	1
Phosphorus as PO4 (SM4500 P E-2011)	0.32		0.090	0.071	mg/L		11/09/23 09:30	11/09/23 15:27	1
Phosphorus as P (SM4500 P E-2011)	0.10		0.030	0.023	mg/L		11/09/23 09:30	11/09/23 15:27	1
Nitrogen, Total (EPA Total Nitrogen)	0.65		0.50	0.50	mg/L			11/10/23 08:20	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (EPA 350.1)	0.050	U	0.10	0.050	mg/L			11/09/23 10:00	1
Orthophosphate as P (SM 4500 P E-2011)	0.0050	U	0.030	0.0050	mg/L			11/02/23 01:55	1
Phosphorus as PO4 (SM4500 P E-2011)	0.087	J	0.090	0.071	mg/L		11/09/23 09:30	11/09/23 15:27	1
Phosphorus as P (SM4500 P E-2011)	0.029	J	0.030	0.023	mg/L		11/09/23 09:30	11/09/23 15:27	1

Client Sample ID: Clarifying Pond

Date Collected: 10/31/23 11:00
Date Received: 10/31/23 19:00

Lab Sample ID: 460-291569-3
Matrix: Water

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide	0.054	U	0.32	0.054	mg/L			11/01/23 18:59	1
Nitrate as N	**0.18**		0.16	0.070	mg/L			11/01/23 18:59	1
Chloride	**1.30**		0.32	0.039	mg/L			11/01/23 18:59	1
Nitrate Nitrite as N	**0.22**		0.16	0.070	mg/L			11/01/23 18:59	1
Nitrite as N	**0.033**	**J**	0.16	0.023	mg/L			11/01/23 18:59	1
Sulfate	**6.17**		0.48	0.095	mg/L			11/01/23 18:59	1

Method: SM-Online 2340B-2011 - Total Hardness (as CaCO3) by calculation - SM Online, 2011

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**62.5**		33.1	33.1	mg/L			11/14/23 07:45	1

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.00023**		0.00020	0.000043	mg/L		11/07/23 11:05	11/07/23 14:34	1

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**2.6**	**J**	4.0	0.91	ug/L		11/10/23 08:52	11/10/23 23:12	1
Boron	**58.9**	**J**	80.0	30.4	ug/L		11/10/23 08:52	11/10/23 23:12	1
Calcium	**16500**		500	53.6	ug/L		11/10/23 08:52	11/10/23 23:12	1
Copper	2.5	U	4.0	2.5	ug/L		11/10/23 08:52	11/10/23 23:12	1
Lead	0.84	U	1.2	0.84	ug/L		11/10/23 08:52	11/10/23 23:12	1
Magnesium	**5190**		200	46.9	ug/L		11/10/23 08:52	11/10/23 23:12	1
Manganese	**7.7**	**J**	8.0	1.5	ug/L		11/10/23 08:52	11/10/23 23:12	1
Nickel	0.91	U	4.0	0.91	ug/L		11/10/23 08:52	11/10/23 23:12	1
Potassium	**1260**		200	112	ug/L		11/10/23 08:52	11/10/23 23:12	1
Selenium	0.59	U	2.5	0.59	ug/L		11/10/23 08:52	11/10/23 23:12	1
Sodium	**3040**		500	219	ug/L		11/10/23 08:52	11/10/23 23:12	1
Strontium	**25.1**		4.0	0.50	ug/L		11/10/23 08:52	11/10/23 23:12	1
Zinc	6.5	U	16.0	6.5	ug/L		11/10/23 08:52	11/10/23 23:12	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**83.8**	**J**	100	35.0	ug/L		11/06/23 05:49	11/06/23 20:16	1
Iron	**215**		50.0	20.0	ug/L		11/03/23 21:15	11/13/23 19:47	1
Lithium	4.9	U	5.0	4.9	ug/L		11/06/23 10:39	11/08/23 20:52	5

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**58.2**		40.0	19.5	ug/L		11/03/23 21:31	11/03/23 23:20	1
Cadmium	0.15	U	0.50	0.15	ug/L		11/09/23 03:44	11/13/23 09:15	1
Lithium	4.9	U	5.0	4.9	ug/L		11/06/23 13:26	11/15/23 17:41	5
Arsenic	0.89	U	2.0	0.89	ug/L		11/03/23 21:31	11/03/23 23:20	1
Iron	20.0	U	50.0	20.0	ug/L		11/09/23 03:44	11/13/23 09:15	1
Calcium	**16900**		500	53.6	ug/L		11/03/23 21:31	11/03/23 23:20	1
Zinc	4.0	U	10.0	4.0	ug/L		11/09/23 03:44	11/13/23 09:15	1
Copper	2.5	U	4.0	2.5	ug/L		11/03/23 21:31	11/03/23 23:20	1
Iron	58.2	U	120	58.2	ug/L		11/03/23 21:31	11/03/23 23:20	1
Lead	0.84	U	1.2	0.84	ug/L		11/03/23 21:31	11/03/23 23:20	1
Magnesium	**5200**		200	46.9	ug/L		11/03/23 21:31	11/03/23 23:20	1
Manganese	**3.5**	**J**	8.0	1.5	ug/L		11/03/23 21:31	11/03/23 23:20	1

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill-Anti-Degradation

Job ID: 460-291569-1

Client Sample ID: Clarifying Pond
Date Collected: 10/31/23 11:00
Date Received: 10/31/23 19:00

Lab Sample ID: 460-291569-3
Matrix: Water

Method: SW846 6020B - Metals (ICP/MS) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nickel	0.91	U	4.0	0.91	ug/L		11/03/23 21:31	11/03/23 23:20	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Resistivity (EPA 120.1)	**0.00711**		0.000100	0.000100	Mohm-cm			11/02/23 14:45	1
Specific Conductance (EPA 120.1)	**141**		1.00	1.00	umhos/cm			11/02/23 14:45	1
Acidity (SM 2310B-2011)	20.0	U	20.0	20.0	mg/L			11/13/23 15:18	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-2011)	**60.5**		5.0	5.0	mg/L			11/06/23 14:25	1
Carbonate Alkalinity as CaCO3 (SM 2320B-2011)	5.0	U	5.0	5.0	mg/L			11/06/23 14:25	1
Alkalinity as CaCO3 to pH 4.5 (SM 2320B-2011)	**60.5**		5.0	5.0	mg/L			11/06/23 14:25	1
Total Dissolved Solids (SM 2540C-2015)	**54.0**		2.5	2.5	mg/L			11/02/23 08:46	1
Total Suspended Solids (SM 2540D-2015)	**4.7**		2.5	2.5	mg/L			11/02/23 07:29	1
Ammonia (EPA 350.1)	0.050	U	0.10	0.050	mg/L			11/09/23 09:45	1
Total Kjeldahl Nitrogen (EPA 351.2)	**0.52**	**J**	1.0	0.50	mg/L		11/03/23 12:00	11/06/23 14:09	1
Chemical Oxygen Demand (EPA 410.4)	**5.3**	**J**	10.0	3.3	mg/L			11/09/23 11:51	1
Oxygen, Dissolved (SM 4500 O C-2016)	**6.5**	**H**	1.0	1.0	mg/L			11/04/23 11:55	1
Orthophosphate as P (SM 4500 P E-2011)	0.0050	U	0.030	0.0050	mg/L			11/02/23 01:55	1
Carbonaceous Biochemical Oxygen Demand 5 (SM 5210 B-2016)	1.0	U	1.0	1.0	mg/L			11/01/23 15:00	1
pH (SW846 9040C)	**7.5**	**HF**	0.1	0.1	SU			11/02/23 10:00	1
Temperature (SW846 9040C)	**18.8**	**HF**	0.1	0.1	Degrees C			11/02/23 10:00	1
Total Organic Carbon (SW846 9060A)	**1.4**		1.0	0.53	mg/L			11/02/23 17:20	1
Phosphorus as PO4 (SM4500 P E-2011)	0.071	U	0.090	0.071	mg/L		11/09/23 09:30	11/09/23 15:27	1
Phosphorus as P (SM4500 P E-2011)	0.023	U	0.030	0.023	mg/L		11/09/23 09:30	11/09/23 15:27	1
Nitrogen, Total (EPA Total Nitrogen)	**0.55**		0.50	0.50	mg/L			11/10/23 08:20	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (EPA 350.1)	0.050	U	0.10	0.050	mg/L			11/09/23 10:02	1
Orthophosphate as P (SM 4500 P E-2011)	0.0050	U	0.030	0.0050	mg/L			11/02/23 01:55	1
Phosphorus as PO4 (SM4500 P E-2011)	0.071	U	0.090	0.071	mg/L		11/09/23 09:30	11/09/23 15:27	1
Phosphorus as P (SM4500 P E-2011)	0.023	U	0.030	0.023	mg/L		11/09/23 09:30	11/09/23 15:27	1

Lab Chronicle

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill-Anti-Degradation

Job ID: 460-291569-1

Client Sample ID: NPDES 001

Date Collected: 10/31/23 08:30
Date Received: 10/31/23 19:00

Lab Sample ID: 460-291569-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		1	941985	OXG	EET EDI	11/01/23 18:29
Total/NA	Analysis	300.0		1	941986	OXG	EET EDI	11/01/23 18:29
Total/NA	Analysis	2340B-2011		1	944555	LBD	EET EDI	11/14/23 07:45
Total/NA	Prep	245.1			690716	NVK	EET BUF	11/07/23 11:05
Total/NA	Analysis	245.1		1	690841	NVK	EET BUF	11/07/23 14:31
Dissolved	Filtration	FILTRATION			648914	MS	EET PEN	11/06/23 12:37
Dissolved	Prep	3005A			648933	MS	EET PEN	11/06/23 13:26 - 11/06/23 13:36 [1]
Dissolved	Analysis	6020B		5	650541	NTH	EET PEN	11/15/23 17:07
Dissolved	Filtration	Filtration			439830	UDL9	ELLE	11/06/23 07:14
Dissolved	Prep	3005A			441324	UAMX	ELLE	11/09/23 03:44
Dissolved	Analysis	6020B		1	442741	F7JF	ELLE	11/13/23 09:11
Dissolved	Filtration	FILTRATION			942675	VAD	EET EDI	11/03/23 21:28
Dissolved	Prep	3010A			942676	VAD	EET EDI	11/03/23 21:31
Dissolved	Analysis	6020B		1	942574	CDC	EET EDI	11/03/23 23:13
Total Recoverable	Prep	3005A			648861	MS	EET PEN	11/06/23 10:39 - 11/06/23 13:19 [1]
Total Recoverable	Analysis	6020B		5	649368	NTH	EET PEN	11/08/23 20:12
Total Recoverable	Prep	3005A			439529	UAMX	ELLE	11/03/23 21:15
Total Recoverable	Analysis	6020B		1	442969	UCIG	ELLE	11/13/23 19:51
Total Recoverable	Prep	3005A			806563	RR	EET SAV	11/06/23 05:49
Total Recoverable	Analysis	6020B		1	806837	BWR	EET SAV	11/06/23 20:10
Total/NA	Prep	3010A			943954	JKF	EET EDI	11/10/23 08:52
Total/NA	Analysis	6020B		1	944064	CDC	EET EDI	11/10/23 23:07
Total/NA	Analysis	120.1		1	942330	HTV	EET EDI	11/02/23 14:45
Total/NA	Analysis	1664A		1	943718	PXP	EET EDI	11/09/23 10:51
Total/NA	Analysis	2310B-2011		1	944438	RAK	EET EDI	11/13/23 15:18
Total/NA	Analysis	2320B-2011		1	942986	AXP	EET EDI	11/06/23 14:12
Total/NA	Analysis	2540C-2015		1	942234	PLS	EET EDI	11/02/23 08:46
Total/NA	Analysis	2540D-2015		1	942219	PLS	EET EDI	11/02/23 07:29
Dissolved	Filtration	FILTRATION			943702	AXP	EET EDI	11/09/23 09:35
Dissolved	Analysis	350.1		1	943748	AXP	EET EDI	11/09/23 09:59
Total/NA	Analysis	350.1		1	943748	AXP	EET EDI	11/09/23 09:42
Total/NA	Prep	351.2			439329	UJE2	ELLE	11/03/23 12:00 - 11/03/23 15:00 [1]
Total/NA	Analysis	351.2		1	440164	JCG7	ELLE	11/06/23 14:40
Total/NA	Analysis	410.4		1	943732	HTV	EET EDI	11/09/23 11:51
Total/NA	Analysis	4500 O C-2016		1	942744	RXA	EET EDI	11/04/23 11:45
Dissolved	Filtration	FILTRATION			942160	VBG	EET EDI	11/02/23 00:49
Dissolved	Analysis	4500 P E-2011		1	942163	VBG	EET EDI	11/02/23 01:55
Total/NA	Analysis	4500 P E-2011		1	942163	VBG	EET EDI	11/02/23 01:55
Total/NA	Analysis	5210 B-2016		1	942084	RXA	EET EDI	11/01/23 14:50
Total/NA	Analysis	9040C		1	942250	MNP	EET EDI	11/02/23 09:55
Total/NA	Analysis	9060A		1	942501	MMC	EET EDI	11/02/23 15:38

Client Sample ID: NPDES 001

Lab Sample ID: 460-291569-1

Date Collected: 10/31/23 08:30

Matrix: Water

Date Received: 10/31/23 19:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Filtration	FILTRATION			943696	RAK	EET EDI	11/09/23 09:25
Dissolved	Prep	SM 4500 P B			943697	RAK	EET EDI	11/09/23 09:30
Dissolved	Analysis	SM4500 P E-2011		1	943786	RAK	EET EDI	11/09/23 15:27
Total/NA	Prep	SM 4500 P B			943697	RAK	EET EDI	11/09/23 09:30
Total/NA	Analysis	SM4500 P E-2011		1	943786	RAK	EET EDI	11/09/23 15:27
Total/NA	Analysis	Total Nitrogen		1	943928	TJW	EET EDI	11/10/23 08:20

Client Sample ID: Upstream

Lab Sample ID: 460-291569-2

Date Collected: 10/31/23 10:00

Matrix: Water

Date Received: 10/31/23 19:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		1	941985	OXG	EET EDI	11/01/23 18:44
Total/NA	Analysis	300.0		1	941986	OXG	EET EDI	11/01/23 18:44
Total/NA	Analysis	2340B-2011		1	944555	LBD	EET EDI	11/14/23 07:45
Total/NA	Prep	245.1			690716	NVK	EET BUF	11/07/23 11:05
Total/NA	Analysis	245.1		1	690841	NVK	EET BUF	11/07/23 14:32
Dissolved	Filtration	FILTRATION			648914	MS	EET PEN	11/06/23 12:37
Dissolved	Prep	3005A			648933	MS	EET PEN	11/06/23 13:26 - 11/06/23 13:36 [1]
Dissolved	Analysis	6020B		5	650541	NTH	EET PEN	11/15/23 17:16
Dissolved	Filtration	Filtration			439830	UDL9	ELLE	11/06/23 07:14
Dissolved	Prep	3005A			441324	UAMX	ELLE	11/09/23 03:44
Dissolved	Analysis	6020B		1	442741	F7JF	ELLE	11/13/23 09:13
Dissolved	Filtration	FILTRATION			942675	VAD	EET EDI	11/03/23 21:28
Dissolved	Prep	3010A			942676	VAD	EET EDI	11/03/23 21:31
Dissolved	Analysis	6020B		1	942574	CDC	EET EDI	11/03/23 23:15
Total Recoverable	Prep	3005A			648861	MS	EET PEN	11/06/23 10:39 - 11/06/23 13:19 [1]
Total Recoverable	Analysis	6020B		5	649368	NTH	EET PEN	11/08/23 20:21
Total Recoverable	Prep	3005A			439529	UAMX	ELLE	11/03/23 21:15
Total Recoverable	Analysis	6020B		1	442969	UCIG	ELLE	11/13/23 19:49
Total Recoverable	Prep	3005A			806563	RR	EET SAV	11/06/23 05:49
Total Recoverable	Analysis	6020B		1	806837	BWR	EET SAV	11/06/23 20:13
Total/NA	Prep	3010A			943954	JKF	EET EDI	11/10/23 08:52
Total/NA	Analysis	6020B		1	944064	CDC	EET EDI	11/10/23 23:10
Total/NA	Analysis	120.1		1	942330	HTV	EET EDI	11/02/23 14:45
Total/NA	Analysis	2310B-2011		1	944438	RAK	EET EDI	11/13/23 15:18
Total/NA	Analysis	2320B-2011		1	942986	AXP	EET EDI	11/06/23 14:18
Total/NA	Analysis	2540C-2015		1	942234	PLS	EET EDI	11/02/23 08:46
Total/NA	Analysis	2540D-2015		1	942219	PLS	EET EDI	11/02/23 07:29
Dissolved	Filtration	FILTRATION			943702	AXP	EET EDI	11/09/23 09:35
Dissolved	Analysis	350.1		1	943748	AXP	EET EDI	11/09/23 10:00
Total/NA	Analysis	350.1		1	943748	AXP	EET EDI	11/09/23 09:43
Total/NA	Prep	351.2			439329	UJE2	ELLE	11/03/23 12:00 - 11/03/23 15:00 [1]
Total/NA	Analysis	351.2		1	440164	JCG7	ELLE	11/06/23 14:07

Client Sample ID: Upstream

Lab Sample ID: 460-291569-2

Date Collected: 10/31/23 10:00

Matrix: Water

Date Received: 10/31/23 19:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	410.4		1	943732	HTV	EET EDI	11/09/23 11:51
Total/NA	Analysis	4500 O C-2016		1	942744	RXA	EET EDI	11/04/23 11:50
Dissolved	Filtration	FILTRATION			942160	VBG	EET EDI	11/02/23 00:49
Dissolved	Analysis	4500 P E-2011		1	942163	VBG	EET EDI	11/02/23 01:55
Total/NA	Analysis	4500 P E-2011		1	942163	VBG	EET EDI	11/02/23 01:55
Total/NA	Analysis	5210 B-2016		1	942084	RXA	EET EDI	11/01/23 14:55
Total/NA	Analysis	9040C		1	942250	MNP	EET EDI	11/02/23 09:57
Total/NA	Analysis	9060A		1	942501	MMC	EET EDI	11/02/23 16:54
Dissolved	Filtration	FILTRATION			943696	RAK	EET EDI	11/09/23 09:25
Dissolved	Prep	SM 4500 P B			943697	RAK	EET EDI	11/09/23 09:30
Dissolved	Analysis	SM4500 P E-2011		1	943786	RAK	EET EDI	11/09/23 15:27
Total/NA	Prep	SM 4500 P B			943697	RAK	EET EDI	11/09/23 09:30
Total/NA	Analysis	SM4500 P E-2011		1	943786	RAK	EET EDI	11/09/23 15:27
Total/NA	Analysis	Total Nitrogen		1	943928	TJW	EET EDI	11/10/23 08:20

Client Sample ID: Clarifying Pond

Lab Sample ID: 460-291569-3

Date Collected: 10/31/23 11:00

Matrix: Water

Date Received: 10/31/23 19:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		1	941985	OXG	EET EDI	11/01/23 18:59
Total/NA	Analysis	300.0		1	941986	OXG	EET EDI	11/01/23 18:59
Total/NA	Analysis	2340B-2011		1	944555	LBD	EET EDI	11/14/23 07:45
Total/NA	Prep	245.1			690716	NVK	EET BUF	11/07/23 11:05
Total/NA	Analysis	245.1		1	690841	NVK	EET BUF	11/07/23 14:34
Dissolved	Filtration	FILTRATION			648914	MS	EET PEN	11/06/23 12:37
Dissolved	Prep	3005A			648933	MS	EET PEN	11/06/23 13:26 - 11/06/23 13:36 [1]
Dissolved	Analysis	6020B		5	650541	NTH	EET PEN	11/15/23 17:41
Dissolved	Filtration	Filtration			439830	UDL9	ELLE	11/06/23 07:14
Dissolved	Prep	3005A			441324	UAMX	ELLE	11/09/23 03:44
Dissolved	Analysis	6020B		1	442741	F7JF	ELLE	11/13/23 09:15
Dissolved	Filtration	FILTRATION			942675	VAD	EET EDI	11/03/23 21:28
Dissolved	Prep	3010A			942676	VAD	EET EDI	11/03/23 21:31
Dissolved	Analysis	6020B		1	942574	CDC	EET EDI	11/03/23 23:20
Total Recoverable	Prep	3005A			648861	MS	EET PEN	11/06/23 10:39 - 11/06/23 13:19 [1]
Total Recoverable	Analysis	6020B		5	649368	NTH	EET PEN	11/08/23 20:52
Total Recoverable	Prep	3005A			439529	UAMX	ELLE	11/03/23 21:15
Total Recoverable	Analysis	6020B		1	442969	UCIG	ELLE	11/13/23 19:47
Total Recoverable	Prep	3005A			806563	RR	EET SAV	11/06/23 05:49
Total Recoverable	Analysis	6020B		1	806837	BWR	EET SAV	11/06/23 20:16
Total/NA	Prep	3010A			943954	JKF	EET EDI	11/10/23 08:52
Total/NA	Analysis	6020B		1	944064	CDC	EET EDI	11/10/23 23:12
Total/NA	Analysis	120.1		1	942330	HTV	EET EDI	11/02/23 14:45
Total/NA	Analysis	2310B-2011		1	944438	RAK	EET EDI	11/13/23 15:18

Lab Chronicle

Client: Heidelberg Materials Northeast LLC
Job ID: 460-291569-1
Project/Site: Rock Hill-Anti-Degradation

Client Sample ID: Clarifying Pond
Lab Sample ID: 460-291569-3
Date Collected: 10/31/23 11:00
Matrix: Water
Date Received: 10/31/23 19:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	2320B-2011		1	942986	AXP	EET EDI	11/06/23 14:25
Total/NA	Analysis	2540C-2015		1	942234	PLS	EET EDI	11/02/23 08:46
Total/NA	Analysis	2540D-2015		1	942219	PLS	EET EDI	11/02/23 07:29
Dissolved	Filtration	FILTRATION			943702	AXP	EET EDI	11/09/23 09:35
Dissolved	Analysis	350.1		1	943748	AXP	EET EDI	11/09/23 10:02
Total/NA	Analysis	350.1		1	943748	AXP	EET EDI	11/09/23 09:45
Total/NA	Prep	351.2			439329	UJE2	ELLE	11/03/23 12:00 - 11/03/23 15:00 [1]
Total/NA	Analysis	351.2		1	440164	JCG7	ELLE	11/06/23 14:09
Total/NA	Analysis	410.4		1	943732	HTV	EET EDI	11/09/23 11:51
Total/NA	Analysis	4500 O C-2016		1	942744	RXA	EET EDI	11/04/23 11:55
Dissolved	Filtration	FILTRATION			942160	VBG	EET EDI	11/02/23 00:49
Dissolved	Analysis	4500 P E-2011		1	942163	VBG	EET EDI	11/02/23 01:55
Total/NA	Analysis	4500 P E-2011		1	942163	VBG	EET EDI	11/02/23 01:55
Total/NA	Analysis	5210 B-2016		1	942084	RXA	EET EDI	11/01/23 15:00
Total/NA	Analysis	9040C		1	942250	MNP	EET EDI	11/02/23 10:00
Total/NA	Analysis	9060A		1	942501	MMC	EET EDI	11/02/23 17:20
Dissolved	Filtration	FILTRATION			943696	RAK	EET EDI	11/09/23 09:25
Dissolved	Prep	SM 4500 P B			943697	RAK	EET EDI	11/09/23 09:30
Dissolved	Analysis	SM4500 P E-2011		1	943786	RAK	EET EDI	11/09/23 15:27
Total/NA	Prep	SM 4500 P B			943697	RAK	EET EDI	11/09/23 09:30
Total/NA	Analysis	SM4500 P E-2011		1	943786	RAK	EET EDI	11/09/23 15:27
Total/NA	Analysis	Total Nitrogen		1	943928	TJW	EET EDI	11/10/23 08:20

[1] This procedure uses a method stipulated length of time for the process. Both start and end times are displayed.

Laboratory References:

EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

EET EDI = Eurofins Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

EET PEN = Eurofins Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

EET SAV = Eurofins Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Microbac = Marietta, OH, 158 Starlite Drive, Marietta, OH 45750

Accreditation/Certification Summary

Client: Heidelberg Materials Northeast LLC
Job ID: 460-291569-1
Project/Site: Rock Hill-Anti-Degradation

Laboratory: Eurofins Edison

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Connecticut	State	PH-0818	01-30-24
DE Haz. Subst. Cleanup Act (HSCA)	State	N/A	01-01-24
Georgia	State	12028 (NJ)	06-30-24
Massachusetts	State	M-NJ312	06-30-24
New Jersey	NELAP	12028	06-30-24
New York	NELAP	11452	04-01-24
Pennsylvania	NELAP	68-00522	02-29-24
Rhode Island	State	LAO00376	12-30-23

Laboratory: Eurofins Buffalo

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Arkansas DEQ	State	88-0686	07-06-23 *
Connecticut	State	PH-0568	03-31-24
Florida	NELAP	E87672	06-30-23 *
Georgia	State	10026 (NY)	03-31-24
Georgia	State Program	N/A	03-31-09 *
Illinois	NELAP	200003	09-30-23 *
Iowa	State	374	03-01-25
Iowa	State Program	374	03-01-09 *
Kansas	NELAP	E-10187	02-01-24
Kentucky (DW)	State	90029	01-01-24
Kentucky (UST)	State	108092	04-01-24
Kentucky (WW)	State	KY90029	12-31-23
Louisiana	NELAP	02031	06-30-23 *
Louisiana (All)	NELAP	02031	06-30-23 *
Maine	State	NY00044	12-04-24
Maryland	State	294	06-30-24
Massachusetts	State	M-NY044	07-01-24
Michigan	State	9937	04-01-24
Michigan	State Program	9937	04-01-09 *
New Hampshire	NELAP	2973	09-11-19 *
New Hampshire	NELAP	2337	11-17-23
New Jersey	NELAP	NY455	06-30-24
New York	NELAP	10026	03-31-24
Pennsylvania	NELAP	68-00281	08-31-24
Rhode Island	State	LAO00328	12-30-23
Texas	NELAP	T104704412-18-10	07-31-23 *
USDA	US Federal Programs	P330-18-00039	03-25-24
Virginia	NELAP	460185	11-02-23 *
Washington	State	C784	02-10-24
Wisconsin	State	998310390	08-31-24

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
A2LA	Dept. of Defense ELAP	0001.01	11-30-24
A2LA	ISO/IEC 17025	0001.01	11-30-24
Alabama	State	43200	01-31-24

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Accreditation/Certification Summary

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill-Anti-Degradation

Job ID: 460-291569-1

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC (Continued)

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alaska	State	PA00009	06-30-24
Alaska (UST)	State	17-027	02-28-24
Arizona	State	AZ0780	03-12-24
Arkansas DEQ	State	88-00660	08-09-24
California	State	2792	01-31-24
Colorado	State	PA00009	06-30-24
Connecticut	State	PH-0746	06-30-25
DE Haz. Subst. Cleanup Act (HSCA)	State	019-006 (PA cert)	01-31-24
Delaware (DW)	State	N/A	01-31-24
Florida	NELAP	E87997	06-30-24
Georgia (DW)	State	C048	01-31-24
Hawaii	State	N/A	01-31-24
Illinois	NELAP	200027	01-31-24
Iowa	State	361	03-01-24
Kansas	NELAP	E-10151	10-31-24
Kentucky (DW)	State	KY90088	12-31-23
Kentucky (UST)	State	0001.01	11-30-24
Kentucky (WW)	State	KY90088	12-31-23
Louisiana (All)	NELAP	02055	06-30-24
Maine	State	2019012	03-12-25
Maryland	State	100	06-30-24
Massachusetts	State	M-PA009	06-30-24
Michigan	State	9930	01-31-24
Minnesota	NELAP	042-999-487	12-31-23
Mississippi	State	023	01-31-24
Missouri	State	450	01-31-25
Montana (DW)	State	0098	01-01-24
Nebraska	State	NE-OS-32-17	01-31-24
New Hampshire	NELAP	2730	01-10-24
New Jersey	NELAP	PA011	06-30-24
New York	NELAP	10670	04-01-24
North Carolina (DW)	State	42705	07-31-24
North Carolina (WW/SW)	State	521	12-31-23
North Dakota	State	R-205	01-31-24
Oklahoma	NELAP	9804	08-31-24
Oregon	NELAP	PA200001	09-11-24
PALA	Canada	1978	09-16-24
Pennsylvania	NELAP	36-00037	01-31-24
Rhode Island	State	LAO00338	12-31-23
South Carolina	State	89002	01-31-24
Tennessee	State	02838	01-31-24
Texas	NELAP	T104704194-23-46	08-31-24
USDA	US Federal Programs	525-22-298-19481	10-25-25
Vermont	State	VT - 36037	10-28-24
Virginia	NELAP	460182	06-14-25
Washington	State	C457	04-11-24
West Virginia (DW)	State	9906 C	12-31-23
West Virginia DEP	State	055	07-31-24
Wyoming	State	8TMS-L	01-31-24
Wyoming (UST)	A2LA	0001.01	11-30-24

Accreditation/Certification Summary

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill-Anti-Degradation

Job ID: 460-291569-1

Laboratory: Eurofins Pensacola

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alabama	State	40150	06-30-24
ANAB	ISO/IEC 17025	L2471	02-22-26
Arkansas DEQ	State	88-00689	08-01-24
California	State	2510	06-30-24
Florida	NELAP	E81010	06-30-24
Georgia	State	E81010(FL)	06-30-24
Illinois	NELAP	200041	10-09-24
Kansas	NELAP	E-10253	10-31-24
Kentucky (UST)	State	53	06-30-24
Louisiana (All)	NELAP	30976	06-30-24
Louisiana (DW)	State	LA017	12-31-23
North Carolina (WW/SW)	State	314	12-31-23
Oklahoma	NELAP	9810	08-31-24
Pennsylvania	NELAP	68-00467	01-31-24
South Carolina	State	96026	06-30-24
Tennessee	State	TN02907	06-30-24
Texas	NELAP	T104704286	09-30-24
US Fish & Wildlife	US Federal Programs	A22340	06-30-24
USDA	US Federal Programs	FLGNV23001	01-08-26
USDA	US Federal Programs	P330-21-00056	05-17-24
Virginia	NELAP	460166	06-14-24
West Virginia DEP	State	136	03-31-24
West Virginia DEP	State	136	03-31-24

Laboratory: Eurofins Savannah

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
	AFCEE	SAVLAB	
Alabama	State	41450	06-30-24
ANAB	Dept. of Defense ELAP	L2463	09-22-24
Arkansas DEQ	State	19-015-0	02-01-24
California	State	2939	06-30-24
Florida	NELAP	E87052	11-09-23
Georgia	State	E87052	06-30-24
Georgia (DW)	State	803	06-30-24
Guam	State	19-007R	04-17-24
Hawaii	State	<cert No.>	06-30-24
Illinois	NELAP	200022	11-14-23
Indiana	State	C-GA-02	06-30-24
Iowa	State	353	07-01-25
Kentucky (UST)	State	NA	06-30-24
Louisiana	NELAP	30690	06-30-24
Louisiana (All)	NELAP	30690	06-30-24
Louisiana (DW)	State	LA009	12-31-23
Maine	State	GA00006	09-25-24
Maryland	State	250	12-31-23
Massachusetts	State	M-GA006	06-30-24
Michigan	State	9925	06-30-24
Mississippi	State	<cert No.>	06-30-24

Accreditation/Certification Summary

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill-Anti-Degradation

Job ID: 460-291569-1

Laboratory: Eurofins Savannah (Continued)

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Nebraska	State	NE-OS-7-04	06-30-24
New Jersey	NELAP	GA769	06-30-24
New Mexico	State	GA00006	06-30-24
North Carolina (DW)	State	13701	07-31-24
North Carolina (WW/SW)	State	269	12-31-23
Pennsylvania	NELAP	68-00474	06-30-24
Puerto Rico	State	GA00006	01-01-24
South Carolina	State	98001	06-30-24
Tennessee	State	TN02961	06-30-24
Texas	NELAP	T1047004185	11-30-23
Texas	TCEQ Water Supply	T104704185	06-30-24
USDA	US Federal Programs	P330-18-00313	09-03-24
Virginia	NELAP	460161	06-14-24
Wyoming	State	8TMS-L	06-30-24

Method Summary

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill-Anti-Degradation

Job ID: 460-291569-1

Method	Method Description	Protocol	Laboratory
300.0	Anions, Ion Chromatography	EPA	EET EDI
2340B-2011	Total Hardness (as CaCO3) by calculation - SM Online, 2011	SM-Online	EET EDI
245.1	Mercury (CVAA)	EPA	EET BUF
6020B	Metals (ICP/MS)	SW846	EET EDI
6020B	Metals (ICP/MS)	SW846	EET PEN
6020B	Metals (ICP/MS)	SW846	EET SAV
6020B	Metals (ICP/MS)	SW846	ELLE
120.1	Conductivity, Specific Conductance	EPA	EET EDI
1664A	HEM and SGT-HEM	1664A	EET EDI
2310B-2011	Acidity	SM	EET EDI
2320B-2011	Alkalinity, Total	SM	EET EDI
2540C-2015	Total Dissolved Solids (Dried at 180 °C)	SM	EET EDI
2540D-2015	Total Suspended Solids (Dried at 103-105°C)	SM	EET EDI
350.1	Nitrogen, Ammonia	EPA	EET EDI
351.2	Nitrogen, Total Kjeldahl	EPA	ELLE
410.4	COD	EPA	EET EDI
4500 O C-2016	Oxygen, Dissolved	SM	EET EDI
4500 P E-2011	Orthophosphate	SM	EET EDI
5210 B-2016	BOD, 5-Day	SM	EET EDI
9040C	pH	SW846	EET EDI
9060A	Organic Carbon, Total (TOC)	SW846	EET EDI
SM4500 P E-2011	Phosphorus	SM	EET EDI
Total Nitrogen	Nitrogen, Total	EPA	EET EDI
Subcontract	Osomotic Pressure	None	Microbac
245.1	Preparation, Mercury	EPA	EET BUF
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	EET PEN
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	EET SAV
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	ELLE
3010A	Preparation, Total Metals	SW846	EET EDI
351.2	Nitrogen, Total Kjeldahl	EPA	ELLE
FILTRATION	Sample Filtration	None	EET EDI
FILTRATION	Sample Filtration	None	EET PEN
Filtration	Sample Filtration	None	ELLE
SM 4500 P B	Phosphorous, Total and Ortho	SM	EET EDI

Protocol References:

1664A = EPA-821-98-002
EPA = US Environmental Protection Agency
None = None
SM = "Standard Methods For The Examination Of Water And Wastewater"
SM-Online = Standard Methods Online
SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600
EET EDI = Eurofins Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900
EET PEN = Eurofins Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001
EET SAV = Eurofins Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858
ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300
Microbac = Marietta, OH, 158 Starlite Drive, Marietta, OH 45750

Sample Summary

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill-Anti-Degradation

Job ID: 460-291569-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
460-291569-1	NPDES 001	Water	10/31/23 08:30	10/31/23 19:00
460-291569-2	Upstream	Water	10/31/23 10:00	10/31/23 19:00
460-291569-3	Clarifying Pond	Water	10/31/23 11:00	10/31/23 19:00

Microbac Laboratories Inc., - Marietta, OH

Client Project ID:

Test America

For:

Julie Gilmore

Eurofins TestAmerica Edison

777 New Durham RD

Edison, NJ 08817

Project State of Origin: Pennsylvania

Project Requested Certification:

Microbac Laboratories Inc., - Marietta, OH 68-01670 PA Department of Environmental Protection

All test results meet the requirements of the QAPP and other applicable contract terms and conditions. Any exceptions are attached to this cover page or addressed in the method narratives presented in the report. All results for soil samples are reported on a 'dry-weight' basis unless specified otherwise. Analytical results for water and wastes are reported on a 'as received' basis unless specified otherwise. A statement of uncertainty for each analysis is available upon request. The reported results are related only to the samples analyzed as received. This laboratory report may be released as a hardcopy and in computer-readable form submitted electronically or on diskette. This laboratory report shall not be reproduced, except in full, without the written approval of Microbac Laboratories, Inc.

Laboratory Project Manager:

Michelle Taylor

Project Manager

Michelle.Taylor@microbac.com

Authorized By:

Michelle Taylor

Project Manager

Issued: 11/09/2023

MICROBAC®

Laboratory Report Number: M3K0294

Client Project ID: Test America

Cooler Receipt Log

Cooler ID: Default Cooler Temp: 2.4°C

Cooler Inspection Checklist

Ice Present or not required?	Yes
Shipping containers sealed or not required?	Yes
Custody seals intact or not required?	Yes
Chain of Custody (COC) Present?	Yes
COC includes customer information?	Yes
Relinquished and received signature on COC?	Yes
Sample collector identified on COC?	Yes
Sample type identified on COC?	Yes
Correct type of Containers Received	No
Correct number of containers listed on COC?	Yes
Containers Intact?	Yes
COC includes requested analyses?	Yes
Enough sample volume for indicated tests received?	Yes
Sample labels match COC (Name, Date & Time?)	Yes
Samples arrived within hold time?	Yes
Correct preservatives on COC or not required?	Yes
Chemical preservations checked or not required?	Yes
Preservation checks meet method requirements?	Yes
VOA vials have zero headspace, or not recd.?	Yes

Laboratory Report Number: M3K0294

Client Project ID: Test America

Sample Notes

PADEP 391-2000-008

A4 **Sample was received with head space.**

Osmotic Pressure

M3K0294-01	NPDES 001 (460-291569-1)	M3K0294-02	Upstream (460-291569-2)
M3K0294-03	Clarifying Pond (460-291569-3)		

MICROBAC®

Laboratory Report Number: M3K0294

Client Project ID: Test America

Microbac Laboratories Inc., - Marietta, OH

CERTIFICATE OF ANALYSIS

Client ID:	NPDES 001 (460-291569-1)			**Collection Date:**	10/31/2023 08:30
Laboratory ID:	M3K0294-01			**Prep Date:**	11/07/2023 16:37
Matrix:	Aqueous			**Analyzed:**	11/07/2023 16:45
Batch / Sequence:	B3K0382 /	**Analytical Method:**	PADEP 391-2000-008	**Calibration:**	NA
Instrument:	OSMOMETER 5004	**Units:**	mOsm/kg	**File ID:**	OsmoticPressure_B3K0382_231107044003.xls
Analyst:	TSD	**Dilution:**	1		

Analyte	CAS Number	Result	MDL	RL	Flag	Qualifier
Osmotic Pressure		**10.0**	6.00	10.0		A4

MICROBAC®

Laboratory Report Number: M3K0294

Client Project ID: Test America

Microbac Laboratories Inc., - Marietta, OH

CERTIFICATE OF ANALYSIS

Client ID:	Upstream (460-291569-2)			**Collection Date:**	10/31/2023 10:00
Laboratory ID:	M3K0294-02			**Prep Date:**	11/07/2023 16:37
Matrix:	Aqueous			**Analyzed:**	11/07/2023 16:45
Batch / Sequence:	B3K0382 /	**Analytical Method:**	PADEP 391-2000-008	**Calibration:**	NA
Instrument:	OSMOMETER 5004	**Units:**	mOsm/kg	**File ID:**	OsmoticPressure_B3K0382_231107044003.xls
Analyst:	TSD	**Dilution:**	1		

Analyte	CAS Number	Result	MDL	RL	Flag	Qualifier
Osmotic Pressure		**11.0**	6.00	10.0		A4

MICROBAC®

Laboratory Report Number: M3K0294

Client Project ID: Test America

Microbac Laboratories Inc., - Marietta, OH

CERTIFICATE OF ANALYSIS

Client ID:	Clarifying Pond (460-291569-3)			**Collection Date:**	10/31/2023 11:00
Laboratory ID:	M3K0294-03			**Prep Date:**	11/07/2023 16:37
Matrix:	Aqueous			**Analyzed:**	11/07/2023 16:45
Batch / Sequence:	B3K0382 /	**Analytical Method:**	PADEP 391-2000-008	**Calibration:**	NA
Instrument:	OSMOMETER 5004	**Units:**	mOsm/kg	**File ID:**	OsmoticPressure_B3K0382_231107044003.xls
Analyst:	TSD	**Dilution:**	1		

Analyte	CAS Number	Result	MDL	RL	Flag	Qualifier
Osmotic Pressure		9.00	6.00	10.0		A4

Laboratory Report Number: M3K0294

Client Project ID: Test America

Notes and Definitions

A4: Sample was received with head space.
MDL: Method Detection Limit
RL: Reporting Limit

MICROBAC®

Laboratory Report Number: M3K0294

Client Project ID: Test America

METHOD BLANKS

Sample ID:	B3K0382-BLK1	**Prep Date:**	11/07/23 16:37	**Matrix:**	Aqueous
Instrument:	OSMOMETER 5004	**Analyzed:**	11/07/23 16:45	**Method:**	PADEP 391-2000-008
File ID:	OsmoticPressure_B3K(	**Sequence:**		**Analyst:**	TSD
Batch:	B3K0382	**Units:**	mOsm/kg	**Calibration:**	

Analyte	Result	MDL	RL	Dilution	Flag	Q
Osmotic Pressure	6.00	6.00	10.0	1	U	

* - Detected in the associated method Blank at a concentration >= RL

MICROBAC®

Laboratory Report Number: M3K0294

Client Project ID: Test America

BLANK SPIKE / DUPLICATE (BS/BSD)

Method:	PADEP 391-2000-008		**Blank Spike**	**Duplicate**
Batch:	B3K0382	**Spike ID:**	B3K0382-BS1	B3K0382-BSD1
Analyst:	TSD	**Prepared:**	11/07/23 16:37	11/07/23 16:37
Matrix:	Aqueous	**Analyzed:**	11/07/23 16:45	11/07/23 16:45
Units:	mOsm/kg	**File ID:**	OsmoticPressure_B3K0382_2311	OsmoticPressure_B3K0382_2311
Instrument:	OSMOMETER 5004	**Initial/Final:**	1mL/1mL	1mL/1mL
Calibration:				

Analyte	BS Spiked	BS Found	BS %Rec	BSD Spiked	BSD Found	BSD %Rec	%RPD	%Rec Limts	RPD Limit	Q
Osmotic Pressure	290	292	101	290	289	99.7	1.03	90 - 110	20	

* - Does not meet %Rec acceptance criteria.
- Does not meet RPD acceptance criteria.

Eurofins Edison
777 New Durham Road
Edison, NJ 08817
Phone: 732-549-3900 Fax: 732-549-3679

Chain of Custody Record

eurofins | Environment Testing

11/19/2023

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Gilmore, Julie L	Carrier Tracking No(s):	COC No: 460-69678.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Julie.Gilmore@et.eurofinsus.com	State of Origin: Pennsylvania	Page: Page 1 of 1
Company: Microbac Laboratories, Inc.		Accreditations Required (See note): NELAP - Pennsylvania		Job #: 460-291569-1
Address: 158 Starlite Drive, ,	Due Date Requested: 11/10/2023			
City: Marietta	TAT Requested (days):			
State, Zip: OH, 45750				
Phone: 800-373-4071(Tel)	PO #:			
Email:	WO #:			
Project Name: Rock Hill-Anti-Degradation	Project #: 46011424			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	SUB (Osomotic Pressure)/ Osomotic Pressure	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
NPDES 001 (460-291569-1)	10/31/23	08:30 Eastern		Water			X	1	
Upstream (460-291569-2)	10/31/23	10:00 Eastern		Water			X	1	
Clarifying Pond (460-291569-3)	10/31/23	11:00 Eastern		Water			X	1	

M 3 K 0 2 9 4

Eurofins TestAmerica Edison
Rec'd: 11/03/2023 10:50
By: Stephanie Murphy Temp: 2.4 (Signature)

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Northeast, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Northeast, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Northeast, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Northeast, LLC.

Possible Hazard Identification	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 1	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		11/2/23 1900	DSG			
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
3	Relinquished by:	Date/Time:	Company	Received by: Stephanie Murphy	Date/Time: 11/3/2023 1050	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

MICROBAC®

Work Order # M31-0249

COOLER TEMP >6° C LOG

SAMPLE ID	Bottle 1 °C	Bottle 2 °C	Bottle 3 °C	Bottle 4 °C	Bottle 5 °C	Bottle 6 °C

11/03/2023 SM

pH Lot # N/A

pH Exceptions

SAMPLE ID	Bottle 1	Bottle 2	Bottle 3	Bottle 4	Bottle 5	Bottle 6

11/03/2023 SM

PRESERVATIVE EXCEPTIONS

__NONE

__AS NOTED

11/03/2023 SM

Document Control # 1957
Last 04-10-2019

Issued to: Document Master File

Eurofins Edison
777 New Durham Road
Edison NJ 08817
Phone: 732-549-3900 Fax: 732-549-3679

45° KOP

Chain of Custody Record

53°
51 KOP 2

eurofins

Client Information	Sampler:	Lab PM: Gilmore, Julie L	Carrier Tracking No(s):	COC No: 460-174571 114292.1
Client Contact: Andrew Gutshall	Phone:	E-Mail: Julie.Gilmore@et.eurofinsus.com	State of Origin:	Page: Page 1 of 2
Company: Heidelberg Materials Northeast LLC	PWSID:			Job #: 291569
Address: 7660 Imperial Way	Due Date Requested:			
City: Allentown	TAT Requested (days):			
State, Zip: PA, 18195	Compliance Project: Δ Yes Δ No			
Phone: 610-366-4819(Tel)	PO #: Purchase Order not required			
Email: andrew.gutshall@heidelbergmaterials.com	WO #:			
Project Name: Rock Hill Anti-Degradation	Project #: 46011424			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:
A HCL, B NaOH, C Zn Acetate, D Nitric Acid, E NaHSO4, F MeOH, G Amchlor, H Ascorbic Acid, I Ice, J DI Water, K EDTA, L EDA, M Hexane, N None, O AsNaO2, P Na2O4S, Q Na2SO3, R Na2S2O3, S H2SO4, T TSP Dodecahydrate, U Acetone, V MCAA, W pH 4-5, Y Trizma, Z other (specify)
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water S=solid, O=waste/oil BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020B Dissolved Lithium	6020B Total Lithium	351.2 Local Method	6020B Dissolved Cd/Fe/Zn	6020B (MOD) Total Fe	350.1 410.4, 4500_P_E	120.1 9040C, SM2310B	360.1 4500_P_E, 6020B	2320B (MOD) Alkalinity	6020B, SM2340B	9060A TOC	2540D, SM5210B_Calc	4500_P_E_Ortho Dissolved Orthophosphate	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	D	S	N	D	S	N	N	N	D	S	N	N		
NPDES 001	10/31/23	0854	G	Water				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		1
PS Team	10/31/23	0900	C	Water			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		2
Cooling Pond	10/31/23	0	G	Water			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		3
				Water																	
				Water																	

SHORT HOLD

460-291569 Chain of Custody

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I II III IV Other (specify)	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		10-31-23	EETN		10/31/23 1220	EETN-KOP
2		10-31-23 1630	EETN KOP		10/31	ETA
3	HD	10/31 1900	ETA		10/31/23 1900	GGG

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.	Cooler Temperature(s) °C and Other Remarks:

Ver 06/08/2021

Eurofins Edison
777 New Durham Road
Edison, NJ 08817
Phone: 732-549-3900 Fax: 732-549-3679

Chain of Custody Record

eurofins

53 ~
51 Kop-2

Client Information	Sampler: EZG	Lab PM: Gilmore, Julie L	Carrier Tracking No(s):	COC No: 460-174571 114292.2
Client Contact: Andrew Gutshall	Phone:	E-Mail: Julie.Gilmore@et.eurofinsus.com	State of Origin:	Page: Page 2 of 2
Company: Heidelberg Materials Northeast LLC	PWSID:	Analysis Requested		Job #: 291569
Address: 7660 Imperial Way	Due Date Requested:			Preservation Codes. A HCL, B NaOH, C Zn Acetate, D Nitric Acid, E NaHSO4, F MeOH, G Amchlor, H Ascorbic Acid, I Ice, J DI Water, K EDTA, L EDA, M Hexane, N None, O AsNaO2, P Na2O4S, Q Na2SO3, R Na2S2O3, S H2SO4, T TSP Dodecahydrate, U Acetone, V MCAA, W pH 4-5, Y Trizma, Z other (specify), Other:
City: Allentown	TAT Requested (days):			
State, Zip: PA, 18195	Compliance Project: Δ Yes Δ No			
Phone: 610-366-4819(Tel)	PO #: Purchase Order not required			
Email: andrew.gutshall@heidelbergmaterials.com	WO #:			
Project Name: Rock Hi Anti-Degradation	Project #: 46011424			
Site:	SSOW#:			

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	4500_P_E_Ortho Total Orthophosphate	2540C TDS	300_ORGFM_28D, 300_ORGFMS	245.1 Local Method	6020B Total Aluminum	DO	oil and grease	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	N	D	D				
NPDES 001	3/31/23	0830	G	Water			/	/	/	/	/	/	/		1
UPSTREAM	03/31/23	0900	G	Water			/	/	/	/	/	/			2
Garden Hose Point	03/31/23	0	G	Water			/	/	/	/	/	/			3
				Water											
				Water											

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I II III IV Other (specify)

Special Instructions/QC Requirements.

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
[signature]	10/31/23	EZG	[signature]	10/31/23 1220	EETN-KOP
[signature]	10-31-23 1630	EETN-KOP	[signature]	10/31	ETA
[signature]	10/31 1800	ETA	[signature]	10/31/23 1900	ETA

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.

Cooler Temperature(s) °C and Other Remarks:

Ver: 06/08/2021

11/19/2023

Eurofins **TestAmerica Edison**

Receipt Temperature and pH Log

Job Number: 291669

Number of Coolers: 2 **IR Gun #** 2

Cooler Temperatures

	RAW	CORRECTED		RAW	CORRECTED		RAW	CORRECTED
Cooler #1:	5.3 °C	5.3 °C	Cooler #4:	°C	°C	Cooler #7:	°C	°C
Cooler #2:	5.1 °C	5.1 °C	Cooler #5:	°C	°C	Cooler #8:	°C	°C
Cooler #3:	°C	°C	Cooler #6:	°C	°C	Cooler #9:	°C	°C

TALS Sample Number	Ammonia (pH<2)	COD (pH<2)	Nitrate Nitrite (pH<2)	Metals* (pH<2)	Hardness (pH<2)	Pest (pH 5-9)	EPH or QAM (pH<2)	Phenols (pH<2)	Sulfide (pH>9)	TKN (pH<2)	TOC (pH<2)	Total Cyanide (pH>12)	Total Phos (pH<2)	Other	Other
1	<2	<2		<2	<2						<2		<2		
2	<2	<2		<2	<2						<2		<2		
3	<2	<2		<2	<2						<2		<2		

If pH adjustments are required record the information below.

Sample No(s). adjusted _____

Preservative Name/Conc. _____ Volume of Preservative used (ml): _____

Lot # of Preservative(s): _____ Expiration Date: _____

The appropriate Project Manager and Department Manager should be notified about the samples which were pH adjusted.

**Samples for Metal analysis which are out of compliance must be acidified at least 24 hours prior to analysis.*

Initials KD **Date.** 10/31

Eurofins Edison
777 New Durham Road
Edison, NJ 08817
Phone: 732-549-3900 Fax: 732-549-3679

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler	Lab PM: Gilmore, Julie L	Carrier Tracking No(s)	COC No: 460-69675.1
Client Contact: Shipping/Receiving	Phone	E-Mail: Julie.Gilmore@et.eurofinsus.com	State of Origin: Pennsylvania	Page: Page 1 of 1
Company: Eurofins Environment Testing Southeast,		Accreditations Required (See note): NELAP - Pennsylvania		Job #: 460-291569-1
Address: 3355 McLemore Drive,	Due Date Requested: 11/7/2023			
City: Pensacola	TAT Requested (days):			
State, Zip: FL, 32514				
Phone: 850-474-1001(Tel) 850-478-2671(Fax)	PO #:			
Email	WO #:			
Project Name: Rock Hill-Anti-Degradation	Project #: 46011424			
Site	SSOW#:			

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)
Other:

Analysis Requested

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020B/3005A (MOD) Single Element 6020B Metals List	6020B/FILTRATION (MOD) Single Element 6020B Metals List	Total Number of containers	Special Instructions/Note:
			Preservation Code:							
NPDES 001 (460-291569-1)	10/31/23	08:30 Eastern		Water			X	X	2	
Upstream (460-291569-2)	10/31/23	10:00 Eastern		Water			X	X	2	
Clarifying Pond (460-291569-3)	10/31/23	11:00 Eastern		Water			X	X	2	

Note Since laboratory accreditations are subject to change, Eurofins Environment Testing Northeast, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories This sample shipment is forwarded under chain-of-custody If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Northeast, LLC laboratory or other instructions will be provided Any changes to accreditation status should be brought to Eurofins Environment Testing Northeast, LLC attention immediately If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Northeast, LLC

Possible Hazard Identification: Unconfirmed	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month): ☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 1	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time: 11/2/23 1900	Company: EET	Received by: BR	Date/Time: 11/3/23 917	Company
Relinquished by:	Date/Time	Company	Received by:	Date/Time	Company
Relinquished by:	Date/Time	Company	Received by:	Date/Time	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 0.0°C IR ID

XH PNSA
32514
FL-US BFM
TRK# 0201 6553 1010 4560
PRIORITY OVERNIGHT
FRI - 03 NOV 10:30A
FedEx Express
J230302G1511201
PENSACOLA FL 32514
(850) 474-1001 REF: 8460-174954
PO: YE8
TO SHIPPING/RECEIVING
EUROFINS ENVIRONMENT TESTING SOUTHE
3355 MCLEMORE DRIVE
BILL SENDER
ORIGIN ID:LDJA (732) 549-3900
SAMPLE RECEIVING
EUROFINS EDISON
777 NEW DURHAM ROAD
EDISON, NJ 08817
UNITED STATES US
RT 574 1 A 10:30 4560
Part # 159469-434 MTW EXP 01/2
5555/CAR/EBAY/6F57

Eurofins Edison
777 New Durham Road
Edison, NJ 08817
Phone: 732-549-3900 Fax: 732-549-3679

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Gilmore, Julie L	Carrier Tracking No(s):	COC No: 460-69669.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Julie.Gilmore@et.eurofinsus.com	State of Origin: Pennsylvania	Page: Page 1 of 1
Company: Eurofins Lancaster Laboratories Environm		Accreditations Required (See note): NELAP - Pennsylvania		Job #: 460-291569-1
Address: 2425 New Holland Pike, ,	Due Date Requested: 11/9/2023			
City: Lancaster	TAT Requested (days):			
State, Zip: PA, 17601				
Phone: 717-656-2300(Tel)	PO #:			
Email:	WO #:			
Project Name: Rock Hill-Anti-Degradation	Project #: 46011424			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)
Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020B/Filtration_ME Dissolved Cd/Fe/Zn	6020B/3005A (MOD) Total Fe	351.2/351.2_Prep	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
NPDES 001 (460-291569-1)	10/31/23	08:30 Eastern		Water			X	X	X	3	
Upstream (460-291569-2)	10/31/23	10:00 Eastern		Water			X	X	X	3	
Clarifying Pond (460-291569-3)	10/31/23	11:00 Eastern		Water			X	X	X	3	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Northeast, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Northeast, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Northeast, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Northeast, LLC.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 1	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
1		11/2/23 1545	EDF Eli		11/2/23 1545	Eli
2		11/2/23 2022	Eli		Date/Time:	Company
3		Date/Time:	Company		Date/Time: 11/2/23 2027	Company

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks: raw: 1.9 corr: 2.0

Eurofins Edison
777 New Durham Road
Edison, NJ 08817
Phone: 732-549-3900 Fax: 732-549-3679

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Gilmore, Julie L	Carrier Tracking No(s):	COC No: 460-69676.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Julie.Gilmore@et.eurofinsus.com	State of Origin: Pennsylvania	Page: Page 1 of 1
Company: Eurofins Environment Testing Northeast,		Accreditations Required (See note): NELAP - Pennsylvania		Job #: 460-291569-1
Address: 10 Hazelwood Drive, ,	Due Date Requested: 11/9/2023			
City: Amherst	TAT Requested (days):			
State, Zip: NY, 14228-2298				
Phone: 716-691-2600(Tel) 716-691-7991(Fax)	PO #:			
Email:	WO #:			
Project Name: Rock Hill-Anti-Degradation	Project #: 46011424			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	245.1/245.1_Prep	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
NPDES 001 (460-291569-1)	10/31/23	08:30 Eastern		Water			X	1	
Upstream (460-291569-2)	10/31/23	10:00 Eastern		Water			X	1	
Clarifying Pond (460-291569-3)	10/31/23	11:00 Eastern		Water			X	1	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Northeast, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Northeast, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Northeast, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Northeast, LLC.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 1	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:		
Relinquished by:	Date/Time: 11/2/23 1900	Company FedEx	Received by:	Date/Time: 11/4/23 1000	Company TVA
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 3.7 # ICE

Eurofins Edison
777 New Durham Road
Edison, NJ 08817
Phone: 732-549-3900 Fax: 732-549-3679

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Gilmore, Julie L	Carrier Tracking No(s):	COC No: 460-69677.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Julie.Gilmore@et.eurofinsus.com	State of Origin: Pennsylvania	Page: Page 1 of 1
Company: Eurofins Environment Testing Southeast,		Accreditations Required (See note): NELAP - Pennsylvania		Job #: 460-291569-1
Address: 5102 LaRoche Avenue, ,	Due Date Requested: 11/10/2023			
City: Savannah	TAT Requested (days):			
State, Zip: GA, 31404				
Phone: 912-354-7858(Tel) 912-352-0165(Fax)	PO #:			
Email:	WO #:			
Project Name: Rock Hill-Anti-Degradation	Project #: 46011424			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020B/3005A Total Aluminum	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
NPDES 001 (460-291569-1)	10/31/23	08:30 Eastern		Water			X	1	
Upstream (460-291569-2)	10/31/23	10:00 Eastern		Water			X	1	
Clarifying Pond (460-291569-3)	10/31/23	11:00 Eastern		Water			X	1	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Northeast, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Northeast, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Northeast, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Northeast, LLC.

Possible Hazard Identification	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 1	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:			
Relinquished by:	Date/Time: 11/2/23 1900	Company: FEDEX	Received by: FH	Date/Time: 11-03-23	Company	
Relinquished by:	Date/Time:	Company	Received by:	Date/Time: 10:01	Company	
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company	

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 1.10 - 1.9

Login Sample Receipt Checklist

Client: Heidelberg Materials Northeast LLC

Job Number: 460-291569-1

Login Number: 291569

List Source: Eurofins Edison

List Number: 1

Creator: Meyers, Gary

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	True	

Login Sample Receipt Checklist

Client: Heidelberg Materials Northeast LLC

Job Number: 460-291569-1

Login Number: 291569
List Number: 5
Creator: Yeager, Brian A

List Source: Eurofins Buffalo
List Creation: 11/06/23 01:20 PM

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	3.7 ICE
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	True	

Login Sample Receipt Checklist

Client: Heidelberg Materials Northeast LLC

Job Number: 460-291569-1

Login Number: 291569
List Number: 2
Creator: Metzger, Katherine A

List Source: Eurofins Lancaster Laboratories Environment Testing, LLC
List Creation: 11/02/23 10:33 PM

Question	Answer	Comment
The cooler's custody seal is intact.	N/A	Not present
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature acceptable,where thermal pres is required(</=6C, not frozen).	True	
Cooler Temperature is recorded.	True	
WV:Container Temp acceptable,where thermal pres is required (</=6C, not frozen).	N/A	
WV: Container Temperature is recorded.	N/A	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the containers received and the COC.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
There is sufficient vol. for all requested analyses.	True	
Is the Field Sampler's name present on COC?	False	Received project as a subcontract.
Sample custody seals are intact.	N/A	Not present.
VOA sample vials do not have headspace >6mm in diameter (none, if from WV)?	N/A	

Login Sample Receipt Checklist

Client: Heidelberg Materials Northeast LLC

Job Number: 460-291569-1

Login Number: 291569
List Number: 4
Creator: Pardonner, Brett

List Source: Eurofins Pensacola
List Creation: 11/03/23 07:30 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	0.0°C IR10
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Heidelberg Materials Northeast LLC

Job Number: 460-291569-1

Login Number: 291569
List Number: 3
Creator: Harley, Tynisha

List Source: Eurofins Savannah
List Creation: 11/03/23 12:51 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Lab Results

November 16, 2023

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Andrew Gutshall
Heidelberg Materials Northeast LLC
7660 Imperial Way
Allentown, Pennsylvania 18195

Generated 12/13/2023 8:14:06 AM

JOB DESCRIPTION

Rock Hill - Anti-Degradation

JOB NUMBER

460-292787-1

Eurofins Edison
777 New Durham Road
Edison NJ 08817

See page two for job notes and contact information.

my EOL

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing Northeast, LLC Project Manager.

Authorization



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Authorized for release by
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Definitions/Glossary

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill - Anti-Degradation

Job ID: 460-292787-1

Qualifiers

HPLC/IC

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

General Chemistry

Qualifier	Qualifier Description
H	Sample was prepped or analyzed beyond the specified holding time. This does not meet regulatory requirements.
H3	Sample was received and analyzed past holding time. This does not meet regulatory requirements.
HF	Parameter with a holding time of 15 minutes. Test performed by laboratory at client's request. Sample was analyzed outside of hold time.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 460-292787-1

Laboratory: Eurofins Edison

Narrative

Job Narrative
460-292787-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

The method detection limit (MDL) is the lowest value detectable by the laboratory for a given analyte as determined by the MDL procedure detailed in EPA 40 CFR 136. Reported MDL values are adjusted for any dilutions and percent moisture (as applicable). The lab is unable to report values below the MDL.

Receipt
The samples were received on 11/16/2023 7:00 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 3.0°C and 3.1°C

Subcontract Work
Method Osomotic Pressure: This method was subcontracted to Microbac Laboratories, Inc. The subcontract laboratory certification is different from that of the facility issuing the final report. The subcontract report is appended in its entirety.

HPLC/IC
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Metals
Method 6020B: The following samples were not filtered within 15 minutes of sample collection as required by the method: NPDES001 (460-292787-1), Upstream (460-292787-2) and Clarifying Pond (460-292787-3). The sample(s) was filtered prior to analysis at the laboratory, and the results have been reported. This does not meet regulatory requirements.

Method 6020B: The following samples were not filtered within 15 minutes of sample collection as required by the method: NPDES001 (460-292787-1), Upstream (460-292787-2), Clarifying Pond (460-292787-3), (460-292787-C-1 MS) and (460-292787-C-1 MSD). The sample(s) was filtered prior to analysis at the laboratory, and the results have been reported.

Method 6020B: The following samples were not filtered and preserved within 15 minutes of sample collection in accordance with 40 CFR Part 136 Table II, Footnote 7, method 6020B. The samples were filtered prior to analysis at the laboratory.

NPDES001 (460-292787-1), Upstream (460-292787-2) and Clarifying Pond (460-292787-3)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

General Chemistry
Method 351.2: The method blank associated with preparation batch 410-448131 and analytical batch 410-448685 contained <AffectedAnalytes> greater than one-half the reporting limit (RL). The samples were not re-analyzed because the samples were ND. The sample results have been qualified and reported.

Method 4500_O_C: This analysis is normally performed in the field and has a method-defined holding time of 15 minutes. The following sample has been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe: NPDES001 (460-292787-1).

Job ID: 460-292787-1 (Continued)

Laboratory: Eurofins Edison (Continued)

Method 4500_O_C: This analysis is normally performed in the field and has a method-defined holding time of 15 minutes. The following sample has been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe: Upstream (460-292787-2).

Method 4500_O_C: This analysis is normally performed in the field and has a method-defined holding time of 15 minutes. The following sample has been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe: Clarifying Pond (460-292787-3).

Method 9040C: This analysis is normally performed in the field and has a method-defined holding time of 15 minutes. The following samples has been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe: NPDES001 (460-292787-1), Upstream (460-292787-2) and Clarifying Pond (460-292787-3).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Client Sample ID: NPDES001
Date Collected: 11/16/23 08:30
Date Received: 11/16/23 19:00

Lab Sample ID: 460-292787-1
Matrix: Water

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide	**0.17**	**J**	0.32	0.054	mg/L			11/17/23 14:32	1
Nitrate as N	**0.080**	**J**	0.16	0.070	mg/L			11/17/23 14:32	1
Chloride	**3.99**		0.32	0.039	mg/L			11/17/23 14:32	1
Nitrate Nitrite as N	**0.080**	**J**	0.16	0.070	mg/L			11/17/23 14:32	1
Nitrite as N	0.023	U	0.16	0.023	mg/L			11/17/23 14:32	1
Sulfate	**9.75**		0.48	0.095	mg/L			11/17/23 14:32	1

Method: SM-Online 2340B-2011 - Total Hardness (as CaCO3) by calculation - SM Online, 2011

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**96.1**		33.1	33.1	mg/L			12/13/23 07:41	1

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000043	U	0.00020	0.000043	mg/L		11/28/23 11:29	11/28/23 14:36	1

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**4.0**		4.0	0.91	ug/L		12/12/23 08:31	12/12/23 17:20	1
Boron	**66.9**	**J**	80.0	30.4	ug/L		12/12/23 08:31	12/12/23 17:20	1
Calcium	**23000**		500	53.6	ug/L		12/12/23 08:31	12/12/23 17:20	1
Copper	2.5	U	4.0	2.5	ug/L		12/12/23 08:31	12/12/23 17:20	1
Lead	0.84	U	1.2	0.84	ug/L		12/12/23 08:31	12/12/23 17:20	1
Magnesium	**9370**		200	46.9	ug/L		12/12/23 08:31	12/12/23 17:20	1
Manganese	**10.8**		8.0	1.5	ug/L		12/12/23 08:31	12/12/23 17:20	1
Nickel	0.91	U	4.0	0.91	ug/L		12/12/23 08:31	12/12/23 17:20	1
Potassium	**1440**		200	112	ug/L		12/12/23 08:31	12/12/23 17:20	1
Selenium	0.59	U	2.5	0.59	ug/L		12/12/23 08:31	12/12/23 17:20	1
Sodium	**4280**		500	219	ug/L		12/12/23 08:31	12/12/23 17:20	1
Strontium	**49.3**		4.0	0.50	ug/L		12/12/23 08:31	12/12/23 17:20	1
Zinc	6.5	U	16.0	6.5	ug/L		12/12/23 08:31	12/12/23 17:20	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	35.0	U	100	35.0	ug/L		11/19/23 10:52	11/21/23 19:50	1
Iron	**85.7**		50.0	20.0	ug/L		11/22/23 14:49	12/02/23 17:34	1
Lithium	4.9	U	5.0	4.9	ug/L		11/27/23 14:24	11/28/23 20:06	5

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	19.5	U	40.0	19.5	ug/L		11/20/23 22:50	11/21/23 00:50	1
Cadmium	0.15	U	0.50	0.15	ug/L		11/25/23 06:08	12/02/23 23:43	1
Lithium	4.9	U	5.0	4.9	ug/L		11/21/23 11:04	11/29/23 18:19	5
Arsenic	0.89	U	2.0	0.89	ug/L		11/20/23 22:50	11/21/23 00:50	1
Iron	**33.3**	**J**	50.0	20.0	ug/L		11/25/23 06:08	12/03/23 16:48	1
Calcium	**21200**		500	53.6	ug/L		11/20/23 22:50	11/21/23 00:50	1
Zinc	4.0	U	10.0	4.0	ug/L		11/25/23 06:08	12/02/23 23:43	1
Copper	2.5	U	4.0	2.5	ug/L		11/20/23 22:50	11/21/23 00:50	1
Iron	58.2	U	120	58.2	ug/L		11/20/23 22:50	11/21/23 00:50	1
Lead	0.84	U	1.2	0.84	ug/L		11/20/23 22:50	11/21/23 00:50	1
Magnesium	**8840**		200	46.9	ug/L		11/20/23 22:50	11/21/23 00:50	1
Manganese	**1.8**	**J**	8.0	1.5	ug/L		11/20/23 22:50	11/21/23 00:50	1

Client Sample ID: NPDES001

Date Collected: 11/16/23 08:30
Date Received: 11/16/23 19:00

Lab Sample ID: 460-292787-1
Matrix: Water

Method: SW846 6020B - Metals (ICP/MS) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nickel	0.91	U	4.0	0.91	ug/L		11/20/23 22:50	11/21/23 00:50	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Resistivity (EPA 120.1)	**0.00487**		0.000100	0.000100	Mohm-cm			11/27/23 13:02	1
Specific Conductance (EPA 120.1)	**206**		1.00	1.00	umhos/cm			11/27/23 13:02	1
Acidity (SM 2310B-2011)	20.0	U	20.0	20.0	mg/L			11/29/23 15:20	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-2011)	**83.6**		5.0	5.0	mg/L			11/22/23 11:08	1
Carbonate Alkalinity as CaCO3 (SM 2320B-2011)	5.0	U	5.0	5.0	mg/L			11/22/23 11:08	1
Alkalinity as CaCO3 to pH 4.5 (SM 2320B-2011)	**83.6**		5.0	5.0	mg/L			11/22/23 11:08	1
Total Dissolved Solids (SM 2540C-2015)	**132**		2.5	2.5	mg/L			11/22/23 07:49	1
Total Suspended Solids (SM 2540D-2015)	2.5	U	2.5	2.5	mg/L			11/21/23 11:12	1
Ammonia (EPA 350.1)	0.050	U	0.10	0.050	mg/L			11/29/23 10:13	1
Total Kjeldahl Nitrogen (EPA 351.2)	0.50	U	1.0	0.50	mg/L		11/29/23 14:00	11/30/23 12:53	1
Chemical Oxygen Demand (EPA 410.4)	**6.1**	**J**	10.0	3.3	mg/L			11/27/23 12:46	1
Oxygen, Dissolved (SM 4500 O C-2016)	**8.9**	**H H3**	1.0	1.0	mg/L			11/17/23 12:15	1
Orthophosphate as P (SM 4500 P E-2011)	0.0050	U	0.030	0.0050	mg/L			11/18/23 01:20	1
Carbonaceous Biochemical Oxygen Demand 5 (SM 5210 B-2016)	1.0	U	1.0	1.0	mg/L			11/17/23 14:40	1
pH (SW846 9040C)	**7.8**	**HF**	0.1	0.1	SU			11/20/23 13:01	1
Temperature (SW846 9040C)	**18.3**	**HF**	0.1	0.1	Degrees C			11/20/23 13:01	1
Total Organic Carbon (SW846 9060A)	**0.81**	**J**	1.0	0.53	mg/L			12/06/23 06:11	1
Phosphorus as PO4 (SM4500 P E-2011)	**0.075**	**J**	0.090	0.071	mg/L		11/30/23 09:08	11/30/23 13:49	1
Phosphorus as P (SM4500 P E-2011)	**0.025**	**J**	0.030	0.023	mg/L		11/30/23 09:08	11/30/23 13:49	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (EPA 350.1)	0.050	U	0.10	0.050	mg/L			11/29/23 10:19	1
Orthophosphate as P (SM 4500 P E-2011)	0.0050	U	0.030	0.0050	mg/L			11/18/23 01:20	1
Phosphorus as PO4 (SM4500 P E-2011)	0.071	U	0.090	0.071	mg/L		11/30/23 09:08	11/30/23 13:49	1
Phosphorus as P (SM4500 P E-2011)	0.023	U	0.030	0.023	mg/L		11/30/23 09:08	11/30/23 13:49	1

Client Sample ID: Upstream

Date Collected: 11/16/23 09:45
Date Received: 11/16/23 19:00

Lab Sample ID: 460-292787-2
Matrix: Water

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide	**0.13**	**J**	0.32	0.054	mg/L			11/17/23 15:16	1
Nitrate as N	**0.071**	**J**	0.16	0.070	mg/L			11/17/23 15:16	1
Chloride	**7.52**		0.32	0.039	mg/L			11/17/23 15:16	1

Client Sample ID: Upstream

Date Collected: 11/16/23 09:45
Date Received: 11/16/23 19:00

Lab Sample ID: 460-292787-2

Matrix: Water

Method: EPA 300.0 - Anions, Ion Chromatography (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate Nitrite as N	**0.071**	**J**	0.16	0.070	mg/L			11/17/23 15:16	1
Nitrite as N	0.023	U	0.16	0.023	mg/L			11/17/23 15:16	1
Sulfate	**28.3**		0.48	0.095	mg/L			11/17/23 15:16	1

Method: SM-Online 2340B-2011 - Total Hardness (as CaCO3) by calculation - SM Online, 2011

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**153**		33.1	33.1	mg/L			12/13/23 07:41	1

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000043	U	0.00020	0.000043	mg/L		11/28/23 11:29	11/28/23 14:42	1

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**13.4**		4.0	0.91	ug/L		11/30/23 08:48	12/03/23 15:31	1
Boron	**56.5**	**J**	80.0	30.4	ug/L		11/30/23 08:48	12/03/23 15:31	1
Calcium	**37000**		500	53.6	ug/L		11/30/23 08:48	12/03/23 15:31	1
Copper	2.5	U	4.0	2.5	ug/L		11/30/23 08:48	12/03/23 15:31	1
Lead	0.84	U	1.2	0.84	ug/L		11/30/23 08:48	12/03/23 15:31	1
Magnesium	**14600**		200	46.9	ug/L		11/30/23 08:48	12/03/23 15:31	1
Manganese	**129**		8.0	1.5	ug/L		11/30/23 08:48	12/03/23 15:31	1
Nickel	**2.7**	**J**	4.0	0.91	ug/L		11/30/23 08:48	12/03/23 15:31	1
Potassium	**982**		200	112	ug/L		11/30/23 08:48	12/03/23 15:31	1
Selenium	0.59	U	2.5	0.59	ug/L		11/30/23 08:48	12/03/23 15:31	1
Sodium	**3720**		500	219	ug/L		11/30/23 08:48	12/03/23 15:31	1
Strontium	**129**		4.0	0.50	ug/L		11/30/23 08:48	12/03/23 15:31	1
Zinc	6.5	U	16.0	6.5	ug/L		11/30/23 08:48	12/03/23 15:31	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	35.0	U	100	35.0	ug/L		11/19/23 10:52	11/21/23 19:54	1
Iron	**459**		50.0	20.0	ug/L		11/21/23 11:39	12/05/23 19:22	1
Lithium	4.9	U	5.0	4.9	ug/L		11/27/23 14:24	11/28/23 20:09	5

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	19.5	U	40.0	19.5	ug/L		11/20/23 22:50	11/21/23 00:52	1
Cadmium	0.15	U	0.50	0.15	ug/L		11/25/23 06:08	12/02/23 23:45	1
Lithium	4.9	U	5.0	4.9	ug/L		11/21/23 11:04	11/29/23 18:41	5
Arsenic	0.89	U	2.0	0.89	ug/L		11/20/23 22:50	11/21/23 00:52	1
Iron	20.0	U	50.0	20.0	ug/L		11/25/23 06:08	12/03/23 16:50	1
Calcium	**34100**		500	53.6	ug/L		11/20/23 22:50	11/21/23 00:52	1
Zinc	4.0	U	10.0	4.0	ug/L		11/25/23 06:08	12/02/23 23:45	1
Copper	2.5	U	4.0	2.5	ug/L		11/20/23 22:50	11/21/23 00:52	1
Iron	58.2	U	120	58.2	ug/L		11/20/23 22:50	11/21/23 00:52	1
Lead	0.84	U	1.2	0.84	ug/L		11/20/23 22:50	11/21/23 00:52	1
Magnesium	**13300**		200	46.9	ug/L		11/20/23 22:50	11/21/23 00:52	1
Manganese	**97.7**		8.0	1.5	ug/L		11/20/23 22:50	11/21/23 00:52	1
Nickel	0.91	U	4.0	0.91	ug/L		11/20/23 22:50	11/21/23 00:52	1

Client Sample ID: Upstream

Date Collected: 11/16/23 09:45
Date Received: 11/16/23 19:00

Lab Sample ID: 460-292787-2
Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Resistivity (EPA 120.1)	**0.00324**		0.000100	0.000100	Mohm-cm			11/27/23 13:02	1
Specific Conductance (EPA 120.1)	**308**		1.00	1.00	umhos/cm			11/27/23 13:02	1
Acidity (SM 2310B-2011)	20.0	U	20.0	20.0	mg/L			11/29/23 15:20	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-2011)	**112**		5.0	5.0	mg/L			11/22/23 11:15	1
Carbonate Alkalinity as CaCO3 (SM 2320B-2011)	5.0	U	5.0	5.0	mg/L			11/22/23 11:15	1
Alkalinity as CaCO3 to pH 4.5 (SM 2320B-2011)	**112**		5.0	5.0	mg/L			11/22/23 11:15	1
Total Dissolved Solids (SM 2540C-2015)	**198**		2.5	2.5	mg/L			11/22/23 07:49	1
Total Suspended Solids (SM 2540D-2015)	**3.2**		2.5	2.5	mg/L			11/21/23 11:12	1
Ammonia (EPA 350.1)	0.050	U	0.10	0.050	mg/L			11/29/23 10:14	1
Total Kjeldahl Nitrogen (EPA 351.2)	0.50	U	1.0	0.50	mg/L		11/30/23 16:26	12/01/23 10:45	1
Chemical Oxygen Demand (EPA 410.4)	**12.1**		10.0	3.3	mg/L			11/27/23 12:46	1
Oxygen, Dissolved (SM 4500 O C-2016)	**8.0**	**H H3**	1.0	1.0	mg/L			11/17/23 12:20	1
Orthophosphate as P (SM 4500 P E-2011)	0.0050	U	0.030	0.0050	mg/L			11/18/23 01:20	1
Carbonaceous Biochemical Oxygen Demand 5 (SM 5210 B-2016)	**3.6**		1.0	1.0	mg/L			11/17/23 14:55	1
pH (SW846 9040C)	**8.0**	**HF**	0.1	0.1	SU			11/20/23 13:03	1
Temperature (SW846 9040C)	**17.8**	**HF**	0.1	0.1	Degrees C			11/20/23 13:03	1
Total Organic Carbon (SW846 9060A)	**2.8**		1.0	0.53	mg/L			12/06/23 03:48	1
Phosphorus as PO4 (SM4500 P E-2011)	0.071	U	0.090	0.071	mg/L		11/30/23 09:08	11/30/23 13:49	1
Phosphorus as P (SM4500 P E-2011)	0.023	U	0.030	0.023	mg/L		11/30/23 09:08	11/30/23 13:49	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (EPA 350.1)	0.050	U	0.10	0.050	mg/L			11/29/23 10:20	1
Orthophosphate as P (SM 4500 P E-2011)	0.0050	U	0.030	0.0050	mg/L			11/18/23 01:20	1
Phosphorus as PO4 (SM4500 P E-2011)	0.071	U	0.090	0.071	mg/L		11/30/23 09:08	11/30/23 13:49	1
Phosphorus as P (SM4500 P E-2011)	0.023	U	0.030	0.023	mg/L		11/30/23 09:08	11/30/23 13:49	1

Client Sample ID: Clarifying Pond

Date Collected: 11/16/23 10:30
Date Received: 11/16/23 19:00

Lab Sample ID: 460-292787-3
Matrix: Water

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide	**0.11**	**J**	0.32	0.054	mg/L			11/17/23 15:31	1
Nitrate as N	**0.27**		0.16	0.070	mg/L			11/17/23 15:31	1
Chloride	**1.37**		0.32	0.039	mg/L			11/17/23 15:31	1
Nitrate Nitrite as N	**0.30**		0.16	0.070	mg/L			11/17/23 15:31	1
Nitrite as N	**0.035**	**J**	0.16	0.023	mg/L			11/17/23 15:31	1
Sulfate	**6.30**		0.48	0.095	mg/L			11/17/23 15:31	1

Client Sample ID: Clarifying Pond

Date Collected: 11/16/23 10:30
Date Received: 11/16/23 19:00

Lab Sample ID: 460-292787-3

Matrix: Water

Method: SM-Online 2340B-2011 - Total Hardness (as CaCO3) by calculation - SM Online, 2011

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**63.9**		33.1	33.1	mg/L			12/13/23 07:41	1

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000043	U	0.00020	0.000043	mg/L		11/28/23 11:29	11/28/23 14:43	1

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**2.7**	**J**	4.0	0.91	ug/L		11/30/23 08:48	12/03/23 15:35	1
Boron	**57.7**	**J**	80.0	30.4	ug/L		11/30/23 08:48	12/03/23 15:35	1
Calcium	**16900**		500	53.6	ug/L		11/30/23 08:48	12/03/23 15:35	1
Copper	2.5	U	4.0	2.5	ug/L		11/30/23 08:48	12/03/23 15:35	1
Lead	0.84	U	1.2	0.84	ug/L		11/30/23 08:48	12/03/23 15:35	1
Magnesium	**5270**		200	46.9	ug/L		11/30/23 08:48	12/03/23 15:35	1
Manganese	**11.1**		8.0	1.5	ug/L		11/30/23 08:48	12/03/23 15:35	1
Nickel	**1.1**	**J**	4.0	0.91	ug/L		11/30/23 08:48	12/03/23 15:35	1
Potassium	**1230**		200	112	ug/L		11/30/23 08:48	12/03/23 15:35	1
Selenium	0.59	U	2.5	0.59	ug/L		11/30/23 08:48	12/03/23 15:35	1
Sodium	**3220**		500	219	ug/L		11/30/23 08:48	12/03/23 15:35	1
Strontium	**24.3**		4.0	0.50	ug/L		11/30/23 08:48	12/03/23 15:35	1
Zinc	6.5	U	16.0	6.5	ug/L		11/30/23 08:48	12/03/23 15:35	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**279**		100	35.0	ug/L		11/19/23 10:52	11/21/23 19:58	1
Iron	**230**		50.0	20.0	ug/L		11/21/23 11:39	12/05/23 19:20	1
Lithium	4.9	U	5.0	4.9	ug/L		11/27/23 14:24	11/28/23 20:03	5

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	19.5	U	40.0	19.5	ug/L		11/20/23 22:50	11/21/23 00:57	1
Cadmium	0.15	U	0.50	0.15	ug/L		11/25/23 06:08	12/02/23 23:47	1
Lithium	4.9	U	5.0	4.9	ug/L		11/21/23 11:04	11/29/23 18:44	5
Arsenic	0.89	U	2.0	0.89	ug/L		11/20/23 22:50	11/21/23 00:57	1
Iron	20.0	U	50.0	20.0	ug/L		11/25/23 06:08	12/03/23 16:52	1
Calcium	**16800**		500	53.6	ug/L		11/20/23 22:50	11/21/23 00:57	1
Zinc	4.0	U	10.0	4.0	ug/L		11/25/23 06:08	12/02/23 23:47	1
Copper	2.5	U	4.0	2.5	ug/L		11/20/23 22:50	11/21/23 00:57	1
Iron	58.2	U	120	58.2	ug/L		11/20/23 22:50	11/21/23 00:57	1
Lead	0.84	U	1.2	0.84	ug/L		11/20/23 22:50	11/21/23 00:57	1
Magnesium	**5010**		200	46.9	ug/L		11/20/23 22:50	11/21/23 00:57	1
Manganese	**6.3**	**J**	8.0	1.5	ug/L		11/20/23 22:50	11/21/23 00:57	1
Nickel	0.91	U	4.0	0.91	ug/L		11/20/23 22:50	11/21/23 00:57	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Resistivity (EPA 120.1)	**0.00707**		0.000100	0.000100	Mohm-cm			11/27/23 13:02	1
Specific Conductance (EPA 120.1)	**141**		1.00	1.00	umhos/cm			11/27/23 13:02	1
Acidity (SM 2310B-2011)	20.0	U	20.0	20.0	mg/L			11/29/23 15:20	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-2011)	**57.0**		5.0	5.0	mg/L			11/22/23 11:21	1

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill - Anti-Degradation

Job ID: 460-292787-1

Client Sample ID: Clarifying Pond
Date Collected: 11/16/23 10:30
Date Received: 11/16/23 19:00

Lab Sample ID: 460-292787-3
Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbonate Alkalinity as CaCO3 (SM 2320B-2011)	5.0	U	5.0	5.0	mg/L			11/22/23 11:21	1
Alkalinity as CaCO3 to pH 4.5 (SM 2320B-2011)	**57.0**		5.0	5.0	mg/L			11/22/23 11:21	1
Total Dissolved Solids (SM 2540C-2015)	**136**		2.5	2.5	mg/L			11/22/23 07:49	1
Total Suspended Solids (SM 2540D-2015)	**3.7**		2.5	2.5	mg/L			11/21/23 11:12	1
Ammonia (EPA 350.1)	0.050	U	0.10	0.050	mg/L			11/29/23 10:16	1
Total Kjeldahl Nitrogen (EPA 351.2)	0.50	U	1.0	0.50	mg/L		11/29/23 14:00	11/30/23 13:02	1
Chemical Oxygen Demand (EPA 410.4)	**4.5**	**J**	10.0	3.3	mg/L			11/27/23 12:46	1
Oxygen, Dissolved (SM 4500 O C-2016)	**8.5**	**H H3**	1.0	1.0	mg/L			11/17/23 12:25	1
Orthophosphate as P (SM 4500 P E-2011)	**0.0057**	**J**	0.030	0.0050	mg/L			11/18/23 01:20	1
Carbonaceous Biochemical Oxygen Demand 5 (SM 5210 B-2016)	1.0	U	1.0	1.0	mg/L			11/17/23 14:59	1
pH (SW846 9040C)	**8.2**	**HF**	0.1	0.1	SU			11/20/23 13:06	1
Temperature (SW846 9040C)	**17.9**	**HF**	0.1	0.1	Degrees C			11/20/23 13:06	1
Total Organic Carbon (SW846 9060A)	**0.64**	**J**	1.0	0.53	mg/L			12/06/23 06:37	1
Phosphorus as PO4 (SM4500 P E-2011)	**0.41**		0.090	0.071	mg/L		11/30/23 09:08	11/30/23 13:49	1
Phosphorus as P (SM4500 P E-2011)	**0.13**		0.030	0.023	mg/L		11/30/23 09:08	11/30/23 13:49	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (EPA 350.1)	0.050	U	0.10	0.050	mg/L			11/29/23 10:33	1
Orthophosphate as P (SM 4500 P E-2011)	0.0050	U	0.030	0.0050	mg/L			11/18/23 01:20	1
Phosphorus as PO4 (SM4500 P E-2011)	0.071	U	0.090	0.071	mg/L		11/30/23 09:08	11/30/23 13:49	1
Phosphorus as P (SM4500 P E-2011)	0.023	U	0.030	0.023	mg/L		11/30/23 09:08	11/30/23 13:49	1

Lab Chronicle

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill - Anti-Degradation

Job ID: 460-292787-1

Client Sample ID: NPDES001

Date Collected: 11/16/23 08:30
Date Received: 11/16/23 19:00

Lab Sample ID: 460-292787-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		1	945292	OXG	EET EDI	11/17/23 14:32
Total/NA	Analysis	300.0		1	945293	OXG	EET EDI	11/17/23 14:32
Total/NA	Analysis	2340B-2011		1	949640	LBD	EET EDI	12/13/23 07:41
Total/NA	Prep	245.1			693407	NVK	EET BUF	11/28/23 11:29
Total/NA	Analysis	245.1		1	693520	NVK	EET BUF	11/28/23 14:36
Dissolved	Filtration	FILTRATION			651148	KWN	EET PEN	11/20/23 15:08
Dissolved	Prep	3005A			651261	MS	EET PEN	11/21/23 11:04 - 11/21/23 11:13 [1]
Dissolved	Analysis	6020B		5	652275	NTH	EET PEN	11/29/23 18:19
Dissolved	Filtration	Filtration			445791	UDL9	ELLE	11/21/23 08:12
Dissolved	Prep	3005A			446723	NU9R	ELLE	11/25/23 06:08
Dissolved	Analysis	6020B		1	449450	S4PD	ELLE	12/02/23 23:43
Dissolved	Filtration	Filtration			445791	UDL9	ELLE	11/21/23 08:12
Dissolved	Prep	3005A			446723	NU9R	ELLE	11/25/23 06:08
Dissolved	Analysis	6020B		1	449605	S4PD	ELLE	12/03/23 16:48
Dissolved	Filtration	FILTRATION			945872	VAD	EET EDI	11/20/23 22:44
Dissolved	Prep	3010A			945873	VAD	EET EDI	11/20/23 22:50
Dissolved	Analysis	6020B		1	945804	YZH	EET EDI	11/21/23 00:50
Total Recoverable	Prep	3005A			651749	KWN	EET PEN	11/27/23 14:24 - 11/27/23 17:08 [1]
Total Recoverable	Analysis	6020B		5	652073	NTH	EET PEN	11/28/23 20:06
Total Recoverable	Prep	3005A			446508	NU9R	ELLE	11/22/23 14:49
Total Recoverable	Analysis	6020B		1	449450	S4PD	ELLE	12/02/23 17:34
Total Recoverable	Prep	3005A			809100	RR	EET SAV	11/19/23 10:52
Total Recoverable	Analysis	6020B		1	809598	BJB	EET SAV	11/21/23 19:50
Total/NA	Prep	3010A			949415	JKF	EET EDI	12/12/23 08:31
Total/NA	Analysis	6020B		1	949472	CDC	EET EDI	12/12/23 17:20
Total/NA	Analysis	120.1		1	946704	MMC	EET EDI	11/27/23 13:02
Total/NA	Analysis	2310B-2011		1	947180	RAK	EET EDI	11/29/23 15:20
Total/NA	Analysis	2320B-2011		1	946256	AXP	EET EDI	11/22/23 11:08
Total/NA	Analysis	2540C-2015		1	946178	PLS	EET EDI	11/22/23 07:49
Total/NA	Analysis	2540D-2015		1	945980	AMN	EET EDI	11/21/23 11:12
Dissolved	Filtration	FILTRATION			947126	AXP	EET EDI	11/29/23 09:43
Dissolved	Analysis	350.1		1	947154	AXP	EET EDI	11/29/23 10:19
Total/NA	Analysis	350.1		1	947154	AXP	EET EDI	11/29/23 10:13
Total/NA	Prep	351.2			448131	NLE3	ELLE	11/29/23 14:00 - 11/29/23 17:00 [1]
Total/NA	Analysis	351.2		1	448685	JCG7	ELLE	11/30/23 12:53
Total/NA	Analysis	410.4		1	946703	HTV	EET EDI	11/27/23 12:46
Total/NA	Analysis	4500 O C-2016		1	945358	RXA	EET EDI	11/17/23 12:15
Dissolved	Filtration	FILTRATION			945454	VBG	EET EDI	11/18/23 00:20
Dissolved	Analysis	4500 P E-2011		1	945452	VBG	EET EDI	11/18/23 01:20
Total/NA	Analysis	4500 P E-2011		1	945452	VBG	EET EDI	11/18/23 01:20
Total/NA	Analysis	5210 B-2016		1	945378	RXA	EET EDI	11/17/23 14:40
Total/NA	Analysis	9040C		1	945741	MNP	EET EDI	11/20/23 13:01
Total/NA	Analysis	9060A		1	948419	MMC	EET EDI	12/06/23 06:11

Client Sample ID: NPDES001

Lab Sample ID: 460-292787-1

Date Collected: 11/16/23 08:30

Matrix: Water

Date Received: 11/16/23 19:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Filtration	FILTRATION			947324	RAK	EET EDI	11/30/23 09:04
Dissolved	Prep	SM 4500 P B			947327	RAK	EET EDI	11/30/23 09:08
Dissolved	Analysis	SM4500 P E-2011		1	947386	RAK	EET EDI	11/30/23 13:49
Total/NA	Prep	SM 4500 P B			947327	RAK	EET EDI	11/30/23 09:08
Total/NA	Analysis	SM4500 P E-2011		1	947386	RAK	EET EDI	11/30/23 13:49

Client Sample ID: Upstream

Lab Sample ID: 460-292787-2

Date Collected: 11/16/23 09:45

Matrix: Water

Date Received: 11/16/23 19:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		1	945292	OXG	EET EDI	11/17/23 15:16
Total/NA	Analysis	300.0		1	945293	OXG	EET EDI	11/17/23 15:16
Total/NA	Analysis	2340B-2011		1	949640	LBD	EET EDI	12/13/23 07:41
Total/NA	Prep	245.1			693407	NVK	EET BUF	11/28/23 11:29
Total/NA	Analysis	245.1		1	693520	NVK	EET BUF	11/28/23 14:42
Dissolved	Filtration	FILTRATION			651148	KWN	EET PEN	11/20/23 15:08
Dissolved	Prep	3005A			651261	MS	EET PEN	11/21/23 11:04 - 11/21/23 11:13 [1]
Dissolved	Analysis	6020B		5	652275	NTH	EET PEN	11/29/23 18:41
Dissolved	Filtration	Filtration			445791	UDL9	ELLE	11/21/23 08:12
Dissolved	Prep	3005A			446723	NU9R	ELLE	11/25/23 06:08
Dissolved	Analysis	6020B		1	449450	S4PD	ELLE	12/02/23 23:45
Dissolved	Filtration	Filtration			445791	UDL9	ELLE	11/21/23 08:12
Dissolved	Prep	3005A			446723	NU9R	ELLE	11/25/23 06:08
Dissolved	Analysis	6020B		1	449605	S4PD	ELLE	12/03/23 16:50
Dissolved	Filtration	FILTRATION			945872	VAD	EET EDI	11/20/23 22:44
Dissolved	Prep	3010A			945873	VAD	EET EDI	11/20/23 22:50
Dissolved	Analysis	6020B		1	945804	YZH	EET EDI	11/21/23 00:52
Total Recoverable	Prep	3005A			651749	KWN	EET PEN	11/27/23 14:24 - 11/27/23 17:08 [1]
Total Recoverable	Analysis	6020B		5	652073	NTH	EET PEN	11/28/23 20:09
Total Recoverable	Prep	3005A			445938	NU9R	ELLE	11/21/23 11:39
Total Recoverable	Analysis	6020B		1	450486	UCIG	ELLE	12/05/23 19:22
Total Recoverable	Prep	3005A			809100	RR	EET SAV	11/19/23 10:52
Total Recoverable	Analysis	6020B		1	809598	BJB	EET SAV	11/21/23 19:54
Total/NA	Prep	3010A			947322	JKF	EET EDI	11/30/23 08:48
Total/NA	Analysis	6020B		1	947857	CDC	EET EDI	12/03/23 15:31
Total/NA	Analysis	120.1		1	946704	MMC	EET EDI	11/27/23 13:02
Total/NA	Analysis	2310B-2011		1	947180	RAK	EET EDI	11/29/23 15:20
Total/NA	Analysis	2320B-2011		1	946256	AXP	EET EDI	11/22/23 11:15
Total/NA	Analysis	2540C-2015		1	946178	PLS	EET EDI	11/22/23 07:49
Total/NA	Analysis	2540D-2015		1	945980	AMN	EET EDI	11/21/23 11:12
Dissolved	Filtration	FILTRATION			947126	AXP	EET EDI	11/29/23 09:43
Dissolved	Analysis	350.1		1	947154	AXP	EET EDI	11/29/23 10:20
Total/NA	Analysis	350.1		1	947154	AXP	EET EDI	11/29/23 10:14

Client Sample ID: Upstream

Lab Sample ID: 460-292787-2

Date Collected: 11/16/23 09:45

Matrix: Water

Date Received: 11/16/23 19:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	351.2			448745	NLE3	ELLE	11/30/23 16:26 - 11/30/23 19:26 [1]
Total/NA	Analysis	351.2		1	449112	JCG7	ELLE	12/01/23 10:45
Total/NA	Analysis	410.4		1	946703	HTV	EET EDI	11/27/23 12:46
Total/NA	Analysis	4500 O C-2016		1	945358	RXA	EET EDI	11/17/23 12:20
Dissolved	Filtration	FILTRATION			945454	VBG	EET EDI	11/18/23 00:20
Dissolved	Analysis	4500 P E-2011		1	945452	VBG	EET EDI	11/18/23 01:20
Total/NA	Analysis	4500 P E-2011		1	945452	VBG	EET EDI	11/18/23 01:20
Total/NA	Analysis	5210 B-2016		1	945378	RXA	EET EDI	11/17/23 14:55
Total/NA	Analysis	9040C		1	945741	MNP	EET EDI	11/20/23 13:03
Total/NA	Analysis	9060A		1	948419	MMC	EET EDI	12/06/23 03:48
Dissolved	Filtration	FILTRATION			947324	RAK	EET EDI	11/30/23 09:04
Dissolved	Prep	SM 4500 P B			947327	RAK	EET EDI	11/30/23 09:08
Dissolved	Analysis	SM4500 P E-2011		1	947386	RAK	EET EDI	11/30/23 13:49
Total/NA	Prep	SM 4500 P B			947327	RAK	EET EDI	11/30/23 09:08
Total/NA	Analysis	SM4500 P E-2011		1	947386	RAK	EET EDI	11/30/23 13:49

Client Sample ID: Clarifying Pond

Lab Sample ID: 460-292787-3

Date Collected: 11/16/23 10:30

Matrix: Water

Date Received: 11/16/23 19:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		1	945292	OXG	EET EDI	11/17/23 15:31
Total/NA	Analysis	300.0		1	945293	OXG	EET EDI	11/17/23 15:31
Total/NA	Analysis	2340B-2011		1	949640	LBD	EET EDI	12/13/23 07:41
Total/NA	Prep	245.1			693407	NVK	EET BUF	11/28/23 11:29
Total/NA	Analysis	245.1		1	693520	NVK	EET BUF	11/28/23 14:43
Dissolved	Filtration	FILTRATION			651148	KWN	EET PEN	11/20/23 15:08
Dissolved	Prep	3005A			651261	MS	EET PEN	11/21/23 11:04 - 11/21/23 11:13 [1]
Dissolved	Analysis	6020B		5	652275	NTH	EET PEN	11/29/23 18:44
Dissolved	Filtration	Filtration			445791	UDL9	ELLE	11/21/23 08:12
Dissolved	Prep	3005A			446723	NU9R	ELLE	11/25/23 06:08
Dissolved	Analysis	6020B		1	449450	S4PD	ELLE	12/02/23 23:47
Dissolved	Filtration	Filtration			445791	UDL9	ELLE	11/21/23 08:12
Dissolved	Prep	3005A			446723	NU9R	ELLE	11/25/23 06:08
Dissolved	Analysis	6020B		1	449605	S4PD	ELLE	12/03/23 16:52
Dissolved	Filtration	FILTRATION			945872	VAD	EET EDI	11/20/23 22:44
Dissolved	Prep	3010A			945873	VAD	EET EDI	11/20/23 22:50
Dissolved	Analysis	6020B		1	945804	YZH	EET EDI	11/21/23 00:57
Total Recoverable	Prep	3005A			651749	KWN	EET PEN	11/27/23 14:24 - 11/27/23 17:08 [1]
Total Recoverable	Analysis	6020B		5	652073	NTH	EET PEN	11/28/23 20:03
Total Recoverable	Prep	3005A			445938	NU9R	ELLE	11/21/23 11:39
Total Recoverable	Analysis	6020B		1	450486	UCIG	ELLE	12/05/23 19:20
Total Recoverable	Prep	3005A			809100	RR	EET SAV	11/19/23 10:52
Total Recoverable	Analysis	6020B		1	809598	BJB	EET SAV	11/21/23 19:58

Lab Chronicle

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill - Anti-Degradation

Job ID: 460-292787-1

Client Sample ID: Clarifying Pond

Date Collected: 11/16/23 10:30
Date Received: 11/16/23 19:00

Lab Sample ID: 460-292787-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3010A			947322	JKF	EET EDI	11/30/23 08:48
Total/NA	Analysis	6020B		1	947857	CDC	EET EDI	12/03/23 15:35
Total/NA	Analysis	120.1		1	946704	MMC	EET EDI	11/27/23 13:02
Total/NA	Analysis	2310B-2011		1	947180	RAK	EET EDI	11/29/23 15:20
Total/NA	Analysis	2320B-2011		1	946256	AXP	EET EDI	11/22/23 11:21
Total/NA	Analysis	2540C-2015		1	946178	PLS	EET EDI	11/22/23 07:49
Total/NA	Analysis	2540D-2015		1	945980	AMN	EET EDI	11/21/23 11:12
Dissolved	Filtration	FILTRATION			947126	AXP	EET EDI	11/29/23 09:43
Dissolved	Analysis	350.1		1	947154	AXP	EET EDI	11/29/23 10:33
Total/NA	Analysis	350.1		1	947154	AXP	EET EDI	11/29/23 10:16
Total/NA	Prep	351.2			448131	NLE3	ELLE	11/29/23 14:00 - 11/29/23 17:00 [1]
Total/NA	Analysis	351.2		1	448685	JCG7	ELLE	11/30/23 13:02
Total/NA	Analysis	410.4		1	946703	HTV	EET EDI	11/27/23 12:46
Total/NA	Analysis	4500 O C-2016		1	945358	RXA	EET EDI	11/17/23 12:25
Dissolved	Filtration	FILTRATION			945454	VBG	EET EDI	11/18/23 00:20
Dissolved	Analysis	4500 P E-2011		1	945452	VBG	EET EDI	11/18/23 01:20
Total/NA	Analysis	4500 P E-2011		1	945452	VBG	EET EDI	11/18/23 01:20
Total/NA	Analysis	5210 B-2016		1	945378	RXA	EET EDI	11/17/23 14:59
Total/NA	Analysis	9040C		1	945741	MNP	EET EDI	11/20/23 13:06
Total/NA	Analysis	9060A		1	948419	MMC	EET EDI	12/06/23 06:37
Dissolved	Filtration	FILTRATION			947324	RAK	EET EDI	11/30/23 09:04
Dissolved	Prep	SM 4500 P B			947327	RAK	EET EDI	11/30/23 09:08
Dissolved	Analysis	SM4500 P E-2011		1	947386	RAK	EET EDI	11/30/23 13:49
Total/NA	Prep	SM 4500 P B			947327	RAK	EET EDI	11/30/23 09:08
Total/NA	Analysis	SM4500 P E-2011		1	947386	RAK	EET EDI	11/30/23 13:49

[1] This procedure uses a method stipulated length of time for the process. Both start and end times are displayed.

Laboratory References:

EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600
EET EDI = Eurofins Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900
EET PEN = Eurofins Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001
EET SAV = Eurofins Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858
ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300
Microbac = Marietta, OH, 158 Starlite Drive, Marietta, OH 45750

Accreditation/Certification Summary

Client: Heidelberg Materials Northeast LLC
Job ID: 460-292787-1
Project/Site: Rock Hill - Anti-Degradation

Laboratory: Eurofins Edison

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Connecticut	State	PH-0818	09-30-24
DE Haz. Subst. Cleanup Act (HSCA)	State	N/A	01-01-24
Georgia	State	12028 (NJ)	06-30-24
Massachusetts	State	M-NJ312	06-30-24
New Jersey	NELAP	12028	06-30-24
New York	NELAP	11452	04-01-24
Pennsylvania	NELAP	68-00522	02-29-24
Rhode Island	State	LAO00376	12-30-23
USDA	US Federal Programs	P330-20-00244	05-31-24

Laboratory: Eurofins Buffalo

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Arkansas DEQ	State	88-0686	07-06-23 *
Connecticut	State	PH-0568	03-31-24
Florida	NELAP	E87672	06-30-23 *
Georgia	State	10026 (NY)	03-31-24
Georgia	State Program	N/A	03-31-09 *
Illinois	NELAP	200003	09-30-23 *
Iowa	State	374	03-01-25
Iowa	State Program	374	03-01-09 *
Kansas	NELAP	E-10187	02-01-24
Kentucky (DW)	State	90029	01-01-24
Kentucky (UST)	State	108092	04-01-24
Kentucky (WW)	State	KY90029	12-31-23
Louisiana	NELAP	02031	06-30-23 *
Louisiana (All)	NELAP	02031	06-30-23 *
Maine	State	NY00044	12-04-24
Maryland	State	294	06-30-24
Massachusetts	State	M-NY044	07-01-24
Michigan	State	9937	04-01-24
Michigan	State Program	9937	04-01-09 *
New Hampshire	NELAP	2973	09-11-19 *
New Hampshire	NELAP	2337	11-17-24
New Jersey	NELAP	NY455	06-30-24
New York	NELAP	10026	03-31-24
Pennsylvania	NELAP	68-00281	08-31-24
Rhode Island	State	LAO00378	12-30-23
Texas	NELAP	T104704412-18-10	07-31-23 *
USDA	US Federal Programs	P330-18-00039	03-25-24
Virginia	NELAP	460185	09-14-24
Washington	State	C784	02-10-24
Wisconsin	State	998310390	08-31-24

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
A2LA	Dept. of Defense ELAP	0001.01	11-30-24
A2LA	ISO/IEC 17025	0001.01	11-30-24

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Accreditation/Certification Summary

Client: Heidelberg Materials Northeast LLC
Job ID: 460-292787-1
Project/Site: Rock Hill - Anti-Degradation

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC (Continued)

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alabama	State	43200	01-31-24
Alaska	State	PA00009	06-30-24
Alaska (UST)	State	17-027	02-28-24
Arizona	State	AZ0780	03-12-24
Arkansas DEQ	State	88-00660	08-09-24
California	State	2792	01-31-24
Colorado	State	PA00009	06-30-24
Connecticut	State	PH-0746	06-30-25
DE Haz. Subst. Cleanup Act (HSCA)	State	019-006 (PA cert)	01-31-24
Delaware (DW)	State	N/A	01-31-24
Florida	NELAP	E87997	06-30-24
Georgia (DW)	State	C048	01-31-24
Hawaii	State	N/A	01-31-24
Illinois	NELAP	200027	01-31-24
Iowa	State	361	03-01-24
Kansas	NELAP	E-10151	10-31-24
Kentucky (DW)	State	KY90088	12-31-23
Kentucky (UST)	State	0001.01	11-30-24
Kentucky (WW)	State	KY90088	12-31-23
Louisiana (All)	NELAP	02055	06-30-24
Maine	State	2019012	03-12-25
Maryland	State	100	06-30-24
Massachusetts	State	M-PA009	06-30-24
Michigan	State	9930	01-31-24
Minnesota	NELAP	042-999-487	12-31-23
Mississippi	State	023	01-31-24
Missouri	State	450	01-31-25
Montana (DW)	State	0098	01-01-25
Nebraska	State	NE-OS-32-17	01-31-24
New Hampshire	NELAP	2730	01-10-24
New Jersey	NELAP	PA011	06-30-24
New York	NELAP	10670	04-01-24
North Carolina (DW)	State	42705	07-31-24
North Carolina (WW/SW)	State	521	12-31-23
North Dakota	State	R-205	01-31-24
Oklahoma	NELAP	9804	08-31-24
Oregon	NELAP	PA200001	09-11-24
PALA	Canada	1978	09-16-24
Pennsylvania	NELAP	36-00037	01-31-24
Rhode Island	State	LAO00338	12-31-23
South Carolina	State	89002	01-31-24
Tennessee	State	02838	01-31-24
Texas	NELAP	T104704194-23-46	08-31-24
USDA	US Federal Programs	525-22-298-19481	10-25-25
Vermont	State	VT - 36037	10-28-24
Virginia	NELAP	460182	06-14-25
Washington	State	C457	04-11-24
West Virginia (DW)	State	9906 C	12-31-23
West Virginia DEP	State	055	07-31-24
Wyoming	State	8TMS-L	01-31-24

Client: Heidelberg Materials Northeast LLC
Job ID: 460-292787-1
Project/Site: Rock Hill - Anti-Degradation

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC (Continued)

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Wyoming (UST)	A2LA	0001.01	11-30-24

Laboratory: Eurofins Pensacola

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alabama	State	40150	06-30-24
ANAB	ISO/IEC 17025	L2471	02-22-26
Arkansas DEQ	State	88-00689	08-01-24
California	State	2510	06-30-24
Florida	NELAP	E81010	06-30-24
Georgia	State	E81010(FL)	06-30-24
Illinois	NELAP	200041	10-09-24
Kansas	NELAP	E-10253	10-31-24
Kentucky (UST)	State	53	06-30-24
Louisiana (All)	NELAP	30976	06-30-24
Louisiana (DW)	State	LA017	12-31-23
North Carolina (WW/SW)	State	314	12-31-23
Oklahoma	NELAP	9810	08-31-24
Pennsylvania	NELAP	68-00467	01-31-24
South Carolina	State	96026	06-30-24
Tennessee	State	TN02907	06-30-24
Texas	NELAP	T104704286	09-30-24
US Fish & Wildlife	US Federal Programs	A22340	06-30-24
USDA	US Federal Programs	FLGNV23001	01-08-26
USDA	US Federal Programs	P330-21-00056	05-17-24
Virginia	NELAP	460166	06-14-24
West Virginia DEP	State	136	03-31-24
West Virginia DEP	State	136	03-31-24

Laboratory: Eurofins Savannah

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
	AFCEE	SAVLAB	
Alabama	State	41450	06-30-24
ANAB	Dept. of Defense ELAP	L2463	09-22-24
Arkansas (DW)	State	GA00006	06-30-24
Arkansas DEQ	State	19-015-0	02-01-24
California	State	2939	06-30-24
Florida	NELAP	E87052	11-30-23
Georgia	State	E87052	06-30-24
Georgia (DW)	State	803	06-30-24
Guam	State	19-007R	04-17-24
Hawaii	State	<cert No.>	06-30-24
Illinois	NELAP	200022	11-30-24
Indiana	State	C-GA-02	06-30-24
Iowa	State	353	07-01-25
Kentucky (UST)	State	NA	06-30-24
Louisiana	NELAP	30690	06-30-24
Louisiana (All)	NELAP	30690	06-30-24

Accreditation/Certification Summary

Client: Heidelberg Materials Northeast LLC
Job ID: 460-292787-1
Project/Site: Rock Hill - Anti-Degradation

Laboratory: Eurofins Savannah (Continued)

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Louisiana (DW)	State	LA009	12-31-23
Maine	State	GA00006	09-25-24
Maryland	State	250	12-31-23
Massachusetts	State	M-GA006	06-30-24
Michigan	State	9925	06-30-24
Mississippi	State	<cert No.>	06-30-24
Nebraska	State	NE-OS-7-04	06-30-24
New Jersey	NELAP	GA769	06-30-24
New Mexico	State	GA00006	12-06-23
North Carolina (DW)	State	13701	07-31-24
North Carolina (WW/SW)	State	269	12-31-23
Pennsylvania	NELAP	68-00474	06-30-24
Puerto Rico	State	GA00006	01-01-24
South Carolina	State	98001	06-30-24
Tennessee	State	TN02961	06-30-24
Texas	NELAP	T1047004185	11-30-23
Texas	TCEQ Water Supply	T104704185	06-30-24
USDA	US Federal Programs	P330-18-00313	09-03-24
Virginia	NELAP	460161	06-14-24
Wyoming	State	8TMS-L	06-30-24

Method Summary

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill - Anti-Degradation

Job ID: 460-292787-1

Method	Method Description	Protocol	Laboratory
300.0	Anions, Ion Chromatography	EPA	EET EDI
2340B-2011	Total Hardness (as CaCO3) by calculation - SM Online, 2011	SM-Online	EET EDI
245.1	Mercury (CVAA)	EPA	EET BUF
6020B	Metals (ICP/MS)	SW846	EET EDI
6020B	Metals (ICP/MS)	SW846	EET PEN
6020B	Metals (ICP/MS)	SW846	EET SAV
6020B	Metals (ICP/MS)	SW846	ELLE
120.1	Conductivity, Specific Conductance	EPA	EET EDI
2310B-2011	Acidity	SM	EET EDI
2320B-2011	Alkalinity, Total	SM	EET EDI
2540C-2015	Total Dissolved Solids (Dried at 180 °C)	SM	EET EDI
2540D-2015	Total Suspended Solids (Dried at 103-105°C)	SM	EET EDI
350.1	Nitrogen, Ammonia	EPA	EET EDI
351.2	Nitrogen, Total Kjeldahl	EPA	ELLE
410.4	COD	EPA	EET EDI
4500 O C-2016	Oxygen, Dissolved	SM	EET EDI
4500 P E-2011	Orthophosphate	SM	EET EDI
5210 B-2016	BOD, 5-Day	SM	EET EDI
9040C	pH	SW846	EET EDI
9060A	Organic Carbon, Total (TOC)	SW846	EET EDI
SM4500 P E-2011	Phosphorus	SM	EET EDI
Subcontract	Osomotic Pressure	None	Microbac
245.1	Preparation, Mercury	EPA	EET BUF
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	EET PEN
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	EET SAV
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	ELLE
3010A	Preparation, Total Metals	SW846	EET EDI
351.2	Nitrogen, Total Kjeldahl	EPA	ELLE
FILTRATION	Sample Filtration	None	EET EDI
FILTRATION	Sample Filtration	None	EET PEN
Filtration	Sample Filtration	None	ELLE
SM 4500 P B	Phosphorous, Total and Ortho	SM	EET EDI

Protocol References:

EPA = US Environmental Protection Agency
None = None
SM = "Standard Methods For The Examination Of Water And Wastewater"
SM-Online = Standard Methods Online
SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600
EET EDI = Eurofins Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900
EET PEN = Eurofins Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001
EET SAV = Eurofins Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858
ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300
Microbac = Marietta, OH, 158 Starlite Drive, Marietta, OH 45750

Sample Summary

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill - Anti-Degradation

Job ID: 460-292787-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
460-292787-1	NPDES001	Water	11/16/23 08:30	11/16/23 19:00
460-292787-2	Upstream	Water	11/16/23 09:45	11/16/23 19:00
460-292787-3	Clarifying Pond	Water	11/16/23 10:30	11/16/23 19:00

Microbac Laboratories Inc., - Marietta, OH

Client Project ID:

Test America

For:

Julie Gilmore

Eurofins TestAmerica Edison

777 New Durham RD

Edison, NJ 08817

Project State of Origin: Pennsylvania

Project Requested Certification:

Microbac Laboratories Inc., - Marietta, OH 68-01670 PA Department of Environmental Protection

All test results meet the requirements of the QAPP and other applicable contract terms and conditions. Any exceptions are attached to this cover page or addressed in the method narratives presented in the report. All results for soil samples are reported on a 'dry-weight' basis unless specified otherwise. Analytical results for water and wastes are reported on a 'as received' basis unless specified otherwise. A statement of uncertainty for each analysis is available upon request. The reported results are related only to the samples analyzed as received. This laboratory report may be released as a hardcopy and in computer-readable form submitted electronically or on diskette. This laboratory report shall not be reproduced, except in full, without the written approval of Microbac Laboratories, Inc.

Laboratory Project Manager:

Michelle Taylor

Project Manager

Michelle.Taylor@microbac.com

Authorized By:

Michelle Taylor

Project Manager

Issued: 11/28/2023

MICROBAC®

Laboratory Report Number: M3K1493

Client Project ID: Test America

Cooler Receipt Log

Cooler ID: Default Cooler Temp: 1.3°C

Cooler Inspection Checklist

Ice Present or not required?	Yes
Shipping containers sealed or not required?	Yes
Custody seals intact or not required?	Yes
Chain of Custody (COC) Present?	Yes
COC includes customer information?	Yes
Relinquished and received signature on COC?	Yes
Sample collector identified on COC?	Yes
Sample type identified on COC?	Yes
Correct type of Containers Received	No
Correct number of containers listed on COC?	Yes
Containers Intact?	Yes
COC includes requested analyses?	Yes
Enough sample volume for indicated tests received?	Yes
Sample labels match COC (Name, Date & Time?)	Yes
Samples arrived within hold time?	Yes
Correct preservatives on COC or not required?	Yes
Chemical preservations checked or not required?	Yes
Preservation checks meet method requirements?	Yes
VOA vials have zero headspace, or not recd.?	Yes

MICROBAC®

Laboratory Report Number: M3K1493

Client Project ID: Test America

Microbac Laboratories Inc., - Marietta, OH

CERTIFICATE OF ANALYSIS

Client ID:	NPDES001 (460-292787-1)			**Collection Date:**	11/16/2023 08:30
Laboratory ID:	M3K1493-01			**Prep Date:**	11/22/2023 14:34
Matrix:	Aqueous			**Analyzed:**	11/22/2023 15:04
Batch / Sequence:	B3K1277 /	**Analytical Method:**	PADEP 391-2000-008	**Calibration:**	NA
Instrument:	OSMOMETER 5004	**Units:**	mOsm/kg	**File ID:**	OsmoticPressure_B3K1277_231122023809.xls
Analyst:	APH	**Dilution:**	1		

Analyte	CAS Number	Result	MDL	RL	Flag	Qualifier
Osmotic Pressure		9.00	6.00	10.0		

MICROBAC®

Laboratory Report Number: M3K1493

Client Project ID: Test America

Microbac Laboratories Inc., - Marietta, OH

CERTIFICATE OF ANALYSIS

Client ID:	Upstream (460-292787-2)			**Collection Date:**	11/16/2023 09:45
Laboratory ID:	M3K1493-02			**Prep Date:**	11/22/2023 14:34
Matrix:	Aqueous			**Analyzed:**	11/22/2023 15:04
Batch / Sequence:	B3K1277 /	**Analytical Method:**	PADEP 391-2000-008	**Calibration:**	NA
Instrument:	OSMOMETER 5004	**Units:**	mOsm/kg	**File ID:**	OsmoticPressure_B3K1277_231122023809.xls
Analyst:	APH	**Dilution:**	1		

Analyte	CAS Number	Result	MDL	RL	Flag	Qualifier
Osmotic Pressure		**11.0**	6.00	10.0		

MICROBAC®

Laboratory Report Number: M3K1493

Client Project ID: Test America

Microbac Laboratories Inc., - Marietta, OH

CERTIFICATE OF ANALYSIS

Client ID:	Clarifying Pond (460-292787-3)			**Collection Date:**	11/16/2023 10:30
Laboratory ID:	M3K1493-03			**Prep Date:**	11/22/2023 14:34
Matrix:	Aqueous			**Analyzed:**	11/22/2023 15:04
Batch / Sequence:	B3K1277 /	**Analytical Method:**	PADEP 391-2000-008	**Calibration:**	NA
Instrument:	OSMOMETER 5004	**Units:**	mOsm/kg	**File ID:**	OsmoticPressure_B3K1277_231122023809.xls
Analyst:	APH	**Dilution:**	1		

Analyte	CAS Number	Result	MDL	RL	Flag	Qualifier
Osmotic Pressure		9.00	6.00	10.0		

Laboratory Report Number: M3K1493

Client Project ID: Test America

Notes and Definitions

:
DL: Detection Limit
LOD: Limit of Detection
LOQ: Limit of Quantitation
MDL: Method Detection Limit
RL: Reporting Limit

MICROBAC®

Laboratory Report Number: M3K1493

Client Project ID: Test America

METHOD BLANKS

Sample ID:	B3K1277-BLK1	**Prep Date:**	11/22/23 14:34	**Matrix:**	Aqueous
Instrument:	OSMOMETER 5004	**Analyzed:**	11/22/23 15:04	**Method:**	PADEP 391-2000-008
File ID:	OsmoticPressure_B3K1	**Sequence:**		**Analyst:**	APH
Batch:	B3K1277	**Units:**	mOsm/kg	**Calibration:**	

Analyte	Result	MDL	RL	Dilution	Flag	Q
Osmotic Pressure	6.00	6.00	10.0	1	U	

* - Detected in the associated method Blank at a concentration >= RL

MICROBAC®

Laboratory Report Number: M3K1493

Client Project ID: Test America

BLANK SPIKE / DUPLICATE (BS/BSD)

Method:	PADEP 391-2000-008		**Blank Spike**	**Duplicate**
Batch:	B3K1277	**Spike ID:**	B3K1277-BS1	B3K1277-BSD1
Analyst:	APH	**Prepared:**	11/22/23 14:34	11/22/23 14:34
Matrix:	Aqueous	**Analyzed:**	11/22/23 15:04	11/22/23 15:04
Units:	mOsm/kg	**File ID:**	OsmoticPressure_B3K1277_2311	OsmoticPressure_B3K1277_2311
Instrument:	OSMOMETER 5004	**Initial/Final:**	1mL/1mL	1mL/1mL
Calibration:				

Analyte	BS Spiked	BS Found	BS %Rec	BSD Spiked	BSD Found	BSD %Rec	%RPD	%Rec Limts	RPD Limit	Q
Osmotic Pressure	290	295	102	290	293	101	0.680	90 - 110	20	

* - Does not meet %Rec acceptance criteria.
- Does not meet RPD acceptance criteria.

Eurofins Edison
777 New Durham Road
Edison, NJ 08817
Phone: 732-549-3900 Fax: 732-549-3679

Chain of Custody Record

eurofins | Environment Testing

12/13/2023

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Gilmore, Julie L	Carrier Tracking No(s):	COC No: 460-69831.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Julie.Gilmore@et.eurofinsus.com	State of Origin: Pennsylvania	Page: Page 1 of 1
Company: Microbac Laboratories, Inc.		Accreditations Required (See note): NELAP - Pennsylvania		Job #: 460-292787-1
Address: 158 Starlite Drive,	Due Date Requested: 11/30/2023			
City: Marietta	TAT Requested (days):			
State, Zip: OH, 45750				
Phone: 800-373-4071(Tel)	PO #:			
Email:	WO #:			
Project Name: Rock Hill - Anti-Degradation	Project #: 46011424			
Site:	SSOW#:			

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)
Other:

Analysis Requested

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	SUB (Osmotic Pressure)/ Osmotic Pressure	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
NPDES001 (460-292787-1)	11/16/23	08:30 Eastern		Water			X	1	
Upstream (460-292787-2)	11/16/23	09:45 Eastern		Water			X	1	
Clarifying Pond (460-292787-3)	11/16/23	10:30 Eastern		Water			X	1	

M 3 K 1 4 9 3
Eurofins TestAmerica Edison
Rec'd: 11/21/2023 11:02
By: Erin Porter Temp: 1.3 (Signature)

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Northeast, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Northeast, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Northeast, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Northeast, LLC.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 1	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		11/20/23 1900	FEDEX			
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time: 11-21-23	Company 1132

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks:

MICROBAC®

Work Order # M0k1453

COOLER TEMP >6° C LOG

SAMPLE ID	Bottle 1 °C	Bottle 2 °C	Bottle 3 °C	Bottle 4 °C	Bottle 5 °C	Bottle 6 °C

11/21/2023 SM

pH Lot # HC325079

pH Exceptions

SAMPLE ID	Bottle 1	Bottle 2	Bottle 3	Bottle 4	Bottle 5	Bottle 6

11/21/2023 SM

PRESERVATIVE EXCEPTIONS

✓ NONE

__ AS NOTED

11/21/2023 SM

Document Control # 1957
Last 04-10-2019

Issued to: Document Master File

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777 New Durham Road
Edison, NJ 08817
Phone: 732-549-3900 Fax: 732-549-3679

Chain of Custody Record

eurofins

Client Information	Sampler	Lab PM: Gilmore, Julie L	Carrier Tracking No(s):	COC No: 460-175302-114795.1
Client Contact: Andrew Gutshall	Phone:	E-Mail: Julie.Gilmore@et.eurofinsus.com	State of Origin:	Page: Page 1 of 2
Company: Heidelberg Materials Northeast LLC	PWSID:			Job #: 292787
Address: 7660 Imperial Way	Due Date Requested:			
City: Allentown	TAT Requested (days):			
State, Zip: PA, 18195	Compliance Project: Δ Yes Δ No			
Phone: 610-366-4819(Tel)	PO #: Purchase Order not required			
Email: andrew.gutshall@heidelbergmaterials.com	WO #:			
Project Name: Rock Hill Anti-Degradation	Project #: 46011424			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:
A HCL, B NaOH, C Zn Acetate, D Nitric Acid, E NaHSO4, F MeOH, G Amchlor, H Ascorbic Acid, I Ice, J DI Water, K EDTA, L EDA, M Hexane, N None, O AsNaO2, P Na2O4S, Q Na2SO3, R Na2S2O3, S H2SO4, T TSP Dodecahydrate, U Acetone, V MCAA, W pH 4-5, Y Trizma, Z other (specify)
Other

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020B Dissolved Lithium N	6020B Total Lithium D	351.2 Local Method S	6020B Dissolved Cd/Fe/Zn N	6020B (MOD) Total Fe D	350.1, 410.4, 4500_P_E S	120.1 9040C N	350.1 4500_P_E, 6020B N	2320B (MOD) Alkalinity N	6020B, SM2340B D	9060A TOC S	2540D, SM5210B_Calc N	4500_P_E_Ortho Dissolved Orthophosphate N	Total Number of containers	Special Instructions/Note:
			Preservation Code:																		
NPDES001	11/16/23	0830	G	Water																2	1
Basin 1				Water																	
Basin 2				Water																	
Upstream	11/16/23	0945	G	Water																2	2
Clarifying Pond	11/16/23	1030	G	Water																2	3

460-292787 Chain of Custody

SHORT HOLD

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I II III, IV Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	11/16/23	ETA		11/16/23 1236	EETN-KOP
Relinquished by:	Date/Time: 11-16-23 1655	Company EETN-KOP	Received by:	Date/Time: 11/16	Company ETA
Relinquished by:	Date/Time: 11/16 1900	Company ETA	Received by:	Date/Time: 11/16/23 900	Company ETA

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.	Cooler Temperature(s) °C and Other Remarks:

Ver 06/08/2021

Eurofins Edison
777 New Durham Road
Edison, NJ 08817
Phone: 732-549-3900 Fax: 732-549-3679

Chain of Custody Record

eurofins

Client Information	Sampler	Lab PM: Gilmore, Julie L	Carrier Tracking No(s):	COC No: 460-175302-114795.2
Client Contact: Andrew Gutshall	Phone:	E-Mail: Julie.Gilmore@et.eurofinsus.com	State of Origin:	Page: Page 2 of 2
Company: Heidelberg Materials Northeast LLC	PWSID:			Job #: 292787

Address: 7660 Imperial Way	Due Date Requested:
City: Allentown	TAT Requested (days):
State, Zip: PA, 18195	Compliance Project: Δ Yes Δ No
Phone: 610-366-4819(Tel)	PO #: Purchase Order not required
Email: andrew.gutshall@heidelbergmaterials.com	WO #:
Project Name: Buck Hill Anti-Degradation	Project #: 46011424
Site:	SSOW#:

Analysis Requested

Preservation Codes:

A	HCL	M	Hexane
B	NaOH	N	None
C	Zn Acetate	O	AsNaO2
D	Nitric Acid	P	Na2O4S
E	NaHSO4	Q	Na2SO3
F	MeOH	R	Na2S2O3
G	Amchlor	S	H2SO4
H	Ascorbic Acid	T	TSP Dodecahydrate
I	Ice	U	Acetone
J	DI Water	V	MCAA
K	EDTA	W	pH 4-5
L	EDA	Y	Trizma
		Z	other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	4500_P_E_Ortho Total Orthophosphate	2540C TDS	300_ORGFM_28D, 300_ORGFMS	245.1 Local Method	6020B Total Aluminum	SHORT HOLD	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	N	D	D			
NPDES001	11/16/23	0830	G	Water									21	1
Basin 1				Water										
Basin 2				Water										
Upstream	11/16/23	0945	G	Water									2	2
Clarifying Pond	11/16/23	1030	G	Water									2	3

Possible Hazard Identification
☐ *Non-Hazard* ☐ *Flammable* ☐ *Skin Irritant* ☐ *Poison B* ☐ *Unknown* ☐ *Radiological*

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*

Deliverable Requested: I, II, III IV Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	11/16/23	ETC4		11/16/23 1236	EETN-KOP
Relinquished by:	Date/Time: 11-16-23 1655	Company EETN-KOP	Received by:	Date/Time: 11/16	Company EDA
Relinquished by:	Date/Time: 11/16 1900	Company EDA	Received by:	Date/Time: 11/16/23 1900	Company ETC4

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.	Cooler Temperature(s) °C and Other Remarks:

Ver: 06/08/2021

Eurofins **TestAmerica Edison**

Receipt Temperature and pH Log

Job Number: 292787

Number of Coolers: 2 IR Gun # 2

Cooler Temperatures

	RAW	CORRECTED		RAW	CORRECTED		RAW	CORRECTED
Cooler #1:	3.1 °C	3.1 °C	Cooler #4:	°C	°C	Cooler #7:	°C	°C
Cooler #2:	3.0 °C	3.0 °C	Cooler #5:	°C	°C	Cooler #8:	°C	°C
Cooler #3:	°C	°C	Cooler #6:	°C	°C	Cooler #9:	°C	°C

TALS Sample Number	Ammonia (pH<2)	COD (pH<2)	Nitrate Nitrite (pH<2)	Metals* (pH<2)	Hardness (pH<2)	Pest (pH 5-9)	EPH or QAM (pH<2)	Phenols (pH<2)	Sulfide (pH>9)	TKN (pH<2)	TOC (pH<2)	Total Cyanide (pH>12)	Total Phos (pH<2)	Other	Other
1	<2	<2		<2	<2					<2	<2		<2		
2	<2	<2		<2	<2					<2	<2		<2		
3	<2	<2		<2	<2					<2	<2		<2		

If pH adjustments are required record the information below:

Sample No(s). adjusted: _____

Preservative Name/Conc.: _____ Volume of Preservative used (ml): _____

Lot # of Preservative(s): _____ Expiration Date: _____

The appropriate Project Manager and Department Manager should be notified about the samples which were pH adjusted.

** Samples for Metal analysis which are out of compliance must be acidified at least 24 hours prior to analysis.*

Initials: KD Date: 11/16

Eurofins Edison
777 New Durham Road
Edison, NJ 08817
Phone: 732-549-3900 Fax: 732-549-3679

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler	Lab PM: Gilmore, Julie L	Carrier Tracking No(s)	COC No: 460-69817.1
Client Contact: Shipping/Receiving	Phone	E-Mail: Julie.Gilmore@et.eurofinsus.com	State of Origin: Pennsylvania	Page: Page 1 of 1
Company: Eurofins Environment Testing Southeast,		Accreditations Required (See note): NELAP - Pennsylvania		Job #: 460-292787-1
Address: 3355 McLemore Drive, ,	Due Date Requested: 11/27/2023			
City: Pensacola	TAT Requested (days):			
State, Zip: FL, 32514				
Phone: 850-474-1001(Tel) 850-478-2671(Fax)	PO #:			
Email	WO #:			
Project Name: Rock Hill - Anti-Degradation	Project #: 46011424			
Site	SSOW#:			

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)

Other:

Analysis Requested

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020B/3005A (MOD) Single Element 6020B Metals List	6020B/FILTRATION (MOD) Single Element 6020B Metals List	Total Number of containers	Special Instructions/Note:
			Preservation Code:							
NPDES001 (460-292787-1)	11/16/23	08.30 Eastern		Water			X	X	2	
Upstream (460-292787-2)	11/16/23	09.45 Eastern		Water			X	X	2	
Clarifying Pond (460-292787-3)	11/16/23	10:30 Eastern		Water			X	X	2	

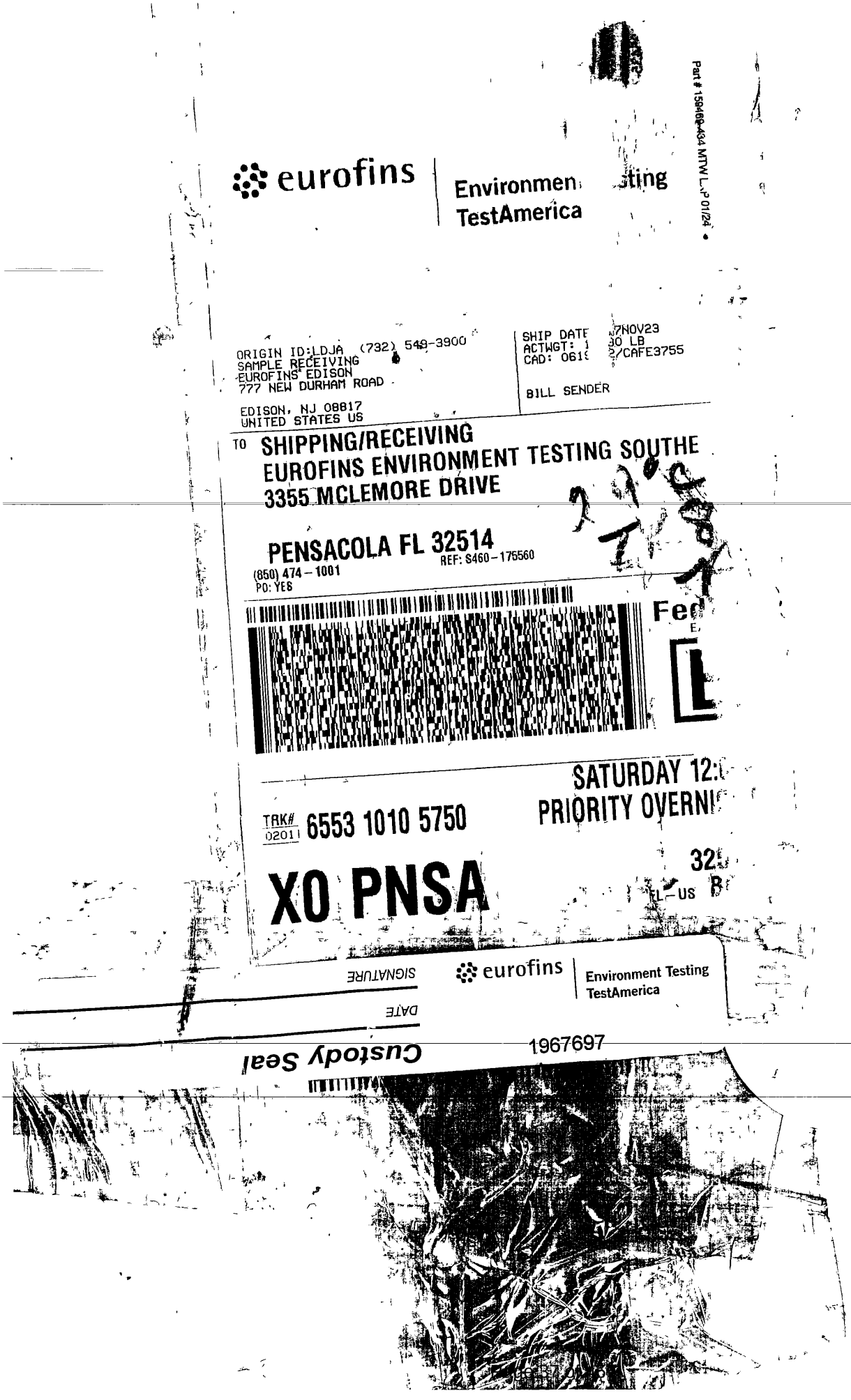
Note. Since laboratory accreditations are subject to change, Eurofins Environment Testing Northeast, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories This sample shipment is forwarded under chain-of-custody If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Northeast, LLC laboratory or other instructions will be provided Any changes to accreditation status should be brought to Eurofins Environment Testing Northeast, LLC attention immediately If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Northeast, LLC

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested. I, II, III, IV, Other (specify) Primary Deliverable Rank: 1	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
	11/17/23 1900	EET SL	BP	11/18/23 750	
Relinquished by	Date/Time	Company	Received by	Date/Time	Company
Relinquished by	Date/Time	Company	Received by	Date/Time	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No:	Cooler Temperature(s) °C and Other Remarks: 2.9°C IR8


eurofins
Environmen sting
TestAmerica
Part # 158468-434 MTW L-P 01/24
ORIGIN ID:LDJA (732) 549-3900
SAMPLE RECEIVING
EUROFINS EDISON
777 NEW DURHAM ROAD
EDISON, NJ 08817
UNITED STATES US
SHIP DATE 7NOV23
ACTWGT: 30 LB
CAD: 0613 /CAFE3755
BILL SENDER
TO SHIPPING/RECEIVING
EUROFINS ENVIRONMENT TESTING SOUTHE
3355 MCLEMORE DRIVE
PENSACOLA FL 32514
(850) 474-1001
PO: YES
REF: S460-175560
Fed
SATURDAY 12:
PRIORITY OVERNI
TRK# 0201 6553 1010 5750
XO PNSA
32
FL-US
eurofins
Environment Testing
TestAmerica
SIGNATURE
DATE
Custody Seal
1967697

Eurofins Edison
777 New Durham Road
Edison, NJ 08817
Phone: 732-549-3900 Fax: 732-549-3679

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Gilmore, Julie L	Carrier Tracking No(s):	COC No: 460-69810.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Julie.Gilmore@et.eurofinsus.com	State of Origin: Pennsylvania	Page: Page 1 of 1
Company: Eurofins Lancaster Laboratories Environm		Accreditations Required (See note): NELAP - Pennsylvania		Job #: 460-292787-1
Address: 2425 New Holland Pike, ,	Due Date Requested: 12/4/2023			
City: Lancaster	TAT Requested (days):			
State, Zip: PA, 17601				
Phone: 717-656-2300(Tel)	PO #:			
Email:	WO #:			
Project Name: Rock Hill - Anti-Degradation	Project #: 46011424			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify), Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020B/3005A (MOD) Total Fe	6020B/Filtration_ME Dissolved Cd/Fe/Zn	351.2/351.2_Prep	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
NPDES001 (460-292787-1)	11/16/23	08:30 Eastern		Water			X	X	X	3	
Upstream (460-292787-2)	11/16/23	09:45 Eastern		Water			X	X	X	3	
Clarifying Pond (460-292787-3)	11/16/23	10:30 Eastern		Water			X	X	X	3	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Northeast, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Northeast, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Northeast, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Northeast, LLC.

Possible Hazard Identification	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 1	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	11/17/23	EET EL			
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	17NN23 1915	ELLE		17NW23 1600	ELLE
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
				11/17/23 1915	

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: raw: 1.8 corr: 1.1

777 New Durham Road
Edison, NJ 08817
Phone: 732-549-3900 Fax: 732-549-3679

Chain of Custody Record

eurofins | Environment Testi

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Gilmore, Julie L	Carrier Tracking No(s):	COC No: 460-69815.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Julie.Gilmore@et.eurofinsus.com	State of Origin: Pennsylvania	Page: Page 1 of 1
Company: Eurofins Environment Testing Northeast,		Accreditations Required (See note): NELAP - Pennsylvania		Job #: 460-292787-1
Address: 10 Hazelwood Drive, ,	Due Date Requested: 11/29/2023			
City: Amherst	TAT Requested (days):			
State, Zip: NY, 14228-2298				
Phone: 716-691-2600(Tel) 716-691-7991(Fax)	PO #:			
Email:	WO #:			
Project Name: Rock Hill - Anti-Degradation	Project #: 46011424			
Site:	SSOW#:			

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)

Other:

Analysis Requested

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	245.1/245.1_Prep	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
NPDES001 (460-292787-1)	11/16/23	08:30 Eastern		Water			X	1	
Upstream (460-292787-2)	11/16/23	09:45 Eastern		Water			X	1	
Clarifying Pond (460-292787-3)	11/16/23	10:30 Eastern		Water			X	1	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Northeast, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Northeast, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Northeast, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Northeast, LLC.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 1	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Date/Time	Company		Date/Time	Company
Relinquished by:	11/17/23 1900	EET	Received by:	11-18-23 1000	TAB
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 2.0 ICE

12/13/2023

Eurofins Edison
777 New Durham Road
Edison, NJ 08817
Phone: 732-549-3900 Fax: 732-549-3679

Chain of Custody Record

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Client Information (Sub Contract Lab)	Sampler:	Lab PM: Gilmore, Julie L	Carrier Tracking No(s):	COC No: 460-69818.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Julie.Gilmore@et.eurofinsus.com	State of Origin: Pennsylvania	Page: Page 1 of 1
Company: Eurofins Environment Testing Southeast,		Accreditations Required (See note): NELAP Pennsylvania		Job #: 460-292787 1
Address: 5102 LaRoche Avenue,	Due Date Requested: 11/30/2023			
City: Savannah	TAT Requested (days):			
State, Zip: GA, 31404				
Phone: 912-354-7858(Tel) 912-352-0165(Fax)	PO #:			
Email:	WO #:			
Project Name: Rock Hill Anti-Degradation	Project #: 46011424			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:
A HCL, B NaOH, C Zn Acetate, D Nitric Acid, E NaHSO4, F MeOH, G Amchlor, H Ascorbic Acid, I Ice, J DI Water, K EDTA, L EDA, M Hexane, N None, O AsNaO2, P Na2O4S, Q Na2SO3, R Na2S2O3, S H2SO4, T TSP Dodecahydrate, U Acetone, V MCAA, W pH 4-5, Y Trizma, Z other (specify)
Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020B/3005A Total Aluminum	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
NPDES001 (460-292787 1)	11/16/23	08:30 Eastern		Water			X	1	
Upstream (460-292787-2)	11/16/23	09:45 Eastern		Water			X	1	
Clarifying Pond (460-292787-3)	11/16/23	10:30 Eastern		Water			X	1	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Northeast, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Northeast, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Northeast, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Northeast, LLC.

Possible Hazard Identification	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III IV Other (specify) Primary Deliverable Rank: 1	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	11/17/23 1900	EET EAL			
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time: 11/18/23 0912	Company Eurofins

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.	Cooler Temperature(s) °C and Other Remarks: 1.5 1.8

Login Sample Receipt Checklist

Client: Heidelberg Materials Northeast LLC

Job Number: 460-292787-1

Login Number: 292787
List Number: 1
Creator: Thundathorn, Sukanan 1

List Source: Eurofins Edison

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Heidelberg Materials Northeast LLC

Job Number: 460-292787-1

Login Number: 292787
List Number: 5
Creator: Yeager, Brian A

List Source: Eurofins Buffalo
List Creation: 11/21/23 09:34 AM

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	2.0 ice
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	True	

Login Sample Receipt Checklist

Client: Heidelberg Materials Northeast LLC

Job Number: 460-292787-1

Login Number: 292787
List Number: 2
Creator: Metzger, Katherine A

List Source: Eurofins Lancaster Laboratories Environment Testing, LLC
List Creation: 11/17/23 10:12 PM

Question	Answer	Comment
The cooler's custody seal is intact.	N/A	Not present
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature acceptable,where thermal pres is required(</=6C, not frozen).	True	
Cooler Temperature is recorded.	True	
WV:Container Temp acceptable,where thermal pres is required (</=6C, not frozen).	N/A	
WV: Container Temperature is recorded.	N/A	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the containers received and the COC.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
There is sufficient vol. for all requested analyses.	True	
Is the Field Sampler's name present on COC?	False	Received project as a subcontract.
Sample custody seals are intact.	N/A	Not present.
VOA sample vials do not have headspace >6mm in diameter (none, if from WV)?	N/A	

Login Sample Receipt Checklist

Client: Heidelberg Materials Northeast LLC

Job Number: 460-292787-1

Login Number: 292787
List Number: 4
Creator: Pardonner, Brett

List Source: Eurofins Pensacola
List Creation: 11/18/23 06:47 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	2.9°C IR8
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Heidelberg Materials Northeast LLC

Job Number: 460-292787-1

Login Number: 292787
List Number: 3
Creator: Watters, David

List Source: Eurofins Savannah
List Creation: 11/18/23 12:53 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	False	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Lab Results

November 30, 2023

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Andrew Gutshall
Heidelberg Materials Northeast LLC
7660 Imperial Way
Allentown, Pennsylvania 18195

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JOB DESCRIPTION

Rock Hill - Anti-Degradation

JOB NUMBER

460-293582-1

Eurofins Edison
777 New Durham Road
Edison NJ 08817

See page two for job notes and contact information.

my EOL

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing Northeast, LLC Project Manager.

Authorization



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12/18/2023 6:10:59 AM

Authorized for release by
Julie Gilmore, Project Manager I
Julie.Gilmore@et.eurofinsus.com
(484)685-0865

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Qualifiers

HPLC/IC

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Metals

Qualifier	Qualifier Description
F2	MS/MSD RPD exceeds control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

General Chemistry

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
H	Sample was prepped or analyzed beyond the specified holding time. This does not meet regulatory requirements.
H3	Sample was received and analyzed past holding time. This does not meet regulatory requirements.
HF	Parameter with a holding time of 15 minutes. Test performed by laboratory at client's request. Sample was analyzed outside of hold time.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job Narrative
460-293582-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

- Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

The method detection limit (MDL) is the lowest value detectable by the laboratory for a given analyte as determined by the MDL procedure detailed in EPA 40 CFR 136. Reported MDL values are adjusted for any dilutions and percent moisture (as applicable). The lab is unable to report values below the MDL.

Receipt
The samples were received on 11/30/2023 7:00 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 2.1°C

Subcontract Work
Method Osomotic Pressure: This method was subcontracted to Microbac Laboratories, Inc. The subcontract laboratory certification is different from that of the facility issuing the final report. The subcontract report is appended in its entirety.

HPLC/IC
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Metals
Method 6020B: The following samples were not filtered within 15 minutes of sample collection as required by the method: NPDES001 (460-293582-1), Upstream (460-293582-2) and Clarifying Pond (460-293582-3). The sample(s) was filtered prior to analysis at the laboratory, and the results have been reported. This does not meet regulatory requirements.

Method 6020B: The following samples were not filtered within 15 minutes of sample collection as required by the method: NPDES001 (460-293582-1), Upstream (460-293582-2), Clarifying Pond (460-293582-3), (460-293582-B-3 MS) and (460-293582-B-3 MSD). The sample(s) was filtered prior to analysis at the laboratory, and the results have been reported.

Method 6020B: The following samples were not filtered and preserved within 15 minutes of sample collection in accordance with 40 CFR Part 136 Table II, Footnote 7, method 6020B. The samples were filtered prior to analysis at the laboratory.

NPDES001 (460-293582-1), Upstream (460-293582-2) and Clarifying Pond (460-293582-3)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

General Chemistry
Method 4500_O_C: This analysis is normally performed in the field and has a method-defined holding time of 15 minutes. The following sample has been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe: NPDES001 (460-293582-1).

Method 4500_O_C: This analysis is normally performed in the field and has a method-defined holding time of 15 minutes. The following sample has been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe: Upstream (460-293582-2).

Method 4500_O_C: This analysis is normally performed in the field and has a method-defined holding time of 15 minutes. The following sample has been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe: Clarifying Pond (460-293582-3).

Job ID: 460-293582-1 (Continued)

Method 9040C: This analysis is normally performed in the field and has a method-defined holding time of 15 minutes. The following samples has been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe: NPDES001 (460-293582-1), Upstream (460-293582-2) and Clarifying Pond (460-293582-3).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Client Sample ID: NPDES001
Date Collected: 11/30/23 07:15
Date Received: 11/30/23 19:00

Lab Sample ID: 460-293582-1
Matrix: Water

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide	0.054	U	0.32	0.054	mg/L			12/01/23 10:31	1
Nitrate as N	**0.11**	**J**	0.16	0.070	mg/L			12/01/23 10:31	1
Chloride	**3.49**		0.32	0.039	mg/L			12/01/23 10:31	1
Nitrate Nitrite as N	**0.15**	**J**	0.16	0.070	mg/L			12/01/23 10:31	1
Nitrite as N	**0.048**	**J**	0.16	0.023	mg/L			12/01/23 10:31	1
Sulfate	**9.77**		0.48	0.095	mg/L			12/01/23 10:31	1

Method: SM-Online 2340B-2011 - Total Hardness (as CaCO3) by calculation - SM Online, 2011

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**91.6**		33.1	33.1	mg/L			12/12/23 09:16	1

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000043	U F2	0.00020	0.000043	mg/L		12/05/23 11:15	12/05/23 14:31	1

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**4.5**		4.0	0.91	ug/L		12/05/23 09:38	12/07/23 19:35	1
Boron	**49.2**	**J**	80.0	30.4	ug/L		12/05/23 09:38	12/07/23 19:35	1
Calcium	**22200**		500	53.6	ug/L		12/05/23 09:38	12/07/23 19:35	1
Copper	2.5	U	4.0	2.5	ug/L		12/05/23 09:38	12/07/23 19:35	1
Lead	0.84	U	1.2	0.84	ug/L		12/05/23 09:38	12/07/23 19:35	1
Magnesium	**8790**		200	46.9	ug/L		12/05/23 09:38	12/07/23 19:35	1
Manganese	**11.4**		8.0	1.5	ug/L		12/05/23 09:38	12/07/23 19:35	1
Nickel	0.91	U	4.0	0.91	ug/L		12/05/23 09:38	12/07/23 19:35	1
Potassium	**1580**		200	112	ug/L		12/05/23 09:38	12/07/23 19:35	1
Selenium	0.59	U	2.5	0.59	ug/L		12/05/23 09:38	12/07/23 19:35	1
Sodium	**3800**		500	219	ug/L		12/05/23 09:38	12/07/23 19:35	1
Strontium	**69.8**		4.0	0.50	ug/L		12/05/23 09:38	12/07/23 19:35	1
Zinc	6.5	U	16.0	6.5	ug/L		12/05/23 09:38	12/07/23 19:35	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**45.8**	**J**	100	35.0	ug/L		12/04/23 05:39	12/04/23 13:52	1
Iron	**152**		50.0	20.0	ug/L		12/06/23 19:37	12/12/23 11:10	1
Lithium	4.9	U	5.0	4.9	ug/L		12/05/23 08:00	12/06/23 19:19	5

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	19.5	U	40.0	19.5	ug/L		12/05/23 19:24	12/05/23 21:08	1
Cadmium	0.15	U	0.50	0.15	ug/L		12/07/23 21:28	12/12/23 19:12	1
Lithium	**5.1**		5.0	4.9	ug/L		12/05/23 14:14	12/06/23 04:06	5
Arsenic	0.89	U	2.0	0.89	ug/L		12/05/23 19:24	12/05/23 21:08	1
Iron	**48.2**	**J**	50.0	20.0	ug/L		12/07/23 21:28	12/12/23 19:12	1
Calcium	**22300**		500	53.6	ug/L		12/05/23 19:24	12/05/23 21:08	1
Zinc	4.0	U	10.0	4.0	ug/L		12/07/23 21:28	12/12/23 19:12	1
Copper	2.5	U	4.0	2.5	ug/L		12/05/23 19:24	12/05/23 21:08	1
Iron	58.2	U	120	58.2	ug/L		12/05/23 19:24	12/05/23 21:08	1
Lead	0.84	U	1.2	0.84	ug/L		12/05/23 19:24	12/05/23 21:08	1
Magnesium	**9170**		200	46.9	ug/L		12/05/23 19:24	12/05/23 21:08	1
Manganese	**3.2**	**J**	8.0	1.5	ug/L		12/05/23 19:24	12/05/23 21:08	1

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill - Anti-Degradation

Job ID: 460-293582-1

Client Sample ID: NPDES001
Date Collected: 11/30/23 07:15
Date Received: 11/30/23 19:00

Lab Sample ID: 460-293582-1
Matrix: Water

Method: SW846 6020B - Metals (ICP/MS) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nickel	0.91	U	4.0	0.91	ug/L		12/05/23 19:24	12/05/23 21:08	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Resistivity (EPA 120.1)	**0.00502**		0.000100	0.000100	Mohm-cm			12/05/23 10:40	1
Specific Conductance (EPA 120.1)	**199**		1.00	1.00	umhos/cm			12/05/23 10:40	1
Acidity (SM 2310B-2011)	20.0	U	20.0	20.0	mg/L			12/13/23 14:31	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-2011)	**81.4**		5.0	5.0	mg/L			12/05/23 12:25	1
Carbonate Alkalinity as CaCO3 (SM 2320B-2011)	5.0	U	5.0	5.0	mg/L			12/05/23 12:25	1
Alkalinity as CaCO3 to pH 4.5 (SM 2320B-2011)	**81.4**		5.0	5.0	mg/L			12/05/23 12:25	1
Total Dissolved Solids (SM 2540C-2015)	**155**		2.5	2.5	mg/L			12/04/23 09:56	1
Total Suspended Solids (SM 2540D-2015)	2.5	U	2.5	2.5	mg/L			12/04/23 09:09	1
Ammonia (EPA 350.1)	0.050	U	0.10	0.050	mg/L			12/07/23 13:21	1
Total Kjeldahl Nitrogen (EPA 351.2)	**0.93**	**J**	1.0	0.50	mg/L		12/13/23 16:32	12/14/23 11:03	1
Chemical Oxygen Demand (EPA 410.4)	3.3	U	10.0	3.3	mg/L			12/05/23 13:55	1
Oxygen, Dissolved (SM 4500 O C-2016)	**9.9**	**H H3**	1.0	1.0	mg/L			12/02/23 13:35	1
Orthophosphate as P (SM 4500 P E-2011)	0.0050	U	0.030	0.0050	mg/L			12/01/23 23:00	1
Carbonaceous Biochemical Oxygen Demand 5 (SM 5210 B-2016)	1.0	U	1.0	1.0	mg/L			12/01/23 14:12	1
pH (SW846 9040C)	**7.7**	**HF**	0.1	0.1	SU			12/04/23 11:16	1
Temperature (SW846 9040C)	**19.6**	**HF**	0.1	0.1	Degrees C			12/04/23 11:16	1
Total Organic Carbon (SW846 9060A)	**2.6**		1.0	0.53	mg/L			12/16/23 06:33	1
Phosphorus as PO4 (SM4500 P E-2011)	**0.079**	**J F1**	0.090	0.071	mg/L		12/11/23 09:13	12/11/23 14:46	1
Phosphorus as P (SM4500 P E-2011)	**0.026**	**J**	0.030	0.023	mg/L		12/11/23 09:13	12/11/23 14:46	1
Nitrogen, Total (EPA Total Nitrogen)	**1.1**		0.50	0.50	mg/L			12/15/23 09:45	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (EPA 350.1)	**0.15**		0.10	0.050	mg/L			12/07/23 13:27	1
Orthophosphate as P (SM 4500 P E-2011)	0.0050	U	0.030	0.0050	mg/L			12/01/23 23:00	1
Phosphorus as PO4 (SM4500 P E-2011)	**0.25**		0.090	0.071	mg/L		12/11/23 09:13	12/11/23 14:46	1
Phosphorus as P (SM4500 P E-2011)	**0.080**		0.030	0.023	mg/L		12/11/23 09:13	12/11/23 14:46	1

Client Sample ID: Upstream

Date Collected: 11/30/23 08:00
Date Received: 11/30/23 19:00

Lab Sample ID: 460-293582-2

Matrix: Water

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide	0.054	U	0.32	0.054	mg/L			12/01/23 10:46	1
Nitrate as N	**0.12**	**J**	0.16	0.070	mg/L			12/01/23 10:46	1
Chloride	**4.45**		0.32	0.039	mg/L			12/01/23 10:46	1
Nitrate Nitrite as N	**0.15**	**J**	0.16	0.070	mg/L			12/01/23 10:46	1
Nitrite as N	**0.036**	**J**	0.16	0.023	mg/L			12/01/23 10:46	1
Sulfate	**13.5**		0.48	0.095	mg/L			12/01/23 10:46	1

Method: SM-Online 2340B-2011 - Total Hardness (as CaCO3) by calculation - SM Online, 2011

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**130**		33.1	33.1	mg/L			12/12/23 09:16	1

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000043	U	0.00020	0.000043	mg/L		12/05/23 11:15	12/05/23 14:36	1

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**14.0**		4.0	0.91	ug/L		12/05/23 09:38	12/07/23 19:37	1
Boron	**54.7**	**J**	80.0	30.4	ug/L		12/05/23 09:38	12/07/23 19:37	1
Calcium	**31700**		500	53.6	ug/L		12/05/23 09:38	12/07/23 19:37	1
Copper	**3.2**	**J**	4.0	2.5	ug/L		12/05/23 09:38	12/07/23 19:37	1
Lead	**0.90**	**J**	1.2	0.84	ug/L		12/05/23 09:38	12/07/23 19:37	1
Magnesium	**12400**		200	46.9	ug/L		12/05/23 09:38	12/07/23 19:37	1
Manganese	**127**		8.0	1.5	ug/L		12/05/23 09:38	12/07/23 19:37	1
Nickel	**1.1**	**J**	4.0	0.91	ug/L		12/05/23 09:38	12/07/23 19:37	1
Potassium	**1290**		200	112	ug/L		12/05/23 09:38	12/07/23 19:37	1
Selenium	0.59	U	2.5	0.59	ug/L		12/05/23 09:38	12/07/23 19:37	1
Sodium	**3910**		500	219	ug/L		12/05/23 09:38	12/07/23 19:37	1
Strontium	**109**		4.0	0.50	ug/L		12/05/23 09:38	12/07/23 19:37	1
Zinc	6.5	U	16.0	6.5	ug/L		12/05/23 09:38	12/07/23 19:37	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	35.0	U	100	35.0	ug/L		12/04/23 05:39	12/04/23 14:04	1
Iron	**143**		50.0	20.0	ug/L		12/06/23 19:37	12/12/23 11:08	1
Lithium	4.9	U	5.0	4.9	ug/L		12/05/23 08:00	12/06/23 19:50	5

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	19.5	U	40.0	19.5	ug/L		12/05/23 19:24	12/05/23 21:20	1
Cadmium	0.15	U	0.50	0.15	ug/L		12/07/23 21:28	12/12/23 19:10	1
Lithium	4.9	U	5.0	4.9	ug/L		12/05/23 14:14	12/06/23 04:16	5
Arsenic	0.89	U	2.0	0.89	ug/L		12/05/23 19:24	12/05/23 21:20	1
Iron	**23.2**	**J**	50.0	20.0	ug/L		12/07/23 21:28	12/12/23 19:10	1
Calcium	**31000**		500	53.6	ug/L		12/05/23 19:24	12/05/23 21:20	1
Zinc	4.0	U	10.0	4.0	ug/L		12/07/23 21:28	12/12/23 19:10	1
Copper	2.5	U	4.0	2.5	ug/L		12/05/23 19:24	12/05/23 21:20	1
Iron	58.2	U	120	58.2	ug/L		12/05/23 19:24	12/05/23 21:20	1
Lead	0.84	U	1.2	0.84	ug/L		12/05/23 19:24	12/05/23 21:20	1
Magnesium	**12300**		200	46.9	ug/L		12/05/23 19:24	12/05/23 21:20	1
Manganese	**27.3**		8.0	1.5	ug/L		12/05/23 19:24	12/05/23 21:20	1

Client Sample ID: Upstream
Lab Sample ID: 460-293582-2

Date Collected: 11/30/23 08:00
Matrix: Water
Date Received: 11/30/23 19:00

Method: SW846 6020B - Metals (ICP/MS) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nickel	0.91	U	4.0	0.91	ug/L		12/05/23 19:24	12/05/23 21:20	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Resistivity (EPA 120.1)	**0.00383**		0.000100	0.000100	Mohm-cm			12/05/23 10:40	1
Specific Conductance (EPA 120.1)	**261**		1.00	1.00	umhos/cm			12/05/23 10:40	1
Acidity (SM 2310B-2011)	20.0	U	20.0	20.0	mg/L			12/13/23 14:31	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-2011)	**109**		5.0	5.0	mg/L			12/05/23 12:31	1
Carbonate Alkalinity as CaCO3 (SM 2320B-2011)	5.0	U	5.0	5.0	mg/L			12/05/23 12:31	1
Alkalinity as CaCO3 to pH 4.5 (SM 2320B-2011)	**109**		5.0	5.0	mg/L			12/05/23 12:31	1
Total Dissolved Solids (SM 2540C-2015)	**140**		2.5	2.5	mg/L			12/04/23 09:56	1
Total Suspended Solids (SM 2540D-2015)	**19.5**		2.5	2.5	mg/L			12/04/23 09:09	1
Ammonia (EPA 350.1)	0.050	U	0.10	0.050	mg/L			12/07/23 13:22	1
Total Kjeldahl Nitrogen (EPA 351.2)	**2.0**		1.0	0.50	mg/L		12/13/23 16:32	12/14/23 10:55	1
Chemical Oxygen Demand (EPA 410.4)	**7.8**	**J**	10.0	3.3	mg/L			12/05/23 13:55	1
Oxygen, Dissolved (SM 4500 O C-2016)	**7.5**	**H H3**	1.0	1.0	mg/L			12/02/23 13:40	1
Orthophosphate as P (SM 4500 P E-2011)	0.0050	U	0.030	0.0050	mg/L			12/01/23 23:00	1
Carbonaceous Biochemical Oxygen Demand 5 (SM 5210 B-2016)	1.0	U	1.0	1.0	mg/L			12/01/23 14:17	1
pH (SW846 9040C)	**7.6**	**HF**	0.1	0.1	SU			12/04/23 11:22	1
Temperature (SW846 9040C)	**20.2**	**HF**	0.1	0.1	Degrees C			12/04/23 11:22	1
Total Organic Carbon (SW846 9060A)	**3.6**		1.0	0.53	mg/L			12/16/23 06:58	1
Phosphorus as PO4 (SM4500 P E-2011)	0.071	U	0.090	0.071	mg/L		12/11/23 09:13	12/11/23 14:46	1
Phosphorus as P (SM4500 P E-2011)	0.023	U	0.030	0.023	mg/L		12/11/23 09:13	12/11/23 14:46	1
Nitrogen, Total (EPA Total Nitrogen)	**2.2**		0.50	0.50	mg/L			12/15/23 09:45	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (EPA 350.1)	0.050	U	0.10	0.050	mg/L			12/07/23 13:28	1
Orthophosphate as P (SM 4500 P E-2011)	0.0050	U	0.030	0.0050	mg/L			12/01/23 23:00	1
Phosphorus as PO4 (SM4500 P E-2011)	**0.14**		0.090	0.071	mg/L		12/11/23 09:13	12/11/23 14:46	1
Phosphorus as P (SM4500 P E-2011)	**0.044**		0.030	0.023	mg/L		12/11/23 09:13	12/11/23 14:46	1

Client Sample ID: Clarifying Pond
Lab Sample ID: 460-293582-3

Date Collected: 11/30/23 08:30
Matrix: Water
Date Received: 11/30/23 19:00

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide	**0.18**	**J**	0.32	0.054	mg/L			12/01/23 11:01	1

Client Sample ID: Clarifying Pond

Date Collected: 11/30/23 08:30
Date Received: 11/30/23 19:00

Lab Sample ID: 460-293582-3

Matrix: Water

Method: EPA 300.0 - Anions, Ion Chromatography (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	0.26		0.16	0.070	mg/L			12/01/23 11:01	1
Chloride	1.33		0.32	0.039	mg/L			12/01/23 11:01	1
Nitrate Nitrite as N	0.29		0.16	0.070	mg/L			12/01/23 11:01	1
Nitrite as N	0.035	J	0.16	0.023	mg/L			12/01/23 11:01	1
Sulfate	5.63		0.48	0.095	mg/L			12/01/23 11:01	1

Method: SM-Online 2340B-2011 - Total Hardness (as CaCO3) by calculation - SM Online, 2011

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	63.8		33.1	33.1	mg/L			12/12/23 09:16	1

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000043	U	0.00020	0.000043	mg/L		12/05/23 11:15	12/05/23 14:37	1

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	4.0		4.0	0.91	ug/L		12/05/23 09:38	12/07/23 19:39	1
Boron	54.5	J	80.0	30.4	ug/L		12/05/23 09:38	12/07/23 19:39	1
Calcium	17000		500	53.6	ug/L		12/05/23 09:38	12/07/23 19:39	1
Copper	3.2	J	4.0	2.5	ug/L		12/05/23 09:38	12/07/23 19:39	1
Lead	0.84	U	1.2	0.84	ug/L		12/05/23 09:38	12/07/23 19:39	1
Magnesium	5210		200	46.9	ug/L		12/05/23 09:38	12/07/23 19:39	1
Manganese	40.8		8.0	1.5	ug/L		12/05/23 09:38	12/07/23 19:39	1
Nickel	1.2	J	4.0	0.91	ug/L		12/05/23 09:38	12/07/23 19:39	1
Potassium	1330		200	112	ug/L		12/05/23 09:38	12/07/23 19:39	1
Selenium	0.59	U	2.5	0.59	ug/L		12/05/23 09:38	12/07/23 19:39	1
Sodium	2870		500	219	ug/L		12/05/23 09:38	12/07/23 19:39	1
Strontium	29.3		4.0	0.50	ug/L		12/05/23 09:38	12/07/23 19:39	1
Zinc	6.5	U	16.0	6.5	ug/L		12/05/23 09:38	12/07/23 19:39	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	695		100	35.0	ug/L		12/04/23 05:39	12/04/23 14:08	1
Iron	716		50.0	20.0	ug/L		12/06/23 19:37	12/12/23 11:12	1
Lithium	4.9	U	5.0	4.9	ug/L		12/05/23 08:00	12/06/23 19:59	5

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	22.8	J	40.0	19.5	ug/L		12/05/23 19:24	12/05/23 21:22	1
Cadmium	0.15	U	0.50	0.15	ug/L		12/07/23 21:28	12/12/23 19:08	1
Lithium	4.9	U	5.0	4.9	ug/L		12/05/23 14:14	12/06/23 04:19	5
Arsenic	0.89	U	2.0	0.89	ug/L		12/05/23 19:24	12/05/23 21:22	1
Iron	25.3	J	50.0	20.0	ug/L		12/07/23 21:28	12/12/23 19:08	1
Calcium	16800		500	53.6	ug/L		12/05/23 19:24	12/05/23 21:22	1
Zinc	4.0	U	10.0	4.0	ug/L		12/07/23 21:28	12/12/23 19:08	1
Copper	2.5	U	4.0	2.5	ug/L		12/05/23 19:24	12/05/23 21:22	1
Iron	58.2	U	120	58.2	ug/L		12/05/23 19:24	12/05/23 21:22	1
Lead	0.84	U	1.2	0.84	ug/L		12/05/23 19:24	12/05/23 21:22	1
Magnesium	5160		200	46.9	ug/L		12/05/23 19:24	12/05/23 21:22	1
Manganese	2.7	J	8.0	1.5	ug/L		12/05/23 19:24	12/05/23 21:22	1
Nickel	0.91	U	4.0	0.91	ug/L		12/05/23 19:24	12/05/23 21:22	1

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill - Anti-Degradation

Job ID: 460-293582-1

Client Sample ID: Clarifying Pond
Date Collected: 11/30/23 08:30
Date Received: 11/30/23 19:00

Lab Sample ID: 460-293582-3
Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Resistivity (EPA 120.1)	**0.00710**		0.000100	0.000100	Mohm-cm			12/05/23 10:40	1
Specific Conductance (EPA 120.1)	**141**		1.00	1.00	umhos/cm			12/05/23 10:40	1
Acidity (SM 2310B-2011)	20.0	U	20.0	20.0	mg/L			12/13/23 14:31	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-2011)	**57.2**		5.0	5.0	mg/L			12/05/23 12:37	1
Carbonate Alkalinity as CaCO3 (SM 2320B-2011)	5.0	U	5.0	5.0	mg/L			12/05/23 12:37	1
Alkalinity as CaCO3 to pH 4.5 (SM 2320B-2011)	**57.2**		5.0	5.0	mg/L			12/05/23 12:37	1
Total Dissolved Solids (SM 2540C-2015)	**72.0**		2.5	2.5	mg/L			12/04/23 09:56	1
Total Suspended Solids (SM 2540D-2015)	**20.1**		3.3	3.3	mg/L			12/04/23 09:09	1
Ammonia (EPA 350.1)	0.050	U	0.10	0.050	mg/L			12/07/23 13:24	1
Total Kjeldahl Nitrogen (EPA 351.2)	**2.3**		1.0	0.50	mg/L		12/13/23 16:32	12/14/23 10:57	1
Chemical Oxygen Demand (EPA 410.4)	3.3	U	10.0	3.3	mg/L			12/05/23 13:55	1
Oxygen, Dissolved (SM 4500 O C-2016)	**9.9**	**H H3**	1.0	1.0	mg/L			12/02/23 13:45	1
Orthophosphate as P (SM 4500 P E-2011)	0.0050	U	0.030	0.0050	mg/L			12/01/23 23:00	1
Carbonaceous Biochemical Oxygen Demand 5 (SM 5210 B-2016)	1.0	U	1.0	1.0	mg/L			12/01/23 14:22	1
pH (SW846 9040C)	**8.0**	**HF**	0.1	0.1	SU			12/04/23 11:25	1
Temperature (SW846 9040C)	**20.0**	**HF**	0.1	0.1	Degrees C			12/04/23 11:25	1
Total Organic Carbon (SW846 9060A)	**1.4**		1.0	0.53	mg/L			12/16/23 07:23	1
Phosphorus as PO4 (SM4500 P E-2011)	**0.44**		0.090	0.071	mg/L		12/11/23 09:13	12/11/23 14:46	1
Phosphorus as P (SM4500 P E-2011)	**0.14**		0.030	0.023	mg/L		12/11/23 09:13	12/11/23 14:46	1
Nitrogen, Total (EPA Total Nitrogen)	**2.6**		0.50	0.50	mg/L			12/15/23 09:45	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (EPA 350.1)	0.050	U	0.10	0.050	mg/L			12/07/23 13:30	1
Orthophosphate as P (SM 4500 P E-2011)	0.0050	U	0.030	0.0050	mg/L			12/01/23 23:00	1
Phosphorus as PO4 (SM4500 P E-2011)	0.071	U	0.090	0.071	mg/L		12/11/23 09:13	12/11/23 14:46	1
Phosphorus as P (SM4500 P E-2011)	0.023	U	0.030	0.023	mg/L		12/11/23 09:13	12/11/23 14:46	1

Lab Chronicle

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill - Anti-Degradation

Job ID: 460-293582-1

Client Sample ID: NPDES001

Date Collected: 11/30/23 07:15
Date Received: 11/30/23 19:00

Lab Sample ID: 460-293582-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		1	947553	OXG	EET EDI	12/01/23 10:31
Total/NA	Analysis	300.0		1	947554	OXG	EET EDI	12/01/23 10:31
Total/NA	Analysis	2340B-2011		1	949429	LBD	EET EDI	12/12/23 09:16
Total/NA	Prep	245.1			694274	NVK	EET BUF	12/05/23 11:15
Total/NA	Analysis	245.1		1	694381	NVK	EET BUF	12/05/23 14:31
Dissolved	Filtration	Filtration			450050	UDL9	ELLE	12/05/23 07:18
Dissolved	Prep	3005A			451499	UAMX	ELLE	12/07/23 21:28
Dissolved	Analysis	6020B		1	453236	UCIG	ELLE	12/12/23 19:12
Dissolved	Filtration	FILTRATION			652987	MS	EET PEN	12/05/23 10:50
Dissolved	Prep	3005A			653041	MS	EET PEN	12/05/23 14:14 - 12/05/23 15:07 [1]
Dissolved	Analysis	6020B		5	653110	BAW	EET PEN	12/06/23 04:06
Dissolved	Filtration	FILTRATION			948273	VAD	EET EDI	12/05/23 19:16
Dissolved	Prep	3010A			948275	VAD	EET EDI	12/05/23 19:24
Dissolved	Analysis	6020B		1	948200	CDC	EET EDI	12/05/23 21:08
Total Recoverable	Prep	3005A			652915	MS	EET PEN	12/05/23 08:00 - 12/05/23 10:52 [1]
Total Recoverable	Analysis	6020B		5	653308	NTH	EET PEN	12/06/23 19:19
Total Recoverable	Prep	3005A			450998	NU9R	ELLE	12/06/23 19:37
Total Recoverable	Analysis	6020B		1	452977	F7JF	ELLE	12/12/23 11:10
Total Recoverable	Prep	3005A			811264	RR	EET SAV	12/04/23 05:39
Total Recoverable	Analysis	6020B		1	811533	BWR	EET SAV	12/04/23 13:52
Total/NA	Prep	3010A			948130	JKF	EET EDI	12/05/23 09:38
Total/NA	Analysis	6020B		1	948682	CDC	EET EDI	12/07/23 19:35
Total/NA	Analysis	120.1		1	948157	MMC	EET EDI	12/05/23 10:40
Total/NA	Analysis	2310B-2011		1	949731	RAK	EET EDI	12/13/23 14:31
Total/NA	Analysis	2320B-2011		1	948189	AXP	EET EDI	12/05/23 12:25
Total/NA	Analysis	2540C-2015		1	947944	HTV	EET EDI	12/04/23 09:56
Total/NA	Analysis	2540D-2015		1	947936	HTV	EET EDI	12/04/23 09:09
Dissolved	Filtration	FILTRATION			948660	AXP	EET EDI	12/07/23 12:46
Dissolved	Analysis	350.1		1	948679	AXP	EET EDI	12/07/23 13:27
Total/NA	Analysis	350.1		1	948679	AXP	EET EDI	12/07/23 13:21
Total/NA	Prep	351.2			453714	NLE3	ELLE	12/13/23 16:32 - 12/13/23 19:32 [1]
Total/NA	Analysis	351.2		1	454145	JCG7	ELLE	12/14/23 11:03
Total/NA	Analysis	410.4		1	948199	HTV	EET EDI	12/05/23 13:55
Total/NA	Analysis	4500 O C-2016		1	947750	RXA	EET EDI	12/02/23 13:35
Dissolved	Filtration	FILTRATION			947691	VBG	EET EDI	12/01/23 20:20
Dissolved	Analysis	4500 P E-2011		1	947695	VBG	EET EDI	12/01/23 23:00
Total/NA	Analysis	4500 P E-2011		1	947695	VBG	EET EDI	12/01/23 23:00
Total/NA	Analysis	5210 B-2016		1	947626	RXA	EET EDI	12/01/23 14:12
Total/NA	Analysis	9040C		1	947943	MNP	EET EDI	12/04/23 11:16
Total/NA	Analysis	9060A		1	950548	MMC	EET EDI	12/16/23 06:33
Dissolved	Filtration	FILTRATION			949195	RAK	EET EDI	12/11/23 09:06
Dissolved	Prep	SM 4500 P B			949198	RAK	EET EDI	12/11/23 09:13
Dissolved	Analysis	SM4500 P E-2011		1	949274	RAK	EET EDI	12/11/23 14:46

Lab Chronicle

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill - Anti-Degradation

Job ID: 460-293582-1

Client Sample ID: NPDES001

Lab Sample ID: 460-293582-1

Date Collected: 11/30/23 07:15

Matrix: Water

Date Received: 11/30/23 19:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	SM 4500 P B			949198	RAK	EET EDI	12/11/23 09:13
Total/NA	Analysis	SM4500 P E-2011		1	949274	RAK	EET EDI	12/11/23 14:46
Total/NA	Analysis	Total Nitrogen		1	950186	JMP	EET EDI	12/15/23 09:45

Client Sample ID: Upstream

Lab Sample ID: 460-293582-2

Date Collected: 11/30/23 08:00

Matrix: Water

Date Received: 11/30/23 19:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		1	947553	OXG	EET EDI	12/01/23 10:46
Total/NA	Analysis	300.0		1	947554	OXG	EET EDI	12/01/23 10:46
Total/NA	Analysis	2340B-2011		1	949429	LBD	EET EDI	12/12/23 09:16
Total/NA	Prep	245.1			694274	NVK	EET BUF	12/05/23 11:15
Total/NA	Analysis	245.1		1	694381	NVK	EET BUF	12/05/23 14:36
Dissolved	Filtration	Filtration			450050	UDL9	ELLE	12/05/23 07:18
Dissolved	Prep	3005A			451499	UAMX	ELLE	12/07/23 21:28
Dissolved	Analysis	6020B		1	453236	UCIG	ELLE	12/12/23 19:10
Dissolved	Filtration	FILTRATION			652987	MS	EET PEN	12/05/23 10:50
Dissolved	Prep	3005A			653041	MS	EET PEN	12/05/23 14:14 - 12/05/23 15:07 [1]
Dissolved	Analysis	6020B		5	653110	BAW	EET PEN	12/06/23 04:16
Dissolved	Filtration	FILTRATION			948273	VAD	EET EDI	12/05/23 19:16
Dissolved	Prep	3010A			948275	VAD	EET EDI	12/05/23 19:24
Dissolved	Analysis	6020B		1	948200	CDC	EET EDI	12/05/23 21:20
Total Recoverable	Prep	3005A			652915	MS	EET PEN	12/05/23 08:00 - 12/05/23 10:52 [1]
Total Recoverable	Analysis	6020B		5	653308	NTH	EET PEN	12/06/23 19:50
Total Recoverable	Prep	3005A			450998	NU9R	ELLE	12/06/23 19:37
Total Recoverable	Analysis	6020B		1	452977	F7JF	ELLE	12/12/23 11:08
Total Recoverable	Prep	3005A			811264	RR	EET SAV	12/04/23 05:39
Total Recoverable	Analysis	6020B		1	811533	BWR	EET SAV	12/04/23 14:04
Total/NA	Prep	3010A			948130	JKF	EET EDI	12/05/23 09:38
Total/NA	Analysis	6020B		1	948682	CDC	EET EDI	12/07/23 19:37
Total/NA	Analysis	120.1		1	948157	MMC	EET EDI	12/05/23 10:40
Total/NA	Analysis	2310B-2011		1	949731	RAK	EET EDI	12/13/23 14:31
Total/NA	Analysis	2320B-2011		1	948189	AXP	EET EDI	12/05/23 12:31
Total/NA	Analysis	2540C-2015		1	947944	HTV	EET EDI	12/04/23 09:56
Total/NA	Analysis	2540D-2015		1	947936	HTV	EET EDI	12/04/23 09:09
Dissolved	Filtration	FILTRATION			948660	AXP	EET EDI	12/07/23 12:46
Dissolved	Analysis	350.1		1	948679	AXP	EET EDI	12/07/23 13:28
Total/NA	Analysis	350.1		1	948679	AXP	EET EDI	12/07/23 13:22
Total/NA	Prep	351.2			453714	NLE3	ELLE	12/13/23 16:32 - 12/13/23 19:32 [1]
Total/NA	Analysis	351.2		1	454145	JCG7	ELLE	12/14/23 10:55
Total/NA	Analysis	410.4		1	948199	HTV	EET EDI	12/05/23 13:55
Total/NA	Analysis	4500 O C-2016		1	947750	RXA	EET EDI	12/02/23 13:40

Lab Chronicle

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill - Anti-Degradation

Job ID: 460-293582-1

Client Sample ID: Upstream

Lab Sample ID: 460-293582-2

Date Collected: 11/30/23 08:00

Matrix: Water

Date Received: 11/30/23 19:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Filtration	FILTRATION			947691	VBG	EET EDI	12/01/23 20:20
Dissolved	Analysis	4500 P E-2011		1	947695	VBG	EET EDI	12/01/23 23:00
Total/NA	Analysis	4500 P E-2011		1	947695	VBG	EET EDI	12/01/23 23:00
Total/NA	Analysis	5210 B-2016		1	947626	RXA	EET EDI	12/01/23 14:17
Total/NA	Analysis	9040C		1	947943	MNP	EET EDI	12/04/23 11:22
Total/NA	Analysis	9060A		1	950548	MMC	EET EDI	12/16/23 06:58
Dissolved	Filtration	FILTRATION			949195	RAK	EET EDI	12/11/23 09:06
Dissolved	Prep	SM 4500 P B			949198	RAK	EET EDI	12/11/23 09:13
Dissolved	Analysis	SM4500 P E-2011		1	949274	RAK	EET EDI	12/11/23 14:46
Total/NA	Prep	SM 4500 P B			949198	RAK	EET EDI	12/11/23 09:13
Total/NA	Analysis	SM4500 P E-2011		1	949274	RAK	EET EDI	12/11/23 14:46
Total/NA	Analysis	Total Nitrogen		1	950186	JMP	EET EDI	12/15/23 09:45

Client Sample ID: Clarifying Pond

Lab Sample ID: 460-293582-3

Date Collected: 11/30/23 08:30

Matrix: Water

Date Received: 11/30/23 19:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		1	947553	OXG	EET EDI	12/01/23 11:01
Total/NA	Analysis	300.0		1	947554	OXG	EET EDI	12/01/23 11:01
Total/NA	Analysis	2340B-2011		1	949429	LBD	EET EDI	12/12/23 09:16
Total/NA	Prep	245.1			694274	NVK	EET BUF	12/05/23 11:15
Total/NA	Analysis	245.1		1	694381	NVK	EET BUF	12/05/23 14:37
Dissolved	Filtration	Filtration			450050	UDL9	ELLE	12/05/23 07:18
Dissolved	Prep	3005A			451499	UAMX	ELLE	12/07/23 21:28
Dissolved	Analysis	6020B		1	453236	UCIG	ELLE	12/12/23 19:08
Dissolved	Filtration	FILTRATION			652987	MS	EET PEN	12/05/23 10:50
Dissolved	Prep	3005A			653041	MS	EET PEN	12/05/23 14:14 - 12/05/23 15:07 [1]
Dissolved	Analysis	6020B		5	653110	BAW	EET PEN	12/06/23 04:19
Dissolved	Filtration	FILTRATION			948273	VAD	EET EDI	12/05/23 19:16
Dissolved	Prep	3010A			948275	VAD	EET EDI	12/05/23 19:24
Dissolved	Analysis	6020B		1	948200	CDC	EET EDI	12/05/23 21:22
Total Recoverable	Prep	3005A			652915	MS	EET PEN	12/05/23 08:00 - 12/05/23 10:52 [1]
Total Recoverable	Analysis	6020B		5	653308	NTH	EET PEN	12/06/23 19:59
Total Recoverable	Prep	3005A			450998	NU9R	ELLE	12/06/23 19:37
Total Recoverable	Analysis	6020B		1	452977	F7JF	ELLE	12/12/23 11:12
Total Recoverable	Prep	3005A			811264	RR	EET SAV	12/04/23 05:39
Total Recoverable	Analysis	6020B		1	811533	BWR	EET SAV	12/04/23 14:08
Total/NA	Prep	3010A			948130	JKF	EET EDI	12/05/23 09:38
Total/NA	Analysis	6020B		1	948682	CDC	EET EDI	12/07/23 19:39
Total/NA	Analysis	120.1		1	948157	MMC	EET EDI	12/05/23 10:40
Total/NA	Analysis	2310B-2011		1	949731	RAK	EET EDI	12/13/23 14:31
Total/NA	Analysis	2320B-2011		1	948189	AXP	EET EDI	12/05/23 12:37
Total/NA	Analysis	2540C-2015		1	947944	HTV	EET EDI	12/04/23 09:56

Lab Chronicle

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill - Anti-Degradation

Job ID: 460-293582-1

Client Sample ID: Clarifying Pond

Date Collected: 11/30/23 08:30
Date Received: 11/30/23 19:00

Lab Sample ID: 460-293582-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	2540D-2015		1	947936	HTV	EET EDI	12/04/23 09:09
Dissolved	Filtration	FILTRATION			948660	AXP	EET EDI	12/07/23 12:46
Dissolved	Analysis	350.1		1	948679	AXP	EET EDI	12/07/23 13:30
Total/NA	Analysis	350.1		1	948679	AXP	EET EDI	12/07/23 13:24
Total/NA	Prep	351.2			453714	NLE3	ELLE	12/13/23 16:32 - 12/13/23 19:32 [1]
Total/NA	Analysis	351.2		1	454145	JCG7	ELLE	12/14/23 10:57
Total/NA	Analysis	410.4		1	948199	HTV	EET EDI	12/05/23 13:55
Total/NA	Analysis	4500 O C-2016		1	947750	RXA	EET EDI	12/02/23 13:45
Dissolved	Filtration	FILTRATION			947691	VBG	EET EDI	12/01/23 20:20
Dissolved	Analysis	4500 P E-2011		1	947695	VBG	EET EDI	12/01/23 23:00
Total/NA	Analysis	4500 P E-2011		1	947695	VBG	EET EDI	12/01/23 23:00
Total/NA	Analysis	5210 B-2016		1	947626	RXA	EET EDI	12/01/23 14:22
Total/NA	Analysis	9040C		1	947943	MNP	EET EDI	12/04/23 11:25
Total/NA	Analysis	9060A		1	950548	MMC	EET EDI	12/16/23 07:23
Dissolved	Filtration	FILTRATION			949195	RAK	EET EDI	12/11/23 09:06
Dissolved	Prep	SM 4500 P B			949198	RAK	EET EDI	12/11/23 09:13
Dissolved	Analysis	SM4500 P E-2011		1	949274	RAK	EET EDI	12/11/23 14:46
Total/NA	Prep	SM 4500 P B			949198	RAK	EET EDI	12/11/23 09:13
Total/NA	Analysis	SM4500 P E-2011		1	949274	RAK	EET EDI	12/11/23 14:46
Total/NA	Analysis	Total Nitrogen		1	950186	JMP	EET EDI	12/15/23 09:45

[1] This procedure uses a method stipulated length of time for the process. Both start and end times are displayed.

Laboratory References:

EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

EET EDI = Eurofins Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

EET PEN = Eurofins Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

EET SAV = Eurofins Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Microbac = Marietta, OH, 158 Starlite Drive, Marietta, OH 45750

Accreditation/Certification Summary

Client: Heidelberg Materials Northeast LLC
Job ID: 460-293582-1
Project/Site: Rock Hill - Anti-Degradation

Laboratory: Eurofins Edison

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Connecticut	State	PH-0818	09-30-24
DE Haz. Subst. Cleanup Act (HSCA)	State	N/A	01-01-24
Georgia	State	12028 (NJ)	06-30-24
Massachusetts	State	M-NJ312	06-30-24
New Jersey	NELAP	12028	06-30-24
New York	NELAP	11452	04-01-24
Pennsylvania	NELAP	68-00522	02-29-24
Rhode Island	State	LAO00376	12-30-23
USDA	US Federal Programs	P330-20-00244	05-31-24

Laboratory: Eurofins Buffalo

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Arkansas DEQ	State	88-0686	07-06-23 *
Connecticut	State	PH-0568	03-31-24
Florida	NELAP	E87672	06-30-23 *
Georgia	State	10026 (NY)	03-31-24
Georgia	State Program	N/A	03-31-09 *
Illinois	NELAP	200003	09-30-23 *
Iowa	State	374	03-01-25
Iowa	State Program	374	03-01-09 *
Kansas	NELAP	E-10187	02-01-24
Kentucky (DW)	State	90029	01-01-24
Kentucky (UST)	State	108092	04-01-24
Kentucky (WW)	State	KY90029	12-31-23
Louisiana	NELAP	02031	06-30-23 *
Louisiana (All)	NELAP	02031	06-30-23 *
Maine	State	NY00044	12-04-24
Maryland	State	294	06-30-24
Massachusetts	State	M-NY044	07-01-24
Michigan	State	9937	04-01-24
Michigan	State Program	9937	04-01-09 *
New Hampshire	NELAP	2973	09-11-19 *
New Hampshire	NELAP	2337	11-17-24
New Jersey	NELAP	NY455	06-30-24
New York	NELAP	10026	03-31-24
Pennsylvania	NELAP	68-00281	08-31-24
Rhode Island	State	LAO00378	12-30-23
Texas	NELAP	T104704412-18-10	07-31-23 *
USDA	US Federal Programs	P330-18-00039	03-25-24
Virginia	NELAP	460185	09-14-24
Washington	State	C784	02-10-24
Wisconsin	State	998310390	08-31-24

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
A2LA	Dept. of Defense ELAP	0001.01	11-30-24
A2LA	ISO/IEC 17025	0001.01	11-30-24

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Accreditation/Certification Summary

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill - Anti-Degradation

Job ID: 460-293582-1

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC (Continued)

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alabama	State	43200	01-31-24
Alaska	State	PA00009	06-30-24
Alaska (UST)	State	17-027	02-28-24
Arizona	State	AZ0780	03-12-24
Arkansas DEQ	State	88-00660	08-09-24
California	State	2792	01-31-24
Colorado	State	PA00009	06-30-24
Connecticut	State	PH-0746	06-30-25
DE Haz. Subst. Cleanup Act (HSCA)	State	019-006 (PA cert)	01-31-24
Delaware (DW)	State	N/A	01-31-24
Florida	NELAP	E87997	06-30-24
Georgia (DW)	State	C048	01-31-24
Hawaii	State	N/A	01-31-24
Illinois	NELAP	200027	01-31-24
Iowa	State	361	03-01-24
Kansas	NELAP	E-10151	10-31-24
Kentucky (DW)	State	KY90088	12-31-23
Kentucky (UST)	State	0001.01	11-30-24
Kentucky (WW)	State	KY90088	12-31-23
Louisiana (All)	NELAP	02055	06-30-24
Maine	State	2019012	03-12-25
Maryland	State	100	06-30-24
Massachusetts	State	M-PA009	06-30-24
Michigan	State	9930	01-31-24
Minnesota	NELAP	042-999-487	12-31-23
Mississippi	State	023	01-31-24
Missouri	State	450	01-31-25
Montana (DW)	State	0098	01-01-25
Nebraska	State	NE-OS-32-17	01-31-24
New Hampshire	NELAP	2730	01-10-24
New Jersey	NELAP	PA011	06-30-24
New York	NELAP	10670	04-01-24
North Carolina (DW)	State	42705	07-31-24
North Carolina (WW/SW)	State	521	12-31-23
North Dakota	State	R-205	01-31-24
Oklahoma	NELAP	9804	08-31-24
Oregon	NELAP	PA200001	09-11-24
PALA	Canada	1978	09-16-24
Pennsylvania	NELAP	36-00037	01-31-24
Rhode Island	State	LAO00338	12-31-23
South Carolina	State	89002	01-31-24
Tennessee	State	02838	01-31-24
Texas	NELAP	T104704194-23-46	08-31-24
USDA	US Federal Programs	525-22-298-19481	10-25-25
Vermont	State	VT - 36037	10-28-24
Virginia	NELAP	460182	06-14-25
Washington	State	C457	04-11-24
West Virginia (DW)	State	9906 C	12-31-23
West Virginia DEP	State	055	07-31-24
Wyoming	State	8TMS-L	01-31-24

Client: Heidelberg Materials Northeast LLC
Job ID: 460-293582-1
Project/Site: Rock Hill - Anti-Degradation

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC (Continued)

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Wyoming (UST)	A2LA	0001.01	11-30-24

Laboratory: Eurofins Pensacola

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alabama	State	40150	06-30-24
ANAB	ISO/IEC 17025	L2471	02-22-26
Arkansas DEQ	State	88-00689	08-01-24
California	State	2510	06-30-24
Florida	NELAP	E81010	06-30-24
Georgia	State	E81010(FL)	06-30-24
Illinois	NELAP	200041	10-09-24
Kansas	NELAP	E-10253	10-31-24
Kentucky (UST)	State	53	06-30-24
Louisiana (All)	NELAP	30976	06-30-24
Louisiana (DW)	State	LA017	12-31-23
North Carolina (WW/SW)	State	314	12-31-23
Oklahoma	NELAP	9810	08-31-24
Pennsylvania	NELAP	68-00467	01-31-24
South Carolina	State	96026	06-30-24
Tennessee	State	TN02907	06-30-24
Texas	NELAP	T104704286	09-30-24
US Fish & Wildlife	US Federal Programs	A22340	06-30-24
USDA	US Federal Programs	FLGNV23001	01-08-26
USDA	US Federal Programs	P330-21-00056	05-17-24
Virginia	NELAP	460166	06-14-24
West Virginia DEP	State	136	03-31-24
West Virginia DEP	State	136	03-31-24

Laboratory: Eurofins Savannah

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
	AFCEE	SAVLAB	
Alabama	State	41450	06-30-24
ANAB	Dept. of Defense ELAP	L2463	09-22-24
Arkansas (DW)	State	GA00006	06-30-24
Arkansas DEQ	State	19-015-0	02-01-24
California	State	2939	06-30-24
Florida	NELAP	E87052	06-30-24
Georgia	State	E87052	06-30-24
Georgia (DW)	State	803	06-30-24
Guam	State	19-007R	04-17-24
Hawaii	State	<cert No.>	06-30-24
Illinois	NELAP	200022	11-30-24
Indiana	State	C-GA-02	06-30-24
Iowa	State	353	07-01-25
Kentucky (UST)	State	NA	06-30-24
Louisiana	NELAP	30690	06-30-24
Louisiana (All)	NELAP	30690	06-30-24

Accreditation/Certification Summary

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill - Anti-Degradation

Job ID: 460-293582-1

Laboratory: Eurofins Savannah (Continued)

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Louisiana (DW)	State	LA009	12-31-23
Maine	State	GA00006	09-25-24
Maryland	State	250	12-31-23
Massachusetts	State	M-GA006	06-30-24
Michigan	State	9925	06-30-24
Mississippi	State	<cert No.>	06-30-24
Nebraska	State	NE-OS-7-04	06-30-24
New Jersey	NELAP	GA769	06-30-24
New Mexico	State	GA00006	12-06-23
North Carolina (DW)	State	13701	07-31-24
North Carolina (WW/SW)	State	269	12-31-23
Pennsylvania	NELAP	68-00474	06-30-24
Puerto Rico	State	GA00006	12-05-23
South Carolina	State	98001	06-30-24
Tennessee	State	TN02961	06-30-24
Texas	NELAP	T1047004185	11-30-24
Texas	TCEQ Water Supply	T104704185	06-30-24
USDA	US Federal Programs	P330-18-00313	09-03-24
Virginia	NELAP	460161	06-14-24
Wyoming	State	8TMS-L	06-30-24

Method Summary

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill - Anti-Degradation

Job ID: 460-293582-1

Method	Method Description	Protocol	Laboratory
300.0	Anions, Ion Chromatography	EPA	EET EDI
2340B-2011	Total Hardness (as CaCO3) by calculation - SM Online, 2011	SM-Online	EET EDI
245.1	Mercury (CVAA)	EPA	EET BUF
6020B	Metals (ICP/MS)	SW846	EET EDI
6020B	Metals (ICP/MS)	SW846	EET PEN
6020B	Metals (ICP/MS)	SW846	EET SAV
6020B	Metals (ICP/MS)	SW846	ELLE
120.1	Conductivity, Specific Conductance	EPA	EET EDI
2310B-2011	Acidity	SM	EET EDI
2320B-2011	Alkalinity, Total	SM	EET EDI
2540C-2015	Total Dissolved Solids (Dried at 180 °C)	SM	EET EDI
2540D-2015	Total Suspended Solids (Dried at 103-105°C)	SM	EET EDI
350.1	Nitrogen, Ammonia	EPA	EET EDI
351.2	Nitrogen, Total Kjeldahl	EPA	ELLE
410.4	COD	EPA	EET EDI
4500 O C-2016	Oxygen, Dissolved	SM	EET EDI
4500 P E-2011	Orthophosphate	SM	EET EDI
5210 B-2016	BOD, 5-Day	SM	EET EDI
9040C	pH	SW846	EET EDI
9060A	Organic Carbon, Total (TOC)	SW846	EET EDI
SM4500 P E-2011	Phosphorus	SM	EET EDI
Total Nitrogen	Nitrogen, Total	EPA	EET EDI
Subcontract	Osomotic Pressure	None	Microbac
245.1	Preparation, Mercury	EPA	EET BUF
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	EET PEN
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	EET SAV
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	ELLE
3010A	Preparation, Total Metals	SW846	EET EDI
351.2	Nitrogen, Total Kjeldahl	EPA	ELLE
FILTRATION	Sample Filtration	None	EET EDI
FILTRATION	Sample Filtration	None	EET PEN
Filtration	Sample Filtration	None	ELLE
SM 4500 P B	Phosphorous, Total and Ortho	SM	EET EDI

Protocol References:

EPA = US Environmental Protection Agency
None = None
SM = "Standard Methods For The Examination Of Water And Wastewater"
SM-Online = Standard Methods Online
SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600
EET EDI = Eurofins Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900
EET PEN = Eurofins Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001
EET SAV = Eurofins Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858
ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300
Microbac = Marietta, OH, 158 Starlite Drive, Marietta, OH 45750

Sample Summary

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill - Anti-Degradation

Job ID: 460-293582-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
460-293582-1	NPDES001	Water	11/30/23 07:15	11/30/23 19:00
460-293582-2	Upstream	Water	11/30/23 08:00	11/30/23 19:00
460-293582-3	Clarifying Pond	Water	11/30/23 08:30	11/30/23 19:00

Microbac Laboratories Inc., - Marietta, OH

Client Project ID:

46011424

For:

Julie Gilmore

Eurofins TestAmerica Edison

777 New Durham RD

Edison, NJ 08817

Project State of Origin: Pennsylvania

Project Requested Certification:

Microbac Laboratories Inc., - Marietta, OH	68-01670	PA Department of Environmental Protection

All test results meet the requirements of the QAPP and other applicable contract terms and conditions. Any exceptions are attached to this cover page or addressed in the method narratives presented in the report. All results for soil samples are reported on a 'dry-weight' basis unless specified otherwise. Analytical results for water and wastes are reported on a 'as received' basis unless specified otherwise. A statement of uncertainty for each analysis is available upon request. The reported results are related only to the samples analyzed as received. This laboratory report may be released as a hardcopy and in computer-readable form submitted electronically or on diskette. This laboratory report shall not be reproduced, except in full, without the written approval of Microbac Laboratories, Inc.

Laboratory Project Manager:

Michelle Taylor

Project Manager

Michelle.Taylor@microbac.com

Authorized By:

Michelle Taylor

Project Manager

Issued: 12/08/2023

MICROBAC®

Laboratory Report Number: M3L0196

Client Project ID: 46011424

Cooler Receipt Log

Cooler ID: Default Cooler Temp: 2.9°C

Cooler Inspection Checklist

Ice Present or not required?	Yes
Shipping containers sealed or not required?	Yes
Custody seals intact or not required?	Yes
Chain of Custody (COC) Present?	Yes
COC includes customer information?	Yes
Relinquished and received signature on COC?	Yes
Sample collector identified on COC?	Yes
Sample type identified on COC?	Yes
Correct type of Containers Received	No
Correct number of containers listed on COC?	Yes
Containers Intact?	Yes
COC includes requested analyses?	Yes
Enough sample volume for indicated tests received?	Yes
Sample labels match COC (Name, Date & Time?)	Yes
Samples arrived within hold time?	Yes
Correct preservatives on COC or not required?	Yes
Chemical preservations checked or not required?	Yes
Preservation checks meet method requirements?	Yes
VOA vials have zero headspace, or not recd.?	Yes

MICROBAC®

Laboratory Report Number: M3L0196

Client Project ID: 46011424

Microbac Laboratories Inc., - Marietta, OH

CERTIFICATE OF ANALYSIS

Client ID:	NPDES001 (460-293582-1)			**Collection Date:**	11/30/2023 07:15
Laboratory ID:	M3L0196-01			**Prep Date:**	12/07/2023 15:52
Matrix:	Aqueous			**Analyzed:**	12/07/2023 16:51
Batch / Sequence:	B3L0290 /	**Analytical Method:**	PADEP 391-2000-008	**Calibration:**	NA
Instrument:	OSMOMETER 5004	**Units:**	mOsm/kg	**File ID:**	OsmoticPressure_B3L0290_231207035811.xls
Analyst:	APH	**Dilution:**	1		

Analyte	CAS Number	Result	MDL	RL	Flag	Qualifier
Osmotic Pressure		9.00	6.00	10.0		

MICROBAC®

Laboratory Report Number: M3L0196

Client Project ID: 46011424

Microbac Laboratories Inc., - Marietta, OH

CERTIFICATE OF ANALYSIS

Client ID:	Upstream (460-293582-2)			**Collection Date:**	11/30/2023 08:00
Laboratory ID:	M3L0196-02			**Prep Date:**	12/07/2023 15:52
Matrix:	Aqueous			**Analyzed:**	12/07/2023 16:51
Batch / Sequence:	B3L0290 /	**Analytical Method:**	PADEP 391-2000-008	**Calibration:**	NA
Instrument:	OSMOMETER 5004	**Units:**	mOsm/kg	**File ID:**	OsmoticPressure_B3L0290_23120703581 1.xls
Analyst:	APH	**Dilution:**	1		

Analyte	CAS Number	Result	MDL	RL	Flag	Qualifier
Osmotic Pressure		8.00	6.00	10.0		

Laboratory Report Number: M3L0196

Client Project ID: 46011424

Microbac Laboratories Inc., - Marietta, OH

CERTIFICATE OF ANALYSIS

Client ID:	Clarifying Pond (460-293582-3)			**Collection Date:**	11/30/2023 08:30
Laboratory ID:	M3L0196-03			**Prep Date:**	12/07/2023 15:52
Matrix:	Aqueous			**Analyzed:**	12/07/2023 16:51
Batch / Sequence:	B3L0290 /	**Analytical Method:**	PADEP 391-2000-008	**Calibration:**	NA
Instrument:	OSMOMETER 5004	**Units:**	mOsm/kg	**File ID:**	OsmoticPressure_B3L0290_23120703581 1.xls
Analyst:	APH	**Dilution:**	1		

Analyte	CAS Number	Result	MDL	RL	Flag	Qualifier
Osmotic Pressure		8.00	6.00	10.0		

Laboratory Report Number: M3L0196

Client Project ID: 46011424

Notes and Definitions

:
DL: Detection Limit
LOD: Limit of Detection
LOQ: Limit of Quantitation
MDL: Method Detection Limit
RL: Reporting Limit

MICROBAC®

Laboratory Report Number: M3L0196

Client Project ID: 46011424

METHOD BLANKS

Sample ID:	B3L0290-BLK1	**Prep Date:**	12/07/23 15:52	**Matrix:**	Aqueous
Instrument:	OSMOMETER 5004	**Analyzed:**	12/07/23 16:51	**Method:**	PADEP 391-2000-008
File ID:	OsmoticPressure_B3L0	**Sequence:**		**Analyst:**	APH
Batch:	B3L0290	**Units:**	mOsm/kg	**Calibration:**	

Analyte	Result	MDL	RL	Dilution	Flag	Q
Osmotic Pressure	6.00	6.00	10.0	1	U	

* - Detected in the associated method Blank at a concentration >= RL

MICROBAC®

Laboratory Report Number: M3L0196

Client Project ID: 46011424

BLANK SPIKE / DUPLICATE (BS/BSD)

Method:	PADEP 391-2000-008		**Blank Spike**	**Duplicate**
Batch:	B3L0290	**Spike ID:**	B3L0290-BS1	B3L0290-BSD1
Analyst:	APH	**Prepared:**	12/07/23 15:52	12/07/23 15:52
Matrix:	Aqueous	**Analyzed:**	12/07/23 16:51	12/07/23 16:51
Units:	mOsm/kg	**File ID:**	OsmoticPressure_B3L0290_2312	OsmoticPressure_B3L0290_2312
Instrument:	OSMOMETER 5004	**Initial/Final:**	1mL/1mL	1mL/1mL
Calibration:				

Analyte	BS Spiked	BS Found	BS %Rec	BSD Spiked	BSD Found	BSD %Rec	%RPD	%Rec Limts	RPD Limit	Q
Osmotic Pressure	290	303	104	290	306	106	0.985	90 - 110	20	

* - Does not meet %Rec acceptance criteria.
- Does not meet RPD acceptance criteria.

Eurofins Edison
777 New Durham Road
Edison, NJ 08817
Phone: 732-549-3900 Fax: 732-549-3679

Chain of Custody Record

eurofins | Environment Testing

12/18/2023

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Gilmore, Julie L	Carrier Tracking No(s):	COC No: 460-69922.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Julie.Gilmore@et.eurofinsus.com	State of Origin: Pennsylvania	Page: Page 1 of 1
Company: Microbac Laboratories, Inc.		Accreditations Required (See note): NELAP - Pennsylvania		Job #: 460-293582-1
Address: 158 Starlite Drive, ,	Due Date Requested: 12/12/2023			
City: Marietta	TAT Requested (days):			
State, Zip: OH, 45750				
Phone: 800-373-4071(Tel)	PO #:			
Email:	WO #:			
Project Name: Rock Hill - Anti-Degradation	Project #: 46011424			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	SUB (Osomotic Pressure)/ Osomotic Pressure	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
NPDES001 (460-293582-1)	11/30/23	07:15 Eastern		Water			X	1	
Upstream (460-293582-2)	11/30/23	08:00 Eastern		Water			X	1	
Clarifying Pond (460-293582-3)	11/30/23	08:30 Eastern		Water			X	1	

M3L0196
Eurofins TestAmerica Edison
Rec'd: 12/05/2023 11:35
By: Stephanie Murphy Temp: 2.9 (Signature)

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Northeast, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Northeast, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Northeast, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Northeast, LLC.

Possible Hazard Identification	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 1	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
		12/4/23 1900	EETEL			
	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	Relinquished by:	Date/Time:	Company	Received by: Stephanie Murphy	Date/Time: 12/5/2023	Company 1135

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks:

Page 31 of 44

MICROBAC®

Work Order # M3L-0196

COOLER TEMP >6° C LOG

SAMPLE ID	Bottle 1 °C	Bottle 2 °C	Bottle 3 °C	Bottle 4 °C	Bottle 5 °C	Bottle 6 °C

12/5/2023 SM

pH Lot # N/A

pH Exceptions

SAMPLE ID	Bottle 1	Bottle 2	Bottle 3	Bottle 4	Bottle 5	Bottle 6

12/5/2023 SM

PRESERVATIVE EXCEPTIONS

✓ NONE

AS NOTED

12/5/2023 SM

Document Control # 1957
Last 04-10-2019

Issued to: Document Master File

Eurofins Edison
777 New Durham Road
Edison, NJ 08817
Phone: 732-549-3900 Fax: 732-549-3679

Chain of Custody Record

450 ~ 17° 21° KOP-2

eurofins

SHORT HOLD

Client Information	Sampler: ERG	Lab PM: Gilmore, Julie L	Carrier Tracking No(s):	COC No: 460-175730-11479
Client Contact: Andrew Gutshall	Phone:	E-Mail: Julie.Gilmore@et.eurofinsus.com	State of Origin:	Page: Page 1 of 2
Company: Heidelberg Materials Northeast LLC	PWSID:			Job #: 2935582
Address: 7660 Imperial Way	Due Date Requested:			
City: Allentown	TAT Requested (days):			
State, Zip: PA, 18195	Compliance Project: Δ Yes Δ No			
Phone: 610-366-4819(Tel)	PO #: Purchase Order not required			
Email: andrew.gutshall@heidelbergmaterials.com	WO #:			
Project Name: Rock Hill Anti-Degradation	Project #: 46011424			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A HCL, B NaOH, C Zn Acetate, D Nitric Acid, E NaHSO4, F MeOH, G Amchlor, H Ascorbic Acid, I Ice, J DI Water, K EDTA, L EDA, M Hexane, N None, O AsNaO2, P Na2O4S, Q Na2SO3, R Na2S2O3, S H2SO4, T TSP Dodecahydrate, U Acetone, V MCAA, W pH 4-5, Y Trizma, Z other (specify)

Other

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water S=solid, O=waste/oil BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020B Dissolved Lithium	6020B Total Lithium	351.2 Local Method	6020B Dissolved Cd/Fe/Zn	6020B (MOD) Total Fe	350.1 410.4, 4500_P_E	120.1 9040C	350.1 4500_P_E, 6020B	2320B (MOD) Alkalinity	6020B, SM2340B	9060A TOC	2540D, SM5210B_Calc	4500_P_E_Ortho Dissolved Orthophosphate	Total Number of containers	Special Instructions/Note:
			Preservation Code:		X	X	N	D	S	N	D	S	N	N	N	D	S	N	N	X	
NPDES001	11/30/23	0715	G	Water																	1
Basin 1				Water																	—
Basin 2				Water																	—
Upstream	11/30/23	0800	G	Water																	2
Clarifying Pond	11/30/23	0850	G	Water																	3

460-293582 Chain of Custody

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III IV Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		11/30/23 1140	ERG		11/30/23 1150	EETN-KOP
2		11-30-23 1645	EETN-KOP		11/30	ETA
3		11/30 1900	ETA		11/30/23 1900	EET

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks:

Ver 06/08/2021

12/18/2023

Eurofins Edison
777 New Durham Road
Edison, NJ 08817
Phone: 732-549-3900 Fax: 732-549-3679

Chain of Custody Record

4°C KOP 17 - 2.1° KOP L

eurofins

Client Information	Sampler: EZG	Lab PM: Gilmore, Julie L	Carrier Tracking No(s):	COC No: 460-175730-114795.2
Client Contact: Andrew Gutshall	Phone:	E-Mail: Julie.Gilmore@et.eurofinsus.com	State of Origin:	Page: Page 2 of 2
Company: Heidelberg Materials Northeast LLC	PWSID:			Job #: 293582
Address: 7660 Imperial Way	Due Date Requested:			
City: Allentown	TAT Requested (days):			
State, Zip: PA, 18195	Compliance Project: Δ Yes Δ No			
Phone: 610-366-4819(Tel)	PO #: Purchase Order not required			
Email: andrew.gutshall@heidelbergmaterials.com	WO #:			
Project Name: Rock Hill Anti-Degradation	Project #: 46011424			
Site:	SSOW#:			

Analysis Requested

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	4500_P_E_Ortho Total Orthophosphate	2540C TDS	300_ORGFM_28D, 300_ORGFMS	245.1 Local Method	6020B Total Aluminum	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	N	D	D		
NPDES001	11/30/23	0715	4	Water									1
Basin 1				Water									~~2~~
Basin 2		0800		Water									~~3~~
Upstream	11/30/23	[redacted]	G	Water									2
Clarifying Pond	11/30/23	0830	4	Water									3

Preservation Codes:

A	HCL	M	Hexane
B	NaOH	N	None
C	Zn Acetate	O	AsNaO2
D	Nitric Acid	P	Na2O4S
E	NaHSO4	Q	Na2SO3
F	MeOH	R	Na2S2O3
G	Amchlor	S	H2SO4
H	Ascorbic Acid	T	TSP Dodecahydrate
I	Ice	U	Acetone
J	DI Water	V	MCAA
K	EDTA	W	pH 4-5
L	EDA	Y	Trizma
		Z	other (specify)

Other:

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I II III, IV Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Date/Time:	Company		Date/Time:	Company
Relinquished by: [signature]	11/30/23 1110	EZG	Received by: [signature]	11/30/23 1150	EEN-KOP
Relinquished by: [signature]	11-30-23 1645	EEN-KOP	Received by: [signature]	11/30	ETA
Relinquished by: [signature]	11/30 1900	ETA	Received by: [signature]	11/30/23	ETA

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.

Cooler Temperature(s) °C and Other Remarks:

Ver: 06/08/2021

12/18/2023

Eurofins TestAmerica Edison
Receipt Temperature and pH Log

Job Number: 293582

Number of Coolers: 2 IR Gun # 2

Cooler Temperatures

	RAW	CORRECTED		RAW	CORRECTED		RAW	CORRECTED
Cooler #1:	1.7 °C	1.7 °C	Cooler #4:	°C	°C	Cooler #7:	°C	°C
Cooler #2:	2.1 °C	2.0 °C	Cooler #5:	°C	°C	Cooler #8:	°C	°C
Cooler #3:	°C	°C	Cooler #6:	°C	°C	Cooler #9:	°C	°C

TALS Sample Number	Ammonia (pH<2)	COD (pH<2)	Nitrate Nitrite (pH<2)	Metals* (pH<2)	Hardness (pH<2)	Pest (pH 5-9)	EPH or OAM (pH<2)	Phenols (pH<2)	Sulfide (pH>9)	TKN (pH<2)	TOC (pH<2)	Total Cyanide (pH>12)	Total Phos (pH<2)	Other	Other
1	<2	<2		<2	<2					<2	<2		<2		
2	<2	<2		<2	<2					<2	<2		<2		
3	<2	<2		<2	<2					<2	<2		<2		

If pH adjustments are required record the information below:

Sample No(s). adjusted: _____

Preservative Name/Conc.: _____ Volume of Preservative used (ml): _____

Lot # of Preservative(s): _____ Expiration Date: _____

The appropriate Project Manager and Department Manager should be notified about the samples which were pH adjusted.

** Samples for Metal analysis which are out of compliance must be acidified at least 24 hours prior to analysis.*

Initials: HS Date: 11/30

Eurofins Edison
777 New Durham Road
Edison, NJ 08817
Phone: 732-549-3900 Fax: 732-549-3679

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Gilmore, Julie L	Carrier Tracking No(s):	COC No: 460-69910.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Julie.Gilmore@et.eurofinsus.com	State of Origin: Pennsylvania	Page: Page 1 of 1
Company: Eurofins Environment Testing Southeast,		Accreditations Required (See note): NELAP - Pennsylvania		Job #: 460-293582-1
Address: 3355 McLemore Drive, ,	Due Date Requested: 12/7/2023			
City: Pensacola	TAT Requested (days):			
State, Zip: FL, 32514				
Phone: 850-474-1001(Tel) 850-478-2671(Fax)	PO #:			
Email:	WO #:			
Project Name: Rock Hill - Anti-Degradation	Project #: 46011424			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)
Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020B/3005A (MOD) Single Element 6020B Metals List	6020B/FILTRATION (MOD) Single Element 6020B Metals List	Total Number of containers	Special Instructions/Note:
			Preservation Code:							
NPDES001 (460-293582-1)	11/30/23	07:15 Eastern		Water			X	X	2	
Upstream (460-293582-2)	11/30/23	08:00 Eastern		Water			X	X	2	
Clarifying Pond (460-293582-3)	11/30/23	08:30 Eastern		Water			X	X	2	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Northeast, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Northeast, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Northeast, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Northeast, LLC.

Possible Hazard Identification	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)***
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) — Primary Deliverable Rank: 1	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	[signature]	12/1/23 1900	FedEx	BP	12/2/23 823	
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 0.9°C FRO

12/18/2023

Eurofins Edison
777 New Durham Road
Edison, NJ 08817
Phone: 732-549-3900 Fax: 732-549-3679

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Gilmore, Julie L	Carrier Tracking No(s):	COC No: 460-69902.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Julie.Gilmore@et.eurofinsus.com	State of Origin: Pennsylvania	Page: Page 1 of 1
Company: Eurofins Lancaster Laboratories Environm		Accreditations Required (See note): NELAP - Pennsylvania		Job #: 460-293582-1
Address: 2425 New Holland Pike, ,	Due Date Requested: 12/14/2023			
City: Lancaster	TAT Requested (days):			
State, Zip: PA, 17601				
Phone: 717-656-2300(Tel)	PO #:			
Email:	WO #:			
Project Name: Rock Hill - Anti-Degradation	Project #: 46011424			
Site:	SSOW#:			

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)

Other:

Analysis Requested

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020B/3005A (MOD) Total Fe	6020B/Filtration_ME Dissolved Cd/Fe/Zn	351.2/351.2_Prep	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
NPDES001 (460-293582-1)	11/30/23	07:15 Eastern		Water			X	X	X	3	
Upstream (460-293582-2)	11/30/23	08:00 Eastern		Water			X	X	X	3	
Clarifying Pond (460-293582-3)	11/30/23	08:30 Eastern		Water			X	X	X	3	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Northeast, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Northeast, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Northeast, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Northeast, LLC.

Possible Hazard Identification	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 1	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		12/1/23 1200	EET EL		12/1/23 1200	
2		12/1/23 2042				
3					12/1/23 2042	

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks: R 1.5 C 1.5

Eurofins Edison
777 New Durham Road
Edison, NJ 08817
Phone: 732-549-3900 Fax: 732-549-3679

Chain of Custody Record

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Client Information (Sub Contract Lab)	Sampler:	Lab PM: Gilmore, Julie L	Carrier Tracking No(s):	COC No: 460-69912.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Julie.Gilmore@et.eurofinsus.com	State of Origin: Pennsylvania	Page: Page 1 of 1
Company: Eurofins Environment Testing Northeast,		Accreditations Required (See note): NELAP - Pennsylvania		Job #: 460-293582-1
Address: 10 Hazelwood Drive, ,	Due Date Requested: 12/11/2023			
City: Amherst	TAT Requested (days):			
State, Zip: NY, 14228-2298				
Phone: 716-691-2600(Tel) 716-691-7991(Fax)	PO #:			
Email:	WO #:			
Project Name: Rock Hill - Anti-Degradation	Project #: 46011424			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	245.1/245.1_Prep	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
NPDES001 (460-293582-1)	11/30/23	07:15 Eastern		Water			X	1	
Upstream (460-293582-2)	11/30/23	08:00 Eastern		Water			X	1	
Clarifying Pond (460-293582-3)	11/30/23	08:30 Eastern		Water			X	1	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Northeast, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Northeast, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Northeast, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Northeast, LLC.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 1	Special Instructions/QC Requirements:
Empty Kit Relinquished by:	Date: Time: Method of Shipment:

	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	12/1/23 1900	EEE		12/2/23 1000	EA
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks: 2.1# 1416

Eurofins Edison
777 New Durham Road
Edison, NJ 08817
Phone: 732-549-3900 Fax: 732-549-3679

Chain of Custody Record

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Client Information (Sub Contract Lab)	Sampler	Lab PM: Gilmore, Julie L	Carrier Tracking No(s):	COC No: 460-69913.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Julie.Gilmore@et.eurofinsus.com	State of Origin: Pennsylvania	Page: Page 1 of 1
Company: Eurofins Environment Testing Southeast,		Accreditations Required (See note): NELAP Pennsylvania		Job #: 460-293582-1
Address: 5102 LaRoche Avenue,	Due Date Requested: 12/12/2023			
City: Savannah	TAT Requested (days):			
State, Zip: GA, 31404				
Phone: 912-354-7858(Tel) 912-352-0165(Fax)	PO #:			
Email:	WO #:			
Project Name: Rock Hill Anti-Degradation	Project #: 46011424			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:
A HCL, B NaOH, C Zn Acetate, D Nitric Acid, E NaHSO4, F MeOH, G Amchlor, H Ascorbic Acid, I Ice, J DI Water, K EDTA, L EDA, M Hexane, N None, O AsNaO2, P Na2O4S, Q Na2SO3, R Na2S2O3, S H2SO4, T TSP Dodecahydrate, U Acetone, V MCAA, W pH 4-5, Y Trizma, Z other (specify)
Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020B/3005A Total Aluminum	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
NPDES001 (460-293582-1)	11/30/23	07:15 Eastern		Water			X	1	
Upstream (460-293582-2)	11/30/23	08:00 Eastern		Water			X	1	
Clarifying Pond (460-293582-3)	11/30/23	08:30 Eastern		Water			X	1	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Northeast, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Northeast, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Northeast, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Northeast, LLC.

Possible Hazard Identification	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV Other (specify) Primary Deliverable Rank: 1	Special Instructions/QC Requirements.

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	12/1/23 1900	EET		12-02-23	
Relinquished by:	Date/Time:	Company	Received by:	Date/Time: 7:21	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.	Cooler Temperature(s) °C and Other Remarks: 5.6 - 5.9

Login Sample Receipt Checklist

Client: Heidelberg Materials Northeast LLC

Job Number: 460-293582-1

Login Number: 293582

List Source: Eurofins Edison

List Number: 1

Creator: Thundathorn, Sukanan 1

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Heidelberg Materials Northeast LLC

Job Number: 460-293582-1

Login Number: 293582
List Number: 5
Creator: Kolb, Chris M

List Source: Eurofins Buffalo
List Creation: 12/04/23 11:08 AM

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	2.1 IR GUN #1 ICE
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	True	

Login Sample Receipt Checklist

Client: Heidelberg Materials Northeast LLC

Job Number: 460-293582-1

Login Number: 293582
List Number: 2
Creator: Roth, Stephanie

List Source: Eurofins Lancaster Laboratories Environment Testing, LLC
List Creation: 12/01/23 10:07 PM

Question	Answer	Comment
The cooler's custody seal is intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature acceptable,where thermal pres is required(</=6C, not frozen).	True	
Cooler Temperature is recorded.	True	
WV:Container Temp acceptable,where thermal pres is required (</=6C, not frozen).	N/A	
WV: Container Temperature is recorded.	N/A	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the containers received and the COC.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
There is sufficient vol. for all requested analyses.	True	
Is the Field Sampler's name present on COC?	False	Received project as a subcontract.
Sample custody seals are intact.	N/A	
VOA sample vials do not have headspace >6mm in diameter (none, if from WV)?	N/A	

Login Sample Receipt Checklist

Client: Heidelberg Materials Northeast LLC

Job Number: 460-293582-1

Login Number: 293582
List Number: 4
Creator: Pardonner, Brett

List Source: Eurofins Pensacola
List Creation: 12/02/23 01:23 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	0.9°C IR8
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Heidelberg Materials Northeast LLC

Job Number: 460-293582-1

Login Number: 293582
List Number: 3
Creator: Harley, Tynisha

List Source: Eurofins Savannah
List Creation: 12/02/23 11:42 AM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Lab Results

December 14, 2023

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ANALYTICAL REPORT

PREPARED FOR

Attn: Andrew Gutshall
Heidelberg Materials Northeast LLC
7660 Imperial Way
Allentown, Pennsylvania 18195

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JOB DESCRIPTION

Rock Hill - Anti Degradation

JOB NUMBER

460-294683-1

Eurofins Edison
777 New Durham Road
Edison NJ 08817

See page two for job notes and contact information.

myEOL

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing Northeast, LLC Project Manager.

Authorization



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1/7/2024 6:37:46 PM

Authorized for release by
Julie Gilmore, Project Manager I
Julie.Gilmore@et.eurofinsus.com
(484)685-0865

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Qualifiers

HPLC/IC

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Metals

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

General Chemistry

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
F1	MS and/or MSD recovery exceeds control limits.
H	Sample was prepped or analyzed beyond the specified holding time. This does not meet regulatory requirements.
H3	Sample was received and analyzed past holding time. This does not meet regulatory requirements.
HF	Parameter with a holding time of 15 minutes. Test performed by laboratory at client's request. Sample was analyzed outside of hold time.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
TNTC	Too Numerous To Count

Job Narrative
460-294683-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

- Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

The method detection limit (MDL) is the lowest value detectable by the laboratory for a given analyte as determined by the MDL procedure detailed in EPA 40 CFR 136. Reported MDL values are adjusted for any dilutions and percent moisture (as applicable). The lab is unable to report values below the MDL.

Receipt
The samples were received on 12/14/2023 7:00 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 3.7°C and 4.3°C

Subcontract Work
Method Osomotic Pressure: This method was subcontracted to Microbac Laboratories, Inc. The subcontract laboratory certification is different from that of the facility issuing the final report. The subcontract report is appended in its entirety.

HPLC/IC
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Metals
Method 6020B: The following samples were not filtered within 15 minutes of sample collection as required by the method: NPDES 001 (460-294683-1), Upstream (460-294683-2) and Clarifring (460-294683-3). The sample(s) was filtered prior to analysis at the laboratory, and the results have been reported. This does not meet regulatory requirements.

Method 6020B: The following samples were not filtered within 15 minutes of sample collection as required by the method: NPDES 001 (460-294683-1), Upstream (460-294683-2) and Clarifring (460-294683-3). The sample(s) was filtered prior to analysis at the laboratory, and the results have been reported.

Method 6020B: The continuing calibration verification (CCV) associated with batch 400-656057 recovered outside the control limit for Lithium. The LCS associated with this CCV was within limits for the affected analytes; therefore, the data have been reported. The associated LCS is impacted: (LCS 400-655723/2-B).

Method 6020B: The method blank for preparation batch 460-950877 and 460-950878 and analytical batch 460-950923 contained nickel above the method detection limit. This target analyte concentration was less than half the reporting limit (1/2RL) in the method blank; therefore, re-extraction and re-analysis of samples was not performed.

Method 6020B: The following samples were not filtered and preserved within 15 minutes of sample collection in accordance with 40 CFR Part 136 Table II, Footnote 7, method 6020B. The samples were filtered prior to analysis at the laboratory.

NPDES 001 (460-294683-1), Upstream (460-294683-2), Clarifring (460-294683-3), (460-294683-I-1 DU) and (460-294683-I-1 MS)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

General Chemistry
Method 4500_O_C: This analysis is normally performed in the field and has a method-defined holding time of 15 minutes. The following samples has been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe: NPDES 001 (460-294683-1), Upstream (460-294683-2) and Clarifring (460-294683-3).

Job ID: 460-294683-1 (Continued)

Method 9040C: This analysis is normally performed in the field and has a method-defined holding time of 15 minutes. The following samples has been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe: NPDES 001 (460-294683-1), Upstream (460-294683-2), Clarifring (460-294683-3), (460-294573-B-2) and (460-294573-B-2 DU).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Client Sample ID: NPDES 001
Date Collected: 12/14/23 09:45
Date Received: 12/14/23 19:00

Lab Sample ID: 460-294683-1
Matrix: Water

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide	0.054	U	0.32	0.054	mg/L			12/15/23 14:20	1
Nitrate as N	0.11	J	0.16	0.070	mg/L			12/15/23 14:20	1
Chloride	2.83		0.32	0.039	mg/L			12/15/23 14:20	1
Nitrate Nitrite as N	0.15	J	0.16	0.070	mg/L			12/15/23 14:20	1
Nitrite as N	0.043	J	0.16	0.023	mg/L			12/15/23 14:20	1
Sulfate	9.25		0.48	0.095	mg/L			12/15/23 14:20	1

Method: SM-Online 2340B-2011 - Total Hardness (as CaCO3) by calculation - SM Online, 2011

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	82.9		33.1	33.1	mg/L			12/29/23 07:24	1

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000043	U	0.00020	0.000043	mg/L		12/20/23 11:47	12/20/23 14:55	1

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	4.2		4.0	0.91	ug/L		12/20/23 14:15	12/20/23 20:05	1
Boron	52.1	J	80.0	30.4	ug/L		12/20/23 14:15	12/20/23 20:05	1
Calcium	20300		500	53.6	ug/L		12/20/23 14:15	12/20/23 20:05	1
Copper	2.5	U	4.0	2.5	ug/L		12/20/23 14:15	12/20/23 20:05	1
Lead	0.84	U	1.2	0.84	ug/L		12/20/23 14:15	12/20/23 20:05	1
Magnesium	7800		200	46.9	ug/L		12/20/23 14:15	12/20/23 20:05	1
Manganese	12.8		8.0	1.5	ug/L		12/20/23 14:15	12/20/23 20:05	1
Nickel	0.91	U	4.0	0.91	ug/L		12/20/23 14:15	12/20/23 20:05	1
Potassium	1410		200	112	ug/L		12/20/23 14:15	12/20/23 20:05	1
Selenium	0.59	U	2.5	0.59	ug/L		12/20/23 14:15	12/20/23 20:05	1
Sodium	3250		500	219	ug/L		12/20/23 14:15	12/20/23 20:05	1
Strontium	61.7		4.0	0.50	ug/L		12/20/23 14:15	12/20/23 20:05	1
Zinc	6.5	U	16.0	6.5	ug/L		12/20/23 14:15	12/20/23 20:05	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	134		100	35.0	ug/L		12/21/23 06:41	12/21/23 15:54	1
Iron	208		50.0	20.0	ug/L		12/27/23 08:15	12/30/23 10:03	1
Lithium	4.9	U	5.0	4.9	ug/L		12/21/23 12:11	12/22/23 14:50	5

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	33.2	J	40.0	19.5	ug/L		12/19/23 02:50	12/19/23 05:33	1
Cadmium	0.15	U	0.50	0.15	ug/L		12/20/23 01:45	12/29/23 08:12	1
Lithium	4.9	U	5.0	4.9	ug/L		12/27/23 08:57	12/29/23 16:52	5
Arsenic	0.89	U	2.0	0.89	ug/L		12/19/23 02:50	12/19/23 05:33	1
Iron	71.9		50.0	20.0	ug/L		12/20/23 01:45	12/29/23 08:12	1
Calcium	20900		500	53.6	ug/L		12/19/23 02:50	12/19/23 05:33	1
Zinc	4.0	U	10.0	4.0	ug/L		12/20/23 01:45	12/29/23 08:12	1
Copper	2.5	U	4.0	2.5	ug/L		12/19/23 02:50	12/19/23 05:33	1
Iron	62.6	J	120	58.2	ug/L		12/19/23 02:50	12/19/23 05:33	1
Lead	0.84	U	1.2	0.84	ug/L		12/19/23 02:50	12/19/23 05:33	1
Magnesium	8180		200	46.9	ug/L		12/19/23 02:50	12/19/23 05:33	1
Manganese	4.8	J	8.0	1.5	ug/L		12/19/23 02:50	12/19/23 05:33	1

Client Sample ID: NPDES 001
Lab Sample ID: 460-294683-1

Date Collected: 12/14/23 09:45
Matrix: Water
Date Received: 12/14/23 19:00

Method: SW846 6020B - Metals (ICP/MS) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nickel	0.91	U	4.0	0.91	ug/L		12/19/23 02:50	12/19/23 05:33	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Resistivity (EPA 120.1)	**0.00526**		0.000100	0.000100	Mohm-cm			12/20/23 14:00	1
Specific Conductance (EPA 120.1)	**190**		1.00	1.00	umhos/cm			12/20/23 14:00	1
Acidity (SM 2310B-2011)	20.0	U	20.0	20.0	mg/L			12/22/23 13:16	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-2011)	**75.1**		5.0	5.0	mg/L			12/27/23 08:46	1
Carbonate Alkalinity as CaCO3 (SM 2320B-2011)	5.0	U	5.0	5.0	mg/L			12/27/23 08:46	1
Alkalinity as CaCO3 to pH 4.5 (SM 2320B-2011)	**75.1**		5.0	5.0	mg/L			12/27/23 08:46	1
Total Dissolved Solids (SM 2540C-2015)	**352**		2.5	2.5	mg/L			12/21/23 09:13	1
Total Suspended Solids (SM 2540D-2015)	2.5	U	2.5	2.5	mg/L			12/20/23 07:37	1
Ammonia (EPA 350.1)	0.050	U	0.10	0.050	mg/L			12/21/23 12:46	1
Total Kjeldahl Nitrogen (EPA 351.2)	**0.66**	**J**	1.0	0.50	mg/L		12/28/23 16:48	12/29/23 11:30	1
Chemical Oxygen Demand (EPA 410.4)	**9.1**	**J**	10.0	3.3	mg/L			12/27/23 13:18	1
Oxygen, Dissolved (SM 4500 O C-2016)	**11.0**	**H H3**	1.0	1.0	mg/L			12/15/23 11:00	1
Orthophosphate as P (SM 4500 P E-2011)	0.0050	U	0.030	0.0050	mg/L			12/16/23 01:50	1
Carbonaceous Biochemical Oxygen Demand 5 (SM 5210 B-2016)	1.0	U	1.0	1.0	mg/L			12/15/23 15:30	1
pH (SW846 9040C)	**7.7**	**HF**	0.1	0.1	SU			12/15/23 11:35	1
Temperature (SW846 9040C)	**23.7**	**HF**	0.1	0.1	Degrees C			12/15/23 11:35	1
Total Organic Carbon (SW846 9060A)	**2.5**	**B**	1.0	0.53	mg/L			01/05/24 09:18	1
Phosphorus as PO4 (SM4500 P E-2011)	**0.49**	**F1**	0.090	0.071	mg/L		12/29/23 12:30	12/29/23 17:30	1
Phosphorus as P (SM4500 P E-2011)	**0.16**		0.030	0.023	mg/L		12/29/23 12:30	12/29/23 17:30	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (EPA 350.1)	0.050	U	0.10	0.050	mg/L			12/21/23 13:03	1
Orthophosphate as P (SM 4500 P E-2011)	0.0050	U	0.030	0.0050	mg/L			12/16/23 01:50	1
Phosphorus as PO4 (SM4500 P E-2011)	**0.49**		0.090	0.071	mg/L		12/29/23 12:30	12/29/23 17:30	1
Phosphorus as P (SM4500 P E-2011)	**0.16**		0.030	0.023	mg/L		12/29/23 12:30	12/29/23 17:30	1

Client Sample ID: Upstream
Lab Sample ID: 460-294683-2

Date Collected: 12/14/23 11:00
Matrix: Water
Date Received: 12/14/23 19:00

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide	0.054	U	0.32	0.054	mg/L			12/15/23 14:35	1
Nitrate as N	**0.11**	**J**	0.16	0.070	mg/L			12/15/23 14:35	1

Client Sample ID: Upstream
Date Collected: 12/14/23 11:00
Date Received: 12/14/23 19:00

Lab Sample ID: 460-294683-2
Matrix: Water

Method: EPA 300.0 - Anions, Ion Chromatography (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2.55		0.32	0.039	mg/L			12/15/23 14:35	1
Nitrate Nitrite as N	0.15	J	0.16	0.070	mg/L			12/15/23 14:35	1
Nitrite as N	0.036	J	0.16	0.023	mg/L			12/15/23 14:35	1
Sulfate	7.90		0.48	0.095	mg/L			12/15/23 14:35	1

Method: SM-Online 2340B-2011 - Total Hardness (as CaCO3) by calculation - SM Online, 2011

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	119		33.1	33.1	mg/L			12/29/23 07:24	1

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000043	U	0.00020	0.000043	mg/L		12/20/23 11:47	12/20/23 15:01	1

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	11.7		4.0	0.91	ug/L		12/20/23 14:15	12/20/23 19:18	1
Boron	48.6	J	80.0	30.4	ug/L		12/20/23 14:15	12/20/23 19:18	1
Calcium	29800		500	53.6	ug/L		12/20/23 14:15	12/20/23 19:18	1
Copper	3.5	J	4.0	2.5	ug/L		12/20/23 14:15	12/20/23 19:18	1
Lead	0.84	U	1.2	0.84	ug/L		12/20/23 14:15	12/20/23 19:18	1
Magnesium	10800		200	46.9	ug/L		12/20/23 14:15	12/20/23 19:18	1
Manganese	54.8		8.0	1.5	ug/L		12/20/23 14:15	12/20/23 19:18	1
Nickel	1.0	J	4.0	0.91	ug/L		12/20/23 14:15	12/20/23 19:18	1
Potassium	1180		200	112	ug/L		12/20/23 14:15	12/20/23 19:18	1
Selenium	0.59	U	2.5	0.59	ug/L		12/20/23 14:15	12/20/23 19:18	1
Sodium	2800		500	219	ug/L		12/20/23 14:15	12/20/23 19:18	1
Strontium	107		4.0	0.50	ug/L		12/20/23 14:15	12/20/23 19:18	1
Zinc	6.5	U	16.0	6.5	ug/L		12/20/23 14:15	12/20/23 19:18	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	38.8	J	100	35.0	ug/L		12/21/23 06:41	12/21/23 15:57	1
Iron	125		50.0	20.0	ug/L		12/27/23 08:15	12/30/23 10:00	1
Lithium	4.9	U	5.0	4.9	ug/L		12/21/23 12:11	12/22/23 14:59	5

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	19.5	U	40.0	19.5	ug/L		12/19/23 02:50	12/19/23 05:38	1
Cadmium	0.15	U	0.50	0.15	ug/L		12/20/23 01:45	12/29/23 08:14	1
Lithium	6.3		5.0	4.9	ug/L		12/27/23 08:57	12/28/23 14:35	5
Arsenic	0.89	U	2.0	0.89	ug/L		12/19/23 02:50	12/19/23 05:38	1
Iron	50.3		50.0	20.0	ug/L		12/20/23 01:45	12/29/23 08:14	1
Calcium	29000		500	53.6	ug/L		12/19/23 02:50	12/19/23 05:38	1
Zinc	4.0	U	10.0	4.0	ug/L		12/20/23 01:45	12/29/23 08:14	1
Copper	2.7	J	4.0	2.5	ug/L		12/19/23 02:50	12/19/23 05:38	1
Iron	58.2	U	120	58.2	ug/L		12/19/23 02:50	12/19/23 05:38	1
Lead	0.84	U	1.2	0.84	ug/L		12/19/23 02:50	12/19/23 05:38	1
Magnesium	10600		200	46.9	ug/L		12/19/23 02:50	12/19/23 05:38	1
Manganese	40.8		8.0	1.5	ug/L		12/19/23 02:50	12/19/23 05:38	1
Nickel	1.3	J B	4.0	0.91	ug/L		12/19/23 02:50	12/19/23 05:38	1

Client Sample ID: Upstream

Lab Sample ID: 460-294683-2

Date Collected: 12/14/23 11:00

Matrix: Water

Date Received: 12/14/23 19:00

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Resistivity (EPA 120.1)	**0.00417**		0.000100	0.000100	Mohm-cm			12/20/23 14:00	1
Specific Conductance (EPA 120.1)	**240**		1.00	1.00	umhos/cm			12/20/23 14:00	1
Acidity (SM 2310B-2011)	20.0	U	20.0	20.0	mg/L			12/22/23 13:16	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-2011)	**105**		5.0	5.0	mg/L			12/27/23 08:58	1
Carbonate Alkalinity as CaCO3 (SM 2320B-2011)	5.0	U	5.0	5.0	mg/L			12/27/23 08:58	1
Alkalinity as CaCO3 to pH 4.5 (SM 2320B-2011)	**105**		5.0	5.0	mg/L			12/27/23 08:58	1
Total Dissolved Solids (SM 2540C-2015)	**442**		2.5	2.5	mg/L			12/21/23 09:13	1
Total Suspended Solids (SM 2540D-2015)	2.5	U	2.5	2.5	mg/L			12/20/23 07:37	1
Ammonia (EPA 350.1)	0.050	U	0.10	0.050	mg/L			12/21/23 12:58	1
Total Kjeldahl Nitrogen (EPA 351.2)	**0.91**	**J**	1.0	0.50	mg/L		12/28/23 16:48	12/29/23 11:32	1
Chemical Oxygen Demand (EPA 410.4)	**13.1**		10.0	3.3	mg/L			12/27/23 13:18	1
Oxygen, Dissolved (SM 4500 O C-2016)	**7.1**	**H**	1.0	1.0	mg/L			12/15/23 11:05	1
Orthophosphate as P (SM 4500 P E-2011)	0.0050	U	0.030	0.0050	mg/L			12/16/23 01:50	1
Carbonaceous Biochemical Oxygen Demand 5 (SM 5210 B-2016)	1.0	U	1.0	1.0	mg/L			12/15/23 15:34	1
pH (SW846 9040C)	**7.4**	**HF**	0.1	0.1	SU			12/15/23 11:40	1
Temperature (SW846 9040C)	**24.1**	**HF**	0.1	0.1	Degrees C			12/15/23 11:40	1
Total Organic Carbon (SW846 9060A)	**4.4**	**B**	1.0	0.53	mg/L			01/05/24 11:21	1
Phosphorus as PO4 (SM4500 P E-2011)	**0.25**		0.090	0.071	mg/L		12/29/23 12:30	12/29/23 17:30	1
Phosphorus as P (SM4500 P E-2011)	**0.083**		0.030	0.023	mg/L		12/29/23 12:30	12/29/23 17:30	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (EPA 350.1)	0.050	U	0.10	0.050	mg/L			12/21/23 13:04	1
Orthophosphate as P (SM 4500 P E-2011)	0.0050	U	0.030	0.0050	mg/L			12/16/23 01:50	1
Phosphorus as PO4 (SM4500 P E-2011)	**0.24**		0.090	0.071	mg/L		12/29/23 12:30	12/29/23 17:30	1
Phosphorus as P (SM4500 P E-2011)	**0.078**		0.030	0.023	mg/L		12/29/23 12:30	12/29/23 17:30	1

Client Sample ID: Clarifring

Lab Sample ID: 460-294683-3

Date Collected: 12/14/23 11:45

Matrix: Water

Date Received: 12/14/23 19:00

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide	0.054	U	0.32	0.054	mg/L			12/15/23 14:50	1
Nitrate as N	**0.30**		0.16	0.070	mg/L			12/15/23 14:50	1
Chloride	**1.17**		0.32	0.039	mg/L			12/15/23 14:50	1
Nitrate Nitrite as N	**0.34**		0.16	0.070	mg/L			12/15/23 14:50	1
Nitrite as N	**0.045**	**J**	0.16	0.023	mg/L			12/15/23 14:50	1
Sulfate	**5.80**		0.48	0.095	mg/L			12/15/23 14:50	1

Client Sample ID: Clarifring

Date Collected: 12/14/23 11:45
Date Received: 12/14/23 19:00

Lab Sample ID: 460-294683-3

Matrix: Water

Method: SM-Online 2340B-2011 - Total Hardness (as CaCO3) by calculation - SM Online, 2011

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**68.1**		33.1	33.1	mg/L			12/29/23 07:24	1

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000043	U	0.00020	0.000043	mg/L		12/20/23 11:47	12/20/23 15:02	1

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**3.0**	**J**	4.0	0.91	ug/L		12/20/23 14:15	12/20/23 20:07	1
Boron	**61.1**	**J**	80.0	30.4	ug/L		12/20/23 14:15	12/20/23 20:07	1
Calcium	**18300**		500	53.6	ug/L		12/20/23 14:15	12/20/23 20:07	1
Copper	2.5	U	4.0	2.5	ug/L		12/20/23 14:15	12/20/23 20:07	1
Lead	0.84	U	1.2	0.84	ug/L		12/20/23 14:15	12/20/23 20:07	1
Magnesium	**5440**		200	46.9	ug/L		12/20/23 14:15	12/20/23 20:07	1
Manganese	**17.3**		8.0	1.5	ug/L		12/20/23 14:15	12/20/23 20:07	1
Nickel	0.91	U	4.0	0.91	ug/L		12/20/23 14:15	12/20/23 20:07	1
Potassium	**1310**		200	112	ug/L		12/20/23 14:15	12/20/23 20:07	1
Selenium	0.59	U	2.5	0.59	ug/L		12/20/23 14:15	12/20/23 20:07	1
Sodium	**2820**		500	219	ug/L		12/20/23 14:15	12/20/23 20:07	1
Strontium	**34.6**		4.0	0.50	ug/L		12/20/23 14:15	12/20/23 20:07	1
Zinc	6.5	U	16.0	6.5	ug/L		12/20/23 14:15	12/20/23 20:07	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**417**		100	35.0	ug/L		12/21/23 06:41	12/21/23 16:00	1
Iron	**430**	**B**	50.0	20.0	ug/L		12/29/23 11:58	01/02/24 11:33	1
Lithium	4.9	U	5.0	4.9	ug/L		12/21/23 12:11	12/22/23 15:08	5

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	19.5	U	40.0	19.5	ug/L		12/19/23 02:50	12/19/23 05:40	1
Cadmium	0.15	U	0.50	0.15	ug/L		12/20/23 01:45	12/29/23 08:16	1
Lithium	4.9	U	5.0	4.9	ug/L		12/27/23 08:57	12/28/23 14:38	5
Arsenic	0.89	U	2.0	0.89	ug/L		12/19/23 02:50	12/19/23 05:40	1
Iron	**33.9**	**J**	50.0	20.0	ug/L		12/20/23 01:45	12/29/23 08:16	1
Calcium	**19200**		500	53.6	ug/L		12/19/23 02:50	12/19/23 05:40	1
Zinc	4.0	U	10.0	4.0	ug/L		12/20/23 01:45	12/29/23 08:16	1
Copper	2.5	U	4.0	2.5	ug/L		12/19/23 02:50	12/19/23 05:40	1
Iron	58.2	U	120	58.2	ug/L		12/19/23 02:50	12/19/23 05:40	1
Lead	0.84	U	1.2	0.84	ug/L		12/19/23 02:50	12/19/23 05:40	1
Magnesium	**5780**		200	46.9	ug/L		12/19/23 02:50	12/19/23 05:40	1
Manganese	**9.5**		8.0	1.5	ug/L		12/19/23 02:50	12/19/23 05:40	1
Nickel	0.91	U	4.0	0.91	ug/L		12/19/23 02:50	12/19/23 05:40	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Resistivity (EPA 120.1)	**0.00648**		0.000100	0.000100	Mohm-cm			12/20/23 14:00	1
Specific Conductance (EPA 120.1)	**154**		1.00	1.00	umhos/cm			12/20/23 14:00	1
Acidity (SM 2310B-2011)	20.0	U	20.0	20.0	mg/L			12/22/23 13:16	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-2011)	**63.6**		5.0	5.0	mg/L			12/27/23 09:04	1

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill - Anti Degradation

Job ID: 460-294683-1

Client Sample ID: Clarifring
Date Collected: 12/14/23 11:45
Date Received: 12/14/23 19:00

Lab Sample ID: 460-294683-3
Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbonate Alkalinity as CaCO3 (SM 2320B-2011)	5.0	U	5.0	5.0	mg/L			12/27/23 09:04	1
Alkalinity as CaCO3 to pH 4.5 (SM 2320B-2011)	**63.6**		5.0	5.0	mg/L			12/27/23 09:04	1
Total Dissolved Solids (SM 2540C-2015)	**158**		2.5	2.5	mg/L			12/21/23 09:13	1
Total Suspended Solids (SM 2540D-2015)	2.5	U	2.5	2.5	mg/L			12/20/23 07:37	1
Ammonia (EPA 350.1)	0.050	U	0.10	0.050	mg/L			12/21/23 13:00	1
Total Kjeldahl Nitrogen (EPA 351.2)	**0.69**	**J**	1.0	0.50	mg/L		12/28/23 16:48	12/29/23 11:34	1
Chemical Oxygen Demand (EPA 410.4)	**5.1**	**J**	10.0	3.3	mg/L			12/27/23 13:18	1
Oxygen, Dissolved (SM 4500 O C-2016)	**10.2**	**H**	1.0	1.0	mg/L			12/15/23 11:10	1
Orthophosphate as P (SM 4500 P E-2011)	0.0050	U	0.030	0.0050	mg/L			12/16/23 01:50	1
Carbonaceous Biochemical Oxygen Demand 5 (SM 5210 B-2016)	1.0	U	1.0	1.0	mg/L			12/15/23 15:38	1
pH (SW846 9040C)	**7.7**	**HF**	0.1	0.1	SU			12/15/23 11:46	1
Temperature (SW846 9040C)	**23.8**	**HF**	0.1	0.1	Degrees C			12/15/23 11:46	1
Total Organic Carbon (SW846 9060A)	**1.7**	**B**	1.0	0.53	mg/L			01/05/24 11:45	1
Phosphorus as PO4 (SM4500 P E-2011)	**0.19**		0.090	0.071	mg/L		12/29/23 12:30	12/29/23 17:30	1
Phosphorus as P (SM4500 P E-2011)	**0.063**		0.030	0.023	mg/L		12/29/23 12:30	12/29/23 17:30	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (EPA 350.1)	0.050	U	0.10	0.050	mg/L			12/21/23 13:06	1
Orthophosphate as P (SM 4500 P E-2011)	0.0050	U	0.030	0.0050	mg/L			12/16/23 01:50	1
Phosphorus as PO4 (SM4500 P E-2011)	**0.16**		0.090	0.071	mg/L		12/29/23 12:30	12/29/23 17:30	1
Phosphorus as P (SM4500 P E-2011)	**0.054**		0.030	0.023	mg/L		12/29/23 12:30	12/29/23 17:30	1

Lab Chronicle

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill - Anti Degradation

Job ID: 460-294683-1

Client Sample ID: NPDES 001

Date Collected: 12/14/23 09:45
Date Received: 12/14/23 19:00

Lab Sample ID: 460-294683-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		1	950152	OXG	EET EDI	12/15/23 14:20
Total/NA	Analysis	300.0		1	950153	OXG	EET EDI	12/15/23 14:20
Total/NA	Analysis	2340B-2011		1	952627	LBD	EET EDI	12/29/23 07:24
Total/NA	Prep	245.1			696032	NVK	EET BUF	12/20/23 11:47
Total/NA	Analysis	245.1		1	696089	NVK	EET BUF	12/20/23 14:55
Dissolved	Filtration	Filtration			455596	UDL9	ELLE	12/19/23 07:29
Dissolved	Prep	3005A			456073	NU9R	ELLE	12/20/23 01:45
Dissolved	Analysis	6020B		1	458875	F7JF	ELLE	12/29/23 08:12
Dissolved	Filtration	FILTRATION			655723	MS	EET PEN	12/27/23 08:28
Dissolved	Prep	3005A			655730	MS	EET PEN	12/27/23 08:57 - 12/27/23 09:30 [1]
Dissolved	Analysis	6020B		5	656252	NTH	EET PEN	12/29/23 16:52
Dissolved	Filtration	FILTRATION			950877	VAD	EET EDI	12/19/23 02:47
Dissolved	Prep	3010A			950878	VAD	EET EDI	12/19/23 02:50
Dissolved	Analysis	6020B		1	950923	VAD	EET EDI	12/19/23 05:33
Total Recoverable	Prep	3005A			655297	MS	EET PEN	12/21/23 12:11 - 12/21/23 15:22 [1]
Total Recoverable	Analysis	6020B		5	655729	NTH	EET PEN	12/22/23 14:50
Total Recoverable	Prep	3005A			457733	NU9R	ELLE	12/27/23 08:15
Total Recoverable	Analysis	6020B		1	459055	F7JF	ELLE	12/30/23 10:03
Total Recoverable	Prep	3005A			814654	RR	EET SAV	12/21/23 06:41
Total Recoverable	Analysis	6020B		1	814981	BWR	EET SAV	12/21/23 15:54
Total/NA	Prep	3010A			951219	NNW	EET EDI	12/20/23 14:15
Total/NA	Analysis	6020B		1	951267	VAD	EET EDI	12/20/23 20:05
Total/NA	Analysis	120.1		1	951229	HTV	EET EDI	12/20/23 14:00
Total/NA	Analysis	2310B-2011		1	951793	RAK	EET EDI	12/22/23 13:16
Total/NA	Analysis	2320B-2011		1	952284	AXP	EET EDI	12/27/23 08:46
Total/NA	Analysis	2540C-2015		1	951429	PLS	EET EDI	12/21/23 09:13
Total/NA	Analysis	2540D-2015		1	951114	PLS	EET EDI	12/20/23 07:37
Dissolved	Filtration	FILTRATION			951501	AXP	EET EDI	12/21/23 12:04
Dissolved	Analysis	350.1		1	951524	AXP	EET EDI	12/21/23 13:03
Total/NA	Analysis	350.1		1	951524	AXP	EET EDI	12/21/23 12:46
Total/NA	Prep	351.2			458539	NLE3	ELLE	12/28/23 16:48 - 12/28/23 19:48 [1]
Total/NA	Analysis	351.2		1	458978	JCG7	ELLE	12/29/23 11:30
Total/NA	Analysis	410.4		1	952265	HTV	EET EDI	12/27/23 13:18
Total/NA	Analysis	4500 O C-2016		1	950226	RXA	EET EDI	12/15/23 11:00
Dissolved	Filtration	FILTRATION			950390	VBG	EET EDI	12/16/23 00:15
Dissolved	Analysis	4500 P E-2011		1	950391	VBG	EET EDI	12/16/23 01:50
Total/NA	Analysis	4500 P E-2011		1	950391	VBG	EET EDI	12/16/23 01:50
Total/NA	Analysis	5210 B-2016		1	950308	RXA	EET EDI	12/15/23 15:30
Total/NA	Analysis	9040C		1	950311	AXP	EET EDI	12/15/23 11:35
Total/NA	Analysis	9060A		1	953588	MMC	EET EDI	01/05/24 09:18
Dissolved	Filtration	FILTRATION			952741	HTV	EET EDI	12/29/23 12:00
Dissolved	Prep	SM 4500 P B			952765	HTV	EET EDI	12/29/23 12:30
Dissolved	Analysis	SM4500 P E-2011		1	952766	HTV	EET EDI	12/29/23 17:30

Client Sample ID: NPDES 001
Lab Sample ID: 460-294683-1

Date Collected: 12/14/23 09:45
Matrix: Water
Date Received: 12/14/23 19:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	SM 4500 P B			952765	HTV	EET EDI	12/29/23 12:30
Total/NA	Analysis	SM4500 P E-2011		1	952766	HTV	EET EDI	12/29/23 17:30

Client Sample ID: Upstream
Lab Sample ID: 460-294683-2

Date Collected: 12/14/23 11:00
Matrix: Water
Date Received: 12/14/23 19:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		1	950152	OXG	EET EDI	12/15/23 14:35
Total/NA	Analysis	300.0		1	950153	OXG	EET EDI	12/15/23 14:35
Total/NA	Analysis	2340B-2011		1	952627	LBD	EET EDI	12/29/23 07:24
Total/NA	Prep	245.1			696032	NVK	EET BUF	12/20/23 11:47
Total/NA	Analysis	245.1		1	696089	NVK	EET BUF	12/20/23 15:01
Dissolved	Filtration	FILTRATION			655723	MS	EET PEN	12/27/23 08:28
Dissolved	Prep	3005A			655730	MS	EET PEN	12/27/23 08:57 - 12/27/23 09:30 [1]
Dissolved	Analysis	6020B		5	655983	NTH	EET PEN	12/28/23 14:35
Dissolved	Filtration	Filtration			455596	UDL9	ELLE	12/19/23 07:29
Dissolved	Prep	3005A			456073	NU9R	ELLE	12/20/23 01:45
Dissolved	Analysis	6020B		1	458875	F7JF	ELLE	12/29/23 08:14
Dissolved	Filtration	FILTRATION			950877	VAD	EET EDI	12/19/23 02:47
Dissolved	Prep	3010A			950878	VAD	EET EDI	12/19/23 02:50
Dissolved	Analysis	6020B		1	950923	VAD	EET EDI	12/19/23 05:38
Total Recoverable	Prep	3005A			655297	MS	EET PEN	12/21/23 12:11 - 12/21/23 15:22 [1]
Total Recoverable	Analysis	6020B		5	655729	NTH	EET PEN	12/22/23 14:59
Total Recoverable	Prep	3005A			457733	NU9R	ELLE	12/27/23 08:15
Total Recoverable	Analysis	6020B		1	459055	F7JF	ELLE	12/30/23 10:00
Total Recoverable	Prep	3005A			814654	RR	EET SAV	12/21/23 06:41
Total Recoverable	Analysis	6020B		1	814981	BWR	EET SAV	12/21/23 15:57
Total/NA	Prep	3010A			951219	NNW	EET EDI	12/20/23 14:15
Total/NA	Analysis	6020B		1	951267	VAD	EET EDI	12/20/23 19:18
Total/NA	Analysis	120.1		1	951229	HTV	EET EDI	12/20/23 14:00
Total/NA	Analysis	2310B-2011		1	951793	RAK	EET EDI	12/22/23 13:16
Total/NA	Analysis	2320B-2011		1	952284	AXP	EET EDI	12/27/23 08:58
Total/NA	Analysis	2540C-2015		1	951429	PLS	EET EDI	12/21/23 09:13
Total/NA	Analysis	2540D-2015		1	951114	PLS	EET EDI	12/20/23 07:37
Dissolved	Filtration	FILTRATION			951501	AXP	EET EDI	12/21/23 12:04
Dissolved	Analysis	350.1		1	951524	AXP	EET EDI	12/21/23 13:04
Total/NA	Analysis	350.1		1	951524	AXP	EET EDI	12/21/23 12:58
Total/NA	Prep	351.2			458539	NLE3	ELLE	12/28/23 16:48 - 12/28/23 19:48 [1]
Total/NA	Analysis	351.2		1	458978	JCG7	ELLE	12/29/23 11:32
Total/NA	Analysis	410.4		1	952265	HTV	EET EDI	12/27/23 13:18
Total/NA	Analysis	4500 O C-2016		1	950226	RXA	EET EDI	12/15/23 11:05
Dissolved	Filtration	FILTRATION			950390	VBG	EET EDI	12/16/23 00:15
Dissolved	Analysis	4500 P E-2011		1	950391	VBG	EET EDI	12/16/23 01:50

Client Sample ID: Upstream

Lab Sample ID: 460-294683-2

Date Collected: 12/14/23 11:00

Matrix: Water

Date Received: 12/14/23 19:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	4500 P E-2011		1	950391	VBG	EET EDI	12/16/23 01:50
Total/NA	Analysis	5210 B-2016		1	950308	RXA	EET EDI	12/15/23 15:34
Total/NA	Analysis	9040C		1	950311	AXP	EET EDI	12/15/23 11:40
Total/NA	Analysis	9060A		1	953588	MMC	EET EDI	01/05/24 11:21
Dissolved	Filtration	FILTRATION			952741	HTV	EET EDI	12/29/23 12:00
Dissolved	Prep	SM 4500 P B			952765	HTV	EET EDI	12/29/23 12:30
Dissolved	Analysis	SM4500 P E-2011		1	952766	HTV	EET EDI	12/29/23 17:30
Total/NA	Prep	SM 4500 P B			952765	HTV	EET EDI	12/29/23 12:30
Total/NA	Analysis	SM4500 P E-2011		1	952766	HTV	EET EDI	12/29/23 17:30

Client Sample ID: Clarifring

Lab Sample ID: 460-294683-3

Date Collected: 12/14/23 11:45

Matrix: Water

Date Received: 12/14/23 19:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		1	950152	OXG	EET EDI	12/15/23 14:50
Total/NA	Analysis	300.0		1	950153	OXG	EET EDI	12/15/23 14:50
Total/NA	Analysis	2340B-2011		1	952627	LBD	EET EDI	12/29/23 07:24
Total/NA	Prep	245.1			696032	NVK	EET BUF	12/20/23 11:47
Total/NA	Analysis	245.1		1	696089	NVK	EET BUF	12/20/23 15:02
Dissolved	Filtration	FILTRATION			655723	MS	EET PEN	12/27/23 08:28
Dissolved	Prep	3005A			655730	MS	EET PEN	12/27/23 08:57 - 12/27/23 09:30 [1]
Dissolved	Analysis	6020B		5	655983	NTH	EET PEN	12/28/23 14:38
Dissolved	Filtration	Filtration			455596	UDL9	ELLE	12/19/23 07:29
Dissolved	Prep	3005A			456073	NU9R	ELLE	12/20/23 01:45
Dissolved	Analysis	6020B		1	458875	F7JF	ELLE	12/29/23 08:16
Dissolved	Filtration	FILTRATION			950877	VAD	EET EDI	12/19/23 02:47
Dissolved	Prep	3010A			950878	VAD	EET EDI	12/19/23 02:50
Dissolved	Analysis	6020B		1	950923	VAD	EET EDI	12/19/23 05:40
Total Recoverable	Prep	3005A			655297	MS	EET PEN	12/21/23 12:11 - 12/21/23 15:22 [1]
Total Recoverable	Analysis	6020B		5	655729	NTH	EET PEN	12/22/23 15:08
Total Recoverable	Prep	3005A			458867	UAMX	ELLE	12/29/23 11:58
Total Recoverable	Analysis	6020B		1	459339	LC3M	ELLE	01/02/24 11:33
Total Recoverable	Prep	3005A			814654	RR	EET SAV	12/21/23 06:41
Total Recoverable	Analysis	6020B		1	814981	BWR	EET SAV	12/21/23 16:00
Total/NA	Prep	3010A			951219	NNW	EET EDI	12/20/23 14:15
Total/NA	Analysis	6020B		1	951267	VAD	EET EDI	12/20/23 20:07
Total/NA	Analysis	120.1		1	951229	HTV	EET EDI	12/20/23 14:00
Total/NA	Analysis	2310B-2011		1	951793	RAK	EET EDI	12/22/23 13:16
Total/NA	Analysis	2320B-2011		1	952284	AXP	EET EDI	12/27/23 09:04
Total/NA	Analysis	2540C-2015		1	951429	PLS	EET EDI	12/21/23 09:13
Total/NA	Analysis	2540D-2015		1	951114	PLS	EET EDI	12/20/23 07:37
Dissolved	Filtration	FILTRATION			951501	AXP	EET EDI	12/21/23 12:04
Dissolved	Analysis	350.1		1	951524	AXP	EET EDI	12/21/23 13:06

Lab Chronicle

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill - Anti Degradation

Job ID: 460-294683-1

Client Sample ID: Clarifring

Date Collected: 12/14/23 11:45
Date Received: 12/14/23 19:00

Lab Sample ID: 460-294683-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	350.1		1	951524	AXP	EET EDI	12/21/23 13:00
Total/NA	Prep	351.2			458539	NLE3	ELLE	12/28/23 16:48 - 12/28/23 19:48 [1]
Total/NA	Analysis	351.2		1	458978	JCG7	ELLE	12/29/23 11:34
Total/NA	Analysis	410.4		1	952265	HTV	EET EDI	12/27/23 13:18
Total/NA	Analysis	4500 O C-2016		1	950226	RXA	EET EDI	12/15/23 11:10
Dissolved	Filtration	FILTRATION			950390	VBG	EET EDI	12/16/23 00:15
Dissolved	Analysis	4500 P E-2011		1	950391	VBG	EET EDI	12/16/23 01:50
Total/NA	Analysis	4500 P E-2011		1	950391	VBG	EET EDI	12/16/23 01:50
Total/NA	Analysis	5210 B-2016		1	950308	RXA	EET EDI	12/15/23 15:38
Total/NA	Analysis	9040C		1	950311	AXP	EET EDI	12/15/23 11:46
Total/NA	Analysis	9060A		1	953588	MMC	EET EDI	01/05/24 11:45
Dissolved	Filtration	FILTRATION			952741	HTV	EET EDI	12/29/23 12:00
Dissolved	Prep	SM 4500 P B			952765	HTV	EET EDI	12/29/23 12:30
Dissolved	Analysis	SM4500 P E-2011		1	952766	HTV	EET EDI	12/29/23 17:30
Total/NA	Prep	SM 4500 P B			952765	HTV	EET EDI	12/29/23 12:30
Total/NA	Analysis	SM4500 P E-2011		1	952766	HTV	EET EDI	12/29/23 17:30

[1] This procedure uses a method stipulated length of time for the process. Both start and end times are displayed.

Laboratory References:

EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

EET EDI = Eurofins Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

EET PEN = Eurofins Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

EET SAV = Eurofins Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Microbac = Marietta, OH, 158 Starlite Drive, Marietta, OH 45750

Accreditation/Certification Summary

Client: Heidelberg Materials Northeast LLC
Job ID: 460-294683-1
Project/Site: Rock Hill - Anti Degradation

Laboratory: Eurofins Edison

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Connecticut	State	PH-0818	09-30-24
Georgia	State	12028 (NJ)	06-30-24
Massachusetts	State	M-NJ312	06-30-24
New Jersey	NELAP	12028	06-30-24
New York	NELAP	11452	04-01-24
Pennsylvania	NELAP	68-00522	02-29-24
USDA	US Federal Programs	P330-20-00244	05-31-24

Laboratory: Eurofins Buffalo

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Arkansas DEQ	State	88-0686	07-06-23 *
Connecticut	State	PH-0568	03-31-24
Florida	NELAP	E87672	06-30-23 *
Georgia	State	10026 (NY)	03-31-24
Georgia	State Program	N/A	03-31-09 *
Illinois	NELAP	200003	09-30-23 *
Iowa	State	374	03-01-25
Iowa	State Program	374	03-01-09 *
Kansas	NELAP	E-10187	02-01-24
Kentucky (DW)	State	90029	01-01-24
Kentucky (UST)	State	108092	04-01-24
Kentucky (WW)	State	KY90029	12-31-23
Louisiana	NELAP	02031	06-30-23 *
Louisiana (All)	NELAP	02031	06-30-23 *
Maine	State	NY00044	12-04-24
Maryland	State	294	06-30-24
Massachusetts	State	M-NY044	07-01-24
Michigan	State	9937	04-01-24
Michigan	State Program	9937	04-01-09 *
New Hampshire	NELAP	2973	09-11-19 *
New Hampshire	NELAP	2337	11-17-24
New Jersey	NELAP	NY455	06-30-24
New York	NELAP	10026	03-31-24
Pennsylvania	NELAP	68-00281	08-31-24
Rhode Island	State	LAO00378	12-30-23
Texas	NELAP	T104704412-18-10	07-31-23 *
USDA	US Federal Programs	P330-18-00039	03-25-24
Virginia	NELAP	460185	09-14-24
Washington	State	C784	02-10-24
Wisconsin	State	998310390	08-31-24

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
A2LA	Dept. of Defense ELAP	0001.01	11-30-24
A2LA	ISO/IEC 17025	0001.01	11-30-24
Alabama	State	43200	01-31-24
Alaska	State	PA00009	06-30-24

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Client: Heidelberg Materials Northeast LLC
Job ID: 460-294683-1
Project/Site: Rock Hill - Anti Degradation

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC (Continued)

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alaska (UST)	State	17-027	02-28-24
Arizona	State	AZ0780	03-12-24
Arkansas DEQ	State	88-00660	08-09-24
California	State	2792	01-31-24
Colorado	State	PA00009	06-30-24
Connecticut	State	PH-0746	06-30-25
DE Haz. Subst. Cleanup Act (HSCA)	State	019-006 (PA cert)	01-31-24
Delaware (DW)	State	N/A	01-31-24
Florida	NELAP	E87997	06-30-24
Georgia (DW)	State	C048	01-31-24
Hawaii	State	N/A	01-31-24
Illinois	NELAP	200027	01-31-25
Iowa	State	361	03-01-24
Kansas	NELAP	E-10151	10-31-24
Kentucky (UST)	State	0001.01	11-30-24
Louisiana (All)	NELAP	02055	06-30-24
Maine	State	2019012	03-12-25
Maryland	State	100	06-30-24
Massachusetts	State	M-PA009	06-30-24
Michigan	State	9930	01-31-24
Mississippi	State	023	01-31-24
Missouri	State	450	01-31-25
Montana (DW)	State	0098	01-01-25
Nebraska	State	NE-OS-32-17	01-31-24
New Hampshire	NELAP	2730	01-10-24
New Jersey	NELAP	PA011	06-30-24
New York	NELAP	10670	04-01-24
North Carolina (DW)	State	42705	07-31-24
North Dakota	State	R-205	01-31-24
Oklahoma	NELAP	9804	08-31-24
Oregon	NELAP	PA200001	09-11-24
Pennsylvania	NELAP	36-00037	01-31-24
Quebec Ministry of Environment and Fight against Climate Change	PALA	1978	09-16-24
South Carolina	State	89002	01-31-24
Tennessee	State	02838	01-31-24
Texas	NELAP	T104704194-23-46	08-31-24
USDA	US Federal Programs	525-22-298-19481	10-25-25
Vermont	State	VT - 36037	10-28-24
Virginia	NELAP	460182	06-14-25
Washington	State	C457	04-11-24
West Virginia DEP	State	055	07-31-24
Wyoming	State	8TMS-L	01-31-24
Wyoming (UST)	A2LA	0001.01	11-30-24

Laboratory: Eurofins Pensacola

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alabama	State	40150	06-30-24
ANAB	ISO/IEC 17025	L2471	02-22-26

Accreditation/Certification Summary

Client: Heidelberg Materials Northeast LLC
Job ID: 460-294683-1
Project/Site: Rock Hill - Anti Degradation

Laboratory: Eurofins Pensacola (Continued)

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Arkansas DEQ	State	88-00689	08-01-24
California	State	2510	06-30-24
Florida	NELAP	E81010	06-30-24
Georgia	State	E81010(FL)	06-30-24
Illinois	NELAP	200041	10-09-24
Kansas	NELAP	E-10253	10-31-24
Kentucky (UST)	State	53	06-30-24
Louisiana (All)	NELAP	30976	06-30-24
Louisiana (DW)	State	LA017	12-31-23
North Carolina (WW/SW)	State	314	12-31-23
Oklahoma	NELAP	9810	08-31-24
Pennsylvania	NELAP	68-00467	01-31-24
South Carolina	State	96026	06-30-24
Tennessee	State	TN02907	06-30-24
Texas	NELAP	T104704286	09-30-24
US Fish & Wildlife	US Federal Programs	A22340	06-30-24
USDA	US Federal Programs	FLGNV23001	01-08-26
USDA	US Federal Programs	P330-21-00056	05-17-24
Virginia	NELAP	460166	06-14-24
West Virginia DEP	State	136	03-31-24
West Virginia DEP	State	136	03-31-24

Laboratory: Eurofins Savannah

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
	AFCEE	SAVLAB	
Alabama	State	41450	06-30-24
ANAB	Dept. of Defense ELAP	L2463	09-22-24
Arkansas (DW)	State	GA00006	06-30-24
Arkansas DEQ	State	19-015-0	02-01-24
California	State	2939	06-30-24
Florida	NELAP	E87052	06-30-24
Georgia	State	E87052	06-30-24
Georgia (DW)	State	803	06-30-24
Guam	State	19-007R	04-17-24
Hawaii	State	<cert No.>	06-30-24
Illinois	NELAP	200022	11-30-24
Indiana	State	C-GA-02	06-30-24
Iowa	State	353	07-01-25
Kentucky (UST)	State	NA	06-30-24
Louisiana	NELAP	30690	06-30-24
Louisiana (All)	NELAP	30690	06-30-24
Louisiana (DW)	State	LA009	12-31-23
Maine	State	GA00006	09-25-24
Maryland	State	250	12-31-24
Massachusetts	State	M-GA006	06-30-24
Michigan	State	9925	06-30-24
Mississippi	State	<cert No.>	06-30-24
Nebraska	State	NE-OS-7-04	06-30-24

Accreditation/Certification Summary

Client: Heidelberg Materials Northeast LLC
Job ID: 460-294683-1
Project/Site: Rock Hill - Anti Degradation

Laboratory: Eurofins Savannah (Continued)

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
New Jersey	NELAP	GA769	06-30-24
New Mexico	State	GA00006	06-30-24
North Carolina (DW)	State	13701	07-31-24
North Carolina (WW/SW)	State	269	12-31-23
Pennsylvania	NELAP	68-00474	06-30-24
Puerto Rico	State	GA00006	01-01-25
South Carolina	State	98001	06-30-24
Tennessee	State	TN02961	06-30-24
Texas	NELAP	T1047004185	11-30-24
Texas	TCEQ Water Supply	T104704185	06-30-24
USDA	US Federal Programs	P330-18-00313	09-03-24
Virginia	NELAP	460161	06-14-24
Wyoming	State	8TMS-L	06-30-24

Method Summary

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill - Anti Degradation

Job ID: 460-294683-1

Method	Method Description	Protocol	Laboratory
300.0	Anions, Ion Chromatography	EPA	EET EDI
2340B-2011	Total Hardness (as CaCO3) by calculation - SM Online, 2011	SM-Online	EET EDI
245.1	Mercury (CVAA)	EPA	EET BUF
6020B	Metals (ICP/MS)	SW846	EET EDI
6020B	Metals (ICP/MS)	SW846	EET PEN
6020B	Metals (ICP/MS)	SW846	EET SAV
6020B	Metals (ICP/MS)	SW846	ELLE
120.1	Conductivity, Specific Conductance	EPA	EET EDI
2310B-2011	Acidity	SM	EET EDI
2320B-2011	Alkalinity, Total	SM	EET EDI
2540C-2015	Total Dissolved Solids (Dried at 180 °C)	SM	EET EDI
2540D-2015	Total Suspended Solids (Dried at 103-105°C)	SM	EET EDI
350.1	Nitrogen, Ammonia	EPA	EET EDI
351.2	Nitrogen, Total Kjeldahl	EPA	ELLE
410.4	COD	EPA	EET EDI
4500 O C-2016	Oxygen, Dissolved	SM	EET EDI
4500 P E-2011	Orthophosphate	SM	EET EDI
5210 B-2016	BOD, 5-Day	SM	EET EDI
9040C	pH	SW846	EET EDI
9060A	Organic Carbon, Total (TOC)	SW846	EET EDI
SM4500 P E-2011	Phosphorus	SM	EET EDI
Subcontract	Osomotic Pressure	None	Microbac
245.1	Preparation, Mercury	EPA	EET BUF
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	EET PEN
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	EET SAV
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	ELLE
3010A	Preparation, Total Metals	SW846	EET EDI
351.2	Nitrogen, Total Kjeldahl	EPA	ELLE
FILTRATION	Sample Filtration	None	EET EDI
FILTRATION	Sample Filtration	None	EET PEN
Filtration	Sample Filtration	None	ELLE
SM 4500 P B	Phosphorous, Total and Ortho	SM	EET EDI

Protocol References:

EPA = US Environmental Protection Agency

None = None

SM = "Standard Methods For The Examination Of Water And Wastewater"

SM-Online = Standard Methods Online

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

EET EDI = Eurofins Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

EET PEN = Eurofins Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

EET SAV = Eurofins Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Microbac = Marietta, OH, 158 Starlite Drive, Marietta, OH 45750

Sample Summary

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill - Anti Degradation

Job ID: 460-294683-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
460-294683-1	NPDES 001	Water	12/14/23 09:45	12/14/23 19:00
460-294683-2	Upstream	Water	12/14/23 11:00	12/14/23 19:00
460-294683-3	Clarifring	Water	12/14/23 11:45	12/14/23 19:00

MICROBAC®

Microbac Laboratories Inc., - Marietta, OH

Client Project ID:

Test America

For:

Julie Gilmore

Eurofins TestAmerica Edison

777 New Durham RD

Edison, NJ 08817

Project State of Origin: Pennsylvania

Project Requested Certification:

Microbac Laboratories Inc., - Marietta, OH	68-01670	PA Department of Environmental Protection

All test results meet the requirements of the QAPP and other applicable contract terms and conditions. Any exceptions are attached to this cover page or addressed in the method narratives presented in the report. All results for soil samples are reported on a 'dry-weight' basis unless specified otherwise. Analytical results for water and wastes are reported on a 'as received' basis unless specified otherwise. A statement of uncertainty for each analysis is available upon request. The reported results are related only to the samples analyzed as received. This laboratory report may be released as a hardcopy and in computer-readable form submitted electronically or on diskette. This laboratory report shall not be reproduced, except in full, without the written approval of Microbac Laboratories, Inc.

Laboratory Project Manager:

Michelle Taylor

Michelle Taylor

Project Manager

Michelle.Taylor@microbac.com

Authorized By:

Tiffany Bailey

Tiffany Bailey

Customer Relationship Coordinator

Issued: 12/22/2023

MICROBAC®

Laboratory Report Number: M3L1282

Client Project ID: Test America

Cooler Receipt Log

Cooler ID: Default Cooler Temp: 3.6°C

Cooler Inspection Checklist

Ice Present or not required?	Yes
Shipping containers sealed or not required?	Yes
Custody seals intact or not required?	Yes
Chain of Custody (COC) Present?	Yes
COC includes customer information?	Yes
Relinquished and received signature on COC?	Yes
Sample collector identified on COC?	Yes
Sample type identified on COC?	Yes
Correct type of Containers Received	No
Correct number of containers listed on COC?	Yes
Containers Intact?	Yes
COC includes requested analyses?	Yes
Enough sample volume for indicated tests received?	Yes
Sample labels match COC (Name, Date & Time?)	Yes
Samples arrived within hold time?	Yes
Correct preservatives on COC or not required?	Yes
Chemical preservations checked or not required?	Yes
Preservation checks meet method requirements?	Yes
VOA vials have zero headspace, or not recd.?	Yes

Laboratory Report Number: M3L1282

Client Project ID: Test America

Sample Notes

PADEP 391-2000-008

A4 **Sample was received with head space.**

Osmotic Pressure

M3L1282-01	NPDES 001 (460-294683-1)	M3L1282-02	Upstream (460-294683-2)
M3L1282-03	Clarifring (460-294683-3)		

MICROBAC®

Laboratory Report Number: M3L1282

Client Project ID: Test America

Microbac Laboratories Inc., - Marietta, OH

CERTIFICATE OF ANALYSIS

Client ID:	NPDES 001 (460-294683-1)			**Collection Date:**	12/14/2023 09:45
Laboratory ID:	M3L1282-01			**Prep Date:**	12/21/2023 10:36
Matrix:	Aqueous			**Analyzed:**	12/21/2023 10:40
Batch / Sequence:	B3L1011 /	**Analytical Method:**	PADEP 391-2000-008	**Calibration:**	NA
Instrument:	OSMOMETER 5004	**Units:**	mOsm/kg	**File ID:**	OsmoticPressure_B3L1011_231221104004.xls
Analyst:	TSD	**Dilution:**	1		

Analyte	CAS Number	Result	MDL	RL	Flag	Qualifier
Osmotic Pressure		8.00	6.00	10.0		A4

MICROBAC®

Laboratory Report Number: M3L1282

Client Project ID: Test America

Microbac Laboratories Inc., - Marietta, OH

CERTIFICATE OF ANALYSIS

Client ID:	Upstream (460-294683-2)			**Collection Date:**	12/14/2023 11:00
Laboratory ID:	M3L1282-02			**Prep Date:**	12/21/2023 10:36
Matrix:	Aqueous			**Analyzed:**	12/21/2023 10:40
Batch / Sequence:	B3L1011 /	**Analytical Method:**	PADEP 391-2000-008	**Calibration:**	NA
Instrument:	OSMOMETER 5004	**Units:**	mOsm/kg	**File ID:**	OsmoticPressure_B3L1011_231221104004.xls
Analyst:	TSD	**Dilution:**	1		

Analyte	CAS Number	Result	MDL	RL	Flag	Qualifier
Osmotic Pressure		**10.0**	6.00	10.0		A4

MICROBAC®

Laboratory Report Number: M3L1282

Client Project ID: Test America

Microbac Laboratories Inc., - Marietta, OH

CERTIFICATE OF ANALYSIS

Client ID:	Clarifring (460-294683-3)			**Collection Date:**	12/14/2023 11:45
Laboratory ID:	M3L1282-03			**Prep Date:**	12/21/2023 10:36
Matrix:	Aqueous			**Analyzed:**	12/21/2023 10:40
Batch / Sequence:	B3L1011 /	**Analytical Method:**	PADEP 391-2000-008	**Calibration:**	NA
Instrument:	OSMOMETER 5004	**Units:**	mOsm/kg	**File ID:**	OsmoticPressure_B3L1011_231221104004.xls
Analyst:	TSD	**Dilution:**	1		

Analyte	CAS Number	Result	MDL	RL	Flag	Qualifier
Osmotic Pressure		ND	6.00	10.0		A4

Laboratory Report Number: M3L1282

Client Project ID: Test America

Notes and Definitions

A4: Sample was received with head space.
MDL: Method Detection Limit
RL: Reporting Limit

MICROBAC®

Laboratory Report Number: M3L1282

Client Project ID: Test America

METHOD BLANKS

Sample ID:	B3L1011-BLK1	**Prep Date:**	12/21/23 10:36	**Matrix:**	Aqueous
Instrument:	OSMOMETER 5004	**Analyzed:**	12/21/23 10:40	**Method:**	PADEP 391-2000-008
File ID:	OsmoticPressure_B3L1	**Sequence:**		**Analyst:**	TSD
Batch:	B3L1011	**Units:**	mOsm/kg	**Calibration:**	

Analyte	Result	MDL	RL	Dilution	Flag	Q
Osmotic Pressure	6.00	6.00	10.0	1	U	

* - Detected in the associated method Blank at a concentration >= RL

Laboratory Report Number: M3L1282

Client Project ID: Test America

BLANK SPIKE / DUPLICATE (BS/BSD)

Method:	PADEP 391-2000-008		**Blank Spike**	**Duplicate**
Batch:	B3L1011	**Spike ID:**	B3L1011-BS1	B3L1011-BSD1
Analyst:	TSD	**Prepared:**	12/21/23 10:36	12/21/23 10:36
Matrix:	Aqueous	**Analyzed:**	12/21/23 10:40	12/21/23 10:40
Units:	mOsm/kg	**File ID:**	OsmoticPressure_B3L1011_2312	OsmoticPressure_B3L1011_2312
Instrument:	OSMOMETER 5004	**Initial/Final:**	1mL/1mL	1mL/1mL
Calibration:				

Analyte	BS Spiked	BS Found	BS %Rec	BSD Spiked	BSD Found	BSD %Rec	%RPD	%Rec Limts	RPD Limit	Q
Osmotic Pressure	290	294	101	290	295	102	0.340	90 - 110	20	

* - Does not meet %Rec acceptance criteria.
- Does not meet RPD acceptance criteria.

Eurofins Edison
777 New Durham Road
Edison, NJ 08817
Phone: 732-549-3900 Fax: 732-549-3679

Chain of Custody Record

eurofins | Environment Testing

1/7/2024

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Gilmore, Julie L	Carrier Tracking No(s):	COC No: 460-70033.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Julie.Gilmore@et.eurofinsus.com	State of Origin: Pennsylvania	Page: Page 1 of 1
Company: Microbac Laboratories, Inc.		Accreditations Required (See note): NELAP - Pennsylvania		Job #: 460-294683-1
Address: 158 Starlite Drive,	Due Date Requested: 12/27/2023			
City: Marietta	TAT Requested (days):			
State, Zip: OH, 45750				
Phone: 800-373-4071(Tel)	PO #:			
Email:	WO #:			
Project Name: Rock Hill - Anti Degradation	Project #: 46011424			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=wastefoil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	SUB (Osmotic Pressure) Osmotic Pressure	Total Number of containers	Special Instructions/Note:
		Preservation Code:			X	X		X	
NPDES 001 (460-294683-1)	12/14/23	09:45 Eastern		Water			X	1	
Upstream (460-294683-2)	12/14/23	11:00 Eastern		Water			X	1	
Clarifring (460-294683-3)	12/14/23	11:45 Eastern		Water			X	1	

M 3 L 1 2 8 2

Eurofins TestAmerica Edison
Rec'd: 12/20/2023 11:30
By: Stephanie Murphy Temp: 3.6 (Signature)

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Northeast, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Northeast, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Northeast, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Northeast, LLC.

Possible Hazard Identification *Unconfirmed*	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*** ☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 1	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:		
Relinquished by:	Date/Time: 12/19/23 1900	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time: 12/20/2023 1130	Company
Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks:		

MICROBAC®

Work Order # MBC1882

COOLER TEMP >6° C LOG

SAMPLE ID	Bottle 1 °C	Bottle 2 °C	Bottle 3 °C	Bottle 4 °C	Bottle 5 °C	Bottle 6 °C

12/20/2023 SM

pH Lot # HC318549

pH Exceptions

SAMPLE ID	Bottle 1	Bottle 2	Bottle 3	Bottle 4	Bottle 5	Bottle 6

12/20/2023 SM

PRESERVATIVE EXCEPTIONS

☑ NONE

☐ AS NOTED

12/20/2023 SM

Document Control # 1957
Last 04-10-2019

Issued to: Document Master File

Eurofins Edison
777 New Durham Road
Edison, NJ 08817
Phone: 732-549-3900 Fax: 732-549-3679

Chain of Custody Record

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Kop 2

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Client Information	Sampler	Lab PM: Gilmore, Julie L	Carrier Tracking No(s):	COC No: 460-176395-111665.1
Client Contact: Andrew Gutshall	Phone:	E-Mail: Julie.Gilmore@et.eurofinsus.com	State of Origin:	Page: Page 1 of 2
Company: Heidelberg Materials Northeast LLC	PWSID:			Job #: 294683
Address: 7660 Imperial Way	Due Date Requested:			
City: Allentown	TAT Requested (days):			
State, Zip: PA, 18195	Compliance Project: Δ Yes Δ No			
Phone: 610-366-4819(Tel)	PO #: Purchase Order not required			
Email: andrew.gutshall@heidelbergmaterials.com	WO #:			
Project Name: Rock Hill Anti-Degradation	Project #: 46011424			
Site:	SSOW#:			

Analysis Requested

SHORT HOLD

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water S=solid, O=waste/oil BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020B Dissolved Lithium	6020B Total Lithium	351.2 Local Method	6020B Dissolved Cd/Fe/Zn	6020B (MOD) Total Fe	350.1, 410.4, 4500_P_E	120.1 9040C	350.1, 4500_P_E, 6020B	2320B (MOD) Alkalinity	6020B, SM2340B	9060A TOC	2540D, SM5210B_Calc	4500_P_E_Ortho Dissolved Orthophosphate	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	D	S	N	D	S	N	N	N	D	S	N	N		
NPDES 001	12/4/23	0945	G	Water																2	1
Upstream	12/23	1.0	G	Water																2	2
Clarifier Pond	12/23	1.5	G	Water																2	3
				Water																	
				Water																	

460-294683 Chain of Custody

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III IV Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		12/14/23	ERG		12/14/23 1328	EETN-KOP
2		12-14-23 1723	EETN-KOP		12/14	ETA
3	HD	12/14 1900	ETA	gdsa received	12-14-23 1900	ETA

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.

Cooler Temperature(s) °C and Other Remarks:

Ver 06/08/2021

1/7/2024

Eurofins Edison
777 New Durham Road
Edison, NJ 08817
Phone: 732-549-3900 Fax: 732-549-3679

Chain of Custody Record

43
37 KOP 2

eurofins

Environment Testing

Client Information	Sampler	Lab PM: Gilmore, Julie L	Carrier Tracking No(s):	COC No: 460-176395-111665.2
Client Contact: Andrew Gutshall	Phone:	E-Mail: Julie.Gilmore@et.eurofinsus.com	State of Origin:	Page: Page 2 of 2
Company: Heidelberg Materials Northeast LLC	PWSID:	Analysis Requested		Job #: 294683
Address: 7660 Imperial Way	Due Date Requested:			Preservation Codes:
City: Allentown	TAT Requested (days):			A HCL, B NaOH, C Zn Acetate, D Nitric Acid, E NaHSO4, F MeOH, G Amchlor, H Ascorbic Acid, I Ice, J DI Water, K EDTA, L EDA, M Hexane, N None, O AsNaO2, P Na2O4S, Q Na2SO3, R Na2S2O3, S H2SO4, T TSP Dodecahydrate, U Acetone, V MCAA, W pH 4-5, Y Trizma, Z other (specify)
State, Zip: PA, 18195	Compliance Project: Δ Yes Δ No			
Phone: 610-366-4819(Tel)	PO #: Purchase Order not required			Other:
Email: andrew.gutshall@heidelbergmaterials.com	WO #:			
Project Name: Rock Hill Anti-Degradation	Project #: 46011424			
Site:	SSOW#:			

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	4500_P_E_Ortho Total Orthophosphate	2540C TDS	300_ORGFM_28D, 300_ORGFMS	245.1 Local Method	6020B Total Aluminum	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	N	D	D		
APOES 001	12/14/23	0915	G	Water			✓	✓	✓	✓	✓	2	1
upstream	12/14/23	0900	G	Water			✓	✓	✓	✓	✓	2	2
Cal. Fishing Pond	12/14/23	1145	G	Water			✓	✓	✓	✓	✓	2	3
				Water									
				Water									

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I II III, IV Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	[signature]	12/14/23	ECN	[signature]	12/14/23 1328	EETNKOP
2	[signature]	12-14-23 1723	EETN-KOP	[signature]	12/14	ETA
3	[signature]	12/14 1900	ETA	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.

Cooler Temperature(s) °C and Other Remarks:

Ver 06/08/2021

Eurofins **TestAmerica Edison**
Receipt Temperature and pH Log

Job Number: 294683

Number of Coolers: 2 IR Gun #: 2

Cooler Temperatures

	RAW	CORRECTED		RAW	CORRECTED		RAW	CORRECTED
Cooler #1:	4.3 °C	4.3 °C	Cooler #4:	°C	°C	Cooler #7:	°C	°C
Cooler #2:	3.7 °C	3.7 °C	Cooler #5:	°C	°C	Cooler #8:	°C	°C
Cooler #3:	°C	°C	Cooler #6:	°C	°C	Cooler #9:	°C	°C

TALS Sample Number	Ammonia (pH<2)	COD (pH<2)	Nitrate Nitrite (pH<2)	Metals* (pH<2)	Hardness (pH<2)	Pest (pH 5-9)	EPH or QAM (pH<2)	Phenols (pH<2)	Sulfide (pH>9)	TKN (pH<2)	TOC (pH<2)	Total Cyanide (pH>12)	Total Phos (pH<2)	Other	Other
1	<2	<2		<2	<2					<2	<2		<2		
2	<2	<2		<2	<2					<2	<2		<2		
3	<2	<2		<2	<2					<2	<2		<2		

If pH adjustments are required record the information below.

Sample No(s) adjusted: _____

Preservative Name/Conc.: _____ Volume of Preservative used (ml): _____

Lot # of Preservative(s): _____ Expiration Date: _____

The appropriate Project Manager and Department Manager should be notified about the samples which were pH adjusted.

** Samples for Metal analysis which are out of compliance must be acidified at least 24 hours prior to analysis.*

Initials: _____ Date: 12/14

Eurofins Edison
777 New Durham Road
Edison, NJ 08817
Phone: 732-549-3900 Fax: 732-549-3679

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Gilmore, Julie L	Carrier Tracking No(s):	COC No: 460-70031.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Julie.Gilmore@et.eurofinsus.com	State of Origin: Pennsylvania	Page: Page 1 of 1
Company: Eurofins Environment Testing Southeast,		Accreditations Required (See note): NELAP - Pennsylvania		Job #: 460-294683-1
Address: 3355 McLemore Drive, ,	Due Date Requested: 12/28/2023			
City: Pensacola	TAT Requested (days):			
State, Zip: FL, 32514				
Phone: 850-474-1001(Tel) 850-478-2671(Fax)	PO #:			
Email:	WO #:			
Project Name: Rock Hill - Anti Degradation	Project #: 46011424			
Site:	SSOW#:			

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)
Other:

Analysis Requested

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020B/3005A (MOD) Single Element 6020B Metals List	6020B/FILTRATION (MOD) Single Element 6020B Metals List	Total Number of containers	Special Instructions/Note:
			Preservation Code:							
NPDES 001 (460-294683-1)	12/14/23	09:45 Eastern		Water			X	X	2	
Upstream (460-294683-2)	12/14/23	11:00 Eastern		Water			X	X	2	
Clarifring (460-294683-3)	12/14/23	11:45 Eastern		Water			X	X	2	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Northeast, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Northeast, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Northeast, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Northeast, LLC.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 1	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	12/19/23 1900	EET			
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	Date/Time:	Company	Received by:	Date/Time:	Company
				12/20/23 1006	

1/7/2024

Eurofins Edison
777 New Durham Road
Edison, NJ 08817
Phone: 732-549-3900 Fax: 732-549-3679

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Gilmore, Julie L	Carrier Tracking No(s):	COC No: 460-70008.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Julie.Gilmore@et.eurofinsus.com	State of Origin: Pennsylvania	Page: Page 1 of 1
Company: Eurofins Lancaster Laboratories Environm		Accreditations Required (See note): NELAP - Pennsylvania		Job #: 460-294683-1
Address: 2425 New Holland Pike,	Due Date Requested: 12/29/2023			
City: Lancaster	TAT Requested (days):			
State, Zip: PA, 17601				
Phone: 717-656-2300(Tel)	PO #:			
Email:	WO #:			
Project Name: Rock Hill - Anti Degradation	Project #: 46011424			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)
Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020B/3005A (MOD) Total Fe	6020B/Filtration_ME Dissolved Cd/Fe/Zn	351.2/351.2_Prep	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
NPDES 001 (460-294683-1)	12/14/23	09:45 Eastern		Water			X	X	X	3	
Upstream (460-294683-2)	12/14/23	11:00 Eastern		Water			X	X	X	3	
Clarifring (460-294683-3)	12/14/23	11:45 Eastern		Water			X	X	X	3	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Northeast, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Northeast, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Northeast, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Northeast, LLC.

Possible Hazard Identification	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 1	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		12/15/23 1538	EET EL		12/15/23 1538	EET EL
2		12/15/23 1912	EET EL			
3					12/15/23 1912	EET EL

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 1.2/4.1

Eurofins Edison
777 New Durham Road
Edison, NJ 08817
Phone: 732-549-3900 Fax: 732-549-3679

Chain of Custody Record

eurofins | Environment Testi

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Gilmore, Julie L	Carrier Tracking No(s):	COC No: 460-70011.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Julie.Gilmore@et.eurofinsus.com	State of Origin: Pennsylvania	Page: Page 1 of 1
Company: Eurofins Environment Testing Northeast,		Accreditations Required (See note): NELAP - Pennsylvania		Job #: 460-294683-1
Address: 10 Hazelwood Drive, ,	Due Date Requested: 12/26/2023			
City: Amherst	TAT Requested (days):			
State, Zip: NY, 14228-2298				
Phone: 716-691-2600(Tel) 716-691-7991(Fax)	PO #:			
Email:	WO #:			
Project Name: Rock Hill - Anti Degradation	Project #: 46011424			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	245.1/245.1_Prep	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
NPDES 001 (460-294683-1)	12/14/23	09:45 Eastern		Water			X	1	
Upstream (460-294683-2)	12/14/23	11:00 Eastern		Water			X	1	
Clarifring (460-294683-3)	12/14/23	11:45 Eastern		Water			X	1	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Northeast, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Northeast, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Northeast, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Northeast, LLC.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 1	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:		
Relinquished by:	Date/Time: 12/15/23 1800	Company EE	Received by:	Date/Time: 12/16/23 1000	Company FA
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: ∆ Yes ∆ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 2.7#1 III=

Eurofins Edison
777 New Durham Road
Edison, NJ 08817
Phone: 732-549-3900 Fax: 732-549-3679

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Gilmore, Julie L	Carrier Tracking No(s):	COC No: 460-70023.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Julie.Gilmore@et.eurofinsus.com	State of Origin: Pennsylvania	Page: Page 1 of 1
Company: Eurofins Environment Testing Southeast,		Accreditations Required (See note): NELAP - Pennsylvania		Job #: 460-294683-1
Address: 5102 LaRoche Avenue, ,	Due Date Requested: 12/27/2023			
City: Savannah	TAT Requested (days):			
State, Zip: GA, 31404				
Phone: 912-354-7858(Tel) 912-352-0165(Fax)	PO #:			
Email:	WO #:			
Project Name: Rock Hill - Anti Degradation	Project #: 46011424			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)
Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020B/3005A Total Aluminum	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
NPDES 001 (460-294683-1)	12/14/23	09:45 Eastern		Water			X	1	
Upstream (460-294683-2)	12/14/23	11:00 Eastern		Water			X	1	
Clarifring (460-294683-3)	12/14/23	11:45 Eastern		Water			X	1	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Northeast, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Northeast, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Northeast, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Northeast, LLC.

Possible Hazard Identification	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 1	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		12/18/23 1400	Eurofins		12/20/23 1032	
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 3.9-4.2

Login Sample Receipt Checklist

Client: Heidelberg Materials Northeast LLC

Job Number: 460-294683-1

Login Number: 294683

List Source: Eurofins Edison

List Number: 1

Creator: Thundathorn, Sukanan 1

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Heidelberg Materials Northeast LLC

Job Number: 460-294683-1

Login Number: 294683
List Number: 3
Creator: Kolb, Chris M

List Source: Eurofins Buffalo
List Creation: 12/18/23 11:02 AM

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	2.7 ir gun #! ice
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	True	

Login Sample Receipt Checklist

Client: Heidelberg Materials Northeast LLC

Job Number: 460-294683-1

Login Number: 294683
List Number: 2
Creator: Wrye, Shaun

List Source: Eurofins Lancaster Laboratories Environment Testing, LLC
List Creation: 12/15/23 08:40 PM

Question	Answer	Comment
The cooler's custody seal is intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature acceptable,where thermal pres is required(</=6C, not frozen).	True	
Cooler Temperature is recorded.	True	
WV:Container Temp acceptable,where thermal pres is required (</=6C, not frozen).	N/A	
WV: Container Temperature is recorded.	N/A	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the containers received and the COC.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
There is sufficient vol. for all requested analyses.	True	
Is the Field Sampler's name present on COC?	False	Received project as a subcontract.
Sample custody seals are intact.	N/A	
VOA sample vials do not have headspace >6mm in diameter (none, if from WV)?	N/A	

Login Sample Receipt Checklist

Client: Heidelberg Materials Northeast LLC

Job Number: 460-294683-1

Login Number: 294683
List Number: 5
Creator: Pardonner, Brett

List Source: Eurofins Pensacola
List Creation: 12/20/23 04:21 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	0.0°C IR11
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Heidelberg Materials Northeast LLC

Job Number: 460-294683-1

Login Number: 294683
List Number: 4
Creator: Johnson, Corey M

List Source: Eurofins Savannah
List Creation: 12/20/23 04:53 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Lab Results

December 29, 2023

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Katie Murray
Heidelberg Materials Northeast LLC
7660 Imperial Way
Allentown, Pennsylvania 18195

Generated 1/16/2024 3:03:10 AM

JOB DESCRIPTION

Rock Hill - Anti-Degradation

JOB NUMBER

460-295630-1

Eurofins Edison
777 New Durham Road
Edison NJ 08817

See page two for job notes and contact information.

my EOL

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing Northeast, LLC Project Manager.

Authorization



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Authorized for release by
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Qualifiers

HPLC/IC

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Metals

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

General Chemistry

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
B	Compound was found in the blank and sample.
F1	MS and/or MSD recovery exceeds control limits.
H	Sample was prepped or analyzed beyond the specified holding time. This does not meet regulatory requirements.
H3	Sample was received and analyzed past holding time. This does not meet regulatory requirements.
HF	Parameter with a holding time of 15 minutes. Test performed by laboratory at client's request. Sample was analyzed outside of hold time.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job Narrative
460-295630-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

- Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

The method detection limit (MDL) is the lowest value detectable by the laboratory for a given analyte as determined by the MDL procedure detailed in EPA 40 CFR 136. Reported MDL values are adjusted for any dilutions and percent moisture (as applicable). The lab is unable to report values below the MDL.

Receipt
The samples were received on 12/29/2023 7:00 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 2.6°C and 3.1°C

Receipt Exceptions
The Chain-of-Custody (COC) was incomplete as received and/or improperly completed. NPDES 001 (460-295630-1), Upstream (460-295630-2) and Clarifying Pond (460-295630-3) Container for Dissolved Oxygen was received but test is not listed on the COC.

Subcontract Work
Method Osomotic Pressure: This method was subcontracted to Microbac Laboratories, Inc. The subcontract laboratory certification is different from that of the facility issuing the final report. The subcontract report is appended in its entirety.

HPLC/IC
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Metals
Method 6020B: The post digestion spike % recoveryr associated with batch 400-656870 was outside of control limits. The associated samples are: (460-295630-D-1-D PDS ^5) and (460-295630-P-1-B PDS ^5).

Method 6020B: The following samples were not filtered within 15 minutes of sample collection as required by the method: NPDES 001 (460-295630-1), Upstream (460-295630-2) and Clarifying Pond (460-295630-3). The sample(s) was filtered prior to analysis at the laboratory, and the results have been reported. This does not meet regulatory requirements.

Method 6020B: The following samples were not filtered within 15 minutes of sample collection as required by the method: NPDES 001 (460-295630-1), Upstream (460-295630-2) and Clarifying Pond (460-295630-3). The sample(s) was filtered prior to analysis at the laboratory, and the results have been reported. This does not meet regulatory requirements.

Method 6020B: The following samples were not filtered within 15 minutes of sample collection as required by the method: NPDES 001 (460-295630-1), Upstream (460-295630-2), Clarifying Pond (460-295630-3), (460-295630-D-1 MS) and (460-295630-D-1 MSD). The sample(s) was filtered prior to analysis at the laboratory, and the results have been reported.

Method 6020B: The matrix spike duplicate (MSD) recoveries for preparation batch 400-656594 and 400-656598 and analytical batch 400-656870 were outside control limits. Non-homogeneity is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 6020B: The matrix spike / matrix spike duplicate (MS/MSD) precision for preparation batch 400-656594 and 400-656598 and analytical batch 400-656870 was outside control limits. Sample matrix interference and/or non-homogeneity are suspected.

Method 6020B: The following samples were not filtered and preserved within 15 minutes of sample collection in accordance with 40 CFR Part 136 Table II, Footnote 7, method 6020B. The samples were filtered prior to analysis at the laboratory.

NPDES 001 (460-295630-1), Upstream (460-295630-2) and Clarifying Pond (460-295630-3)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

General Chemistry
Method 351.2: The laboratory control sample (LCS) for preparation batch 410-461963 and analytical batch 410-462580 recovered outside control limits for the following analytes: TKNs These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method 351.2: The method blank associated with preparation batch 410-462947 and analytical batch 410-463441 contained TKN greater than one-half the reporting limit (RL). The samples were not re-analyzed and results have been qualified and reported.

Method 4500_O_C: This analysis is normally performed in the field and has a method-defined holding time of 15 minutes. The following samples has been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe: NPDES 001 (460-295630-1), Upstream (460-295630-2) and Clarifying Pond (460-295630-3).

Method 9040C: This analysis is normally performed in the field and has a method-defined holding time of 15 minutes. The following samples has been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe: NPDES 001 (460-295630-1), Upstream (460-295630-2) and Clarifying Pond (460-295630-3).

Method SM5210B_Calc: The glucose-glutamic acid standard (LCS) recovered outside the recovery limits specified in the method in batch 460-952857. The method holding time had expired, therefore the analysis was not repeated. The data was qualified and reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Client Sample ID: NPDES 001
Lab Sample ID: 460-295630-1
Date Collected: 12/29/23 08:30
Matrix: Water
Date Received: 12/29/23 19:00

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide	0.054	U	0.32	0.054	mg/L			12/30/23 13:43	1
Nitrate as N	**0.11**	**J**	0.16	0.070	mg/L			12/30/23 13:43	1
Chloride	**1.93**		0.32	0.039	mg/L			12/30/23 13:43	1
Nitrate Nitrite as N	**0.11**	**J**	0.16	0.070	mg/L			12/30/23 13:43	1
Nitrite as N	0.023	U	0.16	0.023	mg/L			12/30/23 13:43	1
Sulfate	**6.02**		0.48	0.095	mg/L			12/30/23 13:43	1

Method: SM-Online 2340B-2011 - Total Hardness (as CaCO3) by calculation - SM Online, 2011

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**60.5**		33.1	33.1	mg/L			01/11/24 17:14	1

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000043	U	0.00020	0.000043	mg/L		01/05/24 12:08	01/05/24 17:02	1

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**5.1**		4.0	0.91	ug/L		01/05/24 08:52	01/09/24 14:24	1
Boron	**37.5**	**J**	80.0	30.4	ug/L		01/05/24 08:52	01/09/24 14:24	1
Calcium	**15000**		500	53.6	ug/L		01/05/24 08:52	01/09/24 14:24	1
Copper	**3.7**	**J**	4.0	2.5	ug/L		01/05/24 08:52	01/09/24 14:24	1
Lead	0.84	U	1.2	0.84	ug/L		01/05/24 08:52	01/09/24 14:24	1
Magnesium	**5610**		200	46.9	ug/L		01/05/24 08:52	01/09/24 14:24	1
Manganese	**17.2**		8.0	1.5	ug/L		01/05/24 08:52	01/09/24 14:24	1
Nickel	0.91	U	4.0	0.91	ug/L		01/05/24 08:52	01/09/24 14:24	1
Potassium	**1430**		200	112	ug/L		01/05/24 08:52	01/09/24 14:24	1
Selenium	0.59	U	2.5	0.59	ug/L		01/05/24 08:52	01/09/24 14:24	1
Sodium	**2700**		500	219	ug/L		01/05/24 08:52	01/09/24 14:24	1
Strontium	**51.7**		4.0	0.50	ug/L		01/05/24 08:52	01/09/24 14:24	1
Zinc	**6.8**	**J**	16.0	6.5	ug/L		01/05/24 08:52	01/09/24 14:24	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**397**		100	35.0	ug/L		01/04/24 05:57	01/04/24 13:48	1
Iron	**469**		50.0	20.0	ug/L		01/04/24 15:07	01/12/24 22:38	1
Lithium	4.9	U	5.0	4.9	ug/L		01/04/24 08:20	01/05/24 12:39	5

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**32.7**	**J**	40.0	19.5	ug/L		01/02/24 23:08	01/03/24 02:05	1
Cadmium	0.15	U	0.50	0.15	ug/L		01/06/24 05:56	01/08/24 18:48	1
Lithium	4.9	U F1 F2	5.0	4.9	ug/L		01/04/24 08:59	01/05/24 15:14	5
Arsenic	0.89	U	2.0	0.89	ug/L		01/02/24 23:08	01/03/24 02:05	1
Iron	**142**		50.0	20.0	ug/L		01/06/24 05:56	01/08/24 18:48	1
Calcium	**17400**		500	53.6	ug/L		01/02/24 23:08	01/03/24 02:05	1
Zinc	**5.0**	**J**	10.0	4.0	ug/L		01/06/24 05:56	01/08/24 18:48	1
Copper	2.5	U	4.0	2.5	ug/L		01/02/24 23:08	01/03/24 02:05	1
Iron	**61.7**	**J**	120	58.2	ug/L		01/02/24 23:08	01/03/24 02:05	1
Lead	0.84	U	1.2	0.84	ug/L		01/02/24 23:08	01/03/24 02:05	1
Magnesium	**6180**		200	46.9	ug/L		01/02/24 23:08	01/03/24 02:05	1
Manganese	**5.9**	**J**	8.0	1.5	ug/L		01/02/24 23:08	01/03/24 02:05	1

Client Sample ID: NPDES 001
Lab Sample ID: 460-295630-1

Date Collected: 12/29/23 08:30
Matrix: Water
Date Received: 12/29/23 19:00

Method: SW846 6020B - Metals (ICP/MS) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nickel	0.91	U	4.0	0.91	ug/L		01/02/24 23:08	01/03/24 02:05	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Resistivity (EPA 120.1)	**0.00729**		0.000100	0.000100	Mohm-cm			01/08/24 09:30	1
Specific Conductance (EPA 120.1)	**137**		1.00	1.00	umhos/cm			01/08/24 09:30	1
Acidity (SM 2310B-2011)	20.0	U	20.0	20.0	mg/L			01/11/24 12:49	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-2011)	**52.7**		5.0	5.0	mg/L			01/03/24 11:51	1
Carbonate Alkalinity as CaCO3 (SM 2320B-2011)	5.0	U	5.0	5.0	mg/L			01/03/24 11:51	1
Alkalinity as CaCO3 to pH 4.5 (SM 2320B-2011)	**52.7**		5.0	5.0	mg/L			01/03/24 11:51	1
Total Dissolved Solids (SM 2540C-2015)	**159**		2.5	2.5	mg/L			01/02/24 08:11	1
Total Suspended Solids (SM 2540D-2015)	2.5	U	2.5	2.5	mg/L			01/02/24 07:21	1
Ammonia (EPA 350.1)	0.050	U	0.10	0.050	mg/L			01/08/24 10:11	1
Total Kjeldahl Nitrogen (EPA 351.2)	**0.70**	**J**	1.0	0.50	mg/L		01/10/24 09:14	01/11/24 13:00	1
Chemical Oxygen Demand (EPA 410.4)	**7.1**	**J**	10.0	3.3	mg/L			01/10/24 16:15	1
Oxygen, Dissolved (SM 4500 O C-2016)	**11.3**	**H H3**	1.0	1.0	mg/L			12/30/23 14:25	1
Orthophosphate as P (SM 4500 P E-2011)	0.0050	U	0.030	0.0050	mg/L			12/30/23 20:25	1
Carbonaceous Biochemical Oxygen Demand 5 (SM 5210 B-2016)	1.0	U *+	1.0	1.0	mg/L			12/30/23 14:00	1
pH (SW846 9040C)	**7.9**	**HF**	0.1	0.1	SU			01/10/24 13:25	1
Temperature (SW846 9040C)	**21.9**	**HF**	0.1	0.1	Degrees C			01/10/24 13:25	1
Total Organic Carbon (SW846 9060A)	**3.0**		1.0	0.53	mg/L			01/10/24 10:42	1
Phosphorus as PO4 (SM4500 P E-2011)	0.071	U F1	0.090	0.071	mg/L		01/09/24 10:21	01/09/24 14:08	1
Phosphorus as P (SM4500 P E-2011)	0.023	U F1	0.030	0.023	mg/L		01/09/24 10:21	01/09/24 14:08	1
Nitrogen, Total (EPA Total Nitrogen)	**0.81**		0.50	0.50	mg/L			01/15/24 08:08	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (EPA 350.1)	0.050	U	0.10	0.050	mg/L			01/08/24 10:27	1
Orthophosphate as P (SM 4500 P E-2011)	0.0050	U	0.030	0.0050	mg/L			12/30/23 20:25	1
Phosphorus as PO4 (SM4500 P E-2011)	0.071	U	0.090	0.071	mg/L		01/09/24 10:21	01/09/24 14:08	1
Phosphorus as P (SM4500 P E-2011)	0.023	U	0.030	0.023	mg/L		01/09/24 10:21	01/09/24 14:08	1

Client Sample ID: Upstream
Lab Sample ID: 460-295630-2

Date Collected: 12/29/23 10:30
Matrix: Water
Date Received: 12/29/23 19:00

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide	0.054	U	0.32	0.054	mg/L			12/30/23 13:58	1
Nitrate as N	**0.096**	**J**	0.16	0.070	mg/L			12/30/23 13:58	1

Client Sample ID: Upstream
Lab Sample ID: 460-295630-2
Date Collected: 12/29/23 10:30
Matrix: Water
Date Received: 12/29/23 19:00

Method: EPA 300.0 - Anions, Ion Chromatography (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1.82**		0.32	0.039	mg/L			12/30/23 13:58	1
Nitrate Nitrite as N	**0.096**	**J**	0.16	0.070	mg/L			12/30/23 13:58	1
Nitrite as N	0.023	U	0.16	0.023	mg/L			12/30/23 13:58	1
Sulfate	**4.67**		0.48	0.095	mg/L			12/30/23 13:58	1

Method: SM-Online 2340B-2011 - Total Hardness (as CaCO3) by calculation - SM Online, 2011

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**78.8**		33.1	33.1	mg/L			01/11/24 17:14	1

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000043	U	0.00020	0.000043	mg/L		01/05/24 12:08	01/05/24 17:04	1

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**10.5**		4.0	0.91	ug/L		01/04/24 18:40	01/08/24 10:26	1
Boron	**41.8**	**J**	80.0	30.4	ug/L		01/04/24 18:40	01/08/24 10:26	1
Calcium	**20500**		500	53.6	ug/L		01/04/24 18:40	01/08/24 10:26	1
Copper	**12.1**		4.0	2.5	ug/L		01/04/24 18:40	01/08/24 10:26	1
Lead	0.84	U	1.2	0.84	ug/L		01/04/24 18:40	01/08/24 10:26	1
Magnesium	**6710**		200	46.9	ug/L		01/04/24 18:40	01/08/24 10:26	1
Manganese	**45.2**		8.0	1.5	ug/L		01/04/24 18:40	01/08/24 10:26	1
Nickel	**4.2**		4.0	0.91	ug/L		01/04/24 18:40	01/08/24 10:26	1
Potassium	**1500**		200	112	ug/L		01/04/24 18:40	01/08/24 10:26	1
Selenium	0.59	U	2.5	0.59	ug/L		01/04/24 18:40	01/08/24 10:26	1
Sodium	**2220**		500	219	ug/L		01/04/24 18:40	01/08/24 10:26	1
Strontium	**77.7**		4.0	0.50	ug/L		01/04/24 18:40	01/08/24 10:26	1
Zinc	6.5	U	16.0	6.5	ug/L		01/04/24 18:40	01/08/24 10:26	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**419**		100	35.0	ug/L		01/04/24 05:57	01/04/24 13:40	1
Iron	**537**		50.0	20.0	ug/L		01/04/24 15:07	01/12/24 22:42	1
Lithium	4.9	U	5.0	4.9	ug/L		01/04/24 08:20	01/05/24 13:23	5

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**30.6**	**J**	40.0	19.5	ug/L		01/02/24 23:08	01/03/24 02:07	1
Cadmium	0.15	U	0.50	0.15	ug/L		01/06/24 05:56	01/08/24 18:50	1
Lithium	4.9	U	5.0	4.9	ug/L		01/04/24 08:59	01/05/24 15:36	5
Arsenic	0.89	U	2.0	0.89	ug/L		01/02/24 23:08	01/03/24 02:07	1
Iron	**140**		50.0	20.0	ug/L		01/06/24 05:56	01/08/24 18:50	1
Calcium	**22500**		500	53.6	ug/L		01/02/24 23:08	01/03/24 02:07	1
Zinc	**4.5**	**J**	10.0	4.0	ug/L		01/06/24 05:56	01/08/24 18:50	1
Copper	**3.4**	**J**	4.0	2.5	ug/L		01/02/24 23:08	01/03/24 02:07	1
Iron	58.2	U	120	58.2	ug/L		01/02/24 23:08	01/03/24 02:07	1
Lead	0.84	U	1.2	0.84	ug/L		01/02/24 23:08	01/03/24 02:07	1
Magnesium	**7300**		200	46.9	ug/L		01/02/24 23:08	01/03/24 02:07	1
Manganese	**43.8**		8.0	1.5	ug/L		01/02/24 23:08	01/03/24 02:07	1
Nickel	0.91	U	4.0	0.91	ug/L		01/02/24 23:08	01/03/24 02:07	1

Client Sample ID: Upstream
Lab Sample ID: 460-295630-2

Date Collected: 12/29/23 10:30
Matrix: Water
Date Received: 12/29/23 19:00

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Resistivity (EPA 120.1)	**0.00561**		0.000100	0.000100	Mohm-cm			01/08/24 09:30	1
Specific Conductance (EPA 120.1)	**178**		1.00	1.00	umhos/cm			01/08/24 09:30	1
Acidity (SM 2310B-2011)	20.0	U	20.0	20.0	mg/L			01/11/24 12:49	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-2011)	**77.9**		5.0	5.0	mg/L			01/03/24 11:56	1
Carbonate Alkalinity as CaCO3 (SM 2320B-2011)	5.0	U	5.0	5.0	mg/L			01/03/24 11:56	1
Alkalinity as CaCO3 to pH 4.5 (SM 2320B-2011)	**77.9**		5.0	5.0	mg/L			01/03/24 11:56	1
Total Dissolved Solids (SM 2540C-2015)	**128**		2.5	2.5	mg/L			01/02/24 08:11	1
Total Suspended Solids (SM 2540D-2015)	2.5	U	2.5	2.5	mg/L			01/02/24 07:21	1
Ammonia (EPA 350.1)	0.050	U	0.10	0.050	mg/L			01/08/24 10:12	1
Total Kjeldahl Nitrogen (EPA 351.2)	**0.78**	**J B**	1.0	0.50	mg/L		01/12/24 12:30	01/15/24 10:02	1
Chemical Oxygen Demand (EPA 410.4)	3.3	U	10.0	3.3	mg/L			01/10/24 16:15	1
Oxygen, Dissolved (SM 4500 O C-2016)	**7.3**	**H H3**	1.0	1.0	mg/L			12/30/23 14:30	1
Orthophosphate as P (SM 4500 P E-2011)	0.0050	U	0.030	0.0050	mg/L			12/30/23 20:25	1
Carbonaceous Biochemical Oxygen Demand 5 (SM 5210 B-2016)	1.0	U *+	1.0	1.0	mg/L			12/30/23 14:05	1
pH (SW846 9040C)	**7.8**	**HF**	0.1	0.1	SU			01/10/24 13:27	1
Temperature (SW846 9040C)	**21.9**	**HF**	0.1	0.1	Degrees C			01/10/24 13:27	1
Total Organic Carbon (SW846 9060A)	**3.8**		1.0	0.53	mg/L			01/10/24 11:08	1
Phosphorus as PO4 (SM4500 P E-2011)	**0.19**		0.090	0.071	mg/L		01/09/24 10:21	01/09/24 14:08	1
Phosphorus as P (SM4500 P E-2011)	**0.060**		0.030	0.023	mg/L		01/09/24 10:21	01/09/24 14:08	1
Nitrogen, Total (EPA Total Nitrogen)	**0.88**		0.50	0.50	mg/L			01/16/24 04:49	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (EPA 350.1)	0.050	U	0.10	0.050	mg/L			01/08/24 10:29	1
Orthophosphate as P (SM 4500 P E-2011)	0.0050	U	0.030	0.0050	mg/L			12/30/23 20:25	1
Phosphorus as PO4 (SM4500 P E-2011)	0.071	U	0.090	0.071	mg/L		01/09/24 10:21	01/09/24 14:08	1
Phosphorus as P (SM4500 P E-2011)	0.023	U	0.030	0.023	mg/L		01/09/24 10:21	01/09/24 14:08	1

Client Sample ID: Clarifying Pond
Lab Sample ID: 460-295630-3

Date Collected: 12/29/23 11:30
Matrix: Water
Date Received: 12/29/23 19:00

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide	0.054	U	0.32	0.054	mg/L			12/30/23 14:13	1
Nitrate as N	**0.22**		0.16	0.070	mg/L			12/30/23 14:13	1
Chloride	**0.82**		0.32	0.039	mg/L			12/30/23 14:13	1
Nitrate Nitrite as N	**0.22**		0.16	0.070	mg/L			12/30/23 14:13	1
Nitrite as N	0.023	U	0.16	0.023	mg/L			12/30/23 14:13	1

Client Sample ID: Clarifying Pond
Date Collected: 12/29/23 11:30
Date Received: 12/29/23 19:00

Lab Sample ID: 460-295630-3
Matrix: Water

Method: EPA 300.0 - Anions, Ion Chromatography (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**3.71**		0.48	0.095	mg/L			12/30/23 14:13	1

Method: SM-Online 2340B-2011 - Total Hardness (as CaCO3) by calculation - SM Online, 2011

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**50.7**		33.1	33.1	mg/L			01/11/24 17:14	1

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000043	U	0.00020	0.000043	mg/L		01/05/24 12:08	01/05/24 17:05	1

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**3.6**	**J**	4.0	0.91	ug/L		01/05/24 08:52	01/09/24 14:27	1
Boron	**45.7**	**J**	80.0	30.4	ug/L		01/05/24 08:52	01/09/24 14:27	1
Calcium	**12700**		500	53.6	ug/L		01/05/24 08:52	01/09/24 14:27	1
Copper	**4.8**		4.0	2.5	ug/L		01/05/24 08:52	01/09/24 14:27	1
Lead	0.84	U	1.2	0.84	ug/L		01/05/24 08:52	01/09/24 14:27	1
Magnesium	**4630**		200	46.9	ug/L		01/05/24 08:52	01/09/24 14:27	1
Manganese	**22.1**		8.0	1.5	ug/L		01/05/24 08:52	01/09/24 14:27	1
Nickel	0.91	U	4.0	0.91	ug/L		01/05/24 08:52	01/09/24 14:27	1
Potassium	**1350**		200	112	ug/L		01/05/24 08:52	01/09/24 14:27	1
Selenium	0.59	U	2.5	0.59	ug/L		01/05/24 08:52	01/09/24 14:27	1
Sodium	**2330**		500	219	ug/L		01/05/24 08:52	01/09/24 14:27	1
Strontium	**29.3**		4.0	0.50	ug/L		01/05/24 08:52	01/09/24 14:27	1
Zinc	6.5	U	16.0	6.5	ug/L		01/05/24 08:52	01/09/24 14:27	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**1070**		100	35.0	ug/L		01/04/24 05:57	01/04/24 13:44	1
Iron	**821**		50.0	20.0	ug/L		01/04/24 15:07	01/12/24 22:40	1
Lithium	4.9	U	5.0	4.9	ug/L		01/04/24 08:20	01/05/24 13:26	5

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**51.6**		40.0	19.5	ug/L		01/02/24 23:08	01/03/24 02:12	1
Cadmium	0.15	U	0.50	0.15	ug/L		01/06/24 05:56	01/08/24 18:52	1
Lithium	4.9	U	5.0	4.9	ug/L		01/04/24 08:59	01/05/24 15:39	5
Arsenic	0.89	U	2.0	0.89	ug/L		01/02/24 23:08	01/03/24 02:12	1
Iron	**103**		50.0	20.0	ug/L		01/06/24 05:56	01/08/24 18:52	1
Calcium	**14200**		500	53.6	ug/L		01/02/24 23:08	01/03/24 02:12	1
Zinc	4.0	U	10.0	4.0	ug/L		01/06/24 05:56	01/08/24 18:52	1
Copper	2.5	U	4.0	2.5	ug/L		01/02/24 23:08	01/03/24 02:12	1
Iron	58.2	U	120	58.2	ug/L		01/02/24 23:08	01/03/24 02:12	1
Lead	0.84	U	1.2	0.84	ug/L		01/02/24 23:08	01/03/24 02:12	1
Magnesium	**4470**		200	46.9	ug/L		01/02/24 23:08	01/03/24 02:12	1
Manganese	**9.6**		8.0	1.5	ug/L		01/02/24 23:08	01/03/24 02:12	1
Nickel	0.91	U	4.0	0.91	ug/L		01/02/24 23:08	01/03/24 02:12	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Resistivity (EPA 120.1)	**0.00838**		0.000100	0.000100	Mohm-cm			01/08/24 09:30	1

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill - Anti-Degradation

Job ID: 460-295630-1

Client Sample ID: Clarifying Pond
Date Collected: 12/29/23 11:30
Date Received: 12/29/23 19:00

Lab Sample ID: 460-295630-3
Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance (EPA 120.1)	**119**		1.00	1.00	umhos/cm			01/08/24 09:30	1
Acidity (SM 2310B-2011)	20.0	U	20.0	20.0	mg/L			01/11/24 12:49	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-2011)	**48.2**		5.0	5.0	mg/L			01/03/24 12:02	1
Carbonate Alkalinity as CaCO3 (SM 2320B-2011)	5.0	U	5.0	5.0	mg/L			01/03/24 12:02	1
Alkalinity as CaCO3 to pH 4.5 (SM 2320B-2011)	**48.2**		5.0	5.0	mg/L			01/03/24 12:02	1
Total Dissolved Solids (SM 2540C-2015)	**151**		2.5	2.5	mg/L			01/02/24 08:11	1
Total Suspended Solids (SM 2540D-2015)	**3.1**		2.6	2.6	mg/L			01/02/24 07:21	1
Ammonia (EPA 350.1)	0.050	U	0.10	0.050	mg/L			01/08/24 10:14	1
Total Kjeldahl Nitrogen (EPA 351.2)	0.50	U *+	1.0	0.50	mg/L		01/10/24 10:12	01/11/24 10:37	1
Chemical Oxygen Demand (EPA 410.4)	3.3	U	10.0	3.3	mg/L			01/10/24 16:15	1
Oxygen, Dissolved (SM 4500 O C-2016)	**10.0**	**H**	1.0	1.0	mg/L			12/30/23 14:35	1
Orthophosphate as P (SM 4500 P E-2011)	0.0050	U	0.030	0.0050	mg/L			12/30/23 20:25	1
Carbonaceous Biochemical Oxygen Demand 5 (SM 5210 B-2016)	1.0	U *+	1.0	1.0	mg/L			12/30/23 14:10	1
pH (SW846 9040C)	**7.9**	**HF**	0.1	0.1	SU			01/10/24 13:30	1
Temperature (SW846 9040C)	**22.5**	**HF**	0.1	0.1	Degrees C			01/10/24 13:30	1
Total Organic Carbon (SW846 9060A)	**1.2**		1.0	0.53	mg/L			01/10/24 11:33	1
Phosphorus as PO4 (SM4500 P E-2011)	**0.13**		0.090	0.071	mg/L		01/09/24 10:21	01/09/24 14:08	1
Phosphorus as P (SM4500 P E-2011)	**0.042**		0.030	0.023	mg/L		01/09/24 10:21	01/09/24 14:08	1
Nitrogen, Total (EPA Total Nitrogen)	0.50	U	0.50	0.50	mg/L			01/12/24 06:07	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (EPA 350.1)	0.050	U	0.10	0.050	mg/L			01/08/24 10:30	1
Orthophosphate as P (SM 4500 P E-2011)	0.0050	U	0.030	0.0050	mg/L			12/30/23 20:25	1
Phosphorus as PO4 (SM4500 P E-2011)	0.071	U	0.090	0.071	mg/L		01/09/24 10:21	01/09/24 14:08	1
Phosphorus as P (SM4500 P E-2011)	0.023	U	0.030	0.023	mg/L		01/09/24 10:21	01/09/24 14:08	1

Lab Chronicle

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill - Anti-Degradation

Job ID: 460-295630-1

Client Sample ID: NPDES 001

Date Collected: 12/29/23 08:30
Date Received: 12/29/23 19:00

Lab Sample ID: 460-295630-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		1	952847	OXG	EET EDI	12/30/23 13:43
Total/NA	Analysis	300.0		1	952848	OXG	EET EDI	12/30/23 13:43
Total/NA	Analysis	2340B-2011		1	954432	LBD	EET EDI	01/11/24 17:14
Total/NA	Prep	245.1			697203	NVK	EET BUF	01/05/24 12:08
Total/NA	Analysis	245.1		1	697268	NVK	EET BUF	01/05/24 17:02
Dissolved	Filtration	FILTRATION			656594	MS	EET PEN	01/04/24 08:27
Dissolved	Prep	3005A			656598	MS	EET PEN	01/04/24 08:59 - 01/04/24 09:09 [1]
Dissolved	Analysis	6020B		5	656870	NTH	EET PEN	01/05/24 15:14
Dissolved	Filtration	Filtration			459604	UDL9	ELLE	01/03/24 07:22
Dissolved	Prep	3005A			460956	NU9R	ELLE	01/06/24 05:56
Dissolved	Analysis	6020B		1	461383	UCIG	ELLE	01/08/24 18:48
Dissolved	Filtration	FILTRATION			953118	VAD	EET EDI	01/02/24 23:04
Dissolved	Prep	3010A			953119	VAD	EET EDI	01/02/24 23:08
Dissolved	Analysis	6020B		1	953062	YZH	EET EDI	01/03/24 02:05
Total Recoverable	Prep	3005A			656593	MS	EET PEN	01/04/24 08:20 - 01/04/24 10:56 [1]
Total Recoverable	Analysis	6020B		5	656870	NTH	EET PEN	01/05/24 12:39
Total Recoverable	Prep	3005A			460347	NU9R	ELLE	01/04/24 15:07
Total Recoverable	Analysis	6020B		1	463137	S4PD	ELLE	01/12/24 22:38
Total Recoverable	Prep	3005A			816379	RR	EET SAV	01/04/24 05:57
Total Recoverable	Analysis	6020B		1	816571	BWR	EET SAV	01/04/24 13:48
Total/NA	Prep	3010A			953541	JKF	EET EDI	01/05/24 08:52
Total/NA	Analysis	6020B		1	954020	CDC	EET EDI	01/09/24 14:24
Total/NA	Analysis	120.1		1	953810	HTV	EET EDI	01/08/24 09:30
Total/NA	Analysis	2310B-2011		1	954402	RAK	EET EDI	01/11/24 12:49
Total/NA	Analysis	2320B-2011		1	953226	RXA	EET EDI	01/03/24 11:51
Total/NA	Analysis	2540C-2015		1	952999	PLS	EET EDI	01/02/24 08:11
Total/NA	Analysis	2540D-2015		1	952997	PLS	EET EDI	01/02/24 07:21
Dissolved	Filtration	FILTRATION			953811	AXP	EET EDI	01/08/24 09:49
Dissolved	Analysis	350.1		1	953838	AXP	EET EDI	01/08/24 10:27
Total/NA	Analysis	350.1		1	953838	AXP	EET EDI	01/08/24 10:11
Total/NA	Prep	351.2			461914	NLE3	ELLE	01/10/24 09:14 - 01/10/24 12:14 [1]
Total/NA	Analysis	351.2		1	462580	JCG7	ELLE	01/11/24 13:00
Total/NA	Analysis	410.4		1	954170	HTV	EET EDI	01/10/24 16:15
Total/NA	Analysis	4500 O C-2016		1	952863	RXA	EET EDI	12/30/23 14:25
Dissolved	Filtration	FILTRATION			952886	VBG	EET EDI	12/30/23 19:00
Dissolved	Analysis	4500 P E-2011		1	952887	VBG	EET EDI	12/30/23 20:25
Total/NA	Analysis	4500 P E-2011		1	952887	VBG	EET EDI	12/30/23 20:25
Total/NA	Analysis	5210 B-2016		1	952857	RXA	EET EDI	12/30/23 14:00
Total/NA	Analysis	9040C		1	954229	YAH	EET EDI	01/10/24 13:25
Total/NA	Analysis	9060A		1	954214	MMC	EET EDI	01/10/24 10:42
Dissolved	Filtration	FILTRATION			953978	RAK	EET EDI	01/09/24 10:18
Dissolved	Prep	SM 4500 P B			953990	RAK	EET EDI	01/09/24 10:21
Dissolved	Analysis	SM4500 P E-2011		1	954019	RAK	EET EDI	01/09/24 14:08

Lab Chronicle

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill - Anti-Degradation

Job ID: 460-295630-1

Client Sample ID: NPDES 001

Lab Sample ID: 460-295630-1

Date Collected: 12/29/23 08:30

Matrix: Water

Date Received: 12/29/23 19:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	SM 4500 P B			953990	RAK	EET EDI	01/09/24 10:21
Total/NA	Analysis	SM4500 P E-2011		1	954019	RAK	EET EDI	01/09/24 14:08
Total/NA	Analysis	Total Nitrogen		1	952996	TJW	EET EDI	01/15/24 08:08

Client Sample ID: Upstream

Lab Sample ID: 460-295630-2

Date Collected: 12/29/23 10:30

Matrix: Water

Date Received: 12/29/23 19:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		1	952847	OXG	EET EDI	12/30/23 13:58
Total/NA	Analysis	300.0		1	952848	OXG	EET EDI	12/30/23 13:58
Total/NA	Analysis	2340B-2011		1	954432	LBD	EET EDI	01/11/24 17:14
Total/NA	Prep	245.1			697203	NVK	EET BUF	01/05/24 12:08
Total/NA	Analysis	245.1		1	697268	NVK	EET BUF	01/05/24 17:04
Dissolved	Filtration	FILTRATION			656594	MS	EET PEN	01/04/24 08:27
Dissolved	Prep	3005A			656598	MS	EET PEN	01/04/24 08:59 - 01/04/24 09:09 [1]
Dissolved	Analysis	6020B		5	656870	NTH	EET PEN	01/05/24 15:36
Dissolved	Filtration	Filtration			459604	UDL9	ELLE	01/03/24 07:22
Dissolved	Prep	3005A			460956	NU9R	ELLE	01/06/24 05:56
Dissolved	Analysis	6020B		1	461383	UCIG	ELLE	01/08/24 18:50
Dissolved	Filtration	FILTRATION			953118	VAD	EET EDI	01/02/24 23:04
Dissolved	Prep	3010A			953119	VAD	EET EDI	01/02/24 23:08
Dissolved	Analysis	6020B		1	953062	YZH	EET EDI	01/03/24 02:07
Total Recoverable	Prep	3005A			656593	MS	EET PEN	01/04/24 08:20 - 01/04/24 10:56 [1]
Total Recoverable	Analysis	6020B		5	656870	NTH	EET PEN	01/05/24 13:23
Total Recoverable	Prep	3005A			460347	NU9R	ELLE	01/04/24 15:07
Total Recoverable	Analysis	6020B		1	463137	S4PD	ELLE	01/12/24 22:42
Total Recoverable	Prep	3005A			816379	RR	EET SAV	01/04/24 05:57
Total Recoverable	Analysis	6020B		1	816571	BWR	EET SAV	01/04/24 13:40
Total/NA	Prep	3010A			953466	GAE	EET EDI	01/04/24 18:40
Total/NA	Analysis	6020B		1	953855	LBD	EET EDI	01/08/24 10:26
Total/NA	Analysis	120.1		1	953810	HTV	EET EDI	01/08/24 09:30
Total/NA	Analysis	2310B-2011		1	954402	RAK	EET EDI	01/11/24 12:49
Total/NA	Analysis	2320B-2011		1	953226	RXA	EET EDI	01/03/24 11:56
Total/NA	Analysis	2540C-2015		1	952999	PLS	EET EDI	01/02/24 08:11
Total/NA	Analysis	2540D-2015		1	952997	PLS	EET EDI	01/02/24 07:21
Dissolved	Filtration	FILTRATION			953811	AXP	EET EDI	01/08/24 09:49
Dissolved	Analysis	350.1		1	953838	AXP	EET EDI	01/08/24 10:29
Total/NA	Analysis	350.1		1	953838	AXP	EET EDI	01/08/24 10:12
Total/NA	Prep	351.2			462947	NLE3	ELLE	01/12/24 12:30 - 01/12/24 15:30 [1]
Total/NA	Analysis	351.2		1	463441	JCG7	ELLE	01/15/24 10:02
Total/NA	Analysis	410.4		1	954170	HTV	EET EDI	01/10/24 16:15
Total/NA	Analysis	4500 O C-2016		1	952863	RXA	EET EDI	12/30/23 14:30

Client Sample ID: Upstream

Lab Sample ID: 460-295630-2

Date Collected: 12/29/23 10:30

Matrix: Water

Date Received: 12/29/23 19:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Filtration	FILTRATION			952886	VBG	EET EDI	12/30/23 19:00
Dissolved	Analysis	4500 P E-2011		1	952887	VBG	EET EDI	12/30/23 20:25
Total/NA	Analysis	4500 P E-2011		1	952887	VBG	EET EDI	12/30/23 20:25
Total/NA	Analysis	5210 B-2016		1	952857	RXA	EET EDI	12/30/23 14:05
Total/NA	Analysis	9040C		1	954229	YAH	EET EDI	01/10/24 13:27
Total/NA	Analysis	9060A		1	954214	MMC	EET EDI	01/10/24 11:08
Dissolved	Filtration	FILTRATION			953978	RAK	EET EDI	01/09/24 10:18
Dissolved	Prep	SM 4500 P B			953990	RAK	EET EDI	01/09/24 10:21
Dissolved	Analysis	SM4500 P E-2011		1	954019	RAK	EET EDI	01/09/24 14:08
Total/NA	Prep	SM 4500 P B			953990	RAK	EET EDI	01/09/24 10:21
Total/NA	Analysis	SM4500 P E-2011		1	954019	RAK	EET EDI	01/09/24 14:08
Total/NA	Analysis	Total Nitrogen		1	952996	TJW	EET EDI	01/16/24 04:49

Client Sample ID: Clarifying Pond

Lab Sample ID: 460-295630-3

Date Collected: 12/29/23 11:30

Matrix: Water

Date Received: 12/29/23 19:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		1	952847	OXG	EET EDI	12/30/23 14:13
Total/NA	Analysis	300.0		1	952848	OXG	EET EDI	12/30/23 14:13
Total/NA	Analysis	2340B-2011		1	954432	LBD	EET EDI	01/11/24 17:14
Total/NA	Prep	245.1			697203	NVK	EET BUF	01/05/24 12:08
Total/NA	Analysis	245.1		1	697268	NVK	EET BUF	01/05/24 17:05
Dissolved	Filtration	FILTRATION			656594	MS	EET PEN	01/04/24 08:27
Dissolved	Prep	3005A			656598	MS	EET PEN	01/04/24 08:59 - 01/04/24 09:09 [1]
Dissolved	Analysis	6020B		5	656870	NTH	EET PEN	01/05/24 15:39
Dissolved	Filtration	Filtration			459604	UDL9	ELLE	01/03/24 07:22
Dissolved	Prep	3005A			460956	NU9R	ELLE	01/06/24 05:56
Dissolved	Analysis	6020B		1	461383	UCIG	ELLE	01/08/24 18:52
Dissolved	Filtration	FILTRATION			953118	VAD	EET EDI	01/02/24 23:04
Dissolved	Prep	3010A			953119	VAD	EET EDI	01/02/24 23:08
Dissolved	Analysis	6020B		1	953062	YZH	EET EDI	01/03/24 02:12
Total Recoverable	Prep	3005A			656593	MS	EET PEN	01/04/24 08:20 - 01/04/24 10:56 [1]
Total Recoverable	Analysis	6020B		5	656870	NTH	EET PEN	01/05/24 13:26
Total Recoverable	Prep	3005A			460347	NU9R	ELLE	01/04/24 15:07
Total Recoverable	Analysis	6020B		1	463137	S4PD	ELLE	01/12/24 22:40
Total Recoverable	Prep	3005A			816379	RR	EET SAV	01/04/24 05:57
Total Recoverable	Analysis	6020B		1	816571	BWR	EET SAV	01/04/24 13:44
Total/NA	Prep	3010A			953541	JKF	EET EDI	01/05/24 08:52
Total/NA	Analysis	6020B		1	954020	CDC	EET EDI	01/09/24 14:27
Total/NA	Analysis	120.1		1	953810	HTV	EET EDI	01/08/24 09:30
Total/NA	Analysis	2310B-2011		1	954402	RAK	EET EDI	01/11/24 12:49
Total/NA	Analysis	2320B-2011		1	953226	RXA	EET EDI	01/03/24 12:02
Total/NA	Analysis	2540C-2015		1	952999	PLS	EET EDI	01/02/24 08:11

Lab Chronicle

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill - Anti-Degradation

Job ID: 460-295630-1

Client Sample ID: Clarifying Pond

Date Collected: 12/29/23 11:30
Date Received: 12/29/23 19:00

Lab Sample ID: 460-295630-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	2540D-2015		1	952997	PLS	EET EDI	01/02/24 07:21
Dissolved	Filtration	FILTRATION			953811	AXP	EET EDI	01/08/24 09:49
Dissolved	Analysis	350.1		1	953838	AXP	EET EDI	01/08/24 10:30
Total/NA	Analysis	350.1		1	953838	AXP	EET EDI	01/08/24 10:14
Total/NA	Prep	351.2			461963	NLE3	ELLE	01/10/24 10:12 - 01/10/24 13:12 [1]
Total/NA	Analysis	351.2		1	462580	JCG7	ELLE	01/11/24 10:37
Total/NA	Analysis	410.4		1	954170	HTV	EET EDI	01/10/24 16:15
Total/NA	Analysis	4500 O C-2016		1	952863	RXA	EET EDI	12/30/23 14:35
Dissolved	Filtration	FILTRATION			952886	VBG	EET EDI	12/30/23 19:00
Dissolved	Analysis	4500 P E-2011		1	952887	VBG	EET EDI	12/30/23 20:25
Total/NA	Analysis	4500 P E-2011		1	952887	VBG	EET EDI	12/30/23 20:25
Total/NA	Analysis	5210 B-2016		1	952857	RXA	EET EDI	12/30/23 14:10
Total/NA	Analysis	9040C		1	954229	YAH	EET EDI	01/10/24 13:30
Total/NA	Analysis	9060A		1	954214	MMC	EET EDI	01/10/24 11:33
Dissolved	Filtration	FILTRATION			953978	RAK	EET EDI	01/09/24 10:18
Dissolved	Prep	SM 4500 P B			953990	RAK	EET EDI	01/09/24 10:21
Dissolved	Analysis	SM4500 P E-2011		1	954019	RAK	EET EDI	01/09/24 14:08
Total/NA	Prep	SM 4500 P B			953990	RAK	EET EDI	01/09/24 10:21
Total/NA	Analysis	SM4500 P E-2011		1	954019	RAK	EET EDI	01/09/24 14:08
Total/NA	Analysis	Total Nitrogen		1	952996	TJW	EET EDI	01/12/24 06:07

[1] This procedure uses a method stipulated length of time for the process. Both start and end times are displayed.

Laboratory References:

EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

EET EDI = Eurofins Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

EET PEN = Eurofins Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

EET SAV = Eurofins Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Microbac = Marietta, OH, 158 Starlite Drive, Marietta, OH 45750

Accreditation/Certification Summary

Client: Heidelberg Materials Northeast LLC
Job ID: 460-295630-1
Project/Site: Rock Hill - Anti-Degradation

Laboratory: Eurofins Edison

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Connecticut	State	PH-0818	09-30-24
Georgia	State	12028 (NJ)	06-30-24
Massachusetts	State	M-NJ312	06-30-24
New Jersey	NELAP	12028	06-30-24
New York	NELAP	11452	04-01-24
Pennsylvania	NELAP	68-00522	02-29-24
USDA	US Federal Programs	P330-20-00244	05-31-24

Laboratory: Eurofins Buffalo

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Arkansas DEQ	State	88-0686	07-06-23 *
Connecticut	State	PH-0568	03-31-24
Florida	NELAP	E87672	06-30-23 *
Georgia	State	10026 (NY)	03-31-24
Georgia	State Program	N/A	03-31-09 *
Illinois	NELAP	200003	09-30-23 *
Iowa	State	374	03-01-25
Iowa	State Program	374	03-01-09 *
Kansas	NELAP	E-10187	02-01-24
Kentucky (UST)	State	108092	04-01-24
Kentucky (WW)	State	KY90029	12-31-23 *
Louisiana	NELAP	02031	06-30-23 *
Louisiana (All)	NELAP	02031	06-30-23 *
Maine	State	NY00044	12-04-24
Maryland	State	294	06-30-24
Massachusetts	State	M-NY044	07-01-24
Michigan	State	9937	04-01-24
Michigan	State Program	9937	04-01-09 *
New Hampshire	NELAP	2973	09-11-19 *
New Hampshire	NELAP	2337	11-17-24
New Jersey	NELAP	NY455	06-30-24
New York	NELAP	10026	03-31-24
Pennsylvania	NELAP	68-00281	08-31-24
Rhode Island	State	LAO00378	12-30-23 *
Texas	NELAP	T104704412-18-10	07-31-23 *
USDA	US Federal Programs	P330-18-00039	03-25-24
Virginia	NELAP	460185	09-14-24
Washington	State	C784	02-10-24
Wisconsin	State	998310390	08-31-24

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
A2LA	Dept. of Defense ELAP	0001.01	11-30-24
A2LA	ISO/IEC 17025	0001.01	11-30-24
Alabama	State	43200	01-31-24
Alaska	State	PA00009	06-30-24
Alaska (UST)	State	17-027	02-28-24

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Client: Heidelberg Materials Northeast LLC
Job ID: 460-295630-1
Project/Site: Rock Hill - Anti-Degradation

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC (Continued)

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Arizona	State	AZ0780	03-12-24
Arkansas DEQ	State	88-00660	08-09-24
California	State	2792	01-31-24
Colorado	State	PA00009	06-30-24
Connecticut	State	PH-0746	06-30-25
DE Haz. Subst. Cleanup Act (HSCA)	State	019-006 (PA cert)	01-31-24
Delaware (DW)	State	N/A	01-31-24
Florida	NELAP	E87997	06-30-24
Georgia (DW)	State	C048	01-31-24
Hawaii	State	N/A	01-31-24
Illinois	NELAP	200027	01-31-25
Iowa	State	361	03-01-24
Kansas	NELAP	E-10151	10-31-24
Kentucky (UST)	State	0001.01	11-30-24
Louisiana (All)	NELAP	02055	06-30-24
Maine	State	2019012	03-12-25
Maryland	State	100	06-30-24
Massachusetts	State	M-PA009	06-30-24
Michigan	State	9930	01-31-24
Mississippi	State	023	01-31-25
Missouri	State	450	01-31-25
Montana (DW)	State	0098	01-01-25
Nebraska	State	NE-OS-32-17	01-31-24
New Jersey	NELAP	PA011	06-30-24
New York	NELAP	10670	04-01-24
North Carolina (DW)	State	42705	07-31-24
North Dakota	State	R-205	01-31-24
Oklahoma	NELAP	9804	08-31-24
Oregon	NELAP	PA200001	09-11-24
Pennsylvania	NELAP	36-00037	01-31-24
Quebec Ministry of Environment and Fight against Climate Change	PALA	507	09-16-24
South Carolina	State	89002	01-31-24
Tennessee	State	02838	01-31-24
Texas	NELAP	T104704194-23-46	08-31-24
USDA	US Federal Programs	525-22-298-19481	10-25-25
Vermont	State	VT - 36037	10-28-24
Virginia	NELAP	460182	06-14-25
Washington	State	C457	04-11-24
West Virginia DEP	State	055	07-31-24
Wyoming	State	8TMS-L	01-31-24
Wyoming (UST)	A2LA	0001.01	11-30-24

Laboratory: Eurofins Pensacola

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alabama	State	40150	06-30-24
ANAB	ISO/IEC 17025	L2471	02-22-26
Arkansas DEQ	State	88-00689	08-01-24
California	State	2510	06-30-24

Client: Heidelberg Materials Northeast LLC
Job ID: 460-295630-1
Project/Site: Rock Hill - Anti-Degradation

Laboratory: Eurofins Pensacola (Continued)

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Florida	NELAP	E81010	06-30-24
Georgia	State	E81010(FL)	06-30-24
Illinois	NELAP	200041	10-09-24
Kansas	NELAP	E-10253	10-31-24
Kentucky (UST)	State	53	06-30-24
Louisiana (All)	NELAP	30976	06-30-24
Louisiana (DW)	State	LA017	12-31-24
North Carolina (WW/SW)	State	314	12-31-24
Oklahoma	NELAP	9810	08-31-24
Pennsylvania	NELAP	68-00467	01-31-24
South Carolina	State	96026	06-30-24
Tennessee	State	TN02907	06-30-24
Texas	NELAP	T104704286	09-30-24
US Fish & Wildlife	US Federal Programs	A22340	06-30-24
USDA	US Federal Programs	FLGNV23001	01-08-26
USDA	US Federal Programs	P330-21-00056	05-17-24
Virginia	NELAP	460166	06-14-24
West Virginia DEP	State	136	03-31-24
West Virginia DEP	State	136	03-31-24

Laboratory: Eurofins Savannah

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
	AFCEE	SAVLAB	
Alabama	State	41450	06-30-24
ANAB	Dept. of Defense ELAP	L2463	09-22-24
Arkansas (DW)	State	GA00006	06-30-24
Arkansas DEQ	State	19-015-0	02-01-24
California	State	2939	06-30-24
Florida	NELAP	E87052	06-30-24
Georgia	State	E87052	06-30-24
Georgia (DW)	State	803	06-30-24
Guam	State	19-007R	04-17-24
Hawaii	State	<cert No.>	06-30-24
Illinois	NELAP	200022	11-30-24
Indiana	State	C-GA-02	06-30-24
Iowa	State	353	07-01-25
Kentucky (UST)	State	NA	06-30-24
Louisiana	NELAP	30690	06-30-24
Louisiana (All)	NELAP	30690	06-30-24
Louisiana (DW)	State	LA009	12-31-24
Maine	State	GA00006	09-25-24
Maryland	State	250	12-31-24
Massachusetts	State	M-GA006	06-30-24
Michigan	State	9925	06-30-24
Mississippi	State	<cert No.>	06-30-24
Nebraska	State	NE-OS-7-04	06-30-24
New Jersey	NELAP	GA769	06-30-24
New Mexico	State	GA00006	06-30-24

Accreditation/Certification Summary

Client: Heidelberg Materials Northeast LLC
Job ID: 460-295630-1
Project/Site: Rock Hill - Anti-Degradation

Laboratory: Eurofins Savannah (Continued)

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
North Carolina (DW)	State	13701	07-31-24
North Carolina (WW/SW)	State	269	01-12-24
Pennsylvania	NELAP	68-00474	06-30-24
Puerto Rico	State	GA00006	01-01-25
South Carolina	State	98001	06-30-24
Tennessee	State	TN02961	06-30-24
Texas	NELAP	T1047004185	11-30-24
Texas	TCEQ Water Supply	T104704185	06-30-24
USDA	US Federal Programs	P330-18-00313	09-03-24
Virginia	NELAP	460161	06-14-24
Wyoming	State	8TMS-L	06-30-24

Method Summary

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill - Anti-Degradation

Job ID: 460-295630-1

Method	Method Description	Protocol	Laboratory
300.0	Anions, Ion Chromatography	EPA	EET EDI
2340B-2011	Total Hardness (as CaCO3) by calculation - SM Online, 2011	SM-Online	EET EDI
245.1	Mercury (CVAA)	EPA	EET BUF
6020B	Metals (ICP/MS)	SW846	EET EDI
6020B	Metals (ICP/MS)	SW846	EET PEN
6020B	Metals (ICP/MS)	SW846	EET SAV
6020B	Metals (ICP/MS)	SW846	ELLE
120.1	Conductivity, Specific Conductance	EPA	EET EDI
2310B-2011	Acidity	SM	EET EDI
2320B-2011	Alkalinity, Total	SM	EET EDI
2540C-2015	Total Dissolved Solids (Dried at 180 °C)	SM	EET EDI
2540D-2015	Total Suspended Solids (Dried at 103-105°C)	SM	EET EDI
350.1	Nitrogen, Ammonia	EPA	EET EDI
351.2	Nitrogen, Total Kjeldahl	EPA	ELLE
410.4	COD	EPA	EET EDI
4500 O C-2016	Oxygen, Dissolved	SM	EET EDI
4500 P E-2011	Orthophosphate	SM	EET EDI
5210 B-2016	BOD, 5-Day	SM	EET EDI
9040C	pH	SW846	EET EDI
9060A	Organic Carbon, Total (TOC)	SW846	EET EDI
SM4500 P E-2011	Phosphorus	SM	EET EDI
Total Nitrogen	Nitrogen, Total	EPA	EET EDI
Subcontract	Osomotic Pressure	None	Microbac
245.1	Preparation, Mercury	EPA	EET BUF
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	EET PEN
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	EET SAV
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	ELLE
3010A	Preparation, Total Metals	SW846	EET EDI
351.2	Nitrogen, Total Kjeldahl	EPA	ELLE
FILTRATION	Sample Filtration	None	EET EDI
FILTRATION	Sample Filtration	None	EET PEN
Filtration	Sample Filtration	None	ELLE
SM 4500 P B	Phosphorous, Total and Ortho	SM	EET EDI

Protocol References:

EPA = US Environmental Protection Agency
None = None
SM = "Standard Methods For The Examination Of Water And Wastewater"
SM-Online = Standard Methods Online
SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600
EET EDI = Eurofins Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900
EET PEN = Eurofins Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001
EET SAV = Eurofins Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858
ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300
Microbac = Marietta, OH, 158 Starlite Drive, Marietta, OH 45750

Sample Summary

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill - Anti-Degradation

Job ID: 460-295630-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
460-295630-1	NPDES 001	Water	12/29/23 08:30	12/29/23 19:00
460-295630-2	Upstream	Water	12/29/23 10:30	12/29/23 19:00
460-295630-3	Clarifying Pond	Water	12/29/23 11:30	12/29/23 19:00

Microbac Laboratories Inc., - Marietta, OH

Client Project ID:

46011424

For:

Julie Gilmore

Eurofins TestAmerica Edison

777 New Durham RD

Edison, NJ 08817

Project State of Origin: Pennsylvania

Project Requested Certification:

Microbac Laboratories Inc., - Marietta, OH	68-01670	PA Department of Environmental Protection

All test results meet the requirements of the QAPP and other applicable contract terms and conditions. Any exceptions are attached to this cover page or addressed in the method narratives presented in the report. All results for soil samples are reported on a 'dry-weight' basis unless specified otherwise. Analytical results for water and wastes are reported on a 'as received' basis unless specified otherwise. A statement of uncertainty for each analysis is available upon request. The reported results are related only to the samples analyzed as received. This laboratory report may be released as a hardcopy and in computer-readable form submitted electronically or on diskette. This laboratory report shall not be reproduced, except in full, without the written approval of Microbac Laboratories, Inc.

Laboratory Project Manager:

Michelle Taylor

Project Manager

Michelle.Taylor@microbac.com

Authorized By:

Michelle Taylor

Project Manager

Issued: 01/09/2024

MICROBAC®

Laboratory Report Number: M4A0156

Client Project ID: 46011424

Cooler Receipt Log

Cooler ID: Default Cooler Temp: 2.3°C

Cooler Inspection Checklist

Ice Present or not required?	Yes
Shipping containers sealed or not required?	Yes
Custody seals intact or not required?	Yes
Chain of Custody (COC) Present?	Yes
COC includes customer information?	Yes
Relinquished and received signature on COC?	Yes
Sample collector identified on COC?	Yes
Sample type identified on COC?	Yes
Correct type of Containers Received	No
Correct number of containers listed on COC?	Yes
Containers Intact?	Yes
COC includes requested analyses?	Yes
Enough sample volume for indicated tests received?	Yes
Sample labels match COC (Name, Date & Time?)	Yes
Samples arrived within hold time?	Yes
Correct preservatives on COC or not required?	Yes
Chemical preservations checked or not required?	Yes
Preservation checks meet method requirements?	Yes
VOA vials have zero headspace, or not recd.?	Yes

Laboratory Report Number: M4A0156

Client Project ID: 46011424

Case Narrative

OP received in poly 250

Laboratory Report Number: M4A0156

Client Project ID: 46011424

Sample Notes

PADEP 391-2000-008

A4 **Sample was received with head space.**

Osmotic Pressure

M4A0156-01	NPDES 001 (460-295630-1)	M4A0156-02	Upstream (460-295630-2)
M4A0156-03	Clarifying Pond (460-295630-3)		

Laboratory Report Number: M4A0156

Client Project ID: 46011424

Microbac Laboratories Inc., - Marietta, OH

CERTIFICATE OF ANALYSIS

Client ID:	NPDES 001 (460-295630-1)			**Collection Date:**	12/29/2023 08:30
Laboratory ID:	M4A0156-01			**Prep Date:**	01/05/2024 14:56
Matrix:	Aqueous			**Analyzed:**	01/05/2024 15:56
Batch / Sequence:	B4A0239 /	**Analytical Method:**	PADEP 391-2000-008	**Calibration:**	NA
Instrument:	OSMOMETER 5004	**Units:**	mOsm/kg	**File ID:**	OsmoticPressure_B4A0239_240105035606.xls
Analyst:	TSD	**Dilution:**	1		

Analyte	CAS Number	Result	MDL	RL	Flag	Qualifier
Osmotic Pressure		8.00	6.00	10.0		A4

MICROBAC®

Laboratory Report Number: M4A0156

Client Project ID: 46011424

Microbac Laboratories Inc., - Marietta, OH

CERTIFICATE OF ANALYSIS

Client ID:	Upstream (460-295630-2)			**Collection Date:**	12/29/2023 10:30
Laboratory ID:	M4A0156-02			**Prep Date:**	01/05/2024 14:56
Matrix:	Aqueous			**Analyzed:**	01/05/2024 15:56
Batch / Sequence:	B4A0239 /	**Analytical Method:**	PADEP 391-2000-008	**Calibration:**	NA
Instrument:	OSMOMETER 5004	**Units:**	mOsm/kg	**File ID:**	OsmoticPressure_B4A0239_240105035606.xls
Analyst:	TSD	**Dilution:**	1		

Analyte	CAS Number	Result	MDL	RL	Flag	Qualifier
Osmotic Pressure		ND	6.00	10.0		A4

Laboratory Report Number: M4A0156

Client Project ID: 46011424

Microbac Laboratories Inc., - Marietta, OH

CERTIFICATE OF ANALYSIS

Client ID:	Clarifying Pond (460-295630-3)			**Collection Date:**	12/29/2023 11:30
Laboratory ID:	M4A0156-03			**Prep Date:**	01/05/2024 14:56
Matrix:	Aqueous			**Analyzed:**	01/05/2024 15:56
Batch / Sequence:	B4A0239 /	**Analytical Method:**	PADEP 391-2000-008	**Calibration:**	NA
Instrument:	OSMOMETER 5004	**Units:**	mOsm/kg	**File ID:**	OsmoticPressure_B4A0239_240105035606.xls
Analyst:	TSD	**Dilution:**	1		

Analyte	CAS Number	Result	MDL	RL	Flag	Qualifier
Osmotic Pressure		ND	6.00	10.0		A4

Laboratory Report Number: M4A0156

Client Project ID: 46011424

Notes and Definitions

A4: Sample was received with head space.
MDL: Method Detection Limit
RL: Reporting Limit

MICROBAC®

Laboratory Report Number: M4A0156

Client Project ID: 46011424

METHOD BLANKS

Sample ID:	B4A0239-BLK1	**Prep Date:**	01/05/24 14:56	**Matrix:**	Aqueous
Instrument:	OSMOMETER 5004	**Analyzed:**	01/05/24 15:56	**Method:**	PADEP 391-2000-008
File ID:	OsmoticPressure_B4A(	**Sequence:**		**Analyst:**	TSD
Batch:	B4A0239	**Units:**	mOsm/kg	**Calibration:**	

Analyte	Result	MDL	RL	Dilution	Flag	Q
Osmotic Pressure	6.00	6.00	10.0	1	U	

* - Detected in the associated method Blank at a concentration >= RL

Laboratory Report Number: M4A0156

Client Project ID: 46011424

BLANK SPIKE / DUPLICATE (BS/BSD)

Method:	PADEP 391-2000-008		**Blank Spike**	**Duplicate**
Batch:	B4A0239	**Spike ID:**	B4A0239-BS1	B4A0239-BSD1
Analyst:	TSD	**Prepared:**	01/05/24 14:56	01/05/24 14:56
Matrix:	Aqueous	**Analyzed:**	01/05/24 15:56	01/05/24 15:56
Units:	mOsm/kg	**File ID:**	OsmoticPressure_B4A0239_2401	OsmoticPressure_B4A0239_2401
Instrument:	OSMOMETER 5004	**Initial/Final:**	1mL/1mL	1mL/1mL
Calibration:				

Analyte	BS Spiked	BS Found	BS %Rec	BSD Spiked	BSD Found	BSD %Rec	%RPD	%Rec Limts	RPD Limit	Q
Osmotic Pressure	290	299	103	290	296	102	1.01	90 - 110	20	

* - Does not meet %Rec acceptance criteria.
- Does not meet RPD acceptance criteria.

Eurofins Edison
777 New Durham Road
Edison, NJ 08817
Phone: 732-549-3900 Fax: 732-549-3679

Chain of Custody Record

eurofins | Environment Testing

1/16/2024

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Gilmore, Julie L	Carrier Tracking No(s):	COC No: 460-70131.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Julie.Gilmore@et.eurofinsus.com	State of Origin: Pennsylvania	Page: Page 1 of 1
Company: Microbac Laboratories, Inc.		Accreditations Required (See note): NELAP - Pennsylvania		Job #: 460-295630-1
Address: 158 Starlite Drive, ,	Due Date Requested: 1/11/2024			
City: Marietta	TAT Requested (days):			
State, Zip: OH, 45750				
Phone: 800-373-4071(Tel)	PO #:			
Email:	WO #:			
Project Name: Rock Hill - Anti-Degradation	Project #: 46011424			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify), Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	SUB (Osomotic Pressure)/ Osomotic Pressure	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
NPDES 001 (460-295630-1)	12/29/23	08:30 Eastern		Water			X	1	
Upstream (460-295630-2)	12/29/23	10:30 Eastern		Water			X	1	
Clarifying Pond (460-295630-3)	12/29/23	11:30 Eastern		Water			X	1	

M 4 A 0 1 5 6

Eurofins TestAmerica Edison
Rec'd: 01/03/2024 11:10
By: Stephanie Murphy Temp: 2.3 (Signature)

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Northeast, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Northeast, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Northeast, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Northeast, LLC.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 1	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		1/2/24 1900	EET EL			
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
3	Relinquished by:	Date/Time:	Company	Received by: Stephanie Murphy	Date/Time: 1/3/2024 1110	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks:

MICROBAC®

Work Order # MMA0156

COOLER TEMP >6° C LOG

SAMPLE ID	Bottle 1 °C	Bottle 2 °C	Bottle 3 °C	Bottle 4 °C	Bottle 5 °C	Bottle 6 °C

1/3/2024 SM

pH Lot # N/A

pH Exceptions

SAMPLE ID	Bottle 1	Bottle 2	Bottle 3	Bottle 4	Bottle 5	Bottle 6

1/3/2024 SM

PRESERVATIVE EXCEPTIONS

✓ NONE

__ AS NOTED

1/3/2024 SM

Document Control # 1957
Last 04-10-2019

Issued to: Document Master File

Eurofins Edison
777 New Durham Road
Edison, NJ 08817
Phone: 732-549-3900 Fax: 732-549-3679

450-KOP

Chain of Custody Record

2-6 ~
3 1 ~ KOP 2

eurofins

Client Information	Sampler: EZG	Lab PM: Gilmore, Julie L	Carrier Tracking No(s):	COC No: 460-176899-115848.1
Client Contact: Andrew Gutshall	Phone:	E-Mail: Julie.Gilmore@et.eurofinsus.com	State of Origin:	Page: Page 1 of 2
Company: Heidelberg Materials Northeast LLC	PWSID:			Job #: 295630
Address: 7660 Imperial Way	Due Date Requested:			
City: Allentown	TAT Requested (days):			
State, Zip: PA, 18195	Compliance Project: Δ Yes Δ No			
Phone: 610-366-4819(Tel)	PO #: Purchase Order not required			
Email: andrew.gutshall@heidelbergmaterials.com	WO #:			
Project Name: Rock Hill Anti-Degradation	Project #: 46011424			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:
A HCL, B NaOH, C Zn Acetate, D Nitric Acid, E NaHSO4, F MeOH, G Amchlor, H Ascorbic Acid, I Ice, J DI Water, K EDTA, L EDA, M Hexane, N None, O AsNaO2, P Na2O4S, Q Na2SO3, R Na2S2O3, S H2SO4, T TSP Dodecahydrate, U Acetone, V MCAA, W pH 4-5, Y Trizma, Z other (specify)
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020B (MOD) Single Element 6020B Metals List N	6020B (MOD) Single Element 6020B Metals List D	351.2 Local Method S	6020B Dissolved Cd/Fe/Zn N	6020B (MOD) Total Fe D	350.1, 410.4, 4500_P_E S	120.1 9040C, SM2310B N	350.1, 4500_P_E, 6020B N	2320B (MOD) Alkalinity N	6020B (MOD) Total Custom Metals D	9060A TOC S	2540D, SM5210B_Calc N	4500_P_E_Ortho Dissolved Orthophosphate N	Total Number of containers	Special Instructions/Note:
			Preservation Code:																		
NPDES 001	12/29/23	0830	G	Water			/	/	/	/	/	/	/	/	/	/	/	/	/	1	1
Basin 1 NO flow NO Sample				Water																	
Basin 2 NO flow NO Sample				Water																	
Upstream	12/29/23	1035	G	Water			/	/	/	/	/	/	/	/	/	/	/	/	-	2	2
Clarifying Pond	12/29/23	1130	G	Water			/	/	/	/	/	/	/	/	/	/	/	/	/	3	3

460-295630 Chain of Custody

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II III IV Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
[signature]	12/29/23 1230		[signature]	12/29/23 1230	EETN-KOP
[signature]	12-29-23 16:25	EETN-KOP	[signature]	12/29	
[signature]	12/29 1900		[signature]	12/29/23 1900	EETG

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.

Cooler Temperature(s) °C and Other Remarks:

Ver 06/08/2021

1/16/2024

Eurofins Edison
777 New Durham Road
Edison, NJ 08817
Phone: 732-549-3900 Fax: 732-549-3679

450 603

Chain of Custody Record

2 6 °
3.1 Cool 2

eurofins

Client Information	Sampler	Lab PM: Gilmore, Julie L	Carrier Tracking No(s):	COC No: 460-176899-115848.2
Client Contact: Andrew Gutshall	Phone:	E-Mail: Julie.Gilmore@et.eurofinsus.com	State of Origin:	Page: Page 2 of 2
Company: Heidelberg Materials Northeast LLC	PWSID:			Job #: 29563 D
Address: 7660 Imperial Way	Due Date Requested:			
City: Allentown	TAT Requested (days):			
State, Zip: PA, 18195	Compliance Project: Δ Yes Δ No			
Phone: 610-366-4819(Tel)	PO #: Purchase Order not required			
Email: andrew.gutshall@heidelbergmaterials.com	WO #:			
Project Name: Rock Hill Anti-Degradation	Project #: 46011424			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:
A HCL, B NaOH, C Zn Acetate, D Nitric Acid, E NaHSO4, F MeOH, G Amchlor, H Ascorbic Acid, I Ice, J DI Water, K EDTA, L EDA, M Hexane, N None, O AsNaO2, P Na2O4S, Q Na2SO3, R Na2S2O3, S H2SO4, T TSP Dodecahydrate, U Acetone, V MCAA, W pH 4-5, Y Trizma, Z other (specify)
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	4500_P_E_Ortho Total Orthophosphate	2540C TDS	300_ORGFM_28D, 300_ORGFMS	245.1 Local Method	6020B Total Aluminum	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	N	D	D		
NPDES 001	12/29/23	0830	G	Water			/	/	/	/	/		1
Basin 1 No flow no sample				Water									
Basin 2 No flow no sample				Water									
Upstream	12/29/23	1035	G	Water			/	/	/	/	/		2
Clarifying Pond	12/29/23	1130	G	Water			/	/	/	/	/		3

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III IV Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	12/29/23 1230			12/29/23 1230	EETN-KOP
Relinquished by:	Date/Time: 12-29-23 1625	Company EETN-KOP	Received by:	Date/Time: 12/29	Company
Relinquished by:	Date/Time: 12/29 1900	Company	Received by:	Date/Time: 12/29/23 1900	Company EETB

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.

Cooler Temperature(s) °C and Other Remarks:

Ver: 06/08/2021

1/16/2024

Eurofins **TestAmerica Edison**

Receipt Temperature and pH Log

Job Number: 295630

Number of Coolers: 2 IR Gun # 2

Cooler Temperatures

	RAW	CORRECTED		RAW	CORRECTED		RAW	CORRECTED
Cooler #1:	2.6 °C	2.6 °C	Cooler #4:	°C	°C	Cooler #7:	°C	°C
Cooler #2:	3.1 °C	3.1 °C	Cooler #5:	°C	°C	Cooler #8:	°C	°C
Cooler #3:	°C	°C	Cooler #6:	°C	°C	Cooler #9:	°C	°C

TALS Sample Number	Ammonia (pH<2)	COD (pH<2)	Nitrate Nitrite (pH<2)	Metals* (pH<2)	Hardness (pH<2)	Pest (pH 5-9)	EPH or QAM (pH<2)	Phenols (pH<2)	Sulfide (pH>9)	TKN (pH<2)	TOC (pH<2)	Total Cyanide (pH>12)	Total Phos (pH<2)	Other	Other
1	✓	✓		✓						✓	✓	-	✓		
2	✓	✓		✓						✓	✓		✓		
3	✓	✓		✓						✓	✓		✓		

If pH adjustments are required record the information below*

Sample No(s). adjusted. _____

Preservative Name/Conc._____ Volume of Preservative used (ml): _____

Lot # of Preservative(s): _____ Expiration Date: _____

The appropriate Project Manager and Department Manager should be notified about the samples which were pH adjusted

Samples for Metal analysis which are out of compliance must be acidified at least 24 hours prior to analysis.

Initials. _____ Date: 12/29/23

Eurofins Edison
777 New Durham Road
Edison, NJ 08817
Phone: 732-549-3900 Fax: 732-549-3679

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Gilmore, Julie L	Carrier Tracking No(s):	COC No: 460-70129.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Julie.Gilmore@et.eurofinsus.com	State of Origin: Pennsylvania	Page: Page 1 of 1
Company: Eurofins Environment Testing Southeast,		Accreditations Required (See note): NELAP - Pennsylvania		Job #: 460-295630-1
Address: 3355 McLemore Drive, ,	Due Date Requested: 1/12/2024			
City: Pensacola	TAT Requested (days):			
State, Zip: FL, 32514				
Phone: 850-474-1001(Tel) 850-478-2671(Fax)	PO #:			
Email:	WO #:			
Project Name: Rock Hill - Anti-Degradation	Project #: 46011424			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020B/3005A (MOD) Single Element 6020B Metals List	6020B/FILTRATION (MOD) Single Element 6020B Metals List	Total Number of containers	Special Instructions/Note:
			Preservation Code:							
NPDES 001 (460-295630-1)	12/29/23	08:30 Eastern		Water			X	X	2	
Upstream (460-295630-2)	12/29/23	10:30 Eastern		Water			X	X	2	
Clarifying Pond (460-295630-3)	12/29/23	11:30 Eastern		Water			X	X	2	

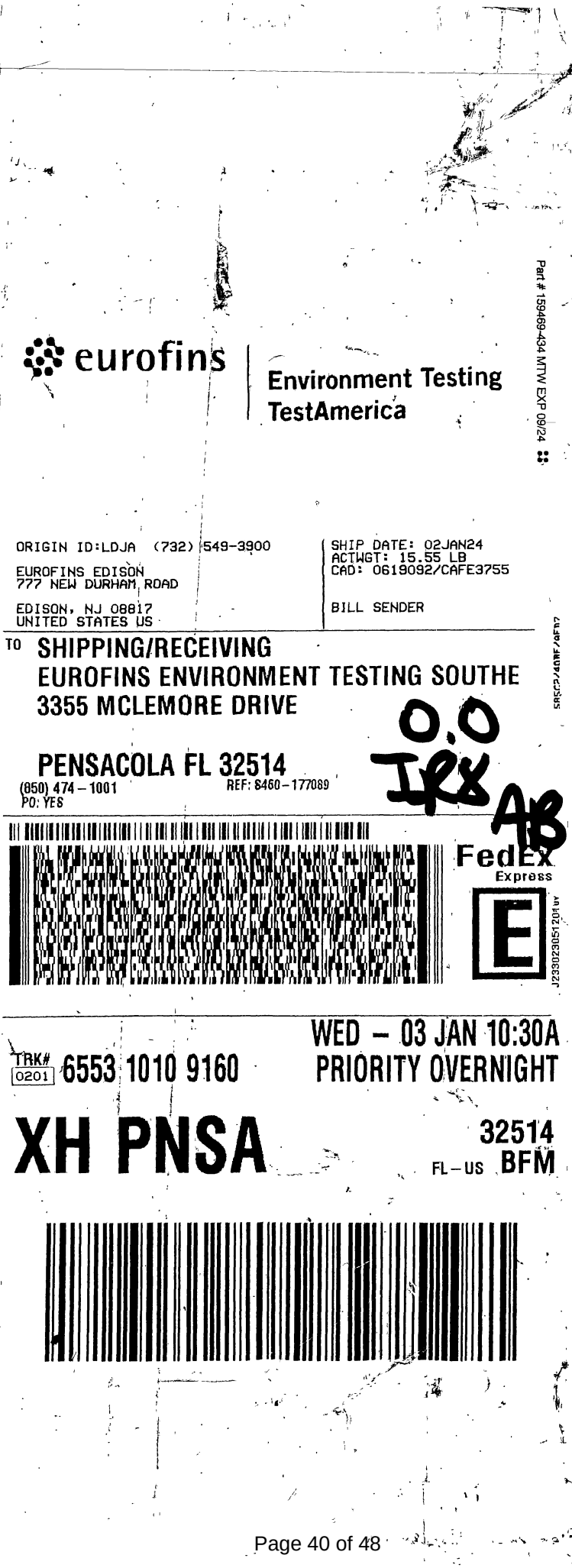
Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Northeast, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Northeast, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Northeast, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Northeast, LLC.

Possible Hazard Identification	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)***
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 1	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	[signature]	1/2/24 1900	EET SL			
	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	Relinquished by:	Date/Time:	Company	Received by: [signature]	Date/Time: 1-3-23 10:00	Company

Custody Seals Intact: ∆ Yes ∆ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 0.0 IR8



eurofins | Environment Testing TestAmerica

Part # 159469-434 MTW EXP 09/24

ORIGIN ID:LDJA (732) 549-3900
EUROFINS EDISON
777 NEW DURHAM ROAD
EDISON, NJ 08817
UNITED STATES US

SHIP DATE: 02JAN24
ACTWGT: 15.55 LB
CAD: 0619092/CAFE3755

BILL SENDER

TO SHIPPING/RECEIVING
EUROFINS ENVIRONMENT TESTING SOUTHE
3355 MCLEMORE DRIVE

PENSACOLA FL 32514
(850) 474-1001
PO: YES
REF: 8460-177089

0.0
IRS
AB

FedEx Express

TRK# 0201 6553 1010 9160

WED - 03 JAN 10:30A
PRIORITY OVERNIGHT

XH PNSA

32514
FL-US BFM

Eurofins Edison
777 New Durham Road
Edison, NJ 08817
Phone: 732-549-3900 Fax: 732-549-3679

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Gilmore, Julie L	Carrier Tracking No(s):	COC No: 460-70121.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Julie.Gilmore@et.eurofinsus.com	State of Origin: Pennsylvania	Page: Page 1 of 1
Company: Eurofins Lancaster Laboratories Environm		Accreditations Required (See note): NELAP - Pennsylvania		Job #: 460-295630-1
Address: 2425 New Holland Pike, ,	Due Date Requested: 1/15/2024			
City: Lancaster	TAT Requested (days):			
State, Zip: PA, 17601				
Phone: 717-656-2300(Tel)	PO #:			
Email:	WO #:			
Project Name: Rock Hill - Anti-Degradation	Project #: 46011424			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify), Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020B/3005A (MOD) Total Fe	6020B/Filtration_ME Dissolved Cd/Fe/Zn	351.2/351.2_Prep	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
NPDES 001 (460-295630-1)	12/29/23	08:30 Eastern		Water			X	X	X	3	
Upstream (460-295630-2)	12/29/23	10:30 Eastern		Water			X	X	X	3	
Clarifying Pond (460-295630-3)	12/29/23	11:30 Eastern		Water			X	X	X	3	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Northeast, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Northeast, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Northeast, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Northeast, LLC.

Possible Hazard Identification	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 1	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
1		1/2/24 1610	ET		1/2/24 1610	ET
2		1/2/24 1912	ET			
3					1/2/24 1912	ET

Custody Seals Intact: ∧ Yes ∧ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: raw. 3.5 corr. 2.9

Eurofins Edison
777 New Durham Road
Edison, NJ 08817
Phone: 732-549-3900 Fax: 732-549-3679

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Gilmore, Julie L	Carrier Tracking No(s):	COC No: 460-70130.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Julie.Gilmore@et.eurofinsus.com	State of Origin: Pennsylvania	Page: Page 1 of 1
Company: Eurofins Environment Testing Northeast,		Accreditations Required (See note): NELAP - Pennsylvania		Job #: 460-295630-1
Address: 10 Hazelwood Drive, ,	Due Date Requested: 1/10/2024			
City: Amherst	TAT Requested (days):			
State, Zip: NY, 14228-2298				
Phone: 716-691-2600(Tel) 716-691-7991(Fax)	PO #:			
Email:	WO #:			
Project Name: Rock Hill - Anti-Degradation	Project #: 46011424			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)
Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	245.1/245.1_Prep	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
NPDES 001 (460-295630-1)	12/29/23	08:30 Eastern		Water			X	1	
Upstream (460-295630-2)	12/29/23	10:30 Eastern		Water			X	1	
Clarifying Pond (460-295630-3)	12/29/23	11:30 Eastern		Water			X	1	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Northeast, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Northeast, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Northeast, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Northeast, LLC.

Possible Hazard Identification: Unconfirmed	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month): ☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 1	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	[signature]	1/2/24 1900	EETE	[signature]	1-3-24 1030	TAB
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 2.3 ICE

Eurofins Edison
777 New Durham Road
Edison, NJ 08817
Phone: 732-549-3900 Fax: 732-549-3679

Chain of Custody Record

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Client Information (Sub Contract Lab)	Sampler:	Lab PM: Gilmore, Julie L	Carrier Tracking No(s):	COC No: 460-70128.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Julie.Gilmore@et.eurofinsus.com	State of Origin: Pennsylvania	Page: Page 1 of 1
Company: Eurofins Environment Testing Southeast,		Accreditations Required (See note): NELAP - Pennsylvania		Job #: 460-295630-1
Address: 5102 LaRoche Avenue, ,	Due Date Requested: 1/11/2024			
City: Savannah	TAT Requested (days):			
State, Zip: GA, 31404				
Phone: 912-354-7858(Tel) 912-352-0165(Fax)	PO #:			
Email:	WO #:			
Project Name: Rock Hill - Anti-Degradation	Project #: 46011424			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020B/3005A Total Aluminum	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
NPDES 001 (460-295630-1)	12/29/23	08:30 Eastern		Water			X	1	
Upstream (460-295630-2)	12/29/23	10:30 Eastern		Water			X	1	
Clarifying Pond (460-295630-3)	12/29/23	11:30 Eastern		Water			X	1	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Northeast, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Northeast, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Northeast, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Northeast, LLC.

Possible Hazard Identification	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 1	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	1/2/24 1900	Eurofins		1-3-24 0916	
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: ∆ Yes ∆ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 1.9/22

Login Sample Receipt Checklist

Client: Heidelberg Materials Northeast LLC

Job Number: 460-295630-1

Login Number: 295630

List Source: Eurofins Edison

List Number: 1

Creator: Rivera, Kenneth

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	False	Refer to Job Narrative for details.
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Heidelberg Materials Northeast LLC

Job Number: 460-295630-1

Login Number: 295630
List Number: 4
Creator: Yeager, Brian A

List Source: Eurofins Buffalo
List Creation: 01/03/24 12:19 PM

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	2.3 ICE
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	True	

Login Sample Receipt Checklist

Client: Heidelberg Materials Northeast LLC

Job Number: 460-295630-1

Login Number: 295630
List Number: 2
Creator: Metzger, Katherine A

List Source: Eurofins Lancaster Laboratories Environment Testing, LLC
List Creation: 01/02/24 08:05 PM

Question	Answer	Comment
The cooler's custody seal is intact.	N/A	Not present
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature acceptable,where thermal pres is required(</=6C, not frozen).	True	
Cooler Temperature is recorded.	True	
WV:Container Temp acceptable,where thermal pres is required (</=6C, not frozen).	N/A	
WV: Container Temperature is recorded.	N/A	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the containers received and the COC.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
There is sufficient vol. for all requested analyses.	True	
Is the Field Sampler's name present on COC?	False	Received project as a subcontract.
Sample custody seals are intact.	N/A	Not present.
VOA sample vials do not have headspace >6mm in diameter (none, if from WV)?	N/A	

Login Sample Receipt Checklist

Client: Heidelberg Materials Northeast LLC

Job Number: 460-295630-1

Login Number: 295630
List Number: 3
Creator: Roberts, Alexis J

List Source: Eurofins Pensacola
List Creation: 01/03/24 10:50 AM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	0.0°C IR8
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Heidelberg Materials Northeast LLC

Job Number: 460-295630-1

Login Number: 295630
List Number: 5
Creator: Stewart, Rendaisha

List Source: Eurofins Savannah
List Creation: 01/03/24 02:31 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Lab Results

January 11, 2024

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ANALYTICAL REPORT

PREPARED FOR

Attn: Katie Murray
Heidelberg Materials Northeast LLC
7660 Imperial Way
Allentown, Pennsylvania 18195

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JOB DESCRIPTION

Rock Hill - Anti-degradation

JOB NUMBER

460-296287-1

Eurofins Edison
777 New Durham Road
Edison NJ 08817

See page two for job notes and contact information.

my EOL

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing Northeast, LLC Project Manager.

Authorization



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Authorized for release by
Julie Gilmore, Project Manager I
Julie.Gilmore@et.eurofinsus.com
(484)685-0865

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Client: Heidelberg Materials Northeast LLC
Job ID: 460-296287-1
Project/Site: Rock Hill - Anti-degradation

Qualifiers

HPLC/IC

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

General Chemistry

Qualifier	Qualifier Description
H	Sample was prepped or analyzed beyond the specified holding time. This does not meet regulatory requirements.
H3	Sample was received and analyzed past holding time. This does not meet regulatory requirements.
HF	Parameter with a holding time of 15 minutes. Test performed by laboratory at client's request. Sample was analyzed outside of hold time.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job Narrative
460-296287-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

- Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

The method detection limit (MDL) is the lowest value detectable by the laboratory for a given analyte as determined by the MDL procedure detailed in EPA 40 CFR 136. Reported MDL values are adjusted for any dilutions and percent moisture (as applicable). The lab is unable to report values below the MDL.

Receipt
The samples were received on 1/11/2024 7:00 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 3.1°C and 3.5°C

Subcontract Work
Method Osomotic Pressure: This method was subcontracted to Microbac Laboratories, Inc. The subcontract laboratory certification is different from that of the facility issuing the final report. The subcontract report is appended in its entirety.

HPLC/IC
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Metals
Method 6020B: The following samples were not filtered within 15 minutes of sample collection as required by the method: NPDES 001 (460-296287-1), Upstream (460-296287-2) and Clarifying Pond (460-296287-3). The sample(s) was filtered prior to analysis at the laboratory, and the results have been reported. This does not meet regulatory requirements.

Method 6020B: The following samples were not filtered within 15 minutes of sample collection as required by the method: NPDES 001 (460-296287-1), Upstream (460-296287-2) and Clarifying Pond (460-296287-3). The samples were filtered prior to analysis at the laboratory, and the results have been reported.

Method 6020B: The following samples were not filtered and preserved within 15 minutes of sample collection in accordance with 40 CFR Part 136 Table II, Footnote 7, method 6020B. The samples were filtered prior to analysis at the laboratory.

NPDES 001 (460-296287-1), Upstream (460-296287-2) and Clarifying Pond (460-296287-3)

Method 6020B: The following samples were not filtered within 15 minutes of sample collection as required by the method: NPDES 001 (460-296287-1), Upstream (460-296287-2) and Clarifying Pond (460-296287-3). The sample(s) was filtered prior to analysis at the laboratory, and the results have been reported. This does not meet regulatory requirements.

Method 6020B: The following samples were not filtered within 15 minutes of sample collection as required by the method: NPDES 001 (460-296287-1), Upstream (460-296287-2) and Clarifying Pond (460-296287-3). The samples were filtered prior to analysis at the laboratory, and the results have been reported.

Method 6020B: The following samples were not filtered and preserved within 15 minutes of sample collection in accordance with 40 CFR Part 136 Table II, Footnote 7, method 6020B. The samples were filtered prior to analysis at the laboratory.

NPDES 001 (460-296287-1), Upstream (460-296287-2) and Clarifying Pond (460-296287-3)

Job ID: 460-296287-1 (Continued) Eurofins Edison

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

General Chemistry
Method 4500_O_C: This analysis is normally performed in the field and has a method-defined holding time of 15 minutes. The following samples has been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe: NPDES 001 (460-296287-1), Upstream (460-296287-2) and Clarifying Pond (460-296287-3).

Method 9040C: This analysis is normally performed in the field and has a method-defined holding time of 15 minutes. The following samples has been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe: NPDES 001 (460-296287-1), Upstream (460-296287-2) and Clarifying Pond (460-296287-3).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Client Sample ID: NPDES 001

Date Collected: 01/11/24 09:00
Date Received: 01/11/24 19:00

Lab Sample ID: 460-296287-1

Matrix: Water

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide	0.054	U	0.32	0.054	mg/L			01/12/24 17:30	1
Nitrate as N	**0.11**	**J**	0.16	0.070	mg/L			01/12/24 17:30	1
Chloride	**5.25**		0.32	0.039	mg/L			01/12/24 17:30	1
Nitrate Nitrite as N	**0.11**	**J**	0.16	0.070	mg/L			01/12/24 17:30	1
Nitrite as N	0.023	U	0.16	0.023	mg/L			01/12/24 17:30	1
Sulfate	**5.29**		0.48	0.095	mg/L			01/12/24 17:30	1

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000043	U	0.00020	0.000043	mg/L		01/16/24 11:38	01/16/24 16:47	1

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**5.5**		4.0	0.91	ug/L		01/12/24 20:25	01/14/24 15:16	1
Boron	**45.2**	**J**	80.0	30.4	ug/L		01/12/24 20:25	01/14/24 15:16	1
Calcium	**15700**		500	53.6	ug/L		01/12/24 20:25	01/14/24 15:16	1
Copper	**3.7**	**J**	4.0	2.5	ug/L		01/12/24 20:25	01/14/24 15:16	1
Lead	0.84	U	1.2	0.84	ug/L		01/12/24 20:25	01/14/24 15:16	1
Magnesium	**6100**		200	46.9	ug/L		01/12/24 20:25	01/14/24 15:16	1
Manganese	**23.7**		8.0	1.5	ug/L		01/12/24 20:25	01/14/24 15:16	1
Nickel	**0.96**	**J**	4.0	0.91	ug/L		01/12/24 20:25	01/14/24 15:16	1
Potassium	**1390**		200	112	ug/L		01/12/24 20:25	01/14/24 15:16	1
Selenium	0.59	U	2.5	0.59	ug/L		01/12/24 20:25	01/14/24 15:16	1
Sodium	**3940**		500	219	ug/L		01/12/24 20:25	01/14/24 15:16	1
Strontium	**53.2**		4.0	0.50	ug/L		01/12/24 20:25	01/14/24 15:16	1
Zinc	6.5	U	16.0	6.5	ug/L		01/12/24 20:25	01/14/24 15:16	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**426**		100	35.0	ug/L		01/15/24 06:29	01/15/24 15:03	1
Iron	**470**		50.0	20.0	ug/L		01/14/24 19:22	01/16/24 16:13	1

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**70.7**		40.0	19.5	ug/L		01/18/24 20:58	01/18/24 23:25	1
Cadmium	0.15	U	0.50	0.15	ug/L		01/23/24 07:45	01/24/24 08:47	1
Arsenic	0.89	U	2.0	0.89	ug/L		01/18/24 20:58	01/18/24 23:25	1
Iron	**117**		50.0	20.0	ug/L		01/23/24 07:45	01/24/24 08:47	1
Calcium	**15300**		500	53.6	ug/L		01/18/24 20:58	01/18/24 23:25	1
Zinc	**5.0**	**J**	10.0	4.0	ug/L		01/23/24 07:45	01/24/24 08:47	1
Copper	2.5	U	4.0	2.5	ug/L		01/18/24 20:58	01/18/24 23:25	1
Iron	**98.3**	**J**	120	58.2	ug/L		01/18/24 20:58	01/18/24 23:25	1
Lead	0.84	U	1.2	0.84	ug/L		01/18/24 20:58	01/18/24 23:25	1
Magnesium	**5760**		200	46.9	ug/L		01/18/24 20:58	01/18/24 23:25	1
Manganese	**5.6**	**J**	8.0	1.5	ug/L		01/18/24 20:58	01/18/24 23:25	1
Nickel	0.91	U	4.0	0.91	ug/L		01/18/24 20:58	01/18/24 23:25	1

Method: SW846 EPA 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	1.3	U	5.0	1.3	ug/L		01/18/24 09:25	01/19/24 12:32	1

Client Sample ID: NPDES 001

Lab Sample ID: 460-296287-1

Date Collected: 01/11/24 09:00

Matrix: Water

Date Received: 01/11/24 19:00

Method: SW846 EPA 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	1.3	U	5.0	1.3	ug/L		01/18/24 09:25	01/19/24 13:28	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Resistivity (EPA 120.1)	**0.00673**		0.000100	0.000100	Mohm-cm			01/25/24 11:30	1
Specific Conductance (EPA 120.1)	**149**		1.00	1.00	umhos/cm			01/25/24 11:30	1
Acidity (SM 2310B-2011)	20.0	U	20.0	20.0	mg/L			01/23/24 14:06	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-2011)	**54.1**		5.0	5.0	mg/L			01/17/24 12:57	1
Carbonate Alkalinity as CaCO3 (SM 2320B-2011)	5.0	U	5.0	5.0	mg/L			01/17/24 12:57	1
Alkalinity as CaCO3 to pH 4.5 (SM 2320B-2011)	**54.1**		5.0	5.0	mg/L			01/17/24 12:57	1
Total Dissolved Solids (SM 2540C-2015)	**232**		2.5	2.5	mg/L			01/17/24 09:11	1
Total Suspended Solids (SM 2540D-2015)	2.5	U	2.5	2.5	mg/L			01/16/24 11:55	1
Ammonia (EPA 350.1)	0.050	U	0.10	0.050	mg/L			01/22/24 10:46	1
Total Kjeldahl Nitrogen (EPA 351.2)	**2.2**		1.0	0.50	mg/L		01/16/24 14:41	01/17/24 11:31	1
Chemical Oxygen Demand (EPA 410.4)	**4.1**	**J**	10.0	3.3	mg/L			01/22/24 15:43	1
Oxygen, Dissolved (SM 4500 O C-2016)	**10.2**	**H H3**	1.0	1.0	mg/L			01/14/24 10:05	1
Orthophosphate as P (SM 4500 P E-2011)	0.0050	U	0.030	0.0050	mg/L			01/12/24 22:02	1
Carbonaceous Biochemical Oxygen Demand 5 (SM 5210 B-2016)	1.0	U	1.0	1.0	mg/L			01/12/24 15:35	1
pH (SW846 9040C)	**7.7**	**HF**	0.1	0.1	SU			01/22/24 11:42	1
Temperature (SW846 9040C)	**21.9**	**HF**	0.1	0.1	Degrees C			01/22/24 11:42	1
Total Organic Carbon (SW846 9060A)	**2.4**		1.0	0.53	mg/L			01/19/24 04:14	1
Phosphorus as PO4 (SM4500 P E-2011)	**0.079**	**J**	0.090	0.071	mg/L		01/22/24 09:19	01/22/24 14:10	1
Phosphorus as P (SM4500 P E-2011)	**0.026**	**J**	0.030	0.023	mg/L		01/22/24 09:19	01/22/24 14:10	1
Nitrogen, Total (EPA Total Nitrogen)	**2.3**		0.50	0.50	mg/L			01/23/24 06:20	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (EPA 350.1)	0.050	U	0.10	0.050	mg/L			01/22/24 10:52	1
Orthophosphate as P (SM 4500 P E-2011)	0.0050	U	0.030	0.0050	mg/L			01/12/24 22:02	1
Phosphorus as PO4 (SM4500 P E-2011)	0.071	U	0.090	0.071	mg/L		01/22/24 09:19	01/22/24 14:10	1
Phosphorus as P (SM4500 P E-2011)	0.023	U	0.030	0.023	mg/L		01/22/24 09:19	01/22/24 14:10	1

Client Sample ID: Upstream

Lab Sample ID: 460-296287-2

Date Collected: 01/11/24 10:30

Matrix: Water

Date Received: 01/11/24 19:00

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide	0.054	U	0.32	0.054	mg/L			01/12/24 17:45	1

Client Sample ID: Upstream

Date Collected: 01/11/24 10:30
Date Received: 01/11/24 19:00

Lab Sample ID: 460-296287-2

Matrix: Water

Method: EPA 300.0 - Anions, Ion Chromatography (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	0.078	J	0.16	0.070	mg/L			01/12/24 17:45	1
Chloride	15.9		0.32	0.039	mg/L			01/12/24 17:45	1
Nitrate Nitrite as N	0.078	J	0.16	0.070	mg/L			01/12/24 17:45	1
Nitrite as N	0.023	U	0.16	0.023	mg/L			01/12/24 17:45	1
Sulfate	4.06		0.48	0.095	mg/L			01/12/24 17:45	1

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000043	U	0.00020	0.000043	mg/L		01/16/24 11:38	01/16/24 16:48	1

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	9.6		4.0	0.91	ug/L		01/12/24 20:25	01/14/24 15:18	1
Boron	43.1	J	80.0	30.4	ug/L		01/12/24 20:25	01/14/24 15:18	1
Calcium	21400		500	53.6	ug/L		01/12/24 20:25	01/14/24 15:18	1
Copper	4.9		4.0	2.5	ug/L		01/12/24 20:25	01/14/24 15:18	1
Lead	0.84	U	1.2	0.84	ug/L		01/12/24 20:25	01/14/24 15:18	1
Magnesium	6950		200	46.9	ug/L		01/12/24 20:25	01/14/24 15:18	1
Manganese	29.3		8.0	1.5	ug/L		01/12/24 20:25	01/14/24 15:18	1
Nickel	0.97	J	4.0	0.91	ug/L		01/12/24 20:25	01/14/24 15:18	1
Potassium	1880		200	112	ug/L		01/12/24 20:25	01/14/24 15:18	1
Selenium	0.59	U	2.5	0.59	ug/L		01/12/24 20:25	01/14/24 15:18	1
Sodium	8980		500	219	ug/L		01/12/24 20:25	01/14/24 15:18	1
Strontium	77.5		4.0	0.50	ug/L		01/12/24 20:25	01/14/24 15:18	1
Zinc	6.5	U	16.0	6.5	ug/L		01/12/24 20:25	01/14/24 15:18	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	231		100	35.0	ug/L		01/15/24 06:29	01/15/24 15:07	1
Iron	379		50.0	20.0	ug/L		01/14/24 19:22	01/16/24 16:03	1

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	70.4		40.0	19.5	ug/L		01/18/24 20:58	01/18/24 23:28	1
Cadmium	0.15	U	0.50	0.15	ug/L		01/23/24 07:45	01/24/24 08:49	1
Arsenic	0.89	U	2.0	0.89	ug/L		01/18/24 20:58	01/18/24 23:28	1
Iron	68.6		50.0	20.0	ug/L		01/23/24 07:45	01/24/24 08:49	1
Calcium	22500		500	53.6	ug/L		01/18/24 20:58	01/18/24 23:28	1
Zinc	4.1	J	10.0	4.0	ug/L		01/23/24 07:45	01/24/24 08:49	1
Copper	2.5	J	4.0	2.5	ug/L		01/18/24 20:58	01/18/24 23:28	1
Iron	77.4	J	120	58.2	ug/L		01/18/24 20:58	01/18/24 23:28	1
Lead	0.84	U	1.2	0.84	ug/L		01/18/24 20:58	01/18/24 23:28	1
Magnesium	7270		200	46.9	ug/L		01/18/24 20:58	01/18/24 23:28	1
Manganese	16.7		8.0	1.5	ug/L		01/18/24 20:58	01/18/24 23:28	1
Nickel	0.91	U	4.0	0.91	ug/L		01/18/24 20:58	01/18/24 23:28	1

Method: SW846 EPA 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	1.3	J	5.0	1.3	ug/L		01/18/24 09:25	01/19/24 12:46	1

Client Sample ID: Upstream
Lab Sample ID: 460-296287-2

Date Collected: 01/11/24 10:30
Matrix: Water
Date Received: 01/11/24 19:00

Method: SW846 EPA 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	1.3	U	5.0	1.3	ug/L		01/18/24 09:25	01/19/24 13:31	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Resistivity (EPA 120.1)	**0.00472**		0.000100	0.000100	Mohm-cm			01/25/24 11:30	1
Specific Conductance (EPA 120.1)	**212**		1.00	1.00	umhos/cm			01/25/24 11:30	1
Acidity (SM 2310B-2011)	20.0	U	20.0	20.0	mg/L			01/23/24 14:06	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-2011)	**74.4**		5.0	5.0	mg/L			01/17/24 13:09	1
Carbonate Alkalinity as CaCO3 (SM 2320B-2011)	5.0	U	5.0	5.0	mg/L			01/17/24 13:09	1
Alkalinity as CaCO3 to pH 4.5 (SM 2320B-2011)	**74.4**		5.0	5.0	mg/L			01/17/24 13:09	1
Total Dissolved Solids (SM 2540C-2015)	**181**		2.5	2.5	mg/L			01/17/24 09:11	1
Total Suspended Solids (SM 2540D-2015)	2.5	U	2.5	2.5	mg/L			01/16/24 11:55	1
Ammonia (EPA 350.1)	0.050	U	0.10	0.050	mg/L			01/22/24 10:48	1
Total Kjeldahl Nitrogen (EPA 351.2)	**1.3**		1.0	0.50	mg/L		01/16/24 14:41	01/17/24 11:33	1
Chemical Oxygen Demand (EPA 410.4)	3.3	U	10.0	3.3	mg/L			01/22/24 15:43	1
Oxygen, Dissolved (SM 4500 O C-2016)	**8.3**	**H H3**	1.0	1.0	mg/L			01/14/24 10:10	1
Orthophosphate as P (SM 4500 P E-2011)	0.0050	U	0.030	0.0050	mg/L			01/12/24 22:02	1
Carbonaceous Biochemical Oxygen Demand 5 (SM 5210 B-2016)	1.0	U	1.0	1.0	mg/L			01/12/24 15:40	1
pH (SW846 9040C)	**7.4**	**HF**	0.1	0.1	SU			01/22/24 11:44	1
Temperature (SW846 9040C)	**22.1**	**HF**	0.1	0.1	Degrees C			01/22/24 11:44	1
Total Organic Carbon (SW846 9060A)	**3.2**		1.0	0.53	mg/L			01/19/24 01:23	1
Phosphorus as PO4 (SM4500 P E-2011)	**0.45**		0.090	0.071	mg/L		01/22/24 09:19	01/22/24 14:10	1
Phosphorus as P (SM4500 P E-2011)	**0.15**		0.030	0.023	mg/L		01/22/24 09:19	01/22/24 14:10	1
Nitrogen, Total (EPA Total Nitrogen)	**1.4**		0.50	0.50	mg/L			01/23/24 06:20	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (EPA 350.1)	0.050	U	0.10	0.050	mg/L			01/22/24 11:05	1
Orthophosphate as P (SM 4500 P E-2011)	0.0050	U	0.030	0.0050	mg/L			01/12/24 22:02	1
Phosphorus as PO4 (SM4500 P E-2011)	0.071	U	0.090	0.071	mg/L		01/22/24 09:19	01/22/24 14:10	1
Phosphorus as P (SM4500 P E-2011)	0.023	U	0.030	0.023	mg/L		01/22/24 09:19	01/22/24 14:10	1

Client Sample ID: Clarifying Pond
Lab Sample ID: 460-296287-3

Date Collected: 01/11/24 11:30
Matrix: Water
Date Received: 01/11/24 19:00

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide	0.054	U	0.32	0.054	mg/L			01/12/24 18:00	1

Client Sample ID: Clarifying Pond
Date Collected: 01/11/24 11:30
Date Received: 01/11/24 19:00

Lab Sample ID: 460-296287-3
Matrix: Water

Method: EPA 300.0 - Anions, Ion Chromatography (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	**0.20**		0.16	0.070	mg/L			01/12/24 18:00	1
Chloride	**0.74**		0.32	0.039	mg/L			01/12/24 18:00	1
Nitrate Nitrite as N	**0.20**		0.16	0.070	mg/L			01/12/24 18:00	1
Nitrite as N	0.023	U	0.16	0.023	mg/L			01/12/24 18:00	1
Sulfate	**2.79**		0.48	0.095	mg/L			01/12/24 18:00	1

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000043	U	0.00020	0.000043	mg/L		01/16/24 11:38	01/16/24 16:50	1

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**4.8**		4.0	0.91	ug/L		01/12/24 20:25	01/14/24 15:21	1
Boron	**48.3**	**J**	80.0	30.4	ug/L		01/12/24 20:25	01/14/24 15:21	1
Calcium	**13100**		500	53.6	ug/L		01/12/24 20:25	01/14/24 15:21	1
Copper	**7.1**		4.0	2.5	ug/L		01/12/24 20:25	01/14/24 15:21	1
Lead	**0.87**	**J**	1.2	0.84	ug/L		01/12/24 20:25	01/14/24 15:21	1
Magnesium	**4390**		200	46.9	ug/L		01/12/24 20:25	01/14/24 15:21	1
Manganese	**30.9**		8.0	1.5	ug/L		01/12/24 20:25	01/14/24 15:21	1
Nickel	**2.5**	**J**	4.0	0.91	ug/L		01/12/24 20:25	01/14/24 15:21	1
Potassium	**1290**		200	112	ug/L		01/12/24 20:25	01/14/24 15:21	1
Selenium	0.59	U	2.5	0.59	ug/L		01/12/24 20:25	01/14/24 15:21	1
Sodium	**2030**		500	219	ug/L		01/12/24 20:25	01/14/24 15:21	1
Strontium	**29.4**		4.0	0.50	ug/L		01/12/24 20:25	01/14/24 15:21	1
Zinc	**6.9**	**J**	16.0	6.5	ug/L		01/12/24 20:25	01/14/24 15:21	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**977**		100	35.0	ug/L		01/15/24 06:29	01/15/24 15:11	1
Iron	**1230**		50.0	20.0	ug/L		01/14/24 19:22	01/16/24 16:11	1

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**181**		40.0	19.5	ug/L		01/18/24 20:58	01/18/24 23:30	1
Cadmium	0.15	U	0.50	0.15	ug/L		01/23/24 07:45	01/24/24 08:45	1
Arsenic	0.89	U	2.0	0.89	ug/L		01/18/24 20:58	01/18/24 23:30	1
Iron	**168**		50.0	20.0	ug/L		01/23/24 07:45	01/24/24 08:45	1
Calcium	**13300**		500	53.6	ug/L		01/18/24 20:58	01/18/24 23:30	1
Zinc	4.0	U	10.0	4.0	ug/L		01/23/24 07:45	01/24/24 08:45	1
Copper	2.5	U	4.0	2.5	ug/L		01/18/24 20:58	01/18/24 23:30	1
Iron	**148**		120	58.2	ug/L		01/18/24 20:58	01/18/24 23:30	1
Lead	0.84	U	1.2	0.84	ug/L		01/18/24 20:58	01/18/24 23:30	1
Magnesium	**4180**		200	46.9	ug/L		01/18/24 20:58	01/18/24 23:30	1
Manganese	**9.2**		8.0	1.5	ug/L		01/18/24 20:58	01/18/24 23:30	1
Nickel	0.91	U	4.0	0.91	ug/L		01/18/24 20:58	01/18/24 23:30	1

Method: SW846 EPA 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	1.3	U	5.0	1.3	ug/L		01/18/24 09:25	01/19/24 13:25	1

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill - Anti-degradation

Job ID: 460-296287-1

Client Sample ID: Clarifying Pond
Date Collected: 01/11/24 11:30
Date Received: 01/11/24 19:00

Lab Sample ID: 460-296287-3
Matrix: Water

Method: SW846 EPA 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	1.3	U	5.0	1.3	ug/L		01/18/24 09:25	01/19/24 13:34	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Resistivity (EPA 120.1)	**0.00898**		0.000100	0.000100	Mohm-cm			01/25/24 11:30	1
Specific Conductance (EPA 120.1)	**111**		1.00	1.00	umhos/cm			01/25/24 11:30	1
Acidity (SM 2310B-2011)	20.0	U	20.0	20.0	mg/L			01/23/24 14:06	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-2011)	**46.1**		5.0	5.0	mg/L			01/17/24 13:15	1
Carbonate Alkalinity as CaCO3 (SM 2320B-2011)	5.0	U	5.0	5.0	mg/L			01/17/24 13:15	1
Alkalinity as CaCO3 to pH 4.5 (SM 2320B-2011)	**46.1**		5.0	5.0	mg/L			01/17/24 13:15	1
Total Dissolved Solids (SM 2540C-2015)	**235**		2.5	2.5	mg/L			01/17/24 09:11	1
Total Suspended Solids (SM 2540D-2015)	**6.5**		2.5	2.5	mg/L			01/16/24 11:55	1
Ammonia (EPA 350.1)	0.050	U	0.10	0.050	mg/L			01/22/24 10:49	1
Total Kjeldahl Nitrogen (EPA 351.2)	**0.56**	**J**	1.0	0.50	mg/L		01/16/24 14:41	01/17/24 11:35	1
Chemical Oxygen Demand (EPA 410.4)	3.3	U	10.0	3.3	mg/L			01/22/24 15:43	1
Oxygen, Dissolved (SM 4500 O C-2016)	**9.5**	**H**	1.0	1.0	mg/L			01/14/24 10:15	1
Orthophosphate as P (SM 4500 P E-2011)	**0.012**	**J**	0.030	0.0050	mg/L			01/12/24 22:02	1
Carbonaceous Biochemical Oxygen Demand 5 (SM 5210 B-2016)	1.0	U	1.0	1.0	mg/L			01/12/24 15:45	1
pH (SW846 9040C)	**7.7**	**HF**	0.1	0.1	SU			01/22/24 11:46	1
Temperature (SW846 9040C)	**22.1**	**HF**	0.1	0.1	Degrees C			01/22/24 11:46	1
Total Organic Carbon (SW846 9060A)	**1.7**		1.0	0.53	mg/L			01/19/24 04:38	1
Phosphorus as PO4 (SM4500 P E-2011)	**0.58**		0.090	0.071	mg/L		01/22/24 09:19	01/22/24 14:10	1
Phosphorus as P (SM4500 P E-2011)	**0.19**		0.030	0.023	mg/L		01/22/24 09:19	01/22/24 14:10	1
Nitrogen, Total (EPA Total Nitrogen)	**0.76**		0.50	0.50	mg/L			01/23/24 06:20	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (EPA 350.1)	0.050	U	0.10	0.050	mg/L			01/22/24 11:06	1
Orthophosphate as P (SM 4500 P E-2011)	**0.0071**	**J**	0.030	0.0050	mg/L			01/12/24 22:02	1
Phosphorus as PO4 (SM4500 P E-2011)	**0.37**		0.090	0.071	mg/L		01/22/24 09:19	01/22/24 14:10	1
Phosphorus as P (SM4500 P E-2011)	**0.12**		0.030	0.023	mg/L		01/22/24 09:19	01/22/24 14:10	1

Lab Chronicle

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill - Anti-degradation

Job ID: 460-296287-1

Client Sample ID: NPDES 001

Date Collected: 01/11/24 09:00
Date Received: 01/11/24 19:00

Lab Sample ID: 460-296287-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		1	954601	OXG	EET EDI	01/12/24 17:30
Total/NA	Analysis	300.0		1	954602	OXG	EET EDI	01/12/24 17:30
Total/NA	Prep	245.1			698122	NVK	EET BUF	01/16/24 11:38
Total/NA	Analysis	245.1		1	698185	NVK	EET BUF	01/16/24 16:47
Dissolved	Filtration	Filtration			463274	UDL9	ELLE	01/15/24 07:40
Dissolved	Prep	3005A			465289	NU9R	ELLE	01/23/24 07:45
Dissolved	Analysis	6020B		1	466248	F7JF	ELLE	01/24/24 08:47
Dissolved	Filtration	FILTRATION			955423	VAD	EET EDI	01/18/24 20:50
Dissolved	Prep	3010A			955425	VAD	EET EDI	01/18/24 20:58
Dissolved	Analysis	6020B		1	955345	CDC	EET EDI	01/18/24 23:25
Total Recoverable	Prep	3005A			463204	UAMX	ELLE	01/14/24 19:22
Total Recoverable	Analysis	6020B		1	463915	UCIG	ELLE	01/16/24 16:13
Total Recoverable	Prep	3005A			817672	RR	EET SAV	01/15/24 06:29
Total Recoverable	Analysis	6020B		1	817915	BWR	EET SAV	01/15/24 15:03
Total/NA	Prep	3010A			954636	GAE	EET EDI	01/12/24 20:25
Total/NA	Analysis	6020B		1	954713	CDC	EET EDI	01/14/24 15:16
Dissolved	Filtration	Filtration			457207	NWW	EET PIT	01/17/24 10:03
Dissolved	Prep	3010A			457299	NWW	EET PIT	01/18/24 09:25
Dissolved	Analysis	EPA 6020B		1	457546	MRG	EET PIT	01/19/24 13:28
Total/NA	Prep	3010A			457299	NWW	EET PIT	01/18/24 09:25
Total/NA	Analysis	EPA 6020B		1	457546	MRG	EET PIT	01/19/24 12:32
Total/NA	Analysis	120.1		1	956393	HTV	EET EDI	01/25/24 11:30
Total/NA	Analysis	2310B-2011		1	955987	RAK	EET EDI	01/23/24 14:06
Total/NA	Analysis	2320B-2011		1	955175	RXA	EET EDI	01/17/24 12:57
Total/NA	Analysis	2540C-2015		1	955120	PLS	EET EDI	01/17/24 09:11
Total/NA	Analysis	2540D-2015		1	954962	PXP	EET EDI	01/16/24 11:55
Dissolved	Filtration	FILTRATION			955787	AXP	EET EDI	01/22/24 10:18
Dissolved	Analysis	350.1		1	955791	AXP	EET EDI	01/22/24 10:52
Total/NA	Analysis	350.1		1	955791	AXP	EET EDI	01/22/24 10:46
Total/NA	Prep	351.2			463797	NLE3	ELLE	01/16/24 14:41 - 01/16/24 17:41 [1]
Total/NA	Analysis	351.2		1	464142	JCG7	ELLE	01/17/24 11:31
Total/NA	Analysis	410.4		1	955846	HTV	EET EDI	01/22/24 15:43
Total/NA	Analysis	4500 O C-2016		1	954711	RXA	EET EDI	01/14/24 10:05
Dissolved	Filtration	FILTRATION			954645	VBG	EET EDI	01/12/24 21:30
Dissolved	Analysis	4500 P E-2011		1	954646	VBG	EET EDI	01/12/24 22:02
Total/NA	Analysis	4500 P E-2011		1	954646	VBG	EET EDI	01/12/24 22:02
Total/NA	Analysis	5210 B-2016		1	954609	RXA	EET EDI	01/12/24 15:35
Total/NA	Analysis	9040C		1	955810	HTV	EET EDI	01/22/24 11:42
Total/NA	Analysis	9060A		1	955472	MMC	EET EDI	01/19/24 04:14
Dissolved	Filtration	FILTRATION			955768	RAK	EET EDI	01/22/24 09:14
Dissolved	Prep	SM 4500 P B			955770	RAK	EET EDI	01/22/24 09:19
Dissolved	Analysis	SM4500 P E-2011		1	955829	RAK	EET EDI	01/22/24 14:10

Client Sample ID: NPDES 001
Lab Sample ID: 460-296287-1

Date Collected: 01/11/24 09:00
Matrix: Water
Date Received: 01/11/24 19:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	SM 4500 P B			955770	RAK	EET EDI	01/22/24 09:19
Total/NA	Analysis	SM4500 P E-2011		1	955829	RAK	EET EDI	01/22/24 14:10
Total/NA	Analysis	Total Nitrogen		1	954802	TJW	EET EDI	01/23/24 06:20

Client Sample ID: Upstream
Lab Sample ID: 460-296287-2

Date Collected: 01/11/24 10:30
Matrix: Water
Date Received: 01/11/24 19:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		1	954601	OXG	EET EDI	01/12/24 17:45
Total/NA	Analysis	300.0		1	954602	OXG	EET EDI	01/12/24 17:45
Total/NA	Prep	245.1			698122	NVK	EET BUF	01/16/24 11:38
Total/NA	Analysis	245.1		1	698185	NVK	EET BUF	01/16/24 16:48
Dissolved	Filtration	Filtration			463274	UDL9	ELLE	01/15/24 07:40
Dissolved	Prep	3005A			465289	NU9R	ELLE	01/23/24 07:45
Dissolved	Analysis	6020B		1	466248	F7JF	ELLE	01/24/24 08:49
Dissolved	Filtration	FILTRATION			955423	VAD	EET EDI	01/18/24 20:50
Dissolved	Prep	3010A			955425	VAD	EET EDI	01/18/24 20:58
Dissolved	Analysis	6020B		1	955345	CDC	EET EDI	01/18/24 23:28
Total Recoverable	Prep	3005A			463204	UAMX	ELLE	01/14/24 19:22
Total Recoverable	Analysis	6020B		1	463915	UCIG	ELLE	01/16/24 16:03
Total Recoverable	Prep	3005A			817672	RR	EET SAV	01/15/24 06:29
Total Recoverable	Analysis	6020B		1	817915	BWR	EET SAV	01/15/24 15:07
Total/NA	Prep	3010A			954636	GAE	EET EDI	01/12/24 20:25
Total/NA	Analysis	6020B		1	954713	CDC	EET EDI	01/14/24 15:18
Dissolved	Filtration	Filtration			457207	NWW	EET PIT	01/17/24 10:03
Dissolved	Prep	3010A			457299	NWW	EET PIT	01/18/24 09:25
Dissolved	Analysis	EPA 6020B		1	457546	MRG	EET PIT	01/19/24 13:31
Total/NA	Prep	3010A			457299	NWW	EET PIT	01/18/24 09:25
Total/NA	Analysis	EPA 6020B		1	457546	MRG	EET PIT	01/19/24 12:46
Total/NA	Analysis	120.1		1	956393	HTV	EET EDI	01/25/24 11:30
Total/NA	Analysis	2310B-2011		1	955987	RAK	EET EDI	01/23/24 14:06
Total/NA	Analysis	2320B-2011		1	955175	RXA	EET EDI	01/17/24 13:09
Total/NA	Analysis	2540C-2015		1	955120	PLS	EET EDI	01/17/24 09:11
Total/NA	Analysis	2540D-2015		1	954962	PXP	EET EDI	01/16/24 11:55
Dissolved	Filtration	FILTRATION			955787	AXP	EET EDI	01/22/24 10:18
Dissolved	Analysis	350.1		1	955791	AXP	EET EDI	01/22/24 11:05
Total/NA	Analysis	350.1		1	955791	AXP	EET EDI	01/22/24 10:48
Total/NA	Prep	351.2			463797	NLE3	ELLE	01/16/24 14:41 - 01/16/24 17:41 [1]
Total/NA	Analysis	351.2		1	464142	JCG7	ELLE	01/17/24 11:33
Total/NA	Analysis	410.4		1	955846	HTV	EET EDI	01/22/24 15:43
Total/NA	Analysis	4500 O C-2016		1	954711	RXA	EET EDI	01/14/24 10:10
Dissolved	Filtration	FILTRATION			954645	VBG	EET EDI	01/12/24 21:30
Dissolved	Analysis	4500 P E-2011		1	954646	VBG	EET EDI	01/12/24 22:02

Client Sample ID: Upstream

Lab Sample ID: 460-296287-2

Date Collected: 01/11/24 10:30

Matrix: Water

Date Received: 01/11/24 19:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	4500 P E-2011		1	954646	VBG	EET EDI	01/12/24 22:02
Total/NA	Analysis	5210 B-2016		1	954609	RXA	EET EDI	01/12/24 15:40
Total/NA	Analysis	9040C		1	955810	HTV	EET EDI	01/22/24 11:44
Total/NA	Analysis	9060A		1	955472	MMC	EET EDI	01/19/24 01:23
Dissolved	Filtration	FILTRATION			955768	RAK	EET EDI	01/22/24 09:14
Dissolved	Prep	SM 4500 P B			955770	RAK	EET EDI	01/22/24 09:19
Dissolved	Analysis	SM4500 P E-2011		1	955829	RAK	EET EDI	01/22/24 14:10
Total/NA	Prep	SM 4500 P B			955770	RAK	EET EDI	01/22/24 09:19
Total/NA	Analysis	SM4500 P E-2011		1	955829	RAK	EET EDI	01/22/24 14:10
Total/NA	Analysis	Total Nitrogen		1	954802	TJW	EET EDI	01/23/24 06:20

Client Sample ID: Clarifying Pond

Lab Sample ID: 460-296287-3

Date Collected: 01/11/24 11:30

Matrix: Water

Date Received: 01/11/24 19:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		1	954601	OXG	EET EDI	01/12/24 18:00
Total/NA	Analysis	300.0		1	954602	OXG	EET EDI	01/12/24 18:00
Total/NA	Prep	245.1			698122	NVK	EET BUF	01/16/24 11:38
Total/NA	Analysis	245.1		1	698185	NVK	EET BUF	01/16/24 16:50
Dissolved	Filtration	Filtration			463274	UDL9	ELLE	01/15/24 07:40
Dissolved	Prep	3005A			465289	NU9R	ELLE	01/23/24 07:45
Dissolved	Analysis	6020B		1	466248	F7JF	ELLE	01/24/24 08:45
Dissolved	Filtration	FILTRATION			955423	VAD	EET EDI	01/18/24 20:50
Dissolved	Prep	3010A			955425	VAD	EET EDI	01/18/24 20:58
Dissolved	Analysis	6020B		1	955345	CDC	EET EDI	01/18/24 23:30
Total Recoverable	Prep	3005A			463204	UAMX	ELLE	01/14/24 19:22
Total Recoverable	Analysis	6020B		1	463915	UCIG	ELLE	01/16/24 16:11
Total Recoverable	Prep	3005A			817672	RR	EET SAV	01/15/24 06:29
Total Recoverable	Analysis	6020B		1	817915	BWR	EET SAV	01/15/24 15:11
Total/NA	Prep	3010A			954636	GAE	EET EDI	01/12/24 20:25
Total/NA	Analysis	6020B		1	954713	CDC	EET EDI	01/14/24 15:21
Dissolved	Filtration	Filtration			457207	NWW	EET PIT	01/17/24 10:03
Dissolved	Prep	3010A			457299	NWW	EET PIT	01/18/24 09:25
Dissolved	Analysis	EPA 6020B		1	457546	MRG	EET PIT	01/19/24 13:34
Total/NA	Prep	3010A			457299	NWW	EET PIT	01/18/24 09:25
Total/NA	Analysis	EPA 6020B		1	457546	MRG	EET PIT	01/19/24 13:25
Total/NA	Analysis	120.1		1	956393	HTV	EET EDI	01/25/24 11:30
Total/NA	Analysis	2310B-2011		1	955987	RAK	EET EDI	01/23/24 14:06
Total/NA	Analysis	2320B-2011		1	955175	RXA	EET EDI	01/17/24 13:15
Total/NA	Analysis	2540C-2015		1	955120	PLS	EET EDI	01/17/24 09:11
Total/NA	Analysis	2540D-2015		1	954962	PXP	EET EDI	01/16/24 11:55
Dissolved	Filtration	FILTRATION			955787	AXP	EET EDI	01/22/24 10:18
Dissolved	Analysis	350.1		1	955791	AXP	EET EDI	01/22/24 11:06

Lab Chronicle

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill - Anti-degradation

Job ID: 460-296287-1

Client Sample ID: Clarifying Pond

Date Collected: 01/11/24 11:30
Date Received: 01/11/24 19:00

Lab Sample ID: 460-296287-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	350.1		1	955791	AXP	EET EDI	01/22/24 10:49
Total/NA	Prep	351.2			463797	NLE3	ELLE	01/16/24 14:41 - 01/16/24 17:41 [1]
Total/NA	Analysis	351.2		1	464142	JCG7	ELLE	01/17/24 11:35
Total/NA	Analysis	410.4		1	955846	HTV	EET EDI	01/22/24 15:43
Total/NA	Analysis	4500 O C-2016		1	954711	RXA	EET EDI	01/14/24 10:15
Dissolved	Filtration	FILTRATION			954645	VBG	EET EDI	01/12/24 21:30
Dissolved	Analysis	4500 P E-2011		1	954646	VBG	EET EDI	01/12/24 22:02
Total/NA	Analysis	4500 P E-2011		1	954646	VBG	EET EDI	01/12/24 22:02
Total/NA	Analysis	5210 B-2016		1	954609	RXA	EET EDI	01/12/24 15:45
Total/NA	Analysis	9040C		1	955810	HTV	EET EDI	01/22/24 11:46
Total/NA	Analysis	9060A		1	955472	MMC	EET EDI	01/19/24 04:38
Dissolved	Filtration	FILTRATION			955768	RAK	EET EDI	01/22/24 09:14
Dissolved	Prep	SM 4500 P B			955770	RAK	EET EDI	01/22/24 09:19
Dissolved	Analysis	SM4500 P E-2011		1	955829	RAK	EET EDI	01/22/24 14:10
Total/NA	Prep	SM 4500 P B			955770	RAK	EET EDI	01/22/24 09:19
Total/NA	Analysis	SM4500 P E-2011		1	955829	RAK	EET EDI	01/22/24 14:10
Total/NA	Analysis	Total Nitrogen		1	954802	TJW	EET EDI	01/23/24 06:20

[1] This procedure uses a method stipulated length of time for the process. Both start and end times are displayed.

Laboratory References:

EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

EET EDI = Eurofins Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

EET PIT = Eurofins Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

EET SAV = Eurofins Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Microbac = Marietta, OH, 158 Starlite Drive, Marietta, OH 45750

Accreditation/Certification Summary

Client: Heidelberg Materials Northeast LLC
Job ID: 460-296287-1
Project/Site: Rock Hill - Anti-degradation

Laboratory: Eurofins Edison

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Connecticut	State	PH-0818	09-30-24
Georgia	State	12028 (NJ)	06-30-24
Massachusetts	State	M-NJ312	06-30-24
New Jersey	NELAP	12028	06-30-24
New York	NELAP	11452	04-01-24
Pennsylvania	NELAP	68-00522	02-29-24
USDA	US Federal Programs	P330-20-00244	05-31-24

Laboratory: Eurofins Buffalo

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Arkansas DEQ	State	88-0686	07-06-23 *
Connecticut	State	PH-0568	03-31-24
Florida	NELAP	E87672	06-30-23 *
Georgia	State	10026 (NY)	03-31-24
Georgia	State Program	N/A	03-31-09 *
Illinois	NELAP	200003	09-30-23 *
Iowa	State	374	03-01-25
Iowa	State Program	374	03-01-09 *
Kansas	NELAP	E-10187	02-01-24
Kentucky (UST)	State	108092	04-01-24
Kentucky (WW)	State	KY90029	12-31-23 *
Louisiana	NELAP	02031	06-30-23 *
Louisiana (All)	NELAP	02031	06-30-23 *
Maine	State	NY00044	12-04-24
Maryland	State	294	06-30-24
Massachusetts	State	M-NY044	07-01-24
Michigan	State	9937	04-01-24
Michigan	State Program	9937	04-01-09 *
New Hampshire	NELAP	2973	09-11-19 *
New Hampshire	NELAP	2337	11-17-24
New Jersey	NELAP	NY455	06-30-24
New York	NELAP	10026	03-31-24
Pennsylvania	NELAP	68-00281	08-31-24
Rhode Island	State	LAO00378	12-30-23 *
Texas	NELAP	T104704412-18-10	07-31-23 *
USDA	US Federal Programs	P330-18-00039	03-25-24
Virginia	NELAP	460185	09-14-24
Washington	State	C784	02-10-24
Wisconsin	State	998310390	08-31-24

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
A2LA	Dept. of Defense ELAP	0001.01	11-30-24
A2LA	ISO/IEC 17025	0001.01	11-30-24
Alabama	State	43200	01-31-24
Alaska	State	PA00009	06-30-24
Alaska (UST)	State	17-027	02-28-24

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Accreditation/Certification Summary

Client: Heidelberg Materials Northeast LLC
Job ID: 460-296287-1
Project/Site: Rock Hill - Anti-degradation

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC (Continued)

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Arizona	State	AZ0780	03-12-24
Arkansas DEQ	State	88-00660	08-09-24
California	State	2792	01-31-24
Colorado	State	PA00009	06-30-24
Connecticut	State	PH-0746	06-30-25
DE Haz. Subst. Cleanup Act (HSCA)	State	019-006 (PA cert)	01-31-24
Delaware (DW)	State	N/A	01-31-24
Florida	NELAP	E87997	06-30-24
Georgia (DW)	State	C048	01-31-24
Hawaii	State	N/A	01-31-24
Illinois	NELAP	200027	01-31-25
Iowa	State	361	03-01-24
Kansas	NELAP	E-10151	10-31-24
Kentucky (DW)	State	KY90088	12-31-24
Kentucky (UST)	State	0001.01	11-30-24
Kentucky (WW)	State	KY90088	12-31-23 *
Louisiana (All)	NELAP	02055	06-30-24
Maine	State	2019012	03-12-25
Maryland	State	100	06-30-24
Massachusetts	State	M-PA009	06-30-24
Michigan	State	9930	01-31-25
Minnesota	NELAP	042-999-487	12-31-24
Mississippi	State	023	01-31-25
Missouri	State	450	01-31-25
Montana (DW)	State	0098	01-01-25
Nebraska	State	NE-OS-32-17	01-31-24
New Hampshire	NELAP	2730	01-10-25
New Jersey	NELAP	PA011	06-30-24
New York	NELAP	10670	04-01-24
North Carolina (DW)	State	42705	07-31-24
North Carolina (WW/SW)	State	521	12-31-24
North Dakota	State	R-205	01-31-24
Oklahoma	NELAP	9804	08-31-24
Oregon	NELAP	PA200001	09-11-24
Pennsylvania	NELAP	36-00037	01-31-25
Quebec Ministry of Environment and Fight against Climate Change	PALA	507	09-16-24
Rhode Island	State	LAO00338	12-30-24
South Carolina	State	89002	01-31-24
Tennessee	State	02838	01-31-24
Texas	NELAP	T104704194-23-46	08-31-24
USDA	US Federal Programs	525-22-298-19481	10-25-25
Vermont	State	VT - 36037	10-28-24
Virginia	NELAP	460182	06-14-25
Washington	State	C457	04-11-24
West Virginia (DW)	State	9906 C	01-31-25
West Virginia DEP	State	055	07-31-24
Wyoming	State	8TMS-L	01-31-24
Wyoming (UST)	A2LA	0001.01	11-30-24

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Accreditation/Certification Summary

Client: Heidelberg Materials Northeast LLC
Job ID: 460-296287-1
Project/Site: Rock Hill - Anti-degradation

Laboratory: Eurofins Pittsburgh

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Arkansas DEQ	State	19-033-0	06-27-24
California	State	2891	04-30-24
Connecticut	State	PH-0688	09-30-24
Florida	NELAP	E871008	06-30-24
Georgia	State	PA 02-00416	04-30-24
Illinois	NELAP	004375	06-30-24
Kansas	NELAP	E-10350	01-31-24
Kentucky (UST)	State	162013	04-30-23 *
Kentucky (WW)	State	KY98043	12-31-23 *
Louisiana	NELAP	04041	06-30-22 *
Louisiana (All)	NELAP	04041	06-30-24
Maine	State	PA00164	03-06-24
Minnesota	NELAP	042-999-482	12-31-24
New Hampshire	NELAP	2030	04-04-24
New Jersey	NELAP	PA005	06-30-24
New York	NELAP	11182	04-01-24
North Carolina (WW/SW)	State	434	12-31-24
North Dakota	State	R-227	04-30-24
Oregon	NELAP	PA-2151	02-06-24
Pennsylvania	NELAP	02-00416	04-30-24
Rhode Island	State	LAO00362	12-31-22 *
South Carolina	State	89014	01-21-24
Texas	NELAP	T104704528	03-31-24
US Fish & Wildlife	US Federal Programs	058448	03-31-24
USDA	US Federal Programs	P330-16-00211	04-11-26
Utah	NELAP	PA001462019-8	05-31-24
Virginia	NELAP	10043	07-14-24
West Virginia DEP	State	142	01-31-25
Wisconsin	State	998027800	08-31-24

Laboratory: Eurofins Savannah

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
	AFCEE	SAVLAB	
Alabama	State	41450	06-30-24
ANAB	Dept. of Defense ELAP	L2463	09-22-24
Arkansas (DW)	State	GA00006	06-30-24
Arkansas DEQ	State	19-015-0	02-01-24
California	State	2939	06-30-24
Florida	NELAP	E87052	06-30-24
Georgia	State	E87052	06-30-24
Georgia (DW)	State	803	06-30-24
Guam	State	19-007R	04-17-24
Hawaii	State	<cert No.>	06-30-24
Illinois	NELAP	200022	11-30-24
Indiana	State	C-GA-02	06-30-24
Iowa	State	353	07-01-25
Kentucky (UST)	State	NA	06-30-24
Louisiana	NELAP	30690	06-30-24

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Accreditation/Certification Summary

Client: Heidelberg Materials Northeast LLC
Job ID: 460-296287-1
Project/Site: Rock Hill - Anti-degradation

Laboratory: Eurofins Savannah (Continued)

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Louisiana (All)	NELAP	30690	06-30-24
Louisiana (DW)	State	LA009	12-31-24
Maine	State	GA00006	09-25-24
Maryland	State	250	12-31-24
Massachusetts	State	M-GA006	06-30-24
Michigan	State	9925	06-30-24
Mississippi	State	<cert No.>	06-30-24
Nebraska	State	NE-OS-7-04	06-30-24
New Jersey	NELAP	GA769	06-30-24
New Mexico	State	GA00006	06-30-24
North Carolina (DW)	State	13701	07-31-24
North Carolina (WW/SW)	State	269	12-31-24
Pennsylvania	NELAP	68-00474	06-30-24
Puerto Rico	State	GA00006	01-01-25
South Carolina	State	98001	01-21-24
Tennessee	State	TN02961	06-30-24
Texas	NELAP	T1047004185	11-30-24
Texas	TCEQ Water Supply	T104704185	06-30-24
USDA	US Federal Programs	P330-18-00313	09-03-24
Virginia	NELAP	460161	06-14-24
Wyoming	State	8TMS-L	06-30-24

Method Summary

Client: Heidelberg Materials Northeast LLC
Job ID: 460-296287-1
Project/Site: Rock Hill - Anti-degradation

Method	Method Description	Protocol	Laboratory
300.0	Anions, Ion Chromatography	EPA	EET EDI
245.1	Mercury (CVAA)	EPA	EET BUF
6020B	Metals (ICP/MS)	SW846	EET EDI
6020B	Metals (ICP/MS)	SW846	EET SAV
6020B	Metals (ICP/MS)	SW846	ELLE
EPA 6020B	Metals (ICP/MS)	SW846	EET PIT
120.1	Conductivity, Specific Conductance	EPA	EET EDI
2310B-2011	Acidity	SM	EET EDI
2320B-2011	Alkalinity, Total	SM	EET EDI
2540C-2015	Total Dissolved Solids (Dried at 180 °C)	SM	EET EDI
2540D-2015	Total Suspended Solids (Dried at 103-105°C)	SM	EET EDI
350.1	Nitrogen, Ammonia	EPA	EET EDI
351.2	Nitrogen, Total Kjeldahl	EPA	ELLE
410.4	COD	EPA	EET EDI
4500 O C-2016	Oxygen, Dissolved	SM	EET EDI
4500 P E-2011	Orthophosphate	SM	EET EDI
5210 B-2016	BOD, 5-Day	SM	EET EDI
9040C	pH	SW846	EET EDI
9060A	Organic Carbon, Total (TOC)	SW846	EET EDI
SM4500 P E-2011	Phosphorus	SM	EET EDI
Total Nitrogen	Nitrogen, Total	EPA	EET EDI
Subcontract	Osomotic Pressure	None	Microbac
245.1	Preparation, Mercury	EPA	EET BUF
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	EET SAV
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	ELLE
3010A	Preparation, Total Metals	SW846	EET EDI
3010A	Preparation, Total Metals	SW846	EET PIT
351.2	Nitrogen, Total Kjeldahl	EPA	ELLE
FILTRATION	Sample Filtration	None	EET EDI
Filtration	Sample Filtration	None	EET PIT
Filtration	Sample Filtration	None	ELLE
SM 4500 P B	Phosphorous, Total and Ortho	SM	EET EDI

Protocol References:

EPA = US Environmental Protection Agency

None = None

SM = "Standard Methods For The Examination Of Water And Wastewater"

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

EET EDI = Eurofins Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

EET PIT = Eurofins Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

EET SAV = Eurofins Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Microbac = Marietta, OH, 158 Starlite Drive, Marietta, OH 45750

Sample Summary

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill - Anti-degradation

Job ID: 460-296287-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
460-296287-1	NPDES 001	Water	01/11/24 09:00	01/11/24 19:00
460-296287-2	Upstream	Water	01/11/24 10:30	01/11/24 19:00
460-296287-3	Clarifying Pond	Water	01/11/24 11:30	01/11/24 19:00

Microbac Laboratories Inc., - Marietta, OH

Client Project ID:

46011424

For:

Julie Gilmore

Eurofins TestAmerica Edison

777 New Durham RD

Edison, NJ 08817

Project State of Origin: Pennsylvania

Project Requested Certification:

Microbac Laboratories Inc., - Marietta, OH	68-01670	PA Department of Environmental Protection

All test results meet the requirements of the QAPP and other applicable contract terms and conditions. Any exceptions are attached to this cover page or addressed in the method narratives presented in the report. All results for soil samples are reported on a 'dry-weight' basis unless specified otherwise. Analytical results for water and wastes are reported on a 'as received' basis unless specified otherwise. A statement of uncertainty for each analysis is available upon request. The reported results are related only to the samples analyzed as received. This laboratory report may be released as a hardcopy and in computer-readable form submitted electronically or on diskette. This laboratory report shall not be reproduced, except in full, without the written approval of Microbac Laboratories, Inc.

Laboratory Project Manager:

Michelle Taylor

Project Manager

Michelle.Taylor@microbac.com

Authorized By:

Michelle Taylor

Project Manager

Issued: 01/24/2024

MICROBAC®

Laboratory Report Number: M4A0894

Client Project ID: 46011424

Cooler Receipt Log

Cooler ID: Default Cooler Temp: 0.8°C

Cooler Inspection Checklist

Ice Present or not required?	Yes
Shipping containers sealed or not required?	Yes
Custody seals intact or not required?	Yes
Chain of Custody (COC) Present?	Yes
COC includes customer information?	Yes
Relinquished and received signature on COC?	Yes
Sample collector identified on COC?	Yes
Sample type identified on COC?	Yes
Correct type of Containers Received	No
Correct number of containers listed on COC?	Yes
Containers Intact?	Yes
COC includes requested analyses?	Yes
Enough sample volume for indicated tests received?	Yes
Sample labels match COC (Name, Date & Time?)	Yes
Samples arrived within hold time?	Yes
Correct preservatives on COC or not required?	Yes
Chemical preservations checked or not required?	Yes
Preservation checks meet method requirements?	Yes
VOA vials have zero headspace, or not recd.?	Yes

MICROBAC®

Laboratory Report Number: M4A0894

Client Project ID: 46011424

Microbac Laboratories Inc., - Marietta, OH

CERTIFICATE OF ANALYSIS

Client ID:	NPDES 001 (460-296287-1)			**Collection Date:**	01/11/2024 09:00
Laboratory ID:	M4A0894-01			**Prep Date:**	01/18/2024 13:54
Matrix:	Aqueous			**Analyzed:**	01/18/2024 13:55
Batch / Sequence:	B4A0762 /	**Analytical Method:**	PADEP 391-2000-008	**Calibration:**	NA
Instrument:	OSMOMETER 5004	**Units:**	mOsm/kg	**File ID:**	OsmoticPressure_B4A0762_240118015716.xls
Analyst:	TSD	**Dilution:**	1		

Analyte	CAS Number	Result	MDL	RL	Flag	Qualifier
Osmotic Pressure		8.00	6.00	10.0		

MICROBAC®

Laboratory Report Number: M4A0894

Client Project ID: 46011424

Microbac Laboratories Inc., - Marietta, OH

CERTIFICATE OF ANALYSIS

Client ID:	Upstream (460-296287-2)			**Collection Date:**	01/11/2024 10:30
Laboratory ID:	M4A0894-02			**Prep Date:**	01/18/2024 13:54
Matrix:	Aqueous			**Analyzed:**	01/18/2024 13:55
Batch / Sequence:	B4A0762 /	**Analytical Method:**	PADEP 391-2000-008	**Calibration:**	NA
Instrument:	OSMOMETER 5004	**Units:**	mOsm/kg	**File ID:**	OsmoticPressure_B4A0762_240118015716.xls
Analyst:	TSD	**Dilution:**	1		

Analyte	CAS Number	Result	MDL	RL	Flag	Qualifier
Osmotic Pressure		**10.0**	6.00	10.0		

Laboratory Report Number: M4A0894

Client Project ID: 46011424

Microbac Laboratories Inc., - Marietta, OH

CERTIFICATE OF ANALYSIS

Client ID:	Clarifying Pond (460-296287-3)			**Collection Date:**	01/11/2024 11:30
Laboratory ID:	M4A0894-03			**Prep Date:**	01/18/2024 13:54
Matrix:	Aqueous			**Analyzed:**	01/18/2024 13:55
Batch / Sequence:	B4A0762 /	**Analytical Method:**	PADEP 391-2000-008	**Calibration:**	NA
Instrument:	OSMOMETER 5004	**Units:**	mOsm/kg	**File ID:**	OsmoticPressure_B4A0762_240118015716.xls
Analyst:	TSD	**Dilution:**	1		

Analyte	CAS Number	Result	MDL	RL	Flag	Qualifier
Osmotic Pressure		ND	6.00	10.0		

Laboratory Report Number: M4A0894

Client Project ID: 46011424

Notes and Definitions

:
DL: Detection Limit
LOD: Limit of Detection
LOQ: Limit of Quantitation
MDL: Method Detection Limit
RL: Reporting Limit

MICROBAC®

Laboratory Report Number: M4A0894

Client Project ID: 46011424

METHOD BLANKS

Sample ID:	B4A0762-BLK1	**Prep Date:**	01/18/24 13:54	**Matrix:**	Aqueous
Instrument:	OSMOMETER 5004	**Analyzed:**	01/18/24 13:55	**Method:**	PADEP 391-2000-008
File ID:	OsmoticPressure_B4A(	**Sequence:**		**Analyst:**	TSD
Batch:	B4A0762	**Units:**	mOsm/kg	**Calibration:**	

Analyte	Result	MDL	RL	Dilution	Flag	Q
Osmotic Pressure	6.00	6.00	10.0	1	U	

* - Detected in the associated method Blank at a concentration >= RL

MICROBAC®

Laboratory Report Number: M4A0894

Client Project ID: 46011424

BLANK SPIKE / DUPLICATE (BS/BSD)

Method:	PADEP 391-2000-008		**Blank Spike**	**Duplicate**
Batch:	B4A0762	**Spike ID:**	B4A0762-BS1	B4A0762-BSD1
Analyst:	TSD	**Prepared:**	01/18/24 13:54	01/18/24 13:54
Matrix:	Aqueous	**Analyzed:**	01/18/24 13:55	01/18/24 13:55
Units:	mOsm/kg	**File ID:**	OsmoticPressure_B4A0762_2401	OsmoticPressure_B4A0762_2401
Instrument:	OSMOMETER 5004	**Initial/Final:**	1mL/1mL	1mL/1mL
Calibration:				

Analyte	BS Spiked	BS Found	BS %Rec	BSD Spiked	BSD Found	BSD %Rec	%RPD	%Rec Limts	RPD Limit	Q
Osmotic Pressure	290	293	101	290	298	103	1.69	90 - 110	20	

* - Does not meet %Rec acceptance criteria.
- Does not meet RPD acceptance criteria.

MICROBAC®

Laboratory Report Number: M4A0894

Client Project ID: 46011424

DUPLICATE

Parent ID:	M4A0894-01	**Calibration:**				**Method:**	PADEP 391-2000-008
Instrument:	OSMOMETER 500	**File ID:**	OsmoticPressure_B	**Dil:**	1	**Matrix:**	Aqueous
Sample ID:	B4A0762-DUP1	**Batch:**	B4A0762			**Units:**	mOsm/kg

Analyte	Parent	Duplicate	RPD	RPD Limit	Q
Osmotic Pressure	8.00	8.00	0.00	20	

Laboratory Report Number: M4A0894

Client Project ID: 46011424

* - Exceeds RPD Limit
- Based on the low concentration of this analyte, Relative Percent Difference is not an appropriate evaluator of precision. The precision of the duplicate analysis is considered acceptable

Eurofins Edison
777 New Durham Road
Edison, NJ 08817
Phone: 732-549-3900 Fax: 732-549-3679

Chain of Custody Record

eurofins | Environment Testing

1/25/2024

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Gilmore, Julie L	Carrier Tracking No(s):	COC No: 460-70209.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Julie.Gilmore@et.eurofinsus.com	State of Origin: Pennsylvania	Page: Page 1 of 1
Company: Microbac Laboratories, Inc.		Accreditations Required (See note): NELAP - Pennsylvania		Job #: 460-296287-1
Address: 158 Starlite Drive, ,	Due Date Requested: 1/23/2024			
City: Marietta	TAT Requested (days):			
State, Zip: OH, 45750				
Phone: 800-373-4071(Tel)	PO #:			
Email:	WO #:			
Project Name: Rock Hill - Anti-degradation	Project #: 46011424			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	SUB (Osmotic Pressure)	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
NPDES 001 (460-296287-1)	1/11/24	09:00 Eastern		Water			X	1	
Upstream (460-296287-2)	1/11/24	10:30 Eastern		Water			X	1	
Clarifying Pond (460-296287-3)	1/11/24	11:30 Eastern		Water			X	1	

M 4 A 0 8 9 4
Eurofins TestAmerica Edison
Rec'd: 01/16/2024 12:15
By: Stephanie Murphy Temp: 0.8 (Signature)

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Northeast, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Northeast, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Northeast, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Northeast, LLC.

Possible Hazard Identification	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 1	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	1/15/24 1900	EETEd.			
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by: Stephanie Murphy	1/16/2024 1215	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

MICROBAC®

Work Order # M4A0509

COOLER TEMP >6° C LOG

SAMPLE ID	Bottle 1 °C	Bottle 2 °C	Bottle 3 °C	Bottle 4 °C	Bottle 5 °C	Bottle 6 °C

EWH 1-16-24

pH Lot # HC316719 pH Exceptions

SAMPLE ID	Bottle 1	Bottle 2	Bottle 3	Bottle 4	Bottle 5	Bottle 6

EWH 1-16-24

PRESERVATIVE EXCEPTIONS

✓ NONE

__ AS NOTED

EWH 1-16-24

Document Control # 1957
Last 04-10-2019

Issued to: Document Master File

Eurofins Edison
777 New Durham Road
Edison, NJ 08817
Phone: 732-549-3900 Fax: 732-549-3679

Chain of Custody Record

eurofins

Client Information	Sampler	Lab PM: Gilmore, Julie L	Carrier Tracking No(s):	COC No: 460-177262-115848.1
Client Contact: Andrew Gutshall	Phone:	E-Mail: Julie.Gilmore@et.eurofinsus.com	State of Origin:	Page: Page 1 of 2
Company: Heidelberg Materials Northeast LLC	PWSID:			Job #: 196269
Address: 7660 Imperial Way	Due Date Requested:			
City: Allentown	TAT Requested (days):			
State, Zip: PA, 18195	Compliance Project: Δ Yes Δ No			
Phone: 610-366-4819(Tel)	PO #: Purchase Order not required			
Email: andrew.gutshall@heidelbergmaterials.com	WO #:			
Project Name: Rock Hill Anti-Degradation	Project #: 46011424			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A HCL, B NaOH, C Zn Acetate, D Nitric Acid, E NaHSO4, F MeOH, G Amchlor, H Ascorbic Acid, I Ice, J DI Water, K EDTA, L EDA, M Hexane, N None, O AsNaO2, P Na2O4S, Q Na2SO3, R Na2S2O3, S H2SO4, T TSP Dodecahydrate, U Acetone, V MCAA, W pH 4-5, Y Trizma, Z other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020B (MOD) Single Element 6020B Metals List N	6020B (MOD) Single Element 6020B Metals List D	351.2 Local Method S	6020B Dissolved Cd/Fe/Zn N	6020B (MOD) Total Fe D	350.1 410.4, 4500_P_E S	120.1 9040C, SM2310B N	350.1 4500_P_E, 6020B N	2320B (MOD) Alkalinity N	6020B (MOD) Total Custom Metals D	9060A TOC S	2540D, SM5210B_Calc N	2540C TDS N	Total Number of containers	Special Instructions/Note:
			Preservation Code:																		
NPDES 001		0900	4	Water																	1
Basin 1	N FOR NO Sample			Water																	1
Basin 2	NO FOR Sample			Water																	1
Upstream	4	030	~~3~~ 4	Water																	2
Clarifying Pond	4	30	4	Water																	3

460-296287 Chain of Custody

SHORT HOLD

Possible Hazard Identification

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sa... retained longer than 1 month)

Return ... ☐ Archive For ____ Months

Deliverable Requested. I, II, III IV Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	4 330	EQ		1/11/24 1407	EETN KHP
	1-11-24 17 22	EETN KHP		1/4	EQ
	1/4 1900	EQ		1/11/24 1900	EETG

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.	Cooler Temperature(s) °C and Other Remarks:

Ver: 06/08/2021

1/25/2024

Eurofins Edison
777 New Durham Road
Edison, NJ 08817
Phone: 732-549-3900 Fax: 732-549-3679

Chain of Custody Record

25 ° 31 ° KOP 2

eurofins

Client Information	Sampler	Lab PM: Gilmore, Julie L	Carrier Tracking No(s):	COC No: 460-177262-115848.2
Client Contact: Andrew Gutshall	Phone:	E-Mail: Julie.Gilmore@et.eurofinsus.com	State of Origin:	Page: Page 2 of 2
Company: Heidelberg Materials Northeast LLC	PWSID:	Analysis Requested		Job #: 196287
Address: 7660 Imperial Way	Due Date Requested:			Preservation Codes: A HCL, B NaOH, C Zn Acetate, D Nitric Acid, E NaHSO4, F MeOH, G Amchlor, H Ascorbic Acid, I Ice, J DI Water, K EDTA, L EDA, M Hexane, N None, O AsNaO2, P Na2O4S, Q Na2SO3, R Na2S2O3, S H2SO4, T TSP Dodecahydrate, U Acetone, V MCAA, W pH 4-5, Y Trizma, Z other (specify), Other:
City: Allentown	TAT Requested (days):			
State, Zip: PA, 18195	Compliance Project: Δ Yes Δ No			
Phone: 610-366-4819(Tel)	PO #: Purchase Order not required			
Email: andrew.gutshall@heidelbergmaterials.com	WO #:			
Project Name: Rock Hill Anti-Degradation	Project #: 46011424			
Site:	SSOW#:			

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	300_ORGFM_28D, 300_ORGFMS	245.1 Local Method	6020B Total Aluminum	Total Number of containers	Special Instructions/Note:
			Preservation Code:		X	X	N	D	D	X	
NPDES 001	24	940	G	Water							
Basin 1	NO FLOW NO SAMPLE			Water							
Basin 2	NO FLOW NO SAMPLE			Water							
Upstream	1/24	030	G	Water							
Clarifying Pond	1/24	130	G	Water							

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III IV Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		1/10 230	EGY		1/11/24 1407	EE TN-KOP
2		1-11-24 1722	EE TN-KOP		1/4	ETA
3	HD	1/11 1900	ETA		1/11/24 1907	

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks:

Ver: 06/08/2021

1/25/2024

Eurofins **TestAmerica Edison**

Receipt Temperature and pH Log

Job Number: 296267

Number of Coolers: 2 IR Gun # 2

Cooler Temperatures

	RAW	CORRECTED		RAW	CORRECTED		RAW	CORRECTED
Cooler #1:	2.5 °C	2.5 °C	Cooler #4:	°C	°C	Cooler #7:	°C	°C
Cooler #2:	3.1 °C	3.1 °C	Cooler #5:	°C	°C	Cooler #8:	°C	°C
Cooler #3:	°C	°C	Cooler #6:	°C	°C	Cooler #9:	°C	°C

TALS Sample Number	Ammonia (pH<2)	COD (pH<2)	Nitrate Nitrite (pH<2)	Metals* (pH<2)	Hardness (pH<2)	Pest (pH 5-9)	EPH or QAM (pH<2)	Phenols (pH<2)	Sulfide (pH>9)	TKN (pH<2)	TOC (pH<2)	Total Cyanide (pH>12)	Total Phos (pH<2)	Other	Other
1	Lr	Lr		Lr									Lr		
2	Lr	Lr		Lr									Lr		
3	Lr	Lr		Lr									Lr		

If pH adjustments are required record the information below:

Sample No(s). adjusted _____

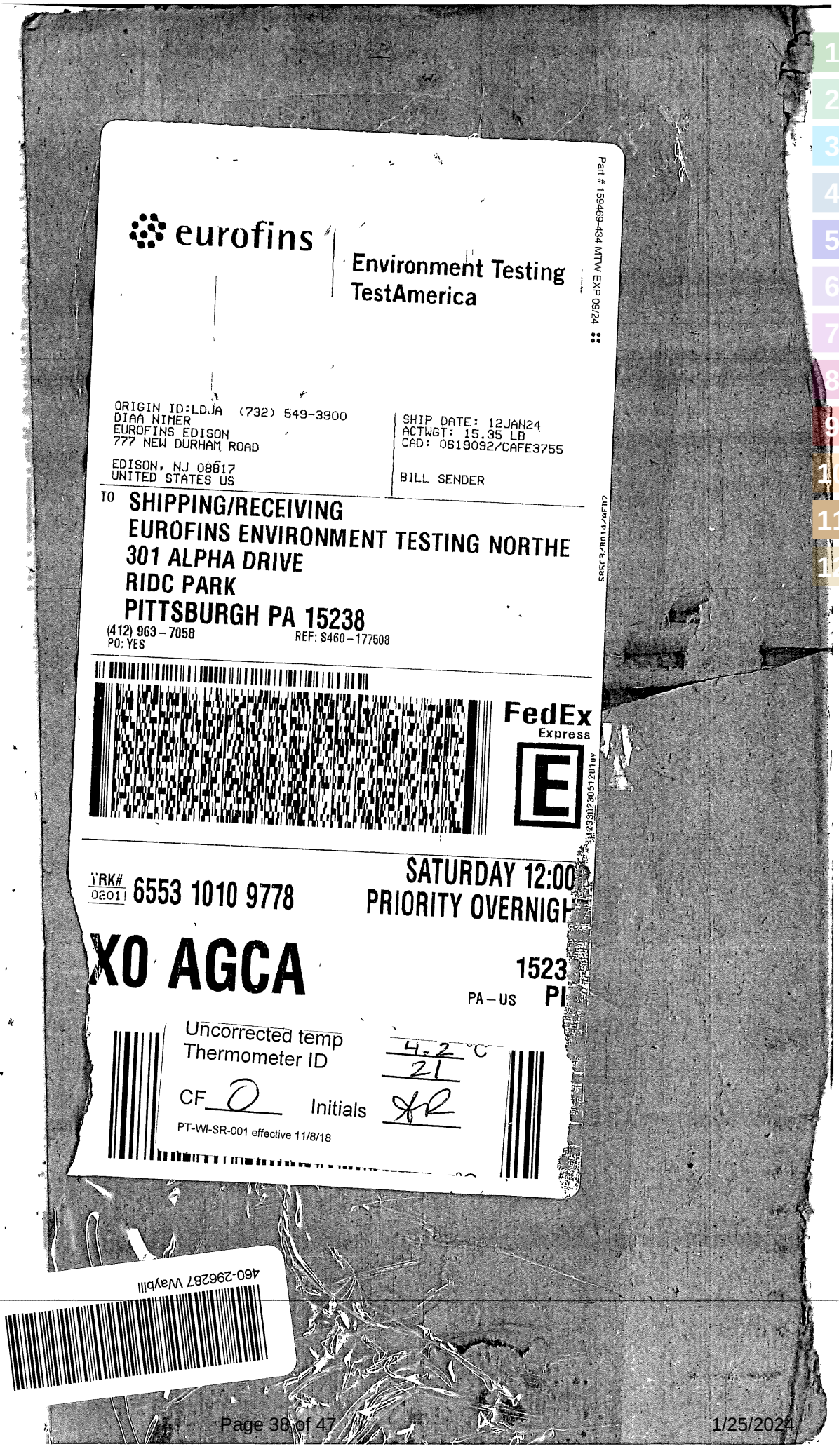
Preservative Name/Conc. _____ Volume of Preservative used (ml): _____

Lot # of Preservative(s): _____ Expiration Date: _____

The appropriate Project Manager and Department Manager should be notified about the samples which were pH adjusted.

*Samples for Metal analysis which are out of compliance must be acidified at least 24 hours prior to analysis.

Initials: HJ Date: 1/11



eurofins | Environment Testing TestAmerica

Part # 159469-434 MTW EXP 09/24

ORIGIN ID:LDJA (732) 549-3900
DIAA NIMER
EUROFINS EDISON
777 NEW DURHAM ROAD

EDISON, NJ 08817
UNITED STATES US

SHIP DATE: 12JAN24
ACTWGT: 15.35 LB
CAD: 0619092/CAFE3755

BILL SENDER

TO SHIPPING/RECEIVING
EUROFINS ENVIRONMENT TESTING NORTHE
301 ALPHA DRIVE
RIDC PARK
PITTSBURGH PA 15238
(412) 963-7058
PO: YES
REF: S460-177508

FedEx Express

TRK# 0201 6553 1010 9778

SATURDAY 12:00
PRIORITY OVERNIGH

XO AGCA

1523
PA-US PI

Uncorrected temp 4.2 °C
Thermometer ID 21
CF 0 Initials KR
PT-WI-SR-001 effective 11/8/18

460-296287 Waybill

Eurofins Edison
777 New Durham Road
Edison, NJ 08817
Phone 732-549-3900 Fax: 732-549-3679

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler	Lab PM: Gilmore, Julie L	Carrier Tracking No(s)	COC No: 460-70199 1
Client Contact: Shipping/Receiving	Phone	E-Mail: Julie.Gilmore@et.eurofinsus.com	State of Origin: Pennsylvania	Page: Page 1 of 1
Company: Eurofins Environment Testing Northeast,		Accreditations Required (See note): NELAP - Pennsylvania		Job #: 460-296287-1
Address: 301 Alpha Drive, RIDC Park,	Due Date Requested: 1/24/2024			
City: Pittsburgh	TAT Requested (days):			
State, Zip: PA, 15238				
Phone: 412-963-7058(Tel) 412-963-2468(Fax)	PO #:			
Email	WO #:			
Project Name: Rock Hill - Anti-degradation	Project #: 46011424			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020B/3010A Total Lithium	6020B/Filtration_ME (MOD) Dissolved Lithium	Total Number of containers	Special Instructions/Note:
			Preservation Code:							
NPDES 001 (460-296287-1)	1/11/24	09.00 Eastern		Water			X	X	2	
Upstream (460-296287-2)	1/11/24	10 30 Eastern		Water			X	X	2	
Clarifying Pond (460-296287-3)	1/11/24	11 30 Eastern		Water			X	X	2	

460-296287 Chain of Custody

Note Since laboratory accreditations are subject to change, Eurofins Environment Testing Northeast, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories This sample shipment is forwarded under chain-of-custody If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Northeast, LLC laboratory or other instructions will be provided Any changes to accreditation status should be brought to Eurofins Environment Testing Northeast, LLC attention immediately If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Northeast, LLC

Possible Hazard Identification: Unconfirmed	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month): ☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested I, II, III, IV, Other (specify) Primary Deliverable Rank. 1	Special Instructions/QC Requirements.

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time: 1/12/24 1900	Company: EET Eli	Received by:	Date/Time: 1/13/24 0930	Company: EETNE
Relinquished by:	Date/Time	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time	Company	Received by:	Date/Time	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks.

1/25/2024

Eurofins Edison
777 New Durham Road
Edison, NJ 08817
Phone: 732-549-3900 Fax: 732-549-3679

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Gilmore, Julie L	Carrier Tracking No(s):	COC No: 460-70195.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Julie.Gilmore@et.eurofinsus.com	State of Origin: Pennsylvania	Page: Page 1 of 1
Company: Eurofins Lancaster Laboratories Environm		Accreditations Required (See note): NELAP - Pennsylvania		Job #: 460-296287-1
Address: 2425 New Holland Pike, ,	Due Date Requested: 1/25/2024			
City: Lancaster	TAT Requested (days):			
State, Zip: PA, 17601				
Phone: 717-656-2300(Tel)	PO #:			
Email:	WO #:			
Project Name: Rock Hill	Project #: 46011424			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)
Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020B/3005A (MOD) Total Fe	6020B/Filtration_ME Dissolved Cd/Fe/Zn	351.2/351.2_Prep	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
NPDES 001 (460-296287-1)	1/11/24	09.00 Eastern		Water			X	X	X	3	
Upstream (460-296287-2)	1/11/24	10:30 Eastern		Water			X	X	X	3	
Clarifying Pond (460-296287-3)	1/11/24	11:30 Eastern		Water			X	X	X	3	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Northeast, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Northeast, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Northeast, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Northeast, LLC.

Possible Hazard Identification	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 1	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
1		1/12/24 16:07	ETL		1/12/24 16:07	ELE
2		1/12/24 20:0	ELE			
3					1/12/24 2007	

Custody Seals Intact: ∆ Yes ∆ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: raw: 0.6 corr: 0.5

Eurofins Edison
777 New Durham Road
Edison, NJ 08817
Phone: 732-549-3900 Fax: 732-549-3679

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Gilmore, Julie L	Carrier Tracking No(s):	COC No: 460-70198.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Julie.Gilmore@et.eurofinsus.com	State of Origin: Pennsylvania	Page: Page 1 of 1
Company: Eurofins Environment Testing Northeast,		Accreditations Required (See note): NELAP - Pennsylvania		Job #: 460-296287-1
Address: 10 Hazelwood Drive, ,	Due Date Requested: 1/22/2024			
City: Amherst	TAT Requested (days):			
State, Zip: NY, 14228-2298				
Phone: 716-691-2600(Tel) 716-691-7991(Fax)	PO #:			
Email:	WO #:			
Project Name: Rock Hill - Anti-degradation	Project #: 46011424			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)
Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	245.1/245.1_Prep	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
NPDES 001 (460-296287-1)	1/11/24	09:00 Eastern		Water			X	1	
Upstream (460-296287-2)	1/11/24	10:30 Eastern		Water			X	1	
Clarifying Pond (460-296287-3)	1/11/24	11:30 Eastern		Water			X	1	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Northeast, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Northeast, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Northeast, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Northeast, LLC.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 1	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:				
Relinquished by:	Date/Time: 1/12/24 1900	Company: EETEL	Received by:	Date/Time: 1/13/24 930	Company: TA		
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company		
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company		

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 3.1 # ICE

Eurofins Edison
777 New Durham Road
Edison, NJ 08817
Phone: 732-549-3900 Fax: 732-549-3679

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Gilmore, Julie L	Carrier Tracking No(s):	COC No: 460-70200.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Julie.Gilmore@et.eurofinsus.com	State of Origin: Pennsylvania	Page: Page 1 of 1
Company: Eurofins Environment Testing Southeast,		Accreditations Required (See note): NELAP Pennsylvania		Job #: 460-296287-1
Address: 5102 LaRoche Avenue,	Due Date Requested: 1/23/2024			
City: Savannah	TAT Requested (days):			
State, Zip: GA, 31404				
Phone: 912-354-7858(Tel) 912-352-0165(Fax)	PO #:			
Email:	WO #:			
Project Name: Rock Hill Anti-degradation	Project #: 46011424			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A	HCL	M	Hexane
B	NaOH	N	None
C	Zn Acetate	O	AsNaO2
D	Nitric Acid	P	Na2O4S
E	NaHSO4	Q	Na2SO3
F	MeOH	R	Na2S2O3
G	Amchlor	S	H2SO4
H	Ascorbic Acid	T	TSP Dodecahydrate
I	Ice	U	Acetone
J	DI Water	V	MCAA
K	EDTA	W	pH 4-5
L	EDA	Y	Trizma
		Z	other (specify)

Other

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020B/3005A Total Aluminum	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
NPDES 001 (460-296287 1)	1/11/24	09:00 Eastern		Water			X	1	
Upstream (460-296287-2)	1/11/24	10:30 Eastern		Water			X	1	
Clarifying Pond (460-296287-3)	1/11/24	11 30 Eastern		Water			X	1	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Northeast, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Northeast, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Northeast, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Northeast, LLC.

Possible Hazard Identification	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV Other (specify) Primary Deliverable Rank: 1	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
1		1/12/24 1900	EET EL.			
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
3	Relinquished by:	Date/Time:	Company	Received by:	1/13/24 0940	Eurofins

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.	Cooler Temperature(s) °C and Other Remarks: 3.5/3.5

Login Sample Receipt Checklist

Client: Heidelberg Materials Northeast LLC

Job Number: 460-296287-1

Login Number: 296287

List Source: Eurofins Edison

List Number: 1

Creator: Thundathorn, Sukanan 1

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Heidelberg Materials Northeast LLC

Job Number: 460-296287-1

Login Number: 296287
List Number: 5
Creator: Kolb, Chris M

List Source: Eurofins Buffalo
List Creation: 01/16/24 10:22 AM

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	3.1 IR GUN #1 ICE
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	True	

Login Sample Receipt Checklist

Client: Heidelberg Materials Northeast LLC

Job Number: 460-296287-1

Login Number: 296287
List Number: 2
Creator: Metzger, Katherine A

List Source: Eurofins Lancaster Laboratories Environment Testing, LLC
List Creation: 01/12/24 08:40 PM

Question	Answer	Comment
The cooler's custody seal is intact.	N/A	Not present
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature acceptable,where thermal pres is required(</=6C, not frozen).	True	
Cooler Temperature is recorded.	True	
WV:Container Temp acceptable,where thermal pres is required (</=6C, not frozen).	N/A	
WV: Container Temperature is recorded.	N/A	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the containers received and the COC.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
There is sufficient vol. for all requested analyses.	True	
Is the Field Sampler's name present on COC?	False	Received project as a subcontract.
Sample custody seals are intact.	N/A	Not present.
VOA sample vials do not have headspace >6mm in diameter (none, if from WV)?	N/A	

Login Sample Receipt Checklist

Client: Heidelberg Materials Northeast LLC

Job Number: 460-296287-1

Login Number: 296287
List Number: 3
Creator: Oster, Rachel A

List Source: Eurofins Pittsburgh
List Creation: 01/13/24 10:28 AM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Heidelberg Materials Northeast LLC

Job Number: 460-296287-1

Login Number: 296287
List Number: 4
Creator: Munro, Caroline

List Source: Eurofins Savannah
List Creation: 01/13/24 12:54 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Lab Results

January 25, 2024

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Katie Murray
Heidelberg Materials Northeast LLC
7660 Imperial Way
Allentown, Pennsylvania 18195

Generated 2/6/2024 5:56:40 AM

JOB DESCRIPTION

Rock Hill - Anti-Degradation

JOB NUMBER

460-296982-1

Eurofins Edison
777 New Durham Road
Edison NJ 08817

See page two for job notes and contact information.

my EOL

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing Northeast, LLC Project Manager.

Authorization



Generated
2/6/2024 5:56:40 AM

Authorized for release by
Julie Gilmore, Project Manager I
Julie.Gilmore@et.eurofinsus.com
(484)685-0865

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Qualifiers

HPLC/IC

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

General Chemistry

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
H	Sample was prepped or analyzed beyond the specified holding time. This does not meet regulatory requirements.
H3	Sample was received and analyzed past holding time. This does not meet regulatory requirements.
HF	Parameter with a holding time of 15 minutes. Test performed by laboratory at client's request. Sample was analyzed outside of hold time.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job Narrative
460-296982-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

- Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

The method detection limit (MDL) is the lowest value detectable by the laboratory for a given analyte as determined by the MDL procedure detailed in EPA 40 CFR 136. Reported MDL values are adjusted for any dilutions and percent moisture (as applicable). The lab is unable to report values below the MDL.

Receipt
The samples were received on 1/25/2024 7:00 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 2.4°C and 2.6°C

Subcontract Work
Method Osomotic Pressure: This method was subcontracted to Microbac Laboratories, Inc. The subcontract laboratory certification is different from that of the facility issuing the final report. The subcontract report is appended in its entirety.

HPLC/IC
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Metals
Method 6020B: The following samples were not filtered within 15 minutes of sample collection as required by the method: NPDES 001 (460-296982-1), Upstream (460-296982-2) and Clarifying Pond (460-296982-3). The sample(s) was filtered prior to analysis at the laboratory, and the results have been reported. This does not meet regulatory requirements.

Method 6020B: The following samples were not filtered within 15 minutes of sample collection as required by the method: NPDES 001 (460-296982-1), Upstream (460-296982-2) and Clarifying Pond (460-296982-3). The samples were filtered prior to analysis at the laboratory, and the results have been reported.

Method 6020B: The following samples were not filtered and preserved within 15 minutes of sample collection in accordance with 40 CFR Part 136 Table II, Footnote 7, method 6020B. The samples were filtered prior to analysis at the laboratory.

NPDES 001 (460-296982-1), Upstream (460-296982-2) and Clarifying Pond (460-296982-3)

Method 6020B: The following samples were not filtered within 15 minutes of sample collection as required by the method: NPDES 001 (460-296982-1), Upstream (460-296982-2) and Clarifying Pond (460-296982-3). The sample(s) was filtered prior to analysis at the laboratory, and the results have been reported. This does not meet regulatory requirements.

Method 6020B: The following samples were not filtered within 15 minutes of sample collection as required by the method: NPDES 001 (460-296982-1), Upstream (460-296982-2) and Clarifying Pond (460-296982-3). The samples were filtered prior to analysis at the laboratory, and the results have been reported.

Method 6020B: The following samples were not filtered and preserved within 15 minutes of sample collection in accordance with 40 CFR Part 136 Table II, Footnote 7, method 6020B. The samples were filtered prior to analysis at the laboratory.

NPDES 001 (460-296982-1), Upstream (460-296982-2) and Clarifying Pond (460-296982-3)

Job ID: 460-296982-1 (Continued)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

General Chemistry

Method 4500_O_C: This analysis is normally performed in the field and has a method-defined holding time of 15 minutes. The following samples has been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe: NPDES 001 (460-296982-1), Upstream (460-296982-2) and Clarifying Pond (460-296982-3).

Method 9040C: This analysis is normally performed in the field and has a method-defined holding time of 15 minutes. The following samples has been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe: NPDES 001 (460-296982-1), Upstream (460-296982-2), Clarifying Pond (460-296982-3), (460-297190-D-1) and (460-297190-D-1 DU).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Client Sample ID: NPDES 001
Date Collected: 01/25/24 09:00
Date Received: 01/25/24 19:00

Lab Sample ID: 460-296982-1
Matrix: Water

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide	**0.065**	**J**	0.32	0.054	mg/L			01/27/24 18:19	1
Nitrate as N	**0.19**		0.16	0.070	mg/L			01/26/24 13:25	1
Chloride	**17.3**		0.32	0.039	mg/L			01/26/24 13:25	1
Nitrate Nitrite as N	**0.19**		0.16	0.070	mg/L			01/26/24 13:25	1
Nitrite as N	0.023	U	0.16	0.023	mg/L			01/26/24 13:25	1
Sulfate	**6.63**		0.48	0.095	mg/L			01/26/24 13:25	1

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000043	U	0.00020	0.000043	mg/L		01/30/24 11:38	01/30/24 15:15	1

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**5.1**		4.0	0.91	ug/L		01/26/24 19:30	01/29/24 15:01	1
Boron	**42.5**	**J**	80.0	30.4	ug/L		01/26/24 19:30	01/29/24 15:01	1
Calcium	**20000**		500	53.6	ug/L		01/26/24 19:30	01/29/24 15:01	1
Copper	**2.7**	**J**	4.0	2.5	ug/L		01/26/24 19:30	01/29/24 15:01	1
Lead	0.84	U	1.2	0.84	ug/L		01/26/24 19:30	01/29/24 15:01	1
Magnesium	**7610**		200	46.9	ug/L		01/26/24 19:30	01/29/24 15:01	1
Manganese	**34.2**		8.0	1.5	ug/L		01/26/24 19:30	01/29/24 15:01	1
Nickel	0.91	U	4.0	0.91	ug/L		01/26/24 19:30	01/29/24 15:01	1
Potassium	**1410**		200	112	ug/L		01/26/24 19:30	01/29/24 15:01	1
Selenium	0.59	U	2.5	0.59	ug/L		01/26/24 19:30	01/29/24 15:01	1
Sodium	**5960**		500	219	ug/L		01/26/24 19:30	01/29/24 15:01	1
Strontium	**66.2**		4.0	0.50	ug/L		01/26/24 19:30	01/29/24 15:01	1
Zinc	6.5	U	16.0	6.5	ug/L		01/26/24 19:30	01/29/24 15:01	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**195**		100	35.0	ug/L		01/29/24 09:25	01/30/24 16:14	1
Iron	**423**		50.0	20.0	ug/L		01/30/24 08:15	02/01/24 20:14	1

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**36.2**	**J**	40.0	19.5	ug/L		01/29/24 23:56	01/30/24 01:57	1
Cadmium	0.15	U	0.50	0.15	ug/L		01/30/24 21:30	01/31/24 15:06	1
Arsenic	0.89	U	2.0	0.89	ug/L		01/29/24 23:56	01/30/24 01:57	1
Iron	**126**		50.0	20.0	ug/L		01/30/24 21:30	01/31/24 15:06	1
Calcium	**20100**		500	53.6	ug/L		01/29/24 23:56	01/30/24 01:57	1
Zinc	**5.9**	**J**	10.0	4.0	ug/L		01/30/24 21:30	01/31/24 15:06	1
Copper	2.5	U	4.0	2.5	ug/L		01/29/24 23:56	01/30/24 01:57	1
Iron	**63.4**	**J**	120	58.2	ug/L		01/29/24 23:56	01/30/24 01:57	1
Lead	0.84	U	1.2	0.84	ug/L		01/29/24 23:56	01/30/24 01:57	1
Magnesium	**7540**		200	46.9	ug/L		01/29/24 23:56	01/30/24 01:57	1
Manganese	**10.8**		8.0	1.5	ug/L		01/29/24 23:56	01/30/24 01:57	1
Nickel	0.91	U	4.0	0.91	ug/L		01/29/24 23:56	01/30/24 01:57	1

Method: SW846 EPA 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	1.3	U	5.0	1.3	ug/L		02/01/24 09:10	02/01/24 15:05	1

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill - Anti-Degradation

Job ID: 460-296982-1

Client Sample ID: NPDES 001
Date Collected: 01/25/24 09:00
Date Received: 01/25/24 19:00

Lab Sample ID: 460-296982-1
Matrix: Water

Method: SW846 EPA 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	1.3	U	5.0	1.3	ug/L		02/01/24 09:10	02/01/24 15:42	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Resistivity (EPA 120.1)	**0.00517**		0.000100	0.000100	Mohm-cm			02/02/24 09:30	1
Specific Conductance (EPA 120.1)	**194**		1.00	1.00	umhos/cm			02/02/24 09:30	1
Acidity (SM 2310B-2011)	20.0	U	20.0	20.0	mg/L			02/05/24 14:12	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-2011)	**61.6**		5.0	5.0	mg/L			01/31/24 14:26	1
Carbonate Alkalinity as CaCO3 (SM 2320B-2011)	5.0	U	5.0	5.0	mg/L			01/31/24 14:26	1
Alkalinity as CaCO3 to pH 4.5 (SM 2320B-2011)	**61.6**		5.0	5.0	mg/L			01/31/24 14:26	1
Total Dissolved Solids (SM 2540C-2015)	**10.0**		2.5	2.5	mg/L			01/30/24 08:44	1
Total Suspended Solids (SM 2540D-2015)	2.5	U	2.5	2.5	mg/L			01/29/24 07:52	1
Ammonia (EPA 350.1)	0.050	U	0.10	0.050	mg/L			02/02/24 11:43	1
Total Kjeldahl Nitrogen (EPA 351.2)	**0.69**	**J**	1.0	0.50	mg/L		01/30/24 15:34	01/31/24 10:45	1
Chemical Oxygen Demand (EPA 410.4)	3.3	U	10.0	3.3	mg/L			02/02/24 12:04	1
Oxygen, Dissolved (SM 4500 O C-2016)	**11.3**	**H H3**	1.0	1.0	mg/L			01/26/24 14:15	1
Orthophosphate as P (SM 4500 P E-2011)	0.0050	U	0.030	0.0050	mg/L			01/26/24 09:00	1
Carbonaceous Biochemical Oxygen Demand 5 (SM 5210 B-2016)	1.0	U	1.0	1.0	mg/L			01/26/24 14:55	1
pH (SW846 9040C)	**7.6**	**HF**	0.1	0.1	SU			01/31/24 10:37	1
Temperature (SW846 9040C)	**23.5**	**HF**	0.1	0.1	Degrees C			01/31/24 10:37	1
Total Organic Carbon (SW846 9060A)	**1.8**		1.0	0.53	mg/L			01/29/24 18:10	1
Phosphorus as PO4 (SM4500 P E-2011)	**0.097**		0.090	0.071	mg/L		02/05/24 10:00	02/05/24 17:52	1
Phosphorus as P (SM4500 P E-2011)	**0.032**		0.030	0.023	mg/L		02/05/24 10:00	02/05/24 17:52	1
Nitrogen, Total (EPA Total Nitrogen)	**0.88**		0.50	0.50	mg/L			02/06/24 05:44	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (EPA 350.1)	0.050	U	0.10	0.050	mg/L			02/02/24 11:49	1
Orthophosphate as P (SM 4500 P E-2011)	0.0050	U	0.030	0.0050	mg/L			01/26/24 09:00	1
Phosphorus as PO4 (SM4500 P E-2011)	**0.12**	**F1**	0.090	0.071	mg/L		02/05/24 10:00	02/05/24 17:52	1
Phosphorus as P (SM4500 P E-2011)	**0.040**		0.030	0.023	mg/L		02/05/24 10:00	02/05/24 17:52	1

Client Sample ID: Upstream

Date Collected: 01/25/24 10:30
Date Received: 01/25/24 19:00

Lab Sample ID: 460-296982-2

Matrix: Water

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide	**0.079**	**J**	0.32	0.054	mg/L			01/27/24 18:35	1
Nitrate as N	**0.11**	**J**	0.16	0.070	mg/L			01/26/24 14:49	1
Chloride	**60.6**		0.32	0.039	mg/L			01/26/24 14:49	1
Nitrate Nitrite as N	**0.11**	**J**	0.16	0.070	mg/L			01/26/24 14:49	1
Nitrite as N	0.023	U	0.16	0.023	mg/L			01/26/24 14:49	1
Sulfate	**4.65**		0.48	0.095	mg/L			01/26/24 14:49	1

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000043	U	0.00020	0.000043	mg/L		01/30/24 11:38	01/30/24 15:19	1

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**10.8**		4.0	0.91	ug/L		01/26/24 19:30	01/29/24 15:03	1
Boron	**42.4**	**J**	80.0	30.4	ug/L		01/26/24 19:30	01/29/24 15:03	1
Calcium	**25000**		500	53.6	ug/L		01/26/24 19:30	01/29/24 15:03	1
Copper	**3.5**	**J**	4.0	2.5	ug/L		01/26/24 19:30	01/29/24 15:03	1
Lead	0.84	U	1.2	0.84	ug/L		01/26/24 19:30	01/29/24 15:03	1
Magnesium	**7930**		200	46.9	ug/L		01/26/24 19:30	01/29/24 15:03	1
Manganese	**76.2**		8.0	1.5	ug/L		01/26/24 19:30	01/29/24 15:03	1
Nickel	**1.0**	**J**	4.0	0.91	ug/L		01/26/24 19:30	01/29/24 15:03	1
Potassium	**1710**		200	112	ug/L		01/26/24 19:30	01/29/24 15:03	1
Selenium	0.59	U	2.5	0.59	ug/L		01/26/24 19:30	01/29/24 15:03	1
Sodium	**10400**		500	219	ug/L		01/26/24 19:30	01/29/24 15:03	1
Strontium	**85.6**		4.0	0.50	ug/L		01/26/24 19:30	01/29/24 15:03	1
Zinc	6.5	U	16.0	6.5	ug/L		01/26/24 19:30	01/29/24 15:03	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**263**		100	35.0	ug/L		01/29/24 09:25	01/30/24 16:06	1
Iron	**430**		50.0	20.0	ug/L		01/30/24 08:15	02/01/24 20:18	1

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**69.8**		40.0	19.5	ug/L		01/29/24 23:56	01/30/24 02:00	1
Cadmium	0.15	U	0.50	0.15	ug/L		01/30/24 21:30	01/31/24 15:08	1
Arsenic	0.89	U	2.0	0.89	ug/L		01/29/24 23:56	01/30/24 02:00	1
Iron	**160**		50.0	20.0	ug/L		01/30/24 21:30	01/31/24 15:08	1
Calcium	**24900**		500	53.6	ug/L		01/29/24 23:56	01/30/24 02:00	1
Zinc	**6.3**	**J**	10.0	4.0	ug/L		01/30/24 21:30	01/31/24 15:08	1
Copper	2.5	U	4.0	2.5	ug/L		01/29/24 23:56	01/30/24 02:00	1
Iron	**92.7**	**J**	120	58.2	ug/L		01/29/24 23:56	01/30/24 02:00	1
Lead	0.84	U	1.2	0.84	ug/L		01/29/24 23:56	01/30/24 02:00	1
Magnesium	**8100**		200	46.9	ug/L		01/29/24 23:56	01/30/24 02:00	1
Manganese	**73.4**		8.0	1.5	ug/L		01/29/24 23:56	01/30/24 02:00	1
Nickel	0.91	U	4.0	0.91	ug/L		01/29/24 23:56	01/30/24 02:00	1

Method: SW846 EPA 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	1.3	U	5.0	1.3	ug/L		02/01/24 09:10	02/01/24 15:19	1

Client Sample ID: Upstream
Lab Sample ID: 460-296982-2

Date Collected: 01/25/24 10:30
Matrix: Water
Date Received: 01/25/24 19:00

Method: SW846 EPA 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	1.3	U	5.0	1.3	ug/L		02/01/24 09:10	02/01/24 15:44	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Resistivity (EPA 120.1)	**0.00389**		0.000100	0.000100	Mohm-cm			02/02/24 09:30	1
Specific Conductance (EPA 120.1)	**257**		1.00	1.00	umhos/cm			02/02/24 09:30	1
Acidity (SM 2310B-2011)	20.0	U	20.0	20.0	mg/L			02/05/24 14:12	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-2011)	**61.3**		5.0	5.0	mg/L			01/31/24 14:32	1
Carbonate Alkalinity as CaCO3 (SM 2320B-2011)	5.0	U	5.0	5.0	mg/L			01/31/24 14:32	1
Alkalinity as CaCO3 to pH 4.5 (SM 2320B-2011)	**61.3**		5.0	5.0	mg/L			01/31/24 14:32	1
Total Dissolved Solids (SM 2540C-2015)	**65.0**		2.5	2.5	mg/L			01/30/24 08:44	1
Total Suspended Solids (SM 2540D-2015)	2.5	U	2.5	2.5	mg/L			01/29/24 07:52	1
Ammonia (EPA 350.1)	0.050	U	0.10	0.050	mg/L			02/02/24 11:45	1
Total Kjeldahl Nitrogen (EPA 351.2)	**0.59**	**J**	1.0	0.50	mg/L		01/30/24 15:34	01/31/24 10:52	1
Chemical Oxygen Demand (EPA 410.4)	3.3	U	10.0	3.3	mg/L			02/02/24 12:04	1
Oxygen, Dissolved (SM 4500 O C-2016)	**9.4**	**H H3**	1.0	1.0	mg/L			01/26/24 14:20	1
Orthophosphate as P (SM 4500 P E-2011)	**0.0057**	**J**	0.030	0.0050	mg/L			01/26/24 09:00	1
Carbonaceous Biochemical Oxygen Demand 5 (SM 5210 B-2016)	1.0	U	1.0	1.0	mg/L			01/26/24 15:00	1
pH (SW846 9040C)	**7.4**	**HF**	0.1	0.1	SU			01/31/24 10:43	1
Temperature (SW846 9040C)	**23.8**	**HF**	0.1	0.1	Degrees C			01/31/24 10:43	1
Total Organic Carbon (SW846 9060A)	**2.4**		1.0	0.53	mg/L			01/29/24 19:31	1
Phosphorus as PO4 (SM4500 P E-2011)	0.071	U	0.090	0.071	mg/L		02/05/24 10:00	02/05/24 17:52	1
Phosphorus as P (SM4500 P E-2011)	0.023	U	0.030	0.023	mg/L		02/05/24 10:00	02/05/24 17:52	1
Nitrogen, Total (EPA Total Nitrogen)	**0.70**		0.50	0.50	mg/L			02/06/24 05:44	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (EPA 350.1)	0.050	U	0.10	0.050	mg/L			02/02/24 12:01	1
Orthophosphate as P (SM 4500 P E-2011)	0.0050	U	0.030	0.0050	mg/L			01/26/24 09:00	1
Phosphorus as PO4 (SM4500 P E-2011)	0.071	U	0.090	0.071	mg/L		02/05/24 10:00	02/05/24 17:52	1
Phosphorus as P (SM4500 P E-2011)	0.023	U	0.030	0.023	mg/L		02/05/24 10:00	02/05/24 17:52	1

Client Sample ID: Clarifying Pond
Lab Sample ID: 460-296982-3

Date Collected: 01/25/24 11:30
Matrix: Water
Date Received: 01/25/24 19:00

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide	0.054	U	0.32	0.054	mg/L			01/27/24 18:50	1
Nitrate as N	**0.32**		0.16	0.070	mg/L			01/26/24 15:04	1

Client Sample ID: Clarifying Pond
Date Collected: 01/25/24 11:30
Date Received: 01/25/24 19:00

Lab Sample ID: 460-296982-3
Matrix: Water

Method: EPA 300.0 - Anions, Ion Chromatography (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1.25**		0.32	0.039	mg/L			01/26/24 15:04	1
Nitrate Nitrite as N	**0.32**		0.16	0.070	mg/L			01/26/24 15:04	1
Nitrite as N	0.023	U	0.16	0.023	mg/L			01/26/24 15:04	1
Sulfate	**5.49**		0.48	0.095	mg/L			01/26/24 15:04	1

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000043	U	0.00020	0.000043	mg/L		01/30/24 11:38	01/30/24 15:20	1

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**2.9**	**J**	4.0	0.91	ug/L		01/26/24 19:30	01/29/24 15:06	1
Boron	**57.9**	**J**	80.0	30.4	ug/L		01/26/24 19:30	01/29/24 15:06	1
Calcium	**18000**		500	53.6	ug/L		01/26/24 19:30	01/29/24 15:06	1
Copper	**2.5**	**J**	4.0	2.5	ug/L		01/26/24 19:30	01/29/24 15:06	1
Lead	0.84	U	1.2	0.84	ug/L		01/26/24 19:30	01/29/24 15:06	1
Magnesium	**6140**		200	46.9	ug/L		01/26/24 19:30	01/29/24 15:06	1
Manganese	**25.0**		8.0	1.5	ug/L		01/26/24 19:30	01/29/24 15:06	1
Nickel	0.91	U	4.0	0.91	ug/L		01/26/24 19:30	01/29/24 15:06	1
Potassium	**1250**		200	112	ug/L		01/26/24 19:30	01/29/24 15:06	1
Selenium	0.59	U	2.5	0.59	ug/L		01/26/24 19:30	01/29/24 15:06	1
Sodium	**3120**		500	219	ug/L		01/26/24 19:30	01/29/24 15:06	1
Strontium	**33.2**		4.0	0.50	ug/L		01/26/24 19:30	01/29/24 15:06	1
Zinc	6.5	U	16.0	6.5	ug/L		01/26/24 19:30	01/29/24 15:06	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**223**		100	35.0	ug/L		01/29/24 09:25	01/30/24 16:10	1
Iron	**325**		50.0	20.0	ug/L		01/30/24 08:15	02/01/24 20:16	1

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**26.2**	**J**	40.0	19.5	ug/L		01/29/24 23:56	01/30/24 02:04	1
Cadmium	0.15	U	0.50	0.15	ug/L		01/30/24 21:30	01/31/24 15:10	1
Arsenic	0.89	U	2.0	0.89	ug/L		01/29/24 23:56	01/30/24 02:04	1
Iron	**25.6**	**J**	50.0	20.0	ug/L		01/30/24 21:30	01/31/24 15:10	1
Calcium	**18500**		500	53.6	ug/L		01/29/24 23:56	01/30/24 02:04	1
Zinc	4.0	U	10.0	4.0	ug/L		01/30/24 21:30	01/31/24 15:10	1
Copper	2.5	U	4.0	2.5	ug/L		01/29/24 23:56	01/30/24 02:04	1
Iron	58.2	U	120	58.2	ug/L		01/29/24 23:56	01/30/24 02:04	1
Lead	0.84	U	1.2	0.84	ug/L		01/29/24 23:56	01/30/24 02:04	1
Magnesium	**6210**		200	46.9	ug/L		01/29/24 23:56	01/30/24 02:04	1
Manganese	**9.1**		8.0	1.5	ug/L		01/29/24 23:56	01/30/24 02:04	1
Nickel	0.91	U	4.0	0.91	ug/L		01/29/24 23:56	01/30/24 02:04	1

Method: SW846 EPA 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	1.3	U	5.0	1.3	ug/L		02/01/24 09:10	02/01/24 15:22	1

Client Sample ID: Clarifying Pond

Lab Sample ID: 460-296982-3

Date Collected: 01/25/24 11:30

Matrix: Water

Date Received: 01/25/24 19:00

Method: SW846 EPA 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	1.3	U	5.0	1.3	ug/L		02/01/24 09:10	02/01/24 15:47	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Resistivity (EPA 120.1)	**0.00649**		0.000100	0.000100	Mohm-cm			02/02/24 09:30	1
Specific Conductance (EPA 120.1)	**154**		1.00	1.00	umhos/cm			02/02/24 09:30	1
Acidity (SM 2310B-2011)	20.0	U	20.0	20.0	mg/L			02/05/24 14:12	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-2011)	**62.9**		5.0	5.0	mg/L			01/31/24 14:38	1
Carbonate Alkalinity as CaCO3 (SM 2320B-2011)	5.0	U	5.0	5.0	mg/L			01/31/24 14:38	1
Alkalinity as CaCO3 to pH 4.5 (SM 2320B-2011)	**62.9**		5.0	5.0	mg/L			01/31/24 14:38	1
Total Dissolved Solids (SM 2540C-2015)	**87.0**		2.5	2.5	mg/L			01/30/24 08:44	1
Total Suspended Solids (SM 2540D-2015)	**5.0**		2.5	2.5	mg/L			01/29/24 07:52	1
Ammonia (EPA 350.1)	0.050	U	0.10	0.050	mg/L			02/02/24 11:46	1
Total Kjeldahl Nitrogen (EPA 351.2)	**0.58**	**J**	1.0	0.50	mg/L		01/30/24 15:34	01/31/24 10:54	1
Chemical Oxygen Demand (EPA 410.4)	3.3	U	10.0	3.3	mg/L			02/02/24 12:04	1
Oxygen, Dissolved (SM 4500 O C-2016)	**10.9**	**H**	1.0	1.0	mg/L			01/26/24 14:25	1
Orthophosphate as P (SM 4500 P E-2011)	0.0050	U	0.030	0.0050	mg/L			01/26/24 09:00	1
Carbonaceous Biochemical Oxygen Demand 5 (SM 5210 B-2016)	1.0	U	1.0	1.0	mg/L			01/26/24 15:05	1
pH (SW846 9040C)	**7.7**	**HF**	0.1	0.1	SU			01/31/24 10:54	1
Temperature (SW846 9040C)	**24.1**	**HF**	0.1	0.1	Degrees C			01/31/24 10:54	1
Total Organic Carbon (SW846 9060A)	**0.96**	**J**	1.0	0.53	mg/L			01/29/24 19:57	1
Phosphorus as PO4 (SM4500 P E-2011)	0.071	U	0.090	0.071	mg/L		02/05/24 10:00	02/05/24 17:52	1
Phosphorus as P (SM4500 P E-2011)	0.023	U	0.030	0.023	mg/L		02/05/24 10:00	02/05/24 17:52	1
Nitrogen, Total (EPA Total Nitrogen)	**0.90**		0.50	0.50	mg/L			02/06/24 05:44	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (EPA 350.1)	0.050	U	0.10	0.050	mg/L			02/02/24 12:03	1
Orthophosphate as P (SM 4500 P E-2011)	0.0050	U	0.030	0.0050	mg/L			01/26/24 09:00	1
Phosphorus as PO4 (SM4500 P E-2011)	0.071	U	0.090	0.071	mg/L		02/05/24 10:00	02/05/24 17:52	1
Phosphorus as P (SM4500 P E-2011)	0.023	U	0.030	0.023	mg/L		02/05/24 10:00	02/05/24 17:52	1

Lab Chronicle

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill - Anti-Degradation

Job ID: 460-296982-1

Client Sample ID: NPDES 001

Date Collected: 01/25/24 09:00
Date Received: 01/25/24 19:00

Lab Sample ID: 460-296982-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		1	956617	OXG	EET EDI	01/26/24 13:25
Total/NA	Analysis	300.0		1	956618	OXG	EET EDI	01/26/24 13:25
Total/NA	Analysis	300.0		1	956735	OXG	EET EDI	01/27/24 18:19
Total/NA	Prep	245.1			699379	NVK	EET BUF	01/30/24 11:38
Total/NA	Analysis	245.1		1	699442	NVK	EET BUF	01/30/24 15:15
Dissolved	Filtration	Filtration			468022	UDL9	ELLE	01/30/24 08:00
Dissolved	Prep	3005A			468371	UAMX	ELLE	01/30/24 21:30
Dissolved	Analysis	6020B		1	468841	UCIG	ELLE	01/31/24 15:06
Dissolved	Filtration	FILTRATION			956923	VAD	EET EDI	01/29/24 23:51
Dissolved	Prep	3010A			956924	VAD	EET EDI	01/29/24 23:56
Dissolved	Analysis	6020B		1	957020	VAD	EET EDI	01/30/24 01:57
Total Recoverable	Prep	3005A			467969	NU9R	ELLE	01/30/24 08:15
Total Recoverable	Analysis	6020B		1	469343	UCIG	ELLE	02/01/24 20:14
Total Recoverable	Prep	3005A			819939	RR	EET SAV	01/29/24 09:25
Total Recoverable	Analysis	6020B		1	820349	BWR	EET SAV	01/30/24 16:14
Total/NA	Prep	3010A			956673	GAE	EET EDI	01/26/24 19:30
Total/NA	Analysis	6020B		1	957020	VAD	EET EDI	01/29/24 15:01
Dissolved	Filtration	Filtration			458130	SJM	EET PIT	01/29/24 08:39
Dissolved	Prep	3010A			458477	NWW	EET PIT	02/01/24 09:10
Dissolved	Analysis	EPA 6020B		1	458626	MRG	EET PIT	02/01/24 15:42
Total/NA	Prep	3010A			458477	NWW	EET PIT	02/01/24 09:10
Total/NA	Analysis	EPA 6020B		1	458626	MRG	EET PIT	02/01/24 15:05
Total/NA	Analysis	120.1		1	957622	HTV	EET EDI	02/02/24 09:30
Total/NA	Analysis	2310B-2011		1	957990	RAK	EET EDI	02/05/24 14:12
Total/NA	Analysis	2320B-2011		1	957293	RXA	EET EDI	01/31/24 14:26
Total/NA	Analysis	2540C-2015		1	956993	PLS	EET EDI	01/30/24 08:44
Total/NA	Analysis	2540D-2015		1	956840	PLS	EET EDI	01/29/24 07:52
Dissolved	Filtration	FILTRATION			957643	RXA	EET EDI	02/02/24 11:33
Dissolved	Analysis	350.1		1	957665	AXP	EET EDI	02/02/24 11:49
Total/NA	Analysis	350.1		1	957665	AXP	EET EDI	02/02/24 11:43
Total/NA	Prep	351.2			468242	NLE3	ELLE	01/30/24 15:34 - 01/30/24 18:34 [1]
Total/NA	Analysis	351.2		1	468711	JCG7	ELLE	01/31/24 10:45
Total/NA	Analysis	410.4		1	957648	HTV	EET EDI	02/02/24 12:04
Total/NA	Analysis	4500 O C-2016		1	956648	RXA	EET EDI	01/26/24 14:15
Dissolved	Filtration	FILTRATION			956580	HTV	EET EDI	01/26/24 08:45
Dissolved	Analysis	4500 P E-2011		1	956582	HTV	EET EDI	01/26/24 09:00
Total/NA	Analysis	4500 P E-2011		1	956582	HTV	EET EDI	01/26/24 09:00
Total/NA	Analysis	5210 B-2016		1	956647	RXA	EET EDI	01/26/24 14:55
Total/NA	Analysis	9040C		1	957252	RXA	EET EDI	01/31/24 10:37
Total/NA	Analysis	9060A		1	957049	MMC	EET EDI	01/29/24 18:10
Dissolved	Filtration	FILTRATION			958028	HTV	EET EDI	02/05/24 10:00
Dissolved	Prep	SM 4500 P B			958030	HTV	EET EDI	02/05/24 10:00
Dissolved	Analysis	SM4500 P E-2011		1	958032	HTV	EET EDI	02/05/24 17:52

Eurofins Edison

Lab Chronicle

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill - Anti-Degradation

Job ID: 460-296982-1

Client Sample ID: NPDES 001

Lab Sample ID: 460-296982-1

Date Collected: 01/25/24 09:00

Matrix: Water

Date Received: 01/25/24 19:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	SM 4500 P B			958030	HTV	EET EDI	02/05/24 10:00
Total/NA	Analysis	SM4500 P E-2011		1	958032	HTV	EET EDI	02/05/24 17:52
Total/NA	Analysis	Total Nitrogen		1	956814	TJW	EET EDI	02/06/24 05:44

Client Sample ID: Upstream

Lab Sample ID: 460-296982-2

Date Collected: 01/25/24 10:30

Matrix: Water

Date Received: 01/25/24 19:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		1	956617	OXG	EET EDI	01/26/24 14:49
Total/NA	Analysis	300.0		1	956618	OXG	EET EDI	01/26/24 14:49
Total/NA	Analysis	300.0		1	956735	OXG	EET EDI	01/27/24 18:35
Total/NA	Prep	245.1			699379	NVK	EET BUF	01/30/24 11:38
Total/NA	Analysis	245.1		1	699442	NVK	EET BUF	01/30/24 15:19
Dissolved	Filtration	Filtration			468022	UDL9	ELLE	01/30/24 08:00
Dissolved	Prep	3005A			468371	UAMX	ELLE	01/30/24 21:30
Dissolved	Analysis	6020B		1	468841	UCIG	ELLE	01/31/24 15:08
Dissolved	Filtration	FILTRATION			956923	VAD	EET EDI	01/29/24 23:51
Dissolved	Prep	3010A			956924	VAD	EET EDI	01/29/24 23:56
Dissolved	Analysis	6020B		1	957020	VAD	EET EDI	01/30/24 02:00
Total Recoverable	Prep	3005A			467969	NU9R	ELLE	01/30/24 08:15
Total Recoverable	Analysis	6020B		1	469343	UCIG	ELLE	02/01/24 20:18
Total Recoverable	Prep	3005A			819939	RR	EET SAV	01/29/24 09:25
Total Recoverable	Analysis	6020B		1	820349	BWR	EET SAV	01/30/24 16:06
Total/NA	Prep	3010A			956673	GAE	EET EDI	01/26/24 19:30
Total/NA	Analysis	6020B		1	957020	VAD	EET EDI	01/29/24 15:03
Dissolved	Filtration	Filtration			458130	SJM	EET PIT	01/29/24 08:39
Dissolved	Prep	3010A			458477	NWW	EET PIT	02/01/24 09:10
Dissolved	Analysis	EPA 6020B		1	458626	MRG	EET PIT	02/01/24 15:44
Total/NA	Prep	3010A			458477	NWW	EET PIT	02/01/24 09:10
Total/NA	Analysis	EPA 6020B		1	458626	MRG	EET PIT	02/01/24 15:19
Total/NA	Analysis	120.1		1	957622	HTV	EET EDI	02/02/24 09:30
Total/NA	Analysis	2310B-2011		1	957990	RAK	EET EDI	02/05/24 14:12
Total/NA	Analysis	2320B-2011		1	957293	RXA	EET EDI	01/31/24 14:32
Total/NA	Analysis	2540C-2015		1	956993	PLS	EET EDI	01/30/24 08:44
Total/NA	Analysis	2540D-2015		1	956840	PLS	EET EDI	01/29/24 07:52
Dissolved	Filtration	FILTRATION			957643	RXA	EET EDI	02/02/24 11:33
Dissolved	Analysis	350.1		1	957665	AXP	EET EDI	02/02/24 12:01
Total/NA	Analysis	350.1		1	957665	AXP	EET EDI	02/02/24 11:45
Total/NA	Prep	351.2			468242	NLE3	ELLE	01/30/24 15:34 - 01/30/24 18:34 [1]
Total/NA	Analysis	351.2		1	468711	JCG7	ELLE	01/31/24 10:52
Total/NA	Analysis	410.4		1	957648	HTV	EET EDI	02/02/24 12:04
Total/NA	Analysis	4500 O C-2016		1	956648	RXA	EET EDI	01/26/24 14:20

Client Sample ID: Upstream

Lab Sample ID: 460-296982-2

Date Collected: 01/25/24 10:30

Matrix: Water

Date Received: 01/25/24 19:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Filtration	FILTRATION			956580	HTV	EET EDI	01/26/24 08:45
Dissolved	Analysis	4500 P E-2011		1	956582	HTV	EET EDI	01/26/24 09:00
Total/NA	Analysis	4500 P E-2011		1	956582	HTV	EET EDI	01/26/24 09:00
Total/NA	Analysis	5210 B-2016		1	956647	RXA	EET EDI	01/26/24 15:00
Total/NA	Analysis	9040C		1	957252	RXA	EET EDI	01/31/24 10:43
Total/NA	Analysis	9060A		1	957049	MMC	EET EDI	01/29/24 19:31
Dissolved	Filtration	FILTRATION			958028	HTV	EET EDI	02/05/24 10:00
Dissolved	Prep	SM 4500 P B			958030	HTV	EET EDI	02/05/24 10:00
Dissolved	Analysis	SM4500 P E-2011		1	958032	HTV	EET EDI	02/05/24 17:52
Total/NA	Prep	SM 4500 P B			958030	HTV	EET EDI	02/05/24 10:00
Total/NA	Analysis	SM4500 P E-2011		1	958032	HTV	EET EDI	02/05/24 17:52
Total/NA	Analysis	Total Nitrogen		1	956814	TJW	EET EDI	02/06/24 05:44

Client Sample ID: Clarifying Pond

Lab Sample ID: 460-296982-3

Date Collected: 01/25/24 11:30

Matrix: Water

Date Received: 01/25/24 19:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		1	956617	OXG	EET EDI	01/26/24 15:04
Total/NA	Analysis	300.0		1	956618	OXG	EET EDI	01/26/24 15:04
Total/NA	Analysis	300.0		1	956735	OXG	EET EDI	01/27/24 18:50
Total/NA	Prep	245.1			699379	NVK	EET BUF	01/30/24 11:38
Total/NA	Analysis	245.1		1	699442	NVK	EET BUF	01/30/24 15:20
Dissolved	Filtration	Filtration			468022	UDL9	ELLE	01/30/24 08:00
Dissolved	Prep	3005A			468371	UAMX	ELLE	01/30/24 21:30
Dissolved	Analysis	6020B		1	468841	UCIG	ELLE	01/31/24 15:10
Dissolved	Filtration	FILTRATION			956923	VAD	EET EDI	01/29/24 23:51
Dissolved	Prep	3010A			956924	VAD	EET EDI	01/29/24 23:56
Dissolved	Analysis	6020B		1	957020	VAD	EET EDI	01/30/24 02:04
Total Recoverable	Prep	3005A			467969	NU9R	ELLE	01/30/24 08:15
Total Recoverable	Analysis	6020B		1	469343	UCIG	ELLE	02/01/24 20:16
Total Recoverable	Prep	3005A			819939	RR	EET SAV	01/29/24 09:25
Total Recoverable	Analysis	6020B		1	820349	BWR	EET SAV	01/30/24 16:10
Total/NA	Prep	3010A			956673	GAE	EET EDI	01/26/24 19:30
Total/NA	Analysis	6020B		1	957020	VAD	EET EDI	01/29/24 15:06
Dissolved	Filtration	Filtration			458130	SJM	EET PIT	01/29/24 08:39
Dissolved	Prep	3010A			458477	NWW	EET PIT	02/01/24 09:10
Dissolved	Analysis	EPA 6020B		1	458626	MRG	EET PIT	02/01/24 15:47
Total/NA	Prep	3010A			458477	NWW	EET PIT	02/01/24 09:10
Total/NA	Analysis	EPA 6020B		1	458626	MRG	EET PIT	02/01/24 15:22
Total/NA	Analysis	120.1		1	957622	HTV	EET EDI	02/02/24 09:30
Total/NA	Analysis	2310B-2011		1	957990	RAK	EET EDI	02/05/24 14:12
Total/NA	Analysis	2320B-2011		1	957293	RXA	EET EDI	01/31/24 14:38
Total/NA	Analysis	2540C-2015		1	956993	PLS	EET EDI	01/30/24 08:44

Lab Chronicle

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill - Anti-Degradation

Job ID: 460-296982-1

Client Sample ID: Clarifying Pond

Date Collected: 01/25/24 11:30
Date Received: 01/25/24 19:00

Lab Sample ID: 460-296982-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	2540D-2015		1	956840	PLS	EET EDI	01/29/24 07:52
Dissolved	Filtration	FILTRATION			957643	RXA	EET EDI	02/02/24 11:33
Dissolved	Analysis	350.1		1	957665	AXP	EET EDI	02/02/24 12:03
Total/NA	Analysis	350.1		1	957665	AXP	EET EDI	02/02/24 11:46
Total/NA	Prep	351.2			468242	NLE3	ELLE	01/30/24 15:34 - 01/30/24 18:34 [1]
Total/NA	Analysis	351.2		1	468711	JCG7	ELLE	01/31/24 10:54
Total/NA	Analysis	410.4		1	957648	HTV	EET EDI	02/02/24 12:04
Total/NA	Analysis	4500 O C-2016		1	956648	RXA	EET EDI	01/26/24 14:25
Dissolved	Filtration	FILTRATION			956580	HTV	EET EDI	01/26/24 08:45
Dissolved	Analysis	4500 P E-2011		1	956582	HTV	EET EDI	01/26/24 09:00
Total/NA	Analysis	4500 P E-2011		1	956582	HTV	EET EDI	01/26/24 09:00
Total/NA	Analysis	5210 B-2016		1	956647	RXA	EET EDI	01/26/24 15:05
Total/NA	Analysis	9040C		1	957252	RXA	EET EDI	01/31/24 10:54
Total/NA	Analysis	9060A		1	957049	MMC	EET EDI	01/29/24 19:57
Dissolved	Filtration	FILTRATION			958028	HTV	EET EDI	02/05/24 10:00
Dissolved	Prep	SM 4500 P B			958030	HTV	EET EDI	02/05/24 10:00
Dissolved	Analysis	SM4500 P E-2011		1	958032	HTV	EET EDI	02/05/24 17:52
Total/NA	Prep	SM 4500 P B			958030	HTV	EET EDI	02/05/24 10:00
Total/NA	Analysis	SM4500 P E-2011		1	958032	HTV	EET EDI	02/05/24 17:52
Total/NA	Analysis	Total Nitrogen		1	956814	TJW	EET EDI	02/06/24 05:44

[1] This procedure uses a method stipulated length of time for the process. Both start and end times are displayed.

Laboratory References:

EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

EET EDI = Eurofins Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

EET PIT = Eurofins Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

EET SAV = Eurofins Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Microbac = Marietta, OH, 158 Starlite Drive, Marietta, OH 45750

Accreditation/Certification Summary

Client: Heidelberg Materials Northeast LLC
Job ID: 460-296982-1
Project/Site: Rock Hill - Anti-Degradation

Laboratory: Eurofins Edison

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Connecticut	State	PH-0818	09-30-24
Georgia	State	12028 (NJ)	06-30-24
Massachusetts	State	M-NJ312	06-30-24
New Jersey	NELAP	12028	06-30-24
New York	NELAP	11452	04-01-24
Pennsylvania	NELAP	68-00522	02-29-24
USDA	US Federal Programs	P330-20-00244	05-31-24

Laboratory: Eurofins Buffalo

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Arkansas DEQ	State	88-0686	07-06-23 *
Connecticut	State	PH-0568	03-31-24
Florida	NELAP	E87672	06-30-23 *
Georgia	State	10026 (NY)	03-31-24
Georgia	State Program	N/A	03-31-09 *
Illinois	NELAP	200003	09-30-23 *
Iowa	State	374	03-01-25
Iowa	State Program	374	03-01-09 *
Kansas	NELAP	E-10187	02-01-24
Kentucky (UST)	State	108092	04-01-24
Kentucky (WW)	State	KY90029	12-31-23 *
Louisiana	NELAP	02031	06-30-23 *
Louisiana (All)	NELAP	02031	06-30-23 *
Maine	State	NY00044	12-04-24
Maryland	State	294	06-30-24
Massachusetts	State	M-NY044	07-01-24
Michigan	State	9937	04-01-24
Michigan	State Program	9937	04-01-09 *
New Hampshire	NELAP	2973	09-11-19 *
New Hampshire	NELAP	2337	11-17-24
New Jersey	NELAP	NY455	06-30-24
New York	NELAP	10026	03-31-24
Pennsylvania	NELAP	68-00281	08-31-24
Rhode Island	State	LAO00378	12-30-23 *
Texas	NELAP	T104704412-18-10	07-31-23 *
USDA	US Federal Programs	P330-18-00039	03-25-24
Virginia	NELAP	460185	09-14-24
Washington	State	C784	02-10-24
Wisconsin	State	998310390	08-31-24

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
A2LA	Dept. of Defense ELAP	0001.01	11-30-24
A2LA	ISO/IEC 17025	0001.01	11-30-24
Alaska	State	PA00009	06-30-24
Alaska (UST)	State	17-027	02-28-24
Arizona	State	AZ0780	03-12-24

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Client: Heidelberg Materials Northeast LLC
Job ID: 460-296982-1
Project/Site: Rock Hill - Anti-Degradation

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC (Continued)

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Arkansas DEQ	State	88-00660	08-09-24
California	State	2792	01-31-24 *
Colorado	State	PA00009	06-30-24
Connecticut	State	PH-0746	06-30-25
Florida	NELAP	E87997	06-30-24
Hawaii	State	N/A	01-31-25
Illinois	NELAP	200027	01-31-25
Iowa	State	361	03-01-24
Kansas	NELAP	E-10151	10-31-24
Kentucky (DW)	State	KY90088	12-31-24
Kentucky (UST)	State	0001.01	11-30-24
Kentucky (WW)	State	KY90088	12-31-23 *
Louisiana (All)	NELAP	02055	06-30-24
Maine	State	2019012	03-12-25
Maryland	State	100	06-30-24
Massachusetts	State	M-PA009	06-30-24
Michigan	State	9930	01-31-25
Minnesota	NELAP	042-999-487	12-31-24
Mississippi	State	023	01-31-25
Missouri	State	450	01-31-25
Montana (DW)	State	0098	01-01-25
New Hampshire	NELAP	2730	01-10-25
New Jersey	NELAP	PA011	06-30-24
New York	NELAP	10670	04-01-24
North Carolina (DW)	State	42705	07-31-24
North Carolina (WW/SW)	State	521	12-31-24
Oklahoma	NELAP	9804	08-31-24
Oregon	NELAP	PA200001	09-11-24
Pennsylvania	NELAP	36-00037	01-31-25
Quebec Ministry of Environment and Fight against Climate Change	PALA	507	09-16-24
Rhode Island	State	LAO00338	12-30-24
Texas	NELAP	T104704194-23-46	08-31-24
USDA	US Federal Programs	525-22-298-19481	10-25-25
Vermont	State	VT - 36037	10-28-24
Virginia	NELAP	460182	06-14-25
Washington	State	C457	04-11-24
West Virginia (DW)	State	9906 C	01-31-25
West Virginia DEP	State	055	07-31-24
Wyoming (UST)	A2LA	0001.01	11-30-24

Laboratory: Eurofins Pittsburgh

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Arkansas DEQ	State	19-033-0	06-27-24
California	State	2891	04-30-24
Connecticut	State	PH-0688	09-30-24
Florida	NELAP	E871008	06-30-24
Georgia	State	PA 02-00416	04-30-24
Illinois	NELAP	004375	06-30-24

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Accreditation/Certification Summary

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill - Anti-Degradation

Job ID: 460-296982-1

Laboratory: Eurofins Pittsburgh (Continued)

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Kansas	NELAP	E-10350	01-31-25
Kentucky (UST)	State	162013	04-30-23 *
Kentucky (WW)	State	KY98043	12-31-23 *
Louisiana	NELAP	04041	06-30-22 *
Louisiana (All)	NELAP	04041	06-30-24
Maine	State	PA00164	03-06-24
Minnesota	NELAP	042-999-482	12-31-24
New Hampshire	NELAP	2030	04-04-24
New Jersey	NELAP	PA005	06-30-24
New York	NELAP	11182	04-01-24
North Carolina (WW/SW)	State	434	12-31-24
North Dakota	State	R-227	04-30-24
Oregon	NELAP	PA-2151	02-06-24
Pennsylvania	NELAP	02-00416	04-30-24
Rhode Island	State	LAO00362	12-31-22 *
South Carolina	State	89014	04-30-25
Texas	NELAP	T104704528	03-31-24
US Fish & Wildlife	US Federal Programs	058448	03-31-24
USDA	US Federal Programs	P330-16-00211	04-11-26
Utah	NELAP	PA001462019-8	05-31-24
Virginia	NELAP	10043	07-14-24
West Virginia DEP	State	142	01-31-25
Wisconsin	State	998027800	08-31-24

Laboratory: Eurofins Savannah

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
	AFCEE	SAVLAB	
Alabama	State	41450	06-30-24
ANAB	Dept. of Defense ELAP	L2463	09-22-24
Arkansas (DW)	State	GA00006	06-30-24
Arkansas DEQ	State	19-015-0	02-01-24
California	State	2939	06-30-24
Florida	NELAP	E87052	06-30-24
Georgia	State	E87052	06-30-24
Georgia (DW)	State	803	06-30-24
Guam	State	19-007R	04-17-24
Hawaii	State	<cert No.>	06-30-24
Illinois	NELAP	200022	11-30-24
Indiana	State	C-GA-02	06-30-24
Iowa	State	353	07-01-25
Kentucky (UST)	State	NA	06-30-24
Louisiana	NELAP	30690	06-30-24
Louisiana (All)	NELAP	30690	06-30-24
Louisiana (DW)	State	LA009	12-31-24
Maine	State	GA00006	09-25-24
Maryland	State	250	12-31-24
Massachusetts	State	M-GA006	06-30-24
Michigan	State	9925	06-30-24

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Accreditation/Certification Summary

Client: Heidelberg Materials Northeast LLC
Job ID: 460-296982-1
Project/Site: Rock Hill - Anti-Degradation

Laboratory: Eurofins Savannah (Continued)

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Mississippi	State	<cert No.>	06-30-24
Nebraska	State	NE-OS-7-04	06-30-24
New Jersey	NELAP	GA769	06-30-24
New Mexico	State	GA00006	06-30-24
North Carolina (DW)	State	13701	07-31-24
North Carolina (WW/SW)	State	269	12-31-24
Pennsylvania	NELAP	68-00474	06-30-24
Puerto Rico	State	GA00006	01-01-25
South Carolina	State	98001	06-30-24
Tennessee	State	TN02961	06-30-24
Texas	NELAP	T1047004185	11-30-24
Texas	TCEQ Water Supply	T104704185	06-30-24
USDA	US Federal Programs	P330-18-00313	09-03-24
Virginia	NELAP	460161	06-14-24
Wyoming	State	8TMS-L	06-30-24

Method Summary

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill - Anti-Degradation

Job ID: 460-296982-1

Method	Method Description	Protocol	Laboratory
300.0	Anions, Ion Chromatography	EPA	EET EDI
245.1	Mercury (CVAA)	EPA	EET BUF
6020B	Metals (ICP/MS)	SW846	EET EDI
6020B	Metals (ICP/MS)	SW846	EET SAV
6020B	Metals (ICP/MS)	SW846	ELLE
EPA 6020B	Metals (ICP/MS)	SW846	EET PIT
120.1	Conductivity, Specific Conductance	EPA	EET EDI
2310B-2011	Acidity	SM	EET EDI
2320B-2011	Alkalinity, Total	SM	EET EDI
2540C-2015	Total Dissolved Solids (Dried at 180 °C)	SM	EET EDI
2540D-2015	Total Suspended Solids (Dried at 103-105°C)	SM	EET EDI
350.1	Nitrogen, Ammonia	EPA	EET EDI
351.2	Nitrogen, Total Kjeldahl	EPA	ELLE
410.4	COD	EPA	EET EDI
4500 O C-2016	Oxygen, Dissolved	SM	EET EDI
4500 P E-2011	Orthophosphate	SM	EET EDI
5210 B-2016	BOD, 5-Day	SM	EET EDI
9040C	pH	SW846	EET EDI
9060A	Organic Carbon, Total (TOC)	SW846	EET EDI
SM4500 P E-2011	Phosphorus	SM	EET EDI
Total Nitrogen	Nitrogen, Total	EPA	EET EDI
Subcontract	Osomotic Pressure	None	Microbac
245.1	Preparation, Mercury	EPA	EET BUF
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	EET SAV
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	ELLE
3010A	Preparation, Total Metals	SW846	EET EDI
3010A	Preparation, Total Metals	SW846	EET PIT
351.2	Nitrogen, Total Kjeldahl	EPA	ELLE
FILTRATION	Sample Filtration	None	EET EDI
Filtration	Sample Filtration	None	EET PIT
Filtration	Sample Filtration	None	ELLE
SM 4500 P B	Phosphorous, Total and Ortho	SM	EET EDI

Protocol References:

EPA = US Environmental Protection Agency

None = None

SM = "Standard Methods For The Examination Of Water And Wastewater"

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

EET EDI = Eurofins Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

EET PIT = Eurofins Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

EET SAV = Eurofins Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Microbac = Marietta, OH, 158 Starlite Drive, Marietta, OH 45750

Sample Summary

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill - Anti-Degradation

Job ID: 460-296982-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
460-296982-1	NPDES 001	Water	01/25/24 09:00	01/25/24 19:00
460-296982-2	Upstream	Water	01/25/24 10:30	01/25/24 19:00
460-296982-3	Clarifying Pond	Water	01/25/24 11:30	01/25/24 19:00

Microbac Laboratories Inc., - Marietta, OH

Client Project ID:

46011424

For:

Julie Gilmore

Eurofins TestAmerica Edison

777 New Durham RD

Edison, NJ 08817

Project State of Origin: Pennsylvania

Project Requested Certification:

Microbac Laboratories Inc., - Marietta, OH	68-01670	PA Department of Environmental Protection

All test results meet the requirements of the QAPP and other applicable contract terms and conditions. Any exceptions are attached to this cover page or addressed in the method narratives presented in the report. All results for soil samples are reported on a 'dry-weight' basis unless specified otherwise. Analytical results for water and wastes are reported on a 'as received' basis unless specified otherwise. A statement of uncertainty for each analysis is available upon request. The reported results are related only to the samples analyzed as received. This laboratory report may be released as a hardcopy and in computer-readable form submitted electronically or on diskette. This laboratory report shall not be reproduced, except in full, without the written approval of Microbac Laboratories, Inc.

Laboratory Project Manager:

Michelle Taylor

Project Manager

Michelle.Taylor@microbac.com

Authorized By:

Michelle Taylor

Project Manager

Issued: 02/01/2024

MICROBAC®

Laboratory Report Number: M4A1656

Client Project ID: 46011424

Cooler Receipt Log

Cooler ID: Default Cooler Temp: 2.8°C

Cooler Inspection Checklist

Ice Present or not required?	Yes
Shipping containers sealed or not required?	Yes
Custody seals intact or not required?	Yes
Chain of Custody (COC) Present?	Yes
COC includes customer information?	Yes
Relinquished and received signature on COC?	Yes
Sample collector identified on COC?	Yes
Sample type identified on COC?	Yes
Correct type of Containers Received	No
Correct number of containers listed on COC?	Yes
Containers Intact?	Yes
COC includes requested analyses?	Yes
Enough sample volume for indicated tests received?	Yes
Sample labels match COC (Name, Date & Time?)	Yes
Samples arrived within hold time?	Yes
Correct preservatives on COC or not required?	Yes
Chemical preservations checked or not required?	Yes
Preservation checks meet method requirements?	Yes
VOA vials have zero headspace, or not recd.?	Yes

Laboratory Report Number: M4A1656

Client Project ID: 46011424

Case Narrative

OP received in 250ml poly.

MICROBAC®

Laboratory Report Number: M4A1656

Client Project ID: 46011424

Microbac Laboratories Inc., - Marietta, OH

CERTIFICATE OF ANALYSIS

Client ID:	NPDES 001 (460-296982-1)			**Collection Date:**	01/25/2024 09:00
Laboratory ID:	M4A1656-01			**Prep Date:**	01/31/2024 15:39
Matrix:	Aqueous			**Analyzed:**	01/31/2024 16:14
Batch / Sequence:	B4A1289 /	**Analytical Method:**	PADEP 391-2000-008	**Calibration:**	NA
Instrument:	OSMOMETER 5004	**Units:**	mOsm/kg	**File ID:**	OsmoticPressure_B4A1289_240131034952.xls
Analyst:	APH	**Dilution:**	1		

Analyte	CAS Number	Result	MDL	RL	Flag	Qualifier
Osmotic Pressure		9.00	6.00	10.0		

MICROBAC®

Laboratory Report Number: M4A1656

Client Project ID: 46011424

Microbac Laboratories Inc., - Marietta, OH

CERTIFICATE OF ANALYSIS

Client ID:	Upstream (460-296982-2)			**Collection Date:**	01/25/2024 10:30
Laboratory ID:	M4A1656-02			**Prep Date:**	01/31/2024 15:39
Matrix:	Aqueous			**Analyzed:**	01/31/2024 16:14
Batch / Sequence:	B4A1289 /	**Analytical Method:**	PADEP 391-2000-008	**Calibration:**	NA
Instrument:	OSMOMETER 5004	**Units:**	mOsm/kg	**File ID:**	OsmoticPressure_B4A1289_240131034952.xls
Analyst:	APH	**Dilution:**	1		

Analyte	CAS Number	Result	MDL	RL	Flag	Qualifier
Osmotic Pressure		**10.0**	6.00	10.0		

MICROBAC®

Laboratory Report Number: M4A1656

Client Project ID: 46011424

Microbac Laboratories Inc., - Marietta, OH

CERTIFICATE OF ANALYSIS

Client ID:	Clarifying Pond (460-296982-3)			**Collection Date:**	01/25/2024 11:30
Laboratory ID:	M4A1656-03			**Prep Date:**	01/31/2024 15:39
Matrix:	Aqueous			**Analyzed:**	01/31/2024 16:14
Batch / Sequence:	B4A1289 /	**Analytical Method:**	PADEP 391-2000-008	**Calibration:**	NA
Instrument:	OSMOMETER 5004	**Units:**	mOsm/kg	**File ID:**	OsmoticPressure_B4A1289_240131034952.xls
Analyst:	APH	**Dilution:**	1		

Analyte	CAS Number	Result	MDL	RL	Flag	Qualifier
Osmotic Pressure		9.00	6.00	10.0		

Laboratory Report Number: M4A1656

Client Project ID: 46011424

Notes and Definitions

:
DL: Detection Limit
LOD: Limit of Detection
LOQ: Limit of Quantitation
MDL: Method Detection Limit
RL: Reporting Limit

MICROBAC®

Laboratory Report Number: M4A1656

Client Project ID: 46011424

METHOD BLANKS

Sample ID:	B4A1289-BLK1	**Prep Date:**	01/31/24 15:39	**Matrix:**	Aqueous
Instrument:	OSMOMETER 5004	**Analyzed:**	01/31/24 16:14	**Method:**	PADEP 391-2000-008
File ID:	OsmoticPressure_B4A´	**Sequence:**		**Analyst:**	APH
Batch:	B4A1289	**Units:**	mOsm/kg	**Calibration:**	

Analyte	Result	MDL	RL	Dilution	Flag	Q
Osmotic Pressure	6.00	6.00	10.0	1	U	

* - Detected in the associated method Blank at a concentration >= RL

MICROBAC®

Laboratory Report Number: M4A1656

Client Project ID: 46011424

BLANK SPIKE / DUPLICATE (BS/BSD)

Method:	PADEP 391-2000-008		**Blank Spike**	**Duplicate**
Batch:	B4A1289	**Spike ID:**	B4A1289-BS1	B4A1289-BSD1
Analyst:	APH	**Prepared:**	01/31/24 15:39	01/31/24 15:39
Matrix:	Aqueous	**Analyzed:**	01/31/24 16:14	01/31/24 16:14
Units:	mOsm/kg	**File ID:**	OsmoticPressure_B4A1289_2401	OsmoticPressure_B4A1289_2401
Instrument:	OSMOMETER 5004	**Initial/Final:**	1mL/1mL	1mL/1mL
Calibration:				

Analyte	BS Spiked	BS Found	BS %Rec	BSD Spiked	BSD Found	BSD %Rec	%RPD	%Rec Limts	RPD Limit	Q
Osmotic Pressure	290	302	104	290	302	104	0.00	90 - 110	20	

* - Does not meet %Rec acceptance criteria.
- Does not meet RPD acceptance criteria.

Eurofins Edison
777 New Durham Road
Edison, NJ 08817
Phone: 732-549-3900 Fax: 732-549-3679

Chain of Custody Record

eurofins | Environment Testing

2/6/2024

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Gilmore, Julie L	Carrier Tracking No(s):	COC No: 460-70288.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Julie.Gilmore@et.eurofinsus.com	State of Origin: Pennsylvania	Page: Page 1 of 1
Company: Microbac Laboratories, Inc.		Accreditations Required (See note): NELAP - Pennsylvania		Job #: 460-296982-1
Address: 158 Starlite Drive, ,	Due Date Requested: 2/6/2024			
City: Marietta	TAT Requested (days):			
State, Zip: OH, 45750	PO #:			
Phone: 800-373-4071(Tel)	WO #:			
Email:	Project #: 46011424			
Project Name: Rock Hill - Anti-Degradation	SSOW#:			
Site:				

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)
Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	SUB (Osomotic Pressure)/ Osomotic Pressure	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
NPDES 001 (460-296982-1)	1/25/24	09:00 Eastern		Water			X	1	
Upstream (460-296982-2)	1/25/24	10:30 Eastern		Water			X	1	
Clarifying Pond (460-296982-3)	1/25/24	11:30 Eastern		Water			X	1	

M4A1656
Eurofins TestAmerica Edison
Rec'd: 01/30/2024 11:10
By: Stephanie Murphy Temp: 2.8 (Signature)

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Northeast, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Northeast, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Northeast, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Northeast, LLC.

Possible Hazard Identification	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 1	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
		1/29/24 1900	ET-TAL			
	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	Relinquished by:	Date/Time:	Company	Received by: Stephanie Murphy	Date/Time: 1/30/2024 1110	Company

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

MICROBAC®

Work Order # MHA1654

COOLER TEMP >6° C LOG

SAMPLE ID	Bottle 1 °C	Bottle 2 °C	Bottle 3 °C	Bottle 4 °C	Bottle 5 °C	Bottle 6 °C

1/30/2024 SM

pH Lot # N/A

pH Exceptions

SAMPLE ID	Bottle 1	Bottle 2	Bottle 3	Bottle 4	Bottle 5	Bottle 6

1/30/2024 SM

PRESERVATIVE EXCEPTIONS

✓ NONE

__ AS NOTED

1/30/2024 SM

Document Control # 1957
Last 04-10-2019

Issued to: Document Master File

Eurofins Edison
777 New Durham Road
Edison, NJ 08817
Phone: 732-549-3900 Fax: 732-549-3679

Chain of Custody Record

2.4 °
2.6 COR 2

eurofins

Client Information	Sampler	Lab PM: Gilmore, Julie L	Carrier Tracking No(s):	COC No: 460-177735-115848.1
Client Contact: Andrew Gutshall	Phone:	E-Mail: Julie.Gilmore@et.eurofinsus.com	State of Origin:	Page: Page 1 of 2
Company: Heidelberg Materials Northeast LLC	PWSID:			Job #: 296982
Address: 7660 Imperial Way	Due Date Requested:			
City: Allentown	TAT Requested (days):			
State, Zip: PA, 18195	Compliance Project: Δ Yes Δ No			
Phone:	PO #: Purchase Order not required			
Email: andrew.gutshall@heidelbergmaterials.com	WO #:			
Project Name: Rock Hill Anti-Degradation	Project #: 46011424			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A	HCL	M	Hexane
B	NaOH	N	None
C	Zn Acetate	O	AsNaO2
D	Nitric Acid	P	Na2O4S
E	NaHSO4	Q	Na2SO3
F	MeOH	R	Na2S2O3
G	Amchlor	S	H2SO4
H	Ascorbic Acid	T	TSP Dodecahydrate
I	Ice	U	Acetone
J	DI Water	V	MCAA
K	EDTA	W	pH 4-5
L	EDA	Y	Trizma
Other:		Z	other (specify)

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020B (MOD) Single Element 6020B Metals List	6020B (MOD) Single Element 6020B Metals List	351.2 Local Method	6020B Dissolved Cd/Fe/Zn	6020B (MOD) Total Fe	350.1 410.4, 4500_P_E	120.1 9040C, SM2310B	360.1 4500_P_E, 6020B	2320B (MOD) Alkalinity	6020B (MOD) Total Custom Metals	9060A TOC	2540D, SM5210B_Calc	2540C TDS	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	D	S	N	D	S	N	N	N	D	S	N	N		
NPDES 001	1/25/24	0900	G	Water																	1
Basin 1 NO flow NO Sample				Water																	—
Basin 2 NO flow NO Sample				Water																	—
Upstream	1/25/24	1030	G	Water																	2
Clarifying Pond	1/25/24	1130	G	Water																	3

SHORT HOLD

460-296982 Chain of Custody

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sa -- assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I II III IV Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	1/25/24	ERS		1/25/24 1514	EETN-KOP
	1-25-24 1800	EETN-KOP		1/25	EETA
	1/25 1800			1/25/24 1900	EETA

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.	Cooler Temperature(s) °C and Other Remarks:

Ver 06/08/2021

Eurofins Edison
777 New Durham Road
Edison NJ 08817
Phone: 732-549-3900 Fax: 732-549-3679

Chain of Custody Record

2.1 - eurofins
2.6 - KOP 2

Client Information	Sampler	Lab PM: Gilmore, Julie L	Carrier Tracking No(s):	COC No: 460-177735-115848.2
Client Contact: Andrew Gutshall	Phone:	E-Mail: Julie.Gilmore@et.eurofinsus.com	State of Origin:	Page: Page 2 of 2
Company: Heidelberg Materials Northeast LLC	PWSID:	Analysis Requested		Job #: 296982
Address: 7660 Imperial Way	Due Date Requested:			Preservation Codes: A HCL, B NaOH, C Zn Acetate, D Nitric Acid, E NaHSO4, F MeOH, G Amchlor, H Ascorbic Acid, I Ice, J DI Water, K EDTA, L EDA, M Hexane, N None, O AsNaO2, P Na2O4S, Q Na2SO3, R Na2S2O3, S H2SO4, T TSP Dodecahydrate, U Acetone, V MCAA, W pH 4-5, Y Trizma, Z other (specify)
City: Allentown	TAT Requested (days):			
State, Zip: PA, 18195	Compliance Project: Δ Yes Δ No			
Phone:	PO #: Purchase Order not required			
Email: andrew.gutshall@heidelbergmaterials.com	WO #:			
Project Name: Rock Hill Anti-Degradation	Project #: 46011424			
Site:	SSOW#:			Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (Wwater, Ssolid, Owaste/oil, BT=Tissue, Aair)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	300_ORGFM_28D, 300_ORGFMS	245.1 Local Method	6020B Total Aluminum	4500_O_C Dissolved Oxygen	4500-P_E Ortho Dissolved	4500 P_E Ortho Total	Total Number of containers	Special Instructions/Note:
			Preservation Code:		X	X	N	D	D				X	
NPDES 001	1/25/24	0900	G	Water										1
Basin 1 No flow no sample				Water										—
Basin 2 No flow no sample				Water										—
Upstream	1/25/24	1030	G	Water										2
Clarifying Pond	1/25/24	1130	G	Water										3

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I II III IV Other (specify)

Special Instructions/QC Requirements.

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		1/25/24			1/25/24 1514	EEIN-KOP
2		1-25-24 500	EEIN-KOP		1/25	ETA
3		1/25 1800			1/25/24 1907	EEIN

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.

Cooler Temperature(s) °C and Other Remarks:

Ver: 06/08/2021

TestAmerica Edison
Receipt Temperature and pH Log

Job Number: 296982

Number of Coolers: 2 IR Gun # 2

Cooler Temperatures

	RAW	CORRECTED		RAW	CORRECTED		RAW	CORRECTED
Cooler #1:	2.9 °C	2.9 °C	Cooler #4:	°C	°C	Cooler #7:	°C	°C
Cooler #2:	2.6 °C	2.6 °C	Cooler #5:	°C	°C	Cooler #8:	°C	°C
Cooler #3:	°C	°C	Cooler #6:	°C	°C	Cooler #9:	°C	°C

TALS Sample Number	Ammonia (pH<2)	COD (pH<2)	Nitrate Nitrite (pH<2)	Metals* (pH<2)	Hardness (pH<2)	Pest (pH 5-9)	EPH or QAM (pH<2)	Phenols (pH<2)	Sulfide (pH>9)	TKN (pH<2)	TOC (pH<2)	Total Cyanide (pH>12)	Total Phos (pH<2)	Other	Other
1	<2	<2		<2						<2	<2		<2		
2	<2	<2		<2						<2	<2		<2		
3	<2	<2		<2						<2	<2		<2		

If pH adjustments are required record the information below.

Sample No(s) adjusted _____

Preservative Name/Conc. _____ Volume of Preservative used (ml): _____

Lot # of Preservative(s): _____ Expiration Date: _____

The appropriate Project Manager and Department Manager should be notified about the samples which were pH adjusted

** Samples for Metal analysis which are out of compliance must be acidified at least 24 hours prior to analysis.*

Initials. _____ Date: 1/25



460-296982 Waybill

Part # 159469-434 MTW EXP 09/24

ORIGIN ID:LDJA (732) 549-3900
KENNETH RIVERA
EUROFINS EDISON
777 NEW DURHAM ROAD

EDISON, NJ 08817
UNITED STATES US

SHIP DATE: 26JAN24
ACTWGT: 40.90 LB
CAD: 0619092/CAFE3755

BILL SENDER

TO SHIPPING/RECEIVING
EUROFINS ENVIRONMENT TESTING NORTHE
301 ALPHA DRIVE
RIDC PARK
PITTSBURGH PA 15238

(412) 963-7058 REF: S460-177911
PO: YES

Uncorrected temp 2.9 °C
Thermometer ID 21

CF 0.0 Initials RB

PT-WI-SR-001 effective 11/8/18

FedEx Express

1 of 2

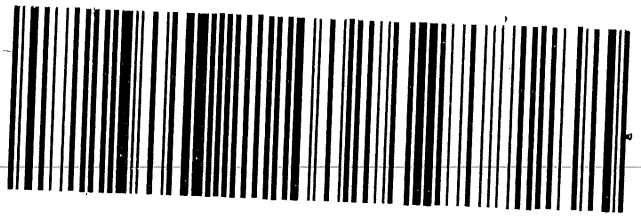
TRK# 0201 6553 1011 0500

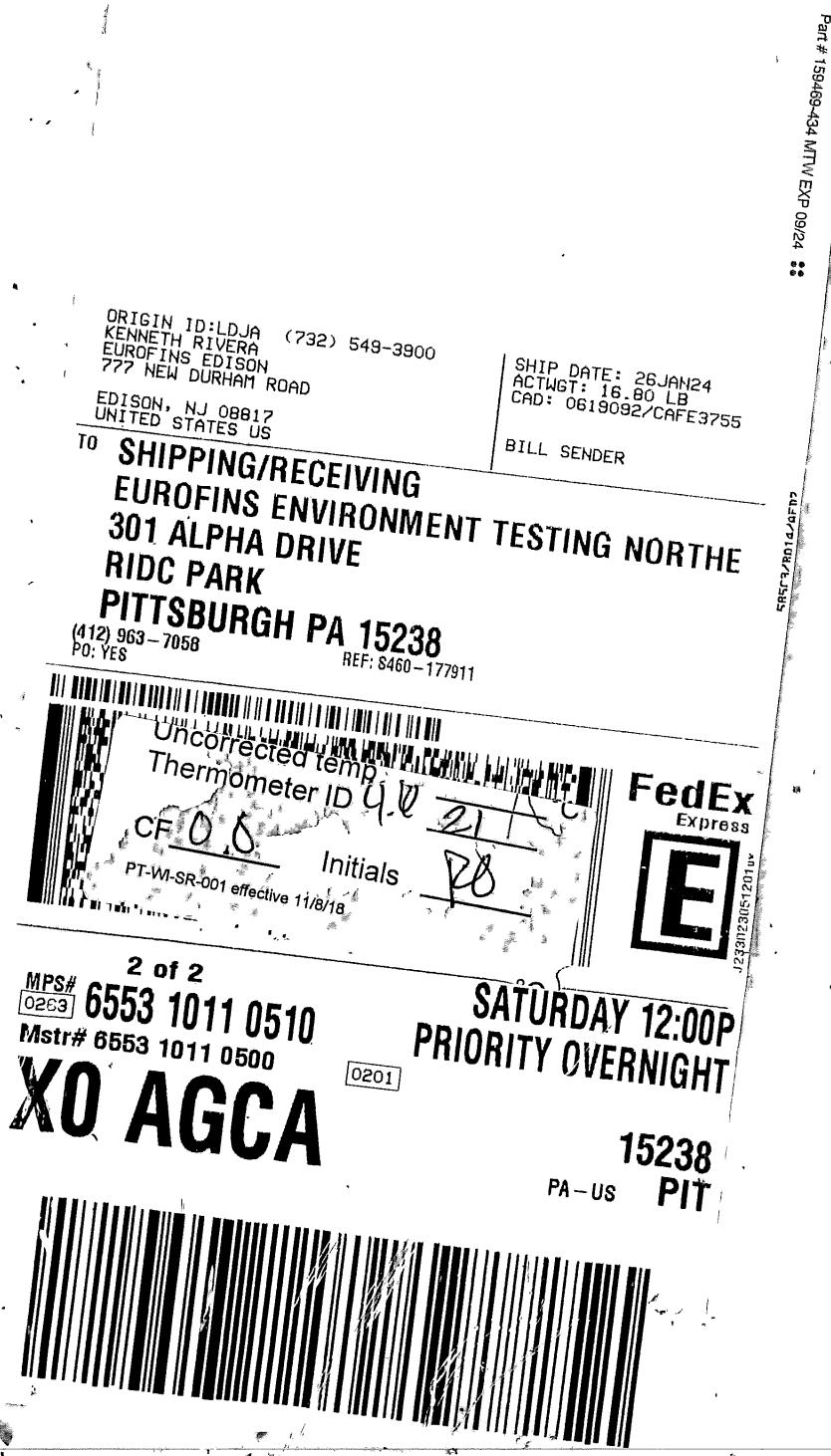
MASTER

XO AGCA

SATURDAY 12:00P
PRIORITY OVERNIGHT

15238
PA-US PIT




Part # 159469-434 MTW EXP 09/24
ORIGIN ID:LDJA (732) 549-3900
KENNETH RIVERA
EUROFINS EDISON
777 NEW DURHAM ROAD
EDISON, NJ 08817
UNITED STATES US
SHIP DATE: 26JAN24
ACTWGT: 16.80 LB
CAD: 0619092/CAFE3755
BILL SENDER
TO SHIPPING/RECEIVING
EUROFINS ENVIRONMENT TESTING NORTHE
301 ALPHA DRIVE
RIDC PARK
PITTSBURGH PA 15238
(412) 963-7058
PO: YES
REF: S460-177911
Uncorrected temp
Thermometer ID
CF
Initials
PT-WI-SR-001 effective 11/8/18
FedEx
Express
2 of 2
MPS# 0263 6553 1011 0510
Mstr# 6553 1011 0500
XO AGCA
0201
SATURDAY 12:00P
PRIORITY OVERNIGHT
15238
PA-US
PIT

Eurofins Edison
777 New Durham Road
Edison, NJ 08817
Phone 732-549-3900 Fax: 732-549-3679

met 1B

Chain of Custody Record

460-296982 Chain of Custody

rofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler	Lab PM: Gilmore, Julie L	0280 1
Client Contact: Shipping/Receiving	Phone	E-Mail: Julie.Gilmore@et.eurofinsus.com	1 of 1

Company: Eurofins Environment Testing Northeast,	Accreditations Required (See note): NELAP - Pennsylvania	Job #: 460-296982-1
Address: 301 Alpha Drive, RIDC Park,	Due Date Requested: 2/7/2024	
City: Pittsburgh	TAT Requested (days):	
State, Zip: PA, 15238	PO #:	
Phone: 412-963-7058(Tel) 412-963-2468(Fax)	WO #:	
Email		
Project Name: Rock Hill - Anti-Degradation	Project #: 46011424	
Site	SSOW#:	

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020B/3010A Total Lithium	6020B/Filtration_ME (MOD) Dissolved Lithium	Total Number of containers	Special Instructions/Note:
			Preservation Code:							
NPDES 001 (460-296982-1)	1/25/24	09 00 Eastern		Water			X	X	2	
Upstream (460-296982-2)	1/25/24	10 30 Eastern		Water			X	X	2	
Clarifying Pond (460-296982-3)	1/25/24	11:30 Eastern		Water			X	X	2	

Note Since laboratory accreditations are subject to change, Eurofins Environment Testing Northeast, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories This sample shipment is forwarded under chain-of-custody If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Northeast, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Northeast, LLC attention immediately If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Northeast, LLC

Possible Hazard Identification	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 1	Special Instructions/QC Requirements:

Empty Kit Relinquished by.	Date	Time.	Method of Shipment:

	Relinquished by:	Date/Time	Company	Received by:	Date/Time	Company
1		1/26/24 1900	EEEL		1/27/24 0930	EMHW
2	Relinquished by:	Date/Time	Company	Received by:	Date/Time	Company
3	Relinquished by:	Date/Time	Company	Received by:	Date/Time	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks

Eurofins Edison
777 New Durham Road
Edison, NJ 08817
Phone: 732-549-3900 Fax: 732-549-3679

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Gilmore, Julie L	Carrier Tracking No(s):	COC No: 460-70277.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Julie.Gilmore@et.eurofinsus.com	State of Origin: Pennsylvania	Page: Page 1 of 1
Company: Eurofins Lancaster Laboratories Environm		Accreditations Required (See note): NELAP - Pennsylvania		Job #: 460-296982-1
Address: 2425 New Holland Pike, ,	Due Date Requested: 2/8/2024			
City: Lancaster	TAT Requested (days):			
State, Zip: PA, 17601				
Phone: 717-656-2300(Tel)	PO #:			
Email:	WO #:			
Project Name: Rock Hill - Anti-Degradation	Project #: 46011424			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify), Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020B/3006A (MOD) Total Fe	6020B/Filtration_ME Dissolved Cd/Fe/Zn	351.2/351.2_Prep	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
NPDES 001 (460-296982-1)	1/25/24	09:00 Eastern		Water			X	X	X	3	
Upstream (460-296982-2)	1/25/24	10:30 Eastern		Water			X	X	X	3	
Clarifying Pond (460-296982-3)	1/25/24	11:30 Eastern		Water			X	X	X	3	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Northeast, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Northeast, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Northeast, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Northeast, LLC.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 1	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
1		1/26/24 1623	ET		1/26/24 1623	ET
2		1/26/24 1930	ET			
3					1/26/24 1930	ET

Custody Seals Intact: ∧ Yes ∧ No	Custody Seal No.: not present	Cooler Temperature(s) °C and Other Remarks:	r: 3.6 c: 3.5

Eurofins Edison
777 New Durham Road
Edison, NJ 08817
Phone: 732-549-3900 Fax: 732-549-3679

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Gilmore, Julie L	Carrier Tracking No(s):	COC No: 460-70282.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Julie.Gilmore@et.eurofinsus.com	State of Origin: Pennsylvania	Page: Page 1 of 1
Company: Eurofins Environment Testing Southeast,		Accreditations Required (See note): NELAP - Pennsylvania		Job #: 460-296982-1
Address: 5102 LaRoche Avenue, ,	Due Date Requested: 2/6/2024			
City: Savannah	TAT Requested (days):			
State, Zip: GA, 31404				
Phone: 912-354-7858(Tel) 912-352-0165(Fax)	PO #:			
Email:	WO #:			
Project Name: Rock Hill - Anti-Degradation	Project #: 46011424			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020B/3005A Total Aluminum	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
NPDES 001 (460-296982-1)	1/25/24	09:00 Eastern		Water			X	1	
Upstream (460-296982-2)	1/25/24	10:30 Eastern		Water			X	1	
Clarifying Pond (460-296982-3)	1/25/24	11:30 Eastern		Water			X	1	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Northeast, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Northeast, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Northeast, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Northeast, LLC.

Possible Hazard Identification	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 1	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:		
Relinquished by:	Date/Time: 1/26/24 1900	Company ETEL	Received by:	Date/Time: 1/27/24 1012	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 1.9/1.9

Login Sample Receipt Checklist

Client: Heidelberg Materials Northeast LLC

Job Number: 460-296982-1

Login Number: 296982

List Source: Eurofins Edison

List Number: 1

Creator: Thundathorn, Sukanan 1

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Heidelberg Materials Northeast LLC

Job Number: 460-296982-1

Login Number: 296982
List Number: 5
Creator: Yeager, Brian A

List Source: Eurofins Buffalo
List Creation: 01/29/24 11:12 AM

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	2.7 ice
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	True	

Login Sample Receipt Checklist

Client: Heidelberg Materials Northeast LLC

Job Number: 460-296982-1

Login Number: 296982
List Number: 2
Creator: Renner, Melissa

List Source: Eurofins Lancaster Laboratories Environment Testing, LLC
List Creation: 01/26/24 10:06 PM

Question	Answer	Comment
The cooler's custody seal is intact.	N/A	Not present
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature acceptable,where thermal pres is required(</=6C, not frozen).	True	
Cooler Temperature is recorded.	True	
WV:Container Temp acceptable,where thermal pres is required (</=6C, not frozen).	N/A	
WV: Container Temperature is recorded.	N/A	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the containers received and the COC.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
There is sufficient vol. for all requested analyses.	True	
Is the Field Sampler's name present on COC?	False	Received project as a subcontract.
Sample custody seals are intact.	N/A	Not present.
VOA sample vials do not have headspace >6mm in diameter (none, if from WV)?	N/A	

Login Sample Receipt Checklist

Client: Heidelberg Materials Northeast LLC

Job Number: 460-296982-1

Login Number: 296982
List Number: 4
Creator: Watson, Debbie

List Source: Eurofins Pittsburgh
List Creation: 01/27/24 03:01 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Heidelberg Materials Northeast LLC

Job Number: 460-296982-1

Login Number: 296982
List Number: 3
Creator: Stewart, Rendaisha

List Source: Eurofins Savannah
List Creation: 01/27/24 02:21 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Lab Results

February 8, 2024

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Katie Murray
Heidelberg Materials Northeast LLC
7660 Imperial Way
Allentown, Pennsylvania 18195

Generated 2/21/2024 3:03:11 PM

JOB DESCRIPTION

Rock Hill - Anti-Degradation

JOB NUMBER

460-297762-1

Eurofins Edison
777 New Durham Road
Edison NJ 08817

See page two for job notes and contact information.

my EOL

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing Northeast, LLC Project Manager.

Authorization



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Authorized for release by
Julie Gilmore, Project Manager I
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Qualifiers

HPLC/IC

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

General Chemistry

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
H	Sample was prepped or analyzed beyond the specified holding time. This does not meet regulatory requirements.
H3	Sample was received and analyzed past holding time. This does not meet regulatory requirements.
HF	Parameter with a holding time of 15 minutes. Test performed by laboratory at client's request. Sample was analyzed outside of hold time.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 460-297762-1 Eurofins Edison

Job Narrative
460-297762-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

- Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

The method detection limit (MDL) is the lowest value detectable by the laboratory for a given analyte as determined by the MDL procedure detailed in EPA 40 CFR 136. Reported MDL values are adjusted for any dilutions and percent moisture (as applicable). The lab is unable to report values below the MDL.

Receipt
The samples were received on 2/8/2024 7:00 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 1.4°C and 2.5°C.

Subcontract Work
Method Osomotic Pressure: This method was subcontracted to Microbac Laboratories, Inc. The subcontract laboratory certification is different from that of the facility issuing the final report. The subcontract report is appended in its entirety.

HPLC/IC
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Metals
Method 6020B - Dissolved: The following samples were not filtered within 15 minutes of sample collection as required by the method: NPDES 001 (460-297762-1), Upstream (460-297762-2) and Clarifying Pond (460-297762-3). The sample(s) was filtered prior to analysis at the laboratory, and the results have been reported. This does not meet regulatory requirements.

Method 6020B - Dissolved: The following samples were not filtered and preserved within 15 minutes of sample collection in accordance with 40 CFR Part 136 Table II, Footnote 7, method 6020B. The samples were filtered prior to analysis at the laboratory.

NPDES 001 (460-297762-1), Upstream (460-297762-2) and Clarifying Pond (460-297762-3)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

General Chemistry
Method 4500_O_C: This analysis is normally performed in the field and has a method-defined holding time of 15 minutes. The following samples has been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe: NPDES 001 (460-297762-1), Upstream (460-297762-2) and Clarifying Pond (460-297762-3).

Method 4500_P_E_Ortho - Dissolved: The following samples were not filtered within 15 minutes of sample collection as required by the method: NPDES 001 (460-297762-1), Upstream (460-297762-2) and Clarifying Pond (460-297762-3). The sample(s) was filtered prior to analysis at the laboratory, and the results have been reported.

Method 9040C: This analysis is normally performed in the field and has a method-defined holding time of 15 minutes. The following samples has been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe: NPDES 001 (460-297762-1), Upstream (460-297762-2), Clarifying Pond (460-297762-3), (460-297885-A-2) and (460-297885-A-2 DU).

Method 9040C: This analysis is normally performed in the field and has a method-defined holding time of 15 minutes. The following samples has been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe: NPDES 001 (460-297762-1), Upstream (460-297762-2) and Clarifying Pond (460-297762-3).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Client Sample ID: NPDES 001
Date Collected: 02/08/24 07:30
Date Received: 02/08/24 19:00

Lab Sample ID: 460-297762-1
Matrix: Water

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide	0.18	J	0.32	0.054	mg/L			02/09/24 10:55	1
Nitrate as N	0.11	J	0.16	0.070	mg/L			02/09/24 10:55	1
Chloride	7.85		0.32	0.039	mg/L			02/09/24 10:55	1
Nitrate Nitrite as N	0.11	J	0.16	0.070	mg/L			02/09/24 10:55	1
Nitrite as N	0.023	U	0.16	0.023	mg/L			02/09/24 10:55	1
Sulfate	8.99		0.48	0.095	mg/L			02/09/24 10:55	1

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000043	U	0.00020	0.000043	mg/L		02/14/24 12:08	02/14/24 16:00	1

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	6.7		4.0	0.91	ug/L		02/09/24 20:40	02/13/24 14:30	1
Boron	55.8	J	80.0	30.4	ug/L		02/09/24 20:40	02/13/24 14:30	1
Calcium	24600		500	53.6	ug/L		02/09/24 20:40	02/13/24 14:30	1
Copper	2.5	U	4.0	2.5	ug/L		02/09/24 20:40	02/13/24 14:30	1
Lead	0.84	U	1.2	0.84	ug/L		02/09/24 20:40	02/13/24 14:30	1
Magnesium	9970		200	46.9	ug/L		02/09/24 20:40	02/13/24 14:30	1
Manganese	107		8.0	1.5	ug/L		02/09/24 20:40	02/13/24 14:30	1
Nickel	0.91	U	4.0	0.91	ug/L		02/09/24 20:40	02/13/24 14:30	1
Potassium	1420		200	112	ug/L		02/09/24 20:40	02/13/24 14:30	1
Selenium	0.59	U	2.5	0.59	ug/L		02/09/24 20:40	02/13/24 14:30	1
Sodium	5510		500	219	ug/L		02/09/24 20:40	02/13/24 14:30	1
Strontium	75.7		4.0	0.50	ug/L		02/09/24 20:40	02/13/24 14:30	1
Zinc	10	J	16.0	6.5	ug/L		02/09/24 20:40	02/13/24 14:30	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	162		100	35.0	ug/L		02/12/24 08:54	02/12/24 17:54	1
Iron	726		50.0	20.0	ug/L		02/12/24 08:30	02/19/24 08:33	1

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	19.5	U	40.0	19.5	ug/L		02/13/24 19:03	02/13/24 21:40	1
Cadmium	0.15	U	0.50	0.15	ug/L		02/13/24 07:45	02/13/24 16:52	1
Arsenic	0.89	U	2.0	0.89	ug/L		02/13/24 19:03	02/13/24 21:40	1
Iron	47.2	J	50.0	20.0	ug/L		02/13/24 07:45	02/13/24 16:52	1
Calcium	24100		500	53.6	ug/L		02/13/24 19:03	02/13/24 21:40	1
Zinc	9.7	J	10.0	4.0	ug/L		02/13/24 07:45	02/13/24 16:52	1
Copper	2.5	U	4.0	2.5	ug/L		02/13/24 19:03	02/13/24 21:40	1
Iron	58.2	U	120	58.2	ug/L		02/13/24 19:03	02/13/24 21:40	1
Lead	0.84	U	1.2	0.84	ug/L		02/13/24 19:03	02/13/24 21:40	1
Magnesium	9940		200	46.9	ug/L		02/13/24 19:03	02/13/24 21:40	1
Manganese	2.5	J	8.0	1.5	ug/L		02/13/24 19:03	02/13/24 21:40	1
Nickel	0.91	U	4.0	0.91	ug/L		02/13/24 19:03	02/13/24 21:40	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Resistivity (EPA 120.1)	0.00441		0.000100	0.000100	Mohm-cm			02/14/24 14:45	1
Specific Conductance (EPA 120.1)	227		1.00	1.00	umhos/cm			02/14/24 14:45	1

Client Sample ID: NPDES 001

Lab Sample ID: 460-297762-1

Date Collected: 02/08/24 07:30

Matrix: Water

Date Received: 02/08/24 19:00

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acidity (SM 2310B-2011)	20.0	U	20.0	20.0	mg/L			02/20/24 14:14	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-2011)	**88.5**		5.0	5.0	mg/L			02/15/24 13:58	1
Carbonate Alkalinity as CaCO3 (SM 2320B-2011)	5.0	U	5.0	5.0	mg/L			02/15/24 13:58	1
Alkalinity as CaCO3 to pH 4.5 (SM 2320B-2011)	**88.5**		5.0	5.0	mg/L			02/15/24 13:58	1
Total Dissolved Solids (SM 2540C-2015)	**53.0**		2.5	2.5	mg/L			02/14/24 10:14	1
Total Suspended Solids (SM 2540D-2015)	2.5	U	2.5	2.5	mg/L			02/15/24 07:44	1
Ammonia (EPA 350.1)	0.050	U	0.10	0.050	mg/L			02/15/24 13:38	1
Total Kjeldahl Nitrogen (EPA 351.2)	**1.1**		1.0	0.50	mg/L		02/15/24 11:08	02/16/24 13:08	1
Chemical Oxygen Demand (EPA 410.4)	**25.1**		10.0	3.3	mg/L			02/15/24 16:10	1
Oxygen, Dissolved (SM 4500 O C-2016)	**10.6**	**H H3**	1.0	1.0	mg/L			02/11/24 11:53	1
Orthophosphate as P (SM 4500 P E-2011)	0.0050	U	0.030	0.0050	mg/L			02/10/24 00:52	1
Carbonaceous Biochemical Oxygen Demand 5 (SM 5210 B-2016)	1.0	U	1.0	1.0	mg/L			02/09/24 15:50	1
pH (SW846 9040C)	**7.7**	**HF**	0.1	0.1	SU			02/14/24 13:29	1
Temperature (SW846 9040C)	**22.2**	**HF**	0.1	0.1	Degrees C			02/14/24 13:29	1
Total Organic Carbon (SW846 9060A)	**1.6**		1.0	0.53	mg/L			02/12/24 20:40	1
Phosphorus as PO4 (SM4500 P E-2011)	0.071	U F1	0.090	0.071	mg/L		02/21/24 11:43	02/21/24 14:18	1
Phosphorus as P (SM4500 P E-2011)	0.023	U F1	0.030	0.023	mg/L		02/21/24 11:43	02/21/24 14:18	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (EPA 350.1)	0.050	U	0.10	0.050	mg/L			02/15/24 13:44	1
Orthophosphate as P (SM 4500 P E-2011)	0.0050	U	0.030	0.0050	mg/L			02/10/24 00:52	1
Phosphorus as PO4 (SM4500 P E-2011)	0.071	U	0.090	0.071	mg/L		02/21/24 11:43	02/21/24 14:18	1
Phosphorus as P (SM4500 P E-2011)	0.023	U	0.030	0.023	mg/L		02/21/24 11:43	02/21/24 14:18	1

Client Sample ID: Upstream

Lab Sample ID: 460-297762-2

Date Collected: 02/08/24 08:00

Matrix: Water

Date Received: 02/08/24 19:00

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide	**0.14**	**J**	0.32	0.054	mg/L			02/09/24 11:10	1
Nitrate as N	0.070	U	0.16	0.070	mg/L			02/09/24 11:10	1
Chloride	**7.95**		0.32	0.039	mg/L			02/09/24 11:10	1
Nitrate Nitrite as N	0.070	U	0.16	0.070	mg/L			02/09/24 11:10	1
Nitrite as N	0.023	U	0.16	0.023	mg/L			02/09/24 11:10	1
Sulfate	**6.18**		0.48	0.095	mg/L			02/09/24 11:10	1

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000043	U	0.00020	0.000043	mg/L		02/14/24 12:08	02/14/24 16:01	1

Client Sample ID: Upstream

Date Collected: 02/08/24 08:00
Date Received: 02/08/24 19:00

Lab Sample ID: 460-297762-2

Matrix: Water

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**10.3**		4.0	0.91	ug/L		02/09/24 20:40	02/13/24 14:32	1
Boron	**45.0**	**J**	80.0	30.4	ug/L		02/09/24 20:40	02/13/24 14:32	1
Calcium	**29600**		500	53.6	ug/L		02/09/24 20:40	02/13/24 14:32	1
Copper	**2.5**	**J**	4.0	2.5	ug/L		02/09/24 20:40	02/13/24 14:32	1
Lead	0.84	U	1.2	0.84	ug/L		02/09/24 20:40	02/13/24 14:32	1
Magnesium	**10600**		200	46.9	ug/L		02/09/24 20:40	02/13/24 14:32	1
Manganese	**15.3**		8.0	1.5	ug/L		02/09/24 20:40	02/13/24 14:32	1
Nickel	0.91	U	4.0	0.91	ug/L		02/09/24 20:40	02/13/24 14:32	1
Potassium	**1220**		200	112	ug/L		02/09/24 20:40	02/13/24 14:32	1
Selenium	0.59	U	2.5	0.59	ug/L		02/09/24 20:40	02/13/24 14:32	1
Sodium	**4360**		500	219	ug/L		02/09/24 20:40	02/13/24 14:32	1
Strontium	**100**		4.0	0.50	ug/L		02/09/24 20:40	02/13/24 14:32	1
Zinc	6.5	U	16.0	6.5	ug/L		02/09/24 20:40	02/13/24 14:32	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	35.0	U	100	35.0	ug/L		02/12/24 08:54	02/12/24 17:52	1
Iron	**495**		50.0	20.0	ug/L		02/12/24 08:30	02/19/24 08:31	1

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	19.5	U	40.0	19.5	ug/L		02/13/24 19:03	02/13/24 21:47	1
Cadmium	0.15	U	0.50	0.15	ug/L		02/13/24 07:45	02/13/24 16:56	1
Arsenic	0.89	U	2.0	0.89	ug/L		02/13/24 19:03	02/13/24 21:47	1
Iron	20.0	U	50.0	20.0	ug/L		02/13/24 07:45	02/13/24 16:56	1
Calcium	**19400**		500	53.6	ug/L		02/13/24 19:03	02/13/24 21:47	1
Zinc	4.0	U	10.0	4.0	ug/L		02/13/24 07:45	02/13/24 16:56	1
Copper	2.5	U	4.0	2.5	ug/L		02/13/24 19:03	02/13/24 21:47	1
Iron	58.2	U	120	58.2	ug/L		02/13/24 19:03	02/13/24 21:47	1
Lead	0.84	U	1.2	0.84	ug/L		02/13/24 19:03	02/13/24 21:47	1
Magnesium	**6320**		200	46.9	ug/L		02/13/24 19:03	02/13/24 21:47	1
Manganese	**3.4**	**J**	8.0	1.5	ug/L		02/13/24 19:03	02/13/24 21:47	1
Nickel	0.91	U	4.0	0.91	ug/L		02/13/24 19:03	02/13/24 21:47	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Resistivity (EPA 120.1)	**0.00403**		0.000100	0.000100	Mohm-cm			02/14/24 14:45	1
Specific Conductance (EPA 120.1)	**248**		1.00	1.00	umhos/cm			02/14/24 14:45	1
Acidity (SM 2310B-2011)	20.0	U	20.0	20.0	mg/L			02/20/24 14:14	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-2011)	**106**		5.0	5.0	mg/L			02/15/24 14:04	1
Carbonate Alkalinity as CaCO3 (SM 2320B-2011)	5.0	U	5.0	5.0	mg/L			02/15/24 14:04	1
Alkalinity as CaCO3 to pH 4.5 (SM 2320B-2011)	**106**		5.0	5.0	mg/L			02/15/24 14:04	1
Total Dissolved Solids (SM 2540C-2015)	**86.0**		2.5	2.5	mg/L			02/14/24 10:14	1
Total Suspended Solids (SM 2540D-2015)	**6.2**		2.5	2.5	mg/L			02/15/24 07:44	1
Ammonia (EPA 350.1)	0.050	U	0.10	0.050	mg/L			02/15/24 13:40	1
Total Kjeldahl Nitrogen (EPA 351.2)	**0.66**	**J**	1.0	0.50	mg/L		02/15/24 11:08	02/16/24 13:10	1

Client Sample ID: Upstream
Lab Sample ID: 460-297762-2

Date Collected: 02/08/24 08:00
Matrix: Water
Date Received: 02/08/24 19:00

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand (EPA 410.4)	25.1		10.0	3.3	mg/L			02/15/24 16:10	1
Oxygen, Dissolved (SM 4500 O C-2016)	7.2	H H3	1.0	1.0	mg/L			02/11/24 11:57	1
Orthophosphate as P (SM 4500 P E-2011)	0.0057	J	0.030	0.0050	mg/L			02/10/24 00:52	1
Carbonaceous Biochemical Oxygen Demand 5 (SM 5210 B-2016)	1.0	U	1.0	1.0	mg/L			02/09/24 15:55	1
pH (SW846 9040C)	7.5	HF	0.1	0.1	SU			02/14/24 13:34	1
Temperature (SW846 9040C)	22.2	HF	0.1	0.1	Degrees C			02/14/24 13:34	1
Total Organic Carbon (SW846 9060A)	2.7		1.0	0.53	mg/L			02/12/24 23:44	1
Phosphorus as PO4 (SM4500 P E-2011)	0.097		0.090	0.071	mg/L		02/21/24 11:43	02/21/24 14:18	1
Phosphorus as P (SM4500 P E-2011)	0.032		0.030	0.023	mg/L		02/21/24 11:43	02/21/24 14:18	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (EPA 350.1)	0.050	U	0.10	0.050	mg/L			02/15/24 13:46	1
Orthophosphate as P (SM 4500 P E-2011)	0.0050	U	0.030	0.0050	mg/L			02/10/24 00:52	1
Phosphorus as PO4 (SM4500 P E-2011)	0.071	U	0.090	0.071	mg/L		02/21/24 11:43	02/21/24 14:18	1
Phosphorus as P (SM4500 P E-2011)	0.023	U	0.030	0.023	mg/L		02/21/24 11:43	02/21/24 14:18	1

Client Sample ID: Clarifying Pond
Lab Sample ID: 460-297762-3

Date Collected: 02/08/24 08:30
Matrix: Water
Date Received: 02/08/24 19:00

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide	0.054	U	0.32	0.054	mg/L			02/09/24 11:25	1
Nitrate as N	0.29		0.16	0.070	mg/L			02/09/24 11:25	1
Chloride	1.23		0.32	0.039	mg/L			02/09/24 11:25	1
Nitrate Nitrite as N	0.29		0.16	0.070	mg/L			02/09/24 11:25	1
Nitrite as N	0.023	U	0.16	0.023	mg/L			02/09/24 11:25	1
Sulfate	5.55		0.48	0.095	mg/L			02/09/24 11:25	1

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000043	U	0.00020	0.000043	mg/L		02/14/24 12:08	02/14/24 16:08	1

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	4.4		4.0	0.91	ug/L		02/09/24 20:40	02/13/24 14:35	1
Boron	62.9	J	80.0	30.4	ug/L		02/09/24 20:40	02/13/24 14:35	1
Calcium	19200		500	53.6	ug/L		02/09/24 20:40	02/13/24 14:35	1
Copper	2.5	U	4.0	2.5	ug/L		02/09/24 20:40	02/13/24 14:35	1
Lead	0.84	U	1.2	0.84	ug/L		02/09/24 20:40	02/13/24 14:35	1
Magnesium	6200		200	46.9	ug/L		02/09/24 20:40	02/13/24 14:35	1
Manganese	40.8		8.0	1.5	ug/L		02/09/24 20:40	02/13/24 14:35	1
Nickel	1.1	J	4.0	0.91	ug/L		02/09/24 20:40	02/13/24 14:35	1

Client Sample ID: Clarifying Pond
Date Collected: 02/08/24 08:30
Date Received: 02/08/24 19:00

Lab Sample ID: 460-297762-3
Matrix: Water

Method: SW846 6020B - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Potassium	**1250**		200	112	ug/L		02/09/24 20:40	02/13/24 14:35	1
Selenium	0.59	U	2.5	0.59	ug/L		02/09/24 20:40	02/13/24 14:35	1
Sodium	**3100**		500	219	ug/L		02/09/24 20:40	02/13/24 14:35	1
Strontium	**38.0**		4.0	0.50	ug/L		02/09/24 20:40	02/13/24 14:35	1
Zinc	6.5	U	16.0	6.5	ug/L		02/09/24 20:40	02/13/24 14:35	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**361**		100	35.0	ug/L		02/12/24 08:54	02/12/24 17:57	1
Iron	**748**		50.0	20.0	ug/L		02/12/24 08:30	02/19/24 08:35	1

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	19.5	U	40.0	19.5	ug/L		02/13/24 19:03	02/13/24 21:42	1
Cadmium	0.15	U	0.50	0.15	ug/L		02/13/24 07:45	02/13/24 16:54	1
Arsenic	0.89	U	2.0	0.89	ug/L		02/13/24 19:03	02/13/24 21:42	1
Iron	**29.5**	**J**	50.0	20.0	ug/L		02/13/24 07:45	02/13/24 16:54	1
Calcium	**29100**		500	53.6	ug/L		02/13/24 19:03	02/13/24 21:42	1
Zinc	4.0	U	10.0	4.0	ug/L		02/13/24 07:45	02/13/24 16:54	1
Copper	2.5	U	4.0	2.5	ug/L		02/13/24 19:03	02/13/24 21:42	1
Iron	58.2	U	120	58.2	ug/L		02/13/24 19:03	02/13/24 21:42	1
Lead	0.84	U	1.2	0.84	ug/L		02/13/24 19:03	02/13/24 21:42	1
Magnesium	**10800**		200	46.9	ug/L		02/13/24 19:03	02/13/24 21:42	1
Manganese	**9.3**		8.0	1.5	ug/L		02/13/24 19:03	02/13/24 21:42	1
Nickel	0.91	U	4.0	0.91	ug/L		02/13/24 19:03	02/13/24 21:42	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Resistivity (EPA 120.1)	**0.00623**		0.000100	0.000100	Mohm-cm			02/14/24 14:45	1
Specific Conductance (EPA 120.1)	**161**		1.00	1.00	umhos/cm			02/14/24 14:45	1
Acidity (SM 2310B-2011)	20.0	U	20.0	20.0	mg/L			02/20/24 14:14	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-2011)	**68.5**		5.0	5.0	mg/L			02/15/24 14:10	1
Carbonate Alkalinity as CaCO3 (SM 2320B-2011)	5.0	U	5.0	5.0	mg/L			02/15/24 14:10	1
Alkalinity as CaCO3 to pH 4.5 (SM 2320B-2011)	**68.5**		5.0	5.0	mg/L			02/15/24 14:10	1
Total Dissolved Solids (SM 2540C-2015)	**37.0**		2.5	2.5	mg/L			02/14/24 10:14	1
Total Suspended Solids (SM 2540D-2015)	**6.6**		2.5	2.5	mg/L			02/15/24 07:44	1
Ammonia (EPA 350.1)	0.050	U	0.10	0.050	mg/L			02/15/24 13:41	1
Total Kjeldahl Nitrogen (EPA 351.2)	**0.93**	**J**	1.0	0.50	mg/L		02/15/24 11:08	02/16/24 13:12	1
Chemical Oxygen Demand (EPA 410.4)	**22.8**		10.0	3.3	mg/L			02/15/24 16:10	1
Oxygen, Dissolved (SM 4500 O C-2016)	**10.4**	**H H3**	1.0	1.0	mg/L			02/11/24 12:00	1
Orthophosphate as P (SM 4500 P E-2011)	0.0050	U	0.030	0.0050	mg/L			02/10/24 00:52	1
Carbonaceous Biochemical Oxygen Demand 5 (SM 5210 B-2016)	1.0	U	1.0	1.0	mg/L			02/09/24 16:00	1
pH (SW846 9040C)	**7.7**	**HF**	0.1	0.1	SU			02/14/24 13:40	1

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill - Anti-Degradation

Job ID: 460-297762-1

Client Sample ID: Clarifying Pond
Date Collected: 02/08/24 08:30
Date Received: 02/08/24 19:00

Lab Sample ID: 460-297762-3
Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Temperature (SW846 9040C)	**22.2**	**HF**	0.1	0.1	Degrees C			02/14/24 13:40	1
Total Organic Carbon (SW846 9060A)	**1.2**		1.0	0.53	mg/L			02/13/24 00:10	1
Phosphorus as PO4 (SM4500 P E-2011)	**0.41**		0.090	0.071	mg/L		02/21/24 11:43	02/21/24 14:18	1
Phosphorus as P (SM4500 P E-2011)	**0.13**		0.030	0.023	mg/L		02/21/24 11:43	02/21/24 14:18	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (EPA 350.1)	**0.10**		0.10	0.050	mg/L			02/15/24 13:58	1
Orthophosphate as P (SM 4500 P E-2011)	0.0050	U	0.030	0.0050	mg/L			02/10/24 00:53	1
Phosphorus as PO4 (SM4500 P E-2011)	0.071	U	0.090	0.071	mg/L		02/21/24 11:43	02/21/24 14:18	1
Phosphorus as P (SM4500 P E-2011)	0.023	U	0.030	0.023	mg/L		02/21/24 11:43	02/21/24 14:18	1

Lab Chronicle

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill - Anti-Degradation

Job ID: 460-297762-1

Client Sample ID: NPDES 001

Date Collected: 02/08/24 07:30
Date Received: 02/08/24 19:00

Lab Sample ID: 460-297762-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		1	958715	OXG	EET EDI	02/09/24 10:55
Total/NA	Analysis	300.0		1	958716	OXG	EET EDI	02/09/24 10:55
Total/NA	Prep	245.1			700762	NVK	EET BUF	02/14/24 12:08
Total/NA	Analysis	245.1		1	700813	NVK	EET BUF	02/14/24 16:00
Dissolved	Filtration	Filtration			472190	UDL9	ELLE	02/11/24 14:50
Dissolved	Prep	3005A			472719	NU9R	ELLE	02/13/24 07:45
Dissolved	Analysis	6020B		1	473005	UCIG	ELLE	02/13/24 16:52
Dissolved	Filtration	FILTRATION			959214	VAD	EET EDI	02/13/24 19:01
Dissolved	Prep	3010A			959216	VAD	EET EDI	02/13/24 19:03
Dissolved	Analysis	6020B		1	959196	CDC	EET EDI	02/13/24 21:40
Total Recoverable	Prep	3005A			472290	NU9R	ELLE	02/12/24 08:30
Total Recoverable	Analysis	6020B		1	474653	F7JF	ELLE	02/19/24 08:33
Total Recoverable	Prep	3005A			822151	RR	EET SAV	02/12/24 08:54
Total Recoverable	Analysis	6020B		1	822348	BWR	EET SAV	02/12/24 17:54
Total/NA	Prep	3010A			958798	GAE	EET EDI	02/09/24 20:40
Total/NA	Analysis	6020B		1	959196	CDC	EET EDI	02/13/24 14:30
Total/NA	Analysis	120.1		1	959412	HTV	EET EDI	02/14/24 14:45
Total/NA	Analysis	2310B-2011		1	960267	RAK	EET EDI	02/20/24 14:14
Total/NA	Analysis	2320B-2011		1	959628	RXA	EET EDI	02/15/24 13:58
Total/NA	Analysis	2540C-2015		1	959331	PLS	EET EDI	02/14/24 10:14
Total/NA	Analysis	2540D-2015		1	959517	PLS	EET EDI	02/15/24 07:44
Dissolved	Filtration	FILTRATION			959593	AXP	EET EDI	02/15/24 13:01
Dissolved	Analysis	350.1		1	959625	AXP	EET EDI	02/15/24 13:44
Total/NA	Analysis	350.1		1	959625	AXP	EET EDI	02/15/24 13:38
Total/NA	Prep	351.2			473710	NLE3	ELLE	02/15/24 11:08 - 02/15/24 14:08 [1]
Total/NA	Analysis	351.2		1	474265	JCG7	ELLE	02/16/24 13:08
Total/NA	Analysis	410.4		1	959598	HTV	EET EDI	02/15/24 16:10
Total/NA	Analysis	4500 O C-2016		1	958921	RXA	EET EDI	02/11/24 11:53
Dissolved	Filtration	FILTRATION			958804	VBG	EET EDI	02/09/24 23:43
Dissolved	Analysis	4500 P E-2011		1	958807	VBG	EET EDI	02/10/24 00:52
Total/NA	Analysis	4500 P E-2011		1	958807	VBG	EET EDI	02/10/24 00:52
Total/NA	Analysis	5210 B-2016		1	958776	RXA	EET EDI	02/09/24 15:50
Total/NA	Analysis	9040C		1	959548	RXA	EET EDI	02/14/24 13:29
Total/NA	Analysis	9060A		1	959378	MMC	EET EDI	02/12/24 20:40
Dissolved	Filtration	FILTRATION			960455	RAK	EET EDI	02/21/24 11:38
Dissolved	Prep	SM 4500 P B			960459	RAK	EET EDI	02/21/24 11:43
Dissolved	Analysis	SM4500 P E-2011		1	960479	RAK	EET EDI	02/21/24 14:18
Total/NA	Prep	SM 4500 P B			960459	RAK	EET EDI	02/21/24 11:43
Total/NA	Analysis	SM4500 P E-2011		1	960479	RAK	EET EDI	02/21/24 14:18

Lab Chronicle

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill - Anti-Degradation

Job ID: 460-297762-1

Client Sample ID: Upstream

Date Collected: 02/08/24 08:00
Date Received: 02/08/24 19:00

Lab Sample ID: 460-297762-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		1	958715	OXG	EET EDI	02/09/24 11:10
Total/NA	Analysis	300.0		1	958716	OXG	EET EDI	02/09/24 11:10
Total/NA	Prep	245.1			700762	NVK	EET BUF	02/14/24 12:08
Total/NA	Analysis	245.1		1	700813	NVK	EET BUF	02/14/24 16:01
Dissolved	Filtration	Filtration			472190	UDL9	ELLE	02/11/24 14:50
Dissolved	Prep	3005A			472719	NU9R	ELLE	02/13/24 07:45
Dissolved	Analysis	6020B		1	473005	UCIG	ELLE	02/13/24 16:56
Dissolved	Filtration	FILTRATION			959214	VAD	EET EDI	02/13/24 19:01
Dissolved	Prep	3010A			959216	VAD	EET EDI	02/13/24 19:03
Dissolved	Analysis	6020B		1	959196	CDC	EET EDI	02/13/24 21:47
Total Recoverable	Prep	3005A			472290	NU9R	ELLE	02/12/24 08:30
Total Recoverable	Analysis	6020B		1	474653	F7JF	ELLE	02/19/24 08:31
Total Recoverable	Prep	3005A			822151	RR	EET SAV	02/12/24 08:54
Total Recoverable	Analysis	6020B		1	822348	BWR	EET SAV	02/12/24 17:52
Total/NA	Prep	3010A			958798	GAE	EET EDI	02/09/24 20:40
Total/NA	Analysis	6020B		1	959196	CDC	EET EDI	02/13/24 14:32
Total/NA	Analysis	120.1		1	959412	HTV	EET EDI	02/14/24 14:45
Total/NA	Analysis	2310B-2011		1	960267	RAK	EET EDI	02/20/24 14:14
Total/NA	Analysis	2320B-2011		1	959628	RXA	EET EDI	02/15/24 14:04
Total/NA	Analysis	2540C-2015		1	959331	PLS	EET EDI	02/14/24 10:14
Total/NA	Analysis	2540D-2015		1	959517	PLS	EET EDI	02/15/24 07:44
Dissolved	Filtration	FILTRATION			959593	AXP	EET EDI	02/15/24 13:01
Dissolved	Analysis	350.1		1	959625	AXP	EET EDI	02/15/24 13:46
Total/NA	Analysis	350.1		1	959625	AXP	EET EDI	02/15/24 13:40
Total/NA	Prep	351.2			473710	NLE3	ELLE	02/15/24 11:08 - 02/15/24 14:08 [1]
Total/NA	Analysis	351.2		1	474265	JCG7	ELLE	02/16/24 13:10
Total/NA	Analysis	410.4		1	959598	HTV	EET EDI	02/15/24 16:10
Total/NA	Analysis	4500 O C-2016		1	958921	RXA	EET EDI	02/11/24 11:57
Dissolved	Filtration	FILTRATION			958804	VBG	EET EDI	02/09/24 23:43
Dissolved	Analysis	4500 P E-2011		1	958807	VBG	EET EDI	02/10/24 00:52
Total/NA	Analysis	4500 P E-2011		1	958807	VBG	EET EDI	02/10/24 00:52
Total/NA	Analysis	5210 B-2016		1	958776	RXA	EET EDI	02/09/24 15:55
Total/NA	Analysis	9040C		1	959548	RXA	EET EDI	02/14/24 13:34
Total/NA	Analysis	9060A		1	959378	MMC	EET EDI	02/12/24 23:44
Dissolved	Filtration	FILTRATION			960455	RAK	EET EDI	02/21/24 11:38
Dissolved	Prep	SM 4500 P B			960459	RAK	EET EDI	02/21/24 11:43
Dissolved	Analysis	SM4500 P E-2011		1	960479	RAK	EET EDI	02/21/24 14:18
Total/NA	Prep	SM 4500 P B			960459	RAK	EET EDI	02/21/24 11:43
Total/NA	Analysis	SM4500 P E-2011		1	960479	RAK	EET EDI	02/21/24 14:18

Lab Chronicle

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill - Anti-Degradation

Job ID: 460-297762-1

Client Sample ID: Clarifying Pond

Date Collected: 02/08/24 08:30
Date Received: 02/08/24 19:00

Lab Sample ID: 460-297762-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		1	958715	OXG	EET EDI	02/09/24 11:25
Total/NA	Analysis	300.0		1	958716	OXG	EET EDI	02/09/24 11:25
Total/NA	Prep	245.1			700762	NVK	EET BUF	02/14/24 12:08
Total/NA	Analysis	245.1		1	700813	NVK	EET BUF	02/14/24 16:08
Dissolved	Filtration	Filtration			472190	UDL9	ELLE	02/11/24 14:50
Dissolved	Prep	3005A			472719	NU9R	ELLE	02/13/24 07:45
Dissolved	Analysis	6020B		1	473005	UCIG	ELLE	02/13/24 16:54
Dissolved	Filtration	FILTRATION			959214	VAD	EET EDI	02/13/24 19:01
Dissolved	Prep	3010A			959216	VAD	EET EDI	02/13/24 19:03
Dissolved	Analysis	6020B		1	959196	CDC	EET EDI	02/13/24 21:42
Total Recoverable	Prep	3005A			472290	NU9R	ELLE	02/12/24 08:30
Total Recoverable	Analysis	6020B		1	474653	F7JF	ELLE	02/19/24 08:35
Total Recoverable	Prep	3005A			822151	RR	EET SAV	02/12/24 08:54
Total Recoverable	Analysis	6020B		1	822348	BWR	EET SAV	02/12/24 17:57
Total/NA	Prep	3010A			958798	GAE	EET EDI	02/09/24 20:40
Total/NA	Analysis	6020B		1	959196	CDC	EET EDI	02/13/24 14:35
Total/NA	Analysis	120.1		1	959412	HTV	EET EDI	02/14/24 14:45
Total/NA	Analysis	2310B-2011		1	960267	RAK	EET EDI	02/20/24 14:14
Total/NA	Analysis	2320B-2011		1	959628	RXA	EET EDI	02/15/24 14:10
Total/NA	Analysis	2540C-2015		1	959331	PLS	EET EDI	02/14/24 10:14
Total/NA	Analysis	2540D-2015		1	959517	PLS	EET EDI	02/15/24 07:44
Dissolved	Filtration	FILTRATION			959593	AXP	EET EDI	02/15/24 13:01
Dissolved	Analysis	350.1		1	959625	AXP	EET EDI	02/15/24 13:58
Total/NA	Analysis	350.1		1	959625	AXP	EET EDI	02/15/24 13:41
Total/NA	Prep	351.2			473710	NLE3	ELLE	02/15/24 11:08 - 02/15/24 14:08 [1]
Total/NA	Analysis	351.2		1	474265	JCG7	ELLE	02/16/24 13:12
Total/NA	Analysis	410.4		1	959598	HTV	EET EDI	02/15/24 16:10
Total/NA	Analysis	4500 O C-2016		1	958921	RXA	EET EDI	02/11/24 12:00
Dissolved	Filtration	FILTRATION			958804	VBG	EET EDI	02/09/24 23:43
Dissolved	Analysis	4500 P E-2011		1	958807	VBG	EET EDI	02/10/24 00:53
Total/NA	Analysis	4500 P E-2011		1	958807	VBG	EET EDI	02/10/24 00:52
Total/NA	Analysis	5210 B-2016		1	958776	RXA	EET EDI	02/09/24 16:00
Total/NA	Analysis	9040C		1	959548	RXA	EET EDI	02/14/24 13:40
Total/NA	Analysis	9060A		1	959378	MMC	EET EDI	02/13/24 00:10
Dissolved	Filtration	FILTRATION			960455	RAK	EET EDI	02/21/24 11:38
Dissolved	Prep	SM 4500 P B			960459	RAK	EET EDI	02/21/24 11:43
Dissolved	Analysis	SM4500 P E-2011		1	960479	RAK	EET EDI	02/21/24 14:18
Total/NA	Prep	SM 4500 P B			960459	RAK	EET EDI	02/21/24 11:43
Total/NA	Analysis	SM4500 P E-2011		1	960479	RAK	EET EDI	02/21/24 14:18

[1] This procedure uses a method stipulated length of time for the process. Both start and end times are displayed.

Lab Chronicle

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill - Anti-Degradation

Job ID: 460-297762-1

Laboratory References:

EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

EET EDI = Eurofins Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

EET SAV = Eurofins Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Microbac = Marietta, OH, 158 Starlite Drive, Marietta, OH 45750

Accreditation/Certification Summary

Client: Heidelberg Materials Northeast LLC
Job ID: 460-297762-1
Project/Site: Rock Hill - Anti-Degradation

Laboratory: Eurofins Edison

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Connecticut	State	PH-0818	09-30-24
Georgia	State	12028 (NJ)	06-30-24
Massachusetts	State	M-NJ312	06-30-24
New Jersey	NELAP	12028	06-30-24
New York	NELAP	11452	04-01-24
Pennsylvania	NELAP	68-00522	02-29-24
USDA	US Federal Programs	P330-20-00244	05-31-24

Laboratory: Eurofins Buffalo

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Arkansas DEQ	State	88-0686	07-06-23 *
Connecticut	State	PH-0568	03-31-24
Florida	NELAP	E87672	06-30-23 *
Georgia	State	10026 (NY)	03-31-24
Georgia	State Program	N/A	03-31-09 *
Illinois	NELAP	200003	09-30-23 *
Iowa	State	374	03-01-25
Iowa	State Program	374	03-01-09 *
Kansas	NELAP	E-10187	02-01-24 *
Kentucky (UST)	State	108092	04-01-24
Kentucky (WW)	State	KY90029	12-31-23 *
Louisiana	NELAP	02031	06-30-23 *
Louisiana (All)	NELAP	02031	06-30-23 *
Maine	State	NY00044	12-04-24
Maryland	State	294	06-30-24
Massachusetts	State	M-NY044	07-01-24
Michigan	State	9937	04-01-24
Michigan	State Program	9937	04-01-09 *
New Hampshire	NELAP	2973	09-11-19 *
New Hampshire	NELAP	2337	11-17-24
New Jersey	NELAP	NY455	06-30-24
New York	NELAP	10026	03-31-24
Pennsylvania	NELAP	68-00281	08-31-24
Rhode Island	State	LAO00378	12-30-23 *
Texas	NELAP	T104704412-18-10	07-31-23 *
USDA	US Federal Programs	P330-18-00039	03-25-24
Virginia	NELAP	460185	09-14-24
Washington	State	C784	02-10-24 *
Wisconsin	State	998310390	08-31-24

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
A2LA	Dept. of Defense ELAP	0001.01	11-30-24
A2LA	ISO/IEC 17025	0001.01	11-30-24
Alaska	State	PA00009	06-30-24
Alaska (UST)	State	17-027	02-28-24
Arizona	State	AZ0780	03-12-24

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Client: Heidelberg Materials Northeast LLC
Job ID: 460-297762-1
Project/Site: Rock Hill - Anti-Degradation

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC (Continued)

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Arkansas DEQ	State	88-00660	08-09-24
California	State	2792	01-31-24 *
Colorado	State	PA00009	06-30-24
Connecticut	State	PH-0746	06-30-25
Florida	NELAP	E87997	06-30-24
Hawaii	State	N/A	01-31-25
Illinois	NELAP	200027	01-31-25
Iowa	State	361	03-01-24
Kansas	NELAP	E-10151	10-31-24
Kentucky (DW)	State	KY90088	12-31-24
Kentucky (UST)	State	0001.01	11-30-24
Kentucky (WW)	State	KY90088	12-31-23 *
Louisiana (All)	NELAP	02055	06-30-24
Maine	State	2019012	03-12-25
Maryland	State	100	06-30-24
Massachusetts	State	M-PA009	06-30-24
Michigan	State	9930	01-31-25
Minnesota	NELAP	042-999-487	12-31-24
Mississippi	State	023	01-31-25
Missouri	State	450	01-31-25
Montana (DW)	State	0098	01-01-25
Nebraska	State	NE-OS-32-17	01-31-25
New Hampshire	NELAP	2730	01-10-25
New Jersey	NELAP	PA011	06-30-24
New York	NELAP	10670	04-01-24
North Carolina (DW)	State	42705	07-31-24
North Carolina (WW/SW)	State	521	12-31-24
Oklahoma	NELAP	9804	08-31-24
Oregon	NELAP	PA200001	09-11-24
Pennsylvania	NELAP	36-00037	01-28-25
Quebec Ministry of Environment and Fight against Climate Change	PALA	507	09-16-24
Rhode Island	State	LAO00338	12-30-24
Tennessee	State	02838	01-31-25
Texas	NELAP	T104704194-23-46	08-31-24
USDA	US Federal Programs	525-22-298-19481	10-25-25
Vermont	State	VT - 36037	10-28-24
Virginia	NELAP	460182	06-14-25
Washington	State	C457	04-11-24
West Virginia (DW)	State	9906 C	01-31-25
West Virginia DEP	State	055	07-31-24
Wyoming (UST)	A2LA	0001.01	11-30-24

Laboratory: Eurofins Savannah

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
	AFCEE	SAVLAB	
Alabama	State	41450	06-30-24
ANAB	Dept. of Defense ELAP	L2463	09-22-24
Arkansas (DW)	State	GA00006	06-30-24

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Accreditation/Certification Summary

Client: Heidelberg Materials Northeast LLC
Job ID: 460-297762-1
Project/Site: Rock Hill - Anti-Degradation

Laboratory: Eurofins Savannah (Continued)

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
California	State	2939	06-30-24
Florida	NELAP	E87052	06-30-24
Georgia	State	E87052	06-30-24
Georgia (DW)	State	803	06-30-24
Guam	State	19-007R	04-17-24
Hawaii	State	<cert No.>	06-30-24
Illinois	NELAP	200022	11-30-24
Indiana	State	C-GA-02	06-30-24
Iowa	State	353	07-01-25
Kentucky (UST)	State	NA	06-30-24
Louisiana	NELAP	30690	06-30-24
Louisiana (All)	NELAP	30690	06-30-24
Louisiana (DW)	State	LA009	12-31-24
Maine	State	GA00006	09-25-24
Maryland	State	250	12-31-24
Massachusetts	State	M-GA006	06-30-24
Michigan	State	9925	06-30-24
Mississippi	State	<cert No.>	06-30-24
Nebraska	State	NE-OS-7-04	06-30-24
New Jersey	NELAP	GA769	06-30-24
New Mexico	State	GA00006	06-30-24
North Carolina (DW)	State	13701	07-31-24
North Carolina (WW/SW)	State	269	12-31-24
Pennsylvania	NELAP	68-00474	06-30-24
Puerto Rico	State	GA00006	01-01-25
South Carolina	State	98001	06-30-24
Tennessee	State	TN02961	06-30-24
Texas	NELAP	T1047004185	11-30-24
Texas	TCEQ Water Supply	T104704185	06-30-24
USDA	US Federal Programs	P330-18-00313	09-03-24
Virginia	NELAP	460161	06-14-24
Wyoming	State	8TMS-L	06-30-24

Method Summary

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill - Anti-Degradation

Job ID: 460-297762-1

Method	Method Description	Protocol	Laboratory
300.0	Anions, Ion Chromatography	EPA	EET EDI
245.1	Mercury (CVAA)	EPA	EET BUF
6020B	Metals (ICP/MS)	SW846	EET EDI
6020B	Metals (ICP/MS)	SW846	EET SAV
6020B	Metals (ICP/MS)	SW846	ELLE
120.1	Conductivity, Specific Conductance	EPA	EET EDI
2310B-2011	Acidity	SM	EET EDI
2320B-2011	Alkalinity, Total	SM	EET EDI
2540C-2015	Total Dissolved Solids (Dried at 180 °C)	SM	EET EDI
2540D-2015	Total Suspended Solids (Dried at 103-105°C)	SM	EET EDI
350.1	Nitrogen, Ammonia	EPA	EET EDI
351.2	Nitrogen, Total Kjeldahl	EPA	ELLE
410.4	COD	EPA	EET EDI
4500 O C-2016	Oxygen, Dissolved	SM	EET EDI
4500 P E-2011	Orthophosphate	SM	EET EDI
5210 B-2016	BOD, 5-Day	SM	EET EDI
9040C	pH	SW846	EET EDI
9060A	Organic Carbon, Total (TOC)	SW846	EET EDI
SM4500 P E-2011	Phosphorus	SM	EET EDI
Subcontract	Osomotic Pressure	None	Microbac
245.1	Preparation, Mercury	EPA	EET BUF
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	EET SAV
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	ELLE
3010A	Preparation, Total Metals	SW846	EET EDI
351.2	Nitrogen, Total Kjeldahl	EPA	ELLE
FILTRATION	Sample Filtration	None	EET EDI
Filtration	Sample Filtration	None	ELLE
SM 4500 P B	Phosphorous, Total and Ortho	SM	EET EDI

Protocol References:

EPA = US Environmental Protection Agency

None = None

SM = "Standard Methods For The Examination Of Water And Wastewater"

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

EET EDI = Eurofins Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

EET SAV = Eurofins Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Microbac = Marietta, OH, 158 Starlite Drive, Marietta, OH 45750

Sample Summary

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill - Anti-Degradation

Job ID: 460-297762-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
460-297762-1	NPDES 001	Water	02/08/24 07:30	02/08/24 19:00
460-297762-2	Upstream	Water	02/08/24 08:00	02/08/24 19:00
460-297762-3	Clarifying Pond	Water	02/08/24 08:30	02/08/24 19:00

Microbac Laboratories Inc., - Marietta, OH

Client Project ID:

46011424

For:

Julie Gilmore

Eurofins TestAmerica Edison

777 New Durham RD

Edison, NJ 08817

Project State of Origin: Pennsylvania

Project Requested Certification:

Microbac Laboratories Inc., - Marietta, OH	68-01670	PA Department of Environmental Protection

All test results meet the requirements of the QAPP and other applicable contract terms and conditions. Any exceptions are attached to this cover page or addressed in the method narratives presented in the report. All results for soil samples are reported on a 'dry-weight' basis unless specified otherwise. Analytical results for water and wastes are reported on a 'as received' basis unless specified otherwise. A statement of uncertainty for each analysis is available upon request. The reported results are related only to the samples analyzed as received. This laboratory report may be released as a hardcopy and in computer-readable form submitted electronically or on diskette. This laboratory report shall not be reproduced, except in full, without the written approval of Microbac Laboratories, Inc.

Laboratory Project Manager:

Michelle Taylor

Project Manager

Michelle.Taylor@microbac.com

Authorized By:

Michelle Taylor

Project Manager

Issued: 02/15/2024

MICROBAC®

Laboratory Report Number: M4B0821

Client Project ID: 46011424

Cooler Receipt Log

Cooler ID: Default Cooler Temp: 1.8°C

Cooler Inspection Checklist

Ice Present or not required?	Yes
Shipping containers sealed or not required?	Yes
Custody seals intact or not required?	Yes
Chain of Custody (COC) Present?	Yes
COC includes customer information?	Yes
Relinquished and received signature on COC?	Yes
Sample collector identified on COC?	Yes
Sample type identified on COC?	Yes
Correct type of Containers Received	Yes
Correct number of containers listed on COC?	Yes
Containers Intact?	Yes
COC includes requested analyses?	Yes
Enough sample volume for indicated tests received?	Yes
Sample labels match COC (Name, Date & Time?)	Yes
Samples arrived within hold time?	Yes
Correct preservatives on COC or not required?	Yes
Chemical preservations checked or not required?	Yes
Preservation checks meet method requirements?	Yes
VOA vials have zero headspace, or not recd.?	Yes

Laboratory Report Number: M4B0821

Client Project ID: 46011424

Sample Notes

PADEP 391-2000-008

A4 **Sample was received with head space.**

Osmotic Pressure

M4B0821-01	NPDES 001 (460-297762-1)	M4B0821-02	Upstream (460-297762-2)
M4B0821-03	Clarifying Pond (460-297762-3)		

MICROBAC®

Laboratory Report Number: M4B0821

Client Project ID: 46011424

Microbac Laboratories Inc., - Marietta, OH

CERTIFICATE OF ANALYSIS

Client ID:	NPDES 001 (460-297762-1)			**Collection Date:**	02/08/2024 07:30
Laboratory ID:	M4B0821-01			**Prep Date:**	02/14/2024 15:48
Matrix:	Aqueous			**Analyzed:**	02/14/2024 16:34
Batch / Sequence:	B4B0748 /	**Analytical Method:**	PADEP 391-2000-008	**Calibration:**	NA
Instrument:	OSMOMETER 5004	**Units:**	mOsm/kg	**File ID:**	OsmoticPressure_B4B0748_240214035055.xls
Analyst:	APH	**Dilution:**	1		

Analyte	CAS Number	Result	MDL	RL	Flag	Qualifier
Osmotic Pressure		9.00	6.00	10.0		A4

MICROBAC®

Laboratory Report Number: M4B0821

Client Project ID: 46011424

Microbac Laboratories Inc., - Marietta, OH

CERTIFICATE OF ANALYSIS

Client ID:	Upstream (460-297762-2)			**Collection Date:**	02/08/2024 08:00
Laboratory ID:	M4B0821-02			**Prep Date:**	02/14/2024 15:48
Matrix:	Aqueous			**Analyzed:**	02/14/2024 16:34
Batch / Sequence:	B4B0748 /	**Analytical Method:**	PADEP 391-2000-008	**Calibration:**	NA
Instrument:	OSMOMETER 5004	**Units:**	mOsm/kg	**File ID:**	OsmoticPressure_B4B0748_240214035055.xls
Analyst:	APH	**Dilution:**	1		

Analyte	CAS Number	Result	MDL	RL	Flag	Qualifier
Osmotic Pressure		**10.0**	6.00	10.0		A4

MICROBAC®

Laboratory Report Number: M4B0821

Client Project ID: 46011424

Microbac Laboratories Inc., - Marietta, OH

CERTIFICATE OF ANALYSIS

Client ID:	Clarifying Pond (460-297762-3)			**Collection Date:**	02/08/2024 08:30
Laboratory ID:	M4B0821-03			**Prep Date:**	02/14/2024 15:48
Matrix:	Aqueous			**Analyzed:**	02/14/2024 16:34
Batch / Sequence:	B4B0748 /	**Analytical Method:**	PADEP 391-2000-008	**Calibration:**	NA
Instrument:	OSMOMETER 5004	**Units:**	mOsm/kg	**File ID:**	OsmoticPressure_B4B0748_240214035055.xls
Analyst:	APH	**Dilution:**	1		

Analyte	CAS Number	Result	MDL	RL	Flag	Qualifier
Osmotic Pressure		9.00	6.00	10.0		A4

Laboratory Report Number: M4B0821

Client Project ID: 46011424

Notes and Definitions

A4: Sample was received with head space.
MDL: Method Detection Limit
RL: Reporting Limit

MICROBAC®

Laboratory Report Number: M4B0821

Client Project ID: 46011424

METHOD BLANKS

Sample ID:	B4B0748-BLK1	**Prep Date:**	02/14/24 15:48	**Matrix:**	Aqueous
Instrument:	OSMOMETER 5004	**Analyzed:**	02/14/24 16:34	**Method:**	PADEP 391-2000-008
File ID:	OsmoticPressure_B4B(	**Sequence:**		**Analyst:**	APH
Batch:	B4B0748	**Units:**	mOsm/kg	**Calibration:**	

Analyte	Result	MDL	RL	Dilution	Flag	Q
Osmotic Pressure	6.00	6.00	10.0	1	U	

* - Detected in the associated method Blank at a concentration >= RL

MICROBAC®

Laboratory Report Number: M4B0821

Client Project ID: 46011424

BLANK SPIKE / DUPLICATE (BS/BSD)

Method:	PADEP 391-2000-008		**Blank Spike**	**Duplicate**
Batch:	B4B0748	**Spike ID:**	B4B0748-BS1	B4B0748-BSD1
Analyst:	APH	**Prepared:**	02/14/24 15:48	02/14/24 15:48
Matrix:	Aqueous	**Analyzed:**	02/14/24 16:34	02/14/24 16:34
Units:	mOsm/kg	**File ID:**	OsmoticPressure_B4B0748_2402	OsmoticPressure_B4B0748_2402
Instrument:	OSMOMETER 5004	**Initial/Final:**	1mL/1mL	1mL/1mL
Calibration:				

Analyte	BS Spiked	BS Found	BS %Rec	BSD Spiked	BSD Found	BSD %Rec	%RPD	%Rec Limts	RPD Limit	Q
Osmotic Pressure	290	314	108	290	313	108	0.319	90 - 110	20	

* - Does not meet %Rec acceptance criteria.
- Does not meet RPD acceptance criteria.

Eurofins Edison
777 New Durham Road
Edison, NJ 08817
Phone: 732-549-3900 Fax: 732-549-3679

Chain of Custody Record

eurofins | Environment Testing

2/21/2024

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Gilmore, Julie L	Carrier Tracking No(s):	COC No: 460-70371.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Julie.Gilmore@et.eurofinsus.com	State of Origin: Pennsylvania	Page: Page 1 of 1
Company: Microbac Laboratories, Inc.		Accreditations Required (See note): NELAP - Pennsylvania		Job #: 460-297762-1
Address: 158 Starlite Drive,	Due Date Requested: 2/20/2024			
City: Marietta	TAT Requested (days):			
State, Zip: OH, 45750	PO #:			
Phone: 800-373-4071(Tel)	WO #:			
Email:	Project #: 46011424			
Project Name: Rock Hill - Anti-Degradation	SSOW#:			
Site:				

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)
Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	SUB (Osomotic Pressure)/ Osmotic Pressure	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
NPDES 001 (460-297762-1)	2/8/24	07:30 Eastern		Water			X	1	
Upstream (460-297762-2)	2/8/24	08:00 Eastern		Water			X	1	
Clarifying Pond (460-297762-3)	2/8/24	08:30 Eastern		Water			X	1	

M 4 B 0 8 2 1
Eurofins TestAmerica Edison
Rec'd 02/13/2024 11:15
By: Erin Porter Temp: 1.8 (Signature)

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Northeast, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Northeast, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Northeast, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Northeast, LLC.

Possible Hazard Identification	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 1	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
		2/12/24 1900	EET Edi			
	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	Relinquished by:	Date/Time:	Company	Received by:	Date/Time: 2-13-24 1115	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

MICROBAC®

Work Order # M68821

COOLER TEMP >6° C LOG

SAMPLE ID	Bottle 1 °C	Bottle 2 °C	Bottle 3 °C	Bottle 4 °C	Bottle 5 °C	Bottle 6 °C

GMH 2-13-24

pH Lot # HC316719

SAMPLE ID	Bottle 1	Bottle 2	Bottle 3	Bottle 4	Bottle 5	Bottle 6

pH Exceptions

GMH 2-13-24

PRESERVATIVE EXCEPTIONS

__NONE

__AS NOTED

GMP 2-13-24

Eurofins Edison
777 New Durham Road
Edison, NJ 08817
Phone: 732-549-3900 Fax: 732-549-3679

Chain of Custody Record

2.5 < eurofins
1 4 2 KOP 2

Client Information	Sampler	Lab PM: Gilmore, Julie L	Carrier Tracking No(s):	COC No: 460-178198-115848.1
Client Contact: Andrew Gutshall	Phone:	E-Mail: Julie.Gilmore@et.eurofinsus.com	State of Origin:	Page: Page 1 of 2
Company: Heidelberg Materials Northeast LLC	PWSID:			Job #: 297762
Address: 7660 Imperial Way	Due Date Requested:			
City: Allentown	TAT Requested (days):			
State, Zip: PA, 18195	Compliance Project: Δ Yes Δ No			
Phone:	PO #: Purchase Order not required			
Email: andrew.gutshall@heidelbergmaterials.com	WO #:			
Project Name: Rock Hill Anti-Degradation	Project #: 46011424			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:
A HCL
B N
C
SHORT HOLD
I
J DI
K EDTA
L EDA
Other
M Hexane
N None
AsNaO2
Na2O4S
Na2SO3
Na2S2O3
NaSO4
P Dodecahydrate
Acetone
MCAA
W pH 4-5
Y Trizma
Z other (specify)

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020B (MOD) Single Element 6020B Metals List	6020B (MOD) Single Element 6020B Metals List	351.2 Local Method	6020B Dissolved Cd/Fe/Zn	6020B (MOD) Total Fe	350.1, 410.4, 4500_P_E	120.1 9040C, SM2310B	350.1, 4500_P_E, 6020B	2320B (MOD) Alkalinity	6020B (MOD) Total Custom Metals	9060A TOC	2540D, SM5210B_Calc	2540C TDS	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	D	S	N	D	S	N	N	N	D	S	N	N		
NPDES 001	2/8/24	0730	G	Water			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		1
Basin 1				~~Water~~																	
Basin 2				~~Water~~																	
Upstream	2/8/24	0800	G	Water			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		2
Clarifying Pond	2/8/24	0830	G	Water			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		3

460-297762 Chain of Custody

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

ıple Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III IV Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		2/8/24 1100	ET2G		2/8/24 1155	ET2N-KOP
2		2-8-24 1600	ET2N-KOP		2/8	ETA
3		2/8 1900	ETA		2/8/24 1900	ET2G

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.

Cooler Temperature(s) °C and Other Remarks:

Ver 06/08/2021

Eurofins Edison
777 New Durham Road
Edison NJ 08817
Phone: 732-549-3900 Fax: 732-549-3679

Chain of Custody Record

2.5 - 1 4 - 1602.2

eurofins

Client Information	Sampler:	Lab PM: Gilmore, Julie L	Carrier Tracking No(s):	COC No: 460-178198-115848.2
Client Contact: Andrew Gutshall	Phone:	E-Mail: Julie.Gilmore@et.eurofinsus.com	State of Origin:	Page: Page 2 of 2
Company: Heidelberg Materials Northeast LLC	PWSID:			Job #: 297762
Address: 7660 Imperial Way	Due Date Requested:			
City: Allentown	TAT Requested (days):			
State, Zip: PA, 18195	Compliance Project: Δ Yes Δ No			
Phone:	PO #: Purchase Order not required			
Email: andrew gutshall@heidelbergmaterials.com	WO #:			
Project Name: Rock Hill Anti-Degradation	Project #: 46011424			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A HCL, B NaOH, C Zn Acetate, D Nitric Acid, E NaHSO4, F MeOH, G Amchlor, H Ascorbic Acid, I Ice, J DI Water, K EDTA, L EDA, M Hexane, N None, O AsNaO2, P Na2O4S, Q Na2SO3, R Na2S2O3, S H2SO4, T TSP Dodecahydrate, U Acetone, V MCAA, W pH 4-5, Y Trizma, Z other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	300_ORGFM_28D, 300_ORGFMS	245.1 Local Method	6020B Total Aluminum	DO	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	D	D			
NPDES 001	2/8/24	0730	G	Water			1	1	1	1		1
Basin 1				~~Water~~								
Basin 2				~~Water~~								
Upstream	2/8/24	0800	G	Water			1	1	1	1		2
Clarifying Pond	2/8/24	0830	G	Water			1	1	1	1		3

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I II III, IV Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time: 2/8/24 1600	Company: ETS	Received by:	Date/Time: 2/8/24 1155	Company: EETN-KOP
Relinquished by:	Date/Time: 2-9-24 1600	Company: EETN-KOP	Received by:	Date/Time: 2/9	Company: ETA
Relinquished by:	Date/Time: 2/9 1900	Company: ETA	Received by:	Date/Time: 2/8/24 1900	Company: EETN

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks:

Ver: 06/08/2021

Eurofins **TestAmerica Edison**

Receipt Temperature and pH Log

Job Number: 297762

Number of Coolers: 2 IR Gun # 2

Cooler Temperatures

	RAW	CORRECTED		RAW	CORRECTED		RAW	CORRECTED
Cooler #1:	2.5 °C	2.5 °C	Cooler #4:	°C	°C	Cooler #7:	°C	°C
Cooler #2:	1.4 °C	1.4 °C	Cooler #5:	°C	°C	Cooler #8:	°C	°C
Cooler #3:	°C	°C	Cooler #6:	°C	°C	Cooler #9:	°C	°C

TALS Sample Number	Ammonia (pH<2)	COD (pH<2)	Nitrate Nitrite (pH<2)	Metals* (pH<2)	Hardness (pH<2)	Pest (pH 5-9)	EPH or QAM (pH<2)	Phenols (pH<2)	Sulfide (pH>9)	TKN (pH<2)	TOC (pH<2)	Total Cyanide (pH>12)	Total Phos (pH<2)	Other	Other
1	<2	<2		<2						<2	<2		<2		
2	<2	<2		<2						<2	<2		<2		
3	<2	<2		<2						<2	<2		<2		

If pH adjustments are required record the information below:

Sample No(s). adjusted _____

Preservative Name/Conc. _____ Volume of Preservative used (ml): _____

Lot # of Preservative(s): _____ Expiration Date: _____

The appropriate Project Manager and Department Manager should be notified about the samples which were pH adjusted

** Samples for Metal analysis which are out of compliance must be acidified at least 24 hours prior to analysis.*

Initials HD **Date:** 2/8

EDS-WI-038, Rev 4 06/09/2014

Eurofins Edison
777 New Durham Road
Edison, NJ 08817
Phone: 732-549-3900 Fax: 732-549-3679

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Gilmore, Julie L	Carrier Tracking No(s):	COC No: 460-70356.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Julie.Gilmore@et.eurofinsus.com	State of Origin: Pennsylvania	Page: Page 1 of 1
Company: Eurofins Lancaster Laboratories Environm		Accreditations Required (See note): NELAP - Pennsylvania		Job #: 460-297762-1
Address: 2425 New Holland Pike, ,	Due Date Requested: 2/22/2024			
City: Lancaster	TAT Requested (days):			
State, Zip: PA, 17601				
Phone: 717-656-2300(Tel)	PO #:			
Email:	WO #:			
Project Name: Rock Hill - Anti-Degradation	Project #: 46011424			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020B/3005A (MOD) Total Fe	6020B/Filtration_ME Dissolved Cd/Fe/Zn	351.2/351.2_Prep	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
NPDES 001 (460-297762-1)	2/8/24	07:30 Eastern		Water			X	X	X	3	
Upstream (460-297762-2)	2/8/24	08:00 Eastern		Water			X	X	X	3	
Clarifying Pond (460-297762-3)	2/8/24	08:30 Eastern		Water			X	X	X	3	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Northeast, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Northeast, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Northeast, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Northeast, LLC.

Possible Hazard Identification	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 1	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	2/9/24 1607	ET		2/9/24 1607	ET
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	2/9/24 1918	ET			
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
				2/9/24 1918	

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 1.7/1.6

Eurofins Edison
777 New Durham Road
Edison, NJ 08817
Phone: 732-549-3900 Fax: 732-549-3679

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Gilmore, Julie L	Carrier Tracking No(s):	COC No: 460-70360.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Julie.Gilmore@et.eurofinsus.com	State of Origin: Pennsylvania	Page: Page 1 of 1
Company: Eurofins Environment Testing Northeast,		Accreditations Required (See note): NELAP - Pennsylvania		Job #: 460-297762-1
Address: 10 Hazelwood Drive, ,	Due Date Requested: 2/19/2024			
City: Amherst	TAT Requested (days):			
State, Zip: NY, 14228-2298				
Phone: 716-691-2600(Tel) 716-691-7991(Fax)	PO #:			
Email:	WO #:			
Project Name: Rock Hill - Anti-Degradation	Project #: 46011424			
Site:	SSOW#:			

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)
Other:

Analysis Requested

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	245.1/245.1_Prep	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
NPDES 001 (460-297762-1)	2/8/24	07:30 Eastern		Water			X	1	
Upstream (460-297762-2)	2/8/24	08:00 Eastern		Water			X	1	
Clarifying Pond (460-297762-3)	2/8/24	08:30 Eastern		Water			X	1	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Northeast, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Northeast, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Northeast, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Northeast, LLC.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 1	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		2/9/24 1900	FETL		2-10-24 1035	TAB
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 3.0 ICE

Eurofins Edison
777 New Durham Road
Edison, NJ 08817
Phone: 732-549-3900 Fax: 732-549-3679

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Gilmore, Julie L	Carrier Tracking No(s):	COC No: 460-70359.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Julie.Gilmore@et.eurofinsus.com	State of Origin: Pennsylvania	Page: Page 1 of 1
Company: Eurofins Environment Testing Southeast,		Accreditations Required (See note): NELAP Pennsylvania		Job #: 460-297762-1
Address: 5102 LaRoche Avenue,	Due Date Requested: 2/20/2024			
City: Savannah	TAT Requested (days):			
State, Zip: GA, 31404				
Phone: 912-354-7858(Tel) 912-352-0165(Fax)	PO #:			
Email:	WO #:			
Project Name: Rock Hill Anti-Degradation	Project #: 46011424			
Site:	SSOW#:			

Analysis Requested

Preservation Codes.

A	HCL	M	Hexane
B	NaOH	N	None
C	Zn Acetate	O	AsNaO2
D	Nitric Acid	P	Na2O4S
E	NaHSO4	Q	Na2SO3
F	MeOH	R	Na2S2O3
G	Amchlor	S	H2SO4
H	Ascorbic Acid	T	TSP Dodecahydrate
I	Ice	U	Acetone
J	DI Water	V	MCAA
K	EDTA	W	pH 4-5
L	EDA	Y	Trizma
		Z	other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020B/3005A Total Aluminum	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
NPDES 001 (460-297762-1)	2/8/24	07:30 Eastern		Water			X	1	
Upstream (460-297762-2)	2/8/24	08:00 Eastern		Water			X	1	
Clarifying Pond (460-297762-3)	2/8/24	08:30 Eastern		Water			X	1	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Northeast, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Northeast, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Northeast, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Northeast, LLC.

Possible Hazard Identification	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III IV Other (specify) Primary Deliverable Rank: 1	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	2/9/24 1900	FEDEX			
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time: 2/10/24 0952	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.	Cooler Temperature(s) °C and Other Remarks: 4.9/4.9

Login Sample Receipt Checklist

Client: Heidelberg Materials Northeast LLC

Job Number: 460-297762-1

Login Number: 297762

List Source: Eurofins Edison

List Number: 1

Creator: Thundathorn, Sukanan 1

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Heidelberg Materials Northeast LLC

Job Number: 460-297762-1

Login Number: 297762
List Number: 4
Creator: Yeager, Brian A

List Source: Eurofins Buffalo
List Creation: 02/12/24 09:42 AM

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	3.0 ICE
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	True	

Login Sample Receipt Checklist

Client: Heidelberg Materials Northeast LLC

Job Number: 460-297762-1

Login Number: 297762
List Number: 2
Creator: Metzger, Katherine A

List Source: Eurofins Lancaster Laboratories Environment Testing, LLC
List Creation: 02/09/24 07:45 PM

Question	Answer	Comment
The cooler's custody seal is intact.	N/A	Not present
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature acceptable,where thermal pres is required(</=6C, not frozen).	True	
Cooler Temperature is recorded.	True	
WV:Container Temp acceptable,where thermal pres is required (</=6C, not frozen).	N/A	
WV: Container Temperature is recorded.	N/A	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the containers received and the COC.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
There is sufficient vol. for all requested analyses.	True	
Is the Field Sampler's name present on COC?	False	Received project as a subcontract.
Sample custody seals are intact.	N/A	Not present.
VOA sample vials do not have headspace >6mm in diameter (none, if from WV)?	N/A	

Login Sample Receipt Checklist

Client: Heidelberg Materials Northeast LLC

Job Number: 460-297762-1

Login Number: 297762
List Number: 3
Creator: Deal, Katelyn

List Source: Eurofins Savannah
List Creation: 02/10/24 11:31 AM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Lab Results

February 22, 2024

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Andrew Gutshall
Heidelberg Materials Northeast LLC
7660 Imperial Way
Allentown, Pennsylvania 18195

Generated 3/4/2024 9:50:19 AM

JOB DESCRIPTION

Rock Hill - Anti-Degradation

JOB NUMBER

460-298636-1

Eurofins Edison
777 New Durham Road
Edison NJ 08817

See page two for job notes and contact information.

my EOL

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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Authorization



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Definitions/Glossary

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill - Anti-Degradation

Job ID: 460-298636-1

Qualifiers

HPLC/IC

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

General Chemistry

Qualifier	Qualifier Description
H	Sample was prepped or analyzed beyond the specified holding time. This does not meet regulatory requirements.
H3	Sample was received and analyzed past holding time. This does not meet regulatory requirements.
HF	Parameter with a holding time of 15 minutes. Test performed by laboratory at client's request. Sample was analyzed outside of hold time.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job Narrative
460-298636-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

- Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

The method detection limit (MDL) is the lowest value detectable by the laboratory for a given analyte as determined by the MDL procedure detailed in EPA 40 CFR 136. Reported MDL values are adjusted for any dilutions and percent moisture (as applicable). The lab is unable to report values below the MDL.

Receipt
The samples were received on 2/22/2024 7:00 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 1.6°C and 1.7°C.

HPLC/IC
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Metals
Method 6020B - Dissolved: The following samples were not filtered within 15 minutes of sample collection as required by the method: NPDES 001 (460-298636-1), Upstream (460-298636-2) and Clarifying Pond (460-298636-3). The sample(s) was filtered prior to analysis at the laboratory, and the results have been reported.

Method 6020B - Dissolved: The following samples were not filtered and preserved within 15 minutes of sample collection in accordance with 40 CFR Part 136 Table II, Footnote 7, method 6020B. The samples were filtered prior to analysis at the laboratory.

NPDES 001 (460-298636-1), Upstream (460-298636-2) and Clarifying Pond (460-298636-3)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

General Chemistry
Method 4500_O_C: This analysis is normally performed in the field and has a method-defined holding time of 15 minutes. The following samples has been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe: NPDES 001 (460-298636-1), Upstream (460-298636-2) and Clarifying Pond (460-298636-3).

Method 9040C: This analysis is normally performed in the field and has a method-defined holding time of 15 minutes. The following samples has been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe: NPDES 001 (460-298636-1), Upstream (460-298636-2), Clarifying Pond (460-298636-3), (460-298702-A-3) and (460-298702-A-3 DU).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Client Sample ID: NPDES 001

Date Collected: 02/22/24 08:30
Date Received: 02/22/24 19:00

Lab Sample ID: 460-298636-1

Matrix: Water

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide	**0.16**	**J**	0.32	0.054	mg/L			02/23/24 18:54	1
Nitrate as N	**0.10**	**J**	0.16	0.070	mg/L			02/23/24 18:54	1
Chloride	**13.1**		0.32	0.039	mg/L			02/23/24 18:54	1
Nitrate Nitrite as N	**0.10**	**J**	0.16	0.070	mg/L			02/23/24 18:54	1
Nitrite as N	0.023	U	0.16	0.023	mg/L			02/23/24 18:54	1
Sulfate	**9.98**		0.48	0.095	mg/L			02/23/24 18:54	1

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000043	U	0.00020	0.000043	mg/L		02/27/24 11:26	02/27/24 14:41	1

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**5.1**		4.0	0.91	ug/L		02/28/24 09:03	02/28/24 15:23	1
Boron	**48.2**	**J**	80.0	30.4	ug/L		02/28/24 09:03	02/28/24 15:23	1
Calcium	**26100**		500	53.6	ug/L		02/28/24 09:03	02/28/24 15:23	1
Copper	2.5	U	4.0	2.5	ug/L		02/28/24 09:03	02/28/24 15:23	1
Lead	0.84	U	1.2	0.84	ug/L		02/28/24 09:03	02/28/24 15:23	1
Magnesium	**10700**		200	46.9	ug/L		02/28/24 09:03	02/28/24 15:23	1
Manganese	**22.9**		8.0	1.5	ug/L		02/28/24 09:03	02/28/24 15:23	1
Nickel	0.91	U	4.0	0.91	ug/L		02/28/24 09:03	02/28/24 15:23	1
Potassium	**1280**		200	112	ug/L		02/28/24 09:03	02/28/24 15:23	1
Selenium	0.59	U	2.5	0.59	ug/L		02/28/24 09:03	02/28/24 15:23	1
Sodium	**6690**		500	219	ug/L		02/28/24 09:03	02/28/24 15:23	1
Strontium	**77.9**		4.0	0.50	ug/L		02/28/24 09:03	02/28/24 15:23	1
Zinc	6.5	U	16.0	6.5	ug/L		02/28/24 09:03	02/28/24 15:23	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	35.0	U	100	35.0	ug/L		02/26/24 07:59	02/26/24 14:15	1
Iron	**160**		50.0	20.0	ug/L		02/26/24 08:00	02/29/24 18:38	1

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	19.5	U	40.0	19.5	ug/L		02/26/24 20:02	02/26/24 22:09	1
Cadmium	0.15	U	0.50	0.15	ug/L		02/28/24 08:20	02/29/24 17:58	1
Arsenic	0.89	U	2.0	0.89	ug/L		02/26/24 20:02	02/26/24 22:09	1
Iron	**37.4**	**J**	50.0	20.0	ug/L		02/28/24 08:20	02/29/24 17:58	1
Calcium	**26300**		500	53.6	ug/L		02/26/24 20:02	02/26/24 22:09	1
Zinc	4.0	U	10.0	4.0	ug/L		02/28/24 08:20	02/29/24 17:58	1
Copper	2.5	U	4.0	2.5	ug/L		02/26/24 20:02	02/26/24 22:09	1
Iron	58.2	U	120	58.2	ug/L		02/26/24 20:02	02/26/24 22:09	1
Lead	0.84	U	1.2	0.84	ug/L		02/26/24 20:02	02/26/24 22:09	1
Magnesium	**10600**		200	46.9	ug/L		02/26/24 20:02	02/26/24 22:09	1
Manganese	**4.4**	**J**	8.0	1.5	ug/L		02/26/24 20:02	02/26/24 22:09	1
Nickel	0.91	U	4.0	0.91	ug/L		02/26/24 20:02	02/26/24 22:09	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Resistivity (EPA 120.1)	**0.00393**		0.000100	0.000100	Mohm-cm			02/29/24 12:18	1
Specific Conductance (EPA 120.1)	**254**		1.00	1.00	umhos/cm			02/29/24 12:18	1

Client Sample ID: NPDES 001

Lab Sample ID: 460-298636-1

Date Collected: 02/22/24 08:30

Matrix: Water

Date Received: 02/22/24 19:00

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acidity (SM 2310B-2011)	20.0	U	20.0	20.0	mg/L			02/29/24 13:59	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-2011)	**91.2**		5.0	5.0	mg/L			02/29/24 12:10	1
Carbonate Alkalinity as CaCO3 (SM 2320B-2011)	5.0	U	5.0	5.0	mg/L			02/29/24 12:10	1
Alkalinity as CaCO3 to pH 4.5 (SM 2320B-2011)	**91.2**		5.0	5.0	mg/L			02/29/24 12:10	1
Total Dissolved Solids (SM 2540C-2015)	**108**		2.5	2.5	mg/L			02/28/24 07:14	1
Total Suspended Solids (SM 2540D-2015)	2.5	U	2.5	2.5	mg/L			02/26/24 09:24	1
Ammonia (EPA 350.1)	0.050	U	0.10	0.050	mg/L			03/01/24 09:36	1
Total Kjeldahl Nitrogen (EPA 351.2	**0.61**	**J**	1.0	0.50	mg/L		02/28/24 08:47	02/29/24 11:21	1
Chemical Oxygen Demand (EPA 410.4)	3.3	U	10.0	3.3	mg/L			02/29/24 14:45	1
Oxygen, Dissolved (SM 4500 O C-2016)	**11.3**	**H H3**	1.0	1.0	mg/L			02/23/24 11:55	1
Carbonaceous Biochemical Oxygen Demand 5 (SM 5210 B-2016)	1.0	U	1.0	1.0	mg/L			02/23/24 14:57	1
pH (SW846 9040C)	**7.7**	**HF**	0.1	0.1	SU			02/28/24 10:41	1
Temperature (SW846 9040C)	**24.5**	**HF**	0.1	0.1	Degrees C			02/28/24 10:41	1
Total Organic Carbon (SW846 9060A)	**1.6**		1.0	0.53	mg/L			02/26/24 12:24	1
Phosphorus as PO4 (SM4500 P E-2011)	**0.29**		0.090	0.071	mg/L		02/28/24 10:00	02/28/24 14:45	1
Phosphorus as P (SM4500 P E-2011)	**0.095**		0.030	0.023	mg/L		02/28/24 10:00	02/28/24 14:45	1
Nitrogen, Total (EPA Total Nitrogen)	**0.71**		0.50	0.50	mg/L			03/01/24 06:14	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (EPA 350.1)	0.050	U	0.10	0.050	mg/L			03/01/24 09:42	1
Phosphorus as PO4 (SM4500 P E-2011)	**0.35**		0.090	0.071	mg/L		02/28/24 10:00	02/28/24 14:45	1
Phosphorus as P (SM4500 P E-2011)	**0.12**		0.030	0.023	mg/L		02/28/24 10:00	02/28/24 14:45	1

Client Sample ID: Upstream

Lab Sample ID: 460-298636-2

Date Collected: 02/22/24 10:00

Matrix: Water

Date Received: 02/22/24 19:00

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide	**0.13**	**J**	0.32	0.054	mg/L			02/23/24 19:09	1
Nitrate as N	**0.076**	**J**	0.16	0.070	mg/L			02/23/24 19:09	1
Chloride	**31.3**		0.32	0.039	mg/L			02/23/24 19:09	1
Nitrate Nitrite as N	**0.076**	**J**	0.16	0.070	mg/L			02/23/24 19:09	1
Nitrite as N	0.023	U	0.16	0.023	mg/L			02/23/24 19:09	1
Sulfate	**6.41**		0.48	0.095	mg/L			02/23/24 19:09	1

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000043	U	0.00020	0.000043	mg/L		02/27/24 11:26	02/27/24 14:48	1

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill - Anti-Degradation

Job ID: 460-298636-1

Client Sample ID: Upstream

Date Collected: 02/22/24 10:00
Date Received: 02/22/24 19:00

Lab Sample ID: 460-298636-2

Matrix: Water

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**12.4**		4.0	0.91	ug/L		02/28/24 09:03	02/28/24 15:26	1
Boron	**37.6**	**J**	80.0	30.4	ug/L		02/28/24 09:03	02/28/24 15:26	1
Calcium	**34500**		500	53.6	ug/L		02/28/24 09:03	02/28/24 15:26	1
Copper	**4.3**		4.0	2.5	ug/L		02/28/24 09:03	02/28/24 15:26	1
Lead	0.84	U	1.2	0.84	ug/L		02/28/24 09:03	02/28/24 15:26	1
Magnesium	**11900**		200	46.9	ug/L		02/28/24 09:03	02/28/24 15:26	1
Manganese	**28.3**		8.0	1.5	ug/L		02/28/24 09:03	02/28/24 15:26	1
Nickel	0.91	U	4.0	0.91	ug/L		02/28/24 09:03	02/28/24 15:26	1
Potassium	**1460**		200	112	ug/L		02/28/24 09:03	02/28/24 15:26	1
Selenium	0.59	U	2.5	0.59	ug/L		02/28/24 09:03	02/28/24 15:26	1
Sodium	**8790**		500	219	ug/L		02/28/24 09:03	02/28/24 15:26	1
Strontium	**119**		4.0	0.50	ug/L		02/28/24 09:03	02/28/24 15:26	1
Zinc	6.5	U	16.0	6.5	ug/L		02/28/24 09:03	02/28/24 15:26	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**150**		100	35.0	ug/L		02/26/24 07:59	02/26/24 14:21	1
Iron	**3020**		50.0	20.0	ug/L		02/26/24 08:00	02/29/24 18:22	1

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	19.5	U	40.0	19.5	ug/L		02/26/24 20:02	02/26/24 22:11	1
Cadmium	0.15	U	0.50	0.15	ug/L		02/28/24 08:20	02/29/24 17:54	1
Arsenic	0.89	U	2.0	0.89	ug/L		02/26/24 20:02	02/26/24 22:11	1
Iron	**29.8**	**J**	50.0	20.0	ug/L		02/28/24 08:20	02/29/24 17:54	1
Calcium	**34100**		500	53.6	ug/L		02/26/24 20:02	02/26/24 22:11	1
Zinc	4.0	U	10.0	4.0	ug/L		02/28/24 08:20	02/29/24 17:54	1
Copper	2.5	U	4.0	2.5	ug/L		02/26/24 20:02	02/26/24 22:11	1
Iron	58.2	U	120	58.2	ug/L		02/26/24 20:02	02/26/24 22:11	1
Lead	0.84	U	1.2	0.84	ug/L		02/26/24 20:02	02/26/24 22:11	1
Magnesium	**11800**		200	46.9	ug/L		02/26/24 20:02	02/26/24 22:11	1
Manganese	**24.3**		8.0	1.5	ug/L		02/26/24 20:02	02/26/24 22:11	1
Nickel	0.91	U	4.0	0.91	ug/L		02/26/24 20:02	02/26/24 22:11	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Resistivity (EPA 120.1)	**0.00322**		0.000100	0.000100	Mohm-cm			02/29/24 12:18	1
Specific Conductance (EPA 120.1)	**310**		1.00	1.00	umhos/cm			02/29/24 12:18	1
Acidity (SM 2310B-2011)	20.0	U	20.0	20.0	mg/L			02/29/24 13:59	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-2011)	**98.8**		5.0	5.0	mg/L			02/29/24 12:22	1
Carbonate Alkalinity as CaCO3 (SM 2320B-2011)	5.0	U	5.0	5.0	mg/L			02/29/24 12:22	1
Alkalinity as CaCO3 to pH 4.5 (SM 2320B-2011)	**98.8**		5.0	5.0	mg/L			02/29/24 12:22	1
Total Dissolved Solids (SM 2540C-2015)	**152**		2.5	2.5	mg/L			02/28/24 07:14	1
Total Suspended Solids (SM 2540D-2015)	**7.4**		2.5	2.5	mg/L			02/26/24 09:24	1
Ammonia (EPA 350.1)	0.050	U	0.10	0.050	mg/L			03/01/24 09:37	1
Total Kjeldahl Nitrogen (EPA 351.2	**0.92**	**J**	1.0	0.50	mg/L		02/27/24 09:09	02/28/24 10:45	1

Client Sample ID: Upstream

Lab Sample ID: 460-298636-2

Date Collected: 02/22/24 10:00

Matrix: Water

Date Received: 02/22/24 19:00

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand (EPA 410.4)	8.7	J	10.0	3.3	mg/L			02/29/24 14:45	1
Oxygen, Dissolved (SM 4500 O C-2016)	7.8	H H3	1.0	1.0	mg/L			02/23/24 12:00	1
Carbonaceous Biochemical Oxygen Demand 5 (SM 5210 B-2016)	1.0	U	1.0	1.0	mg/L			02/23/24 15:03	1
pH (SW846 9040C)	7.4	HF	0.1	0.1	SU			02/28/24 10:47	1
Temperature (SW846 9040C)	24.9	HF	0.1	0.1	Degrees C			02/28/24 10:47	1
Total Organic Carbon (SW846 9060A)	3.4		1.0	0.53	mg/L			02/23/24 19:15	1
Phosphorus as PO4 (SM4500 P E-2011)	0.65		0.090	0.071	mg/L		02/28/24 10:00	02/28/24 14:45	1
Phosphorus as P (SM4500 P E-2011)	0.21		0.030	0.023	mg/L		02/28/24 10:00	02/28/24 14:45	1
Nitrogen, Total (EPA Total Nitrogen)	1.0		0.50	0.50	mg/L			03/01/24 06:14	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (EPA 350.1)	0.050	U	0.10	0.050	mg/L			03/01/24 09:43	1
Phosphorus as PO4 (SM4500 P E-2011)	0.80		0.090	0.071	mg/L		02/28/24 10:00	02/28/24 14:45	1
Phosphorus as P (SM4500 P E-2011)	0.26		0.030	0.023	mg/L		02/28/24 10:00	02/28/24 14:45	1

Client Sample ID: Clarifying Pond

Lab Sample ID: 460-298636-3

Date Collected: 02/22/24 11:00

Matrix: Water

Date Received: 02/22/24 19:00

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide	0.15	J	0.32	0.054	mg/L			02/23/24 19:24	1
Nitrate as N	0.26		0.16	0.070	mg/L			02/23/24 19:24	1
Chloride	1.24		0.32	0.039	mg/L			02/23/24 19:24	1
Nitrate Nitrite as N	0.30		0.16	0.070	mg/L			02/23/24 19:24	1
Nitrite as N	0.038	J	0.16	0.023	mg/L			02/23/24 19:24	1
Sulfate	5.42		0.48	0.095	mg/L			02/23/24 19:24	1

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000043	U	0.00020	0.000043	mg/L		02/27/24 11:26	02/27/24 14:50	1

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	3.5	J	4.0	0.91	ug/L		02/28/24 09:03	02/28/24 15:28	1
Boron	52.5	J	80.0	30.4	ug/L		02/28/24 09:03	02/28/24 15:28	1
Calcium	17900		500	53.6	ug/L		02/28/24 09:03	02/28/24 15:28	1
Copper	2.5	U	4.0	2.5	ug/L		02/28/24 09:03	02/28/24 15:28	1
Lead	0.84	U	1.2	0.84	ug/L		02/28/24 09:03	02/28/24 15:28	1
Magnesium	5990		200	46.9	ug/L		02/28/24 09:03	02/28/24 15:28	1
Manganese	29.8		8.0	1.5	ug/L		02/28/24 09:03	02/28/24 15:28	1
Nickel	0.91	U	4.0	0.91	ug/L		02/28/24 09:03	02/28/24 15:28	1
Potassium	1130		200	112	ug/L		02/28/24 09:03	02/28/24 15:28	1

Client Sample ID: Clarifying Pond

Date Collected: 02/22/24 11:00
Date Received: 02/22/24 19:00

Lab Sample ID: 460-298636-3

Matrix: Water

Method: SW846 6020B - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Selenium	0.59	U	2.5	0.59	ug/L		02/28/24 09:03	02/28/24 15:28	1
Sodium	**3040**		500	219	ug/L		02/28/24 09:03	02/28/24 15:28	1
Strontium	**33.3**		4.0	0.50	ug/L		02/28/24 09:03	02/28/24 15:28	1
Zinc	6.5	U	16.0	6.5	ug/L		02/28/24 09:03	02/28/24 15:28	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**292**		100	35.0	ug/L		02/26/24 07:59	02/26/24 14:18	1
Iron	**520**		50.0	20.0	ug/L		02/26/24 07:45	02/28/24 11:56	1

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	19.5	U	40.0	19.5	ug/L		02/26/24 20:02	02/26/24 22:14	1
Cadmium	0.15	U	0.50	0.15	ug/L		02/28/24 08:20	02/29/24 17:56	1
Arsenic	0.89	U	2.0	0.89	ug/L		02/26/24 20:02	02/26/24 22:14	1
Iron	**31.4**	**J**	50.0	20.0	ug/L		02/28/24 08:20	02/29/24 17:56	1
Calcium	**19400**		500	53.6	ug/L		02/26/24 20:02	02/26/24 22:14	1
Zinc	4.0	U	10.0	4.0	ug/L		02/28/24 08:20	02/29/24 17:56	1
Copper	2.5	U	4.0	2.5	ug/L		02/26/24 20:02	02/26/24 22:14	1
Iron	58.2	U	120	58.2	ug/L		02/26/24 20:02	02/26/24 22:14	1
Lead	0.84	U	1.2	0.84	ug/L		02/26/24 20:02	02/26/24 22:14	1
Magnesium	**6130**		200	46.9	ug/L		02/26/24 20:02	02/26/24 22:14	1
Manganese	**3.4**	**J**	8.0	1.5	ug/L		02/26/24 20:02	02/26/24 22:14	1
Nickel	0.91	U	4.0	0.91	ug/L		02/26/24 20:02	02/26/24 22:14	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Resistivity (EPA 120.1)	**0.00652**		0.000100	0.000100	Mohm-cm			02/29/24 12:18	1
Specific Conductance (EPA 120.1)	**153**		1.00	1.00	umhos/cm			02/29/24 12:18	1
Acidity (SM 2310B-2011)	20.0	U	20.0	20.0	mg/L			02/29/24 14:01	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-2011)	**62.0**		5.0	5.0	mg/L			02/29/24 12:28	1
Carbonate Alkalinity as CaCO3 (SM 2320B-2011)	5.0	U	5.0	5.0	mg/L			02/29/24 12:28	1
Alkalinity as CaCO3 to pH 4.5 (SM 2320B-2011)	**62.0**		5.0	5.0	mg/L			02/29/24 12:28	1
Total Dissolved Solids (SM 2540C-2015)	**47.0**		2.5	2.5	mg/L			02/28/24 07:14	1
Total Suspended Solids (SM 2540D-2015)	**16.1**		2.5	2.5	mg/L			02/26/24 09:24	1
Ammonia (EPA 350.1)	0.050	U	0.10	0.050	mg/L			03/01/24 09:39	1
Total Kjeldahl Nitrogen (EPA 351.2)	0.50	U	1.0	0.50	mg/L		02/27/24 09:09	02/28/24 10:51	1
Chemical Oxygen Demand (EPA 410.4)	3.3	U	10.0	3.3	mg/L			02/29/24 14:45	1
Oxygen, Dissolved (SM 4500 O C-2016)	**11.5**	**H**	1.0	1.0	mg/L			02/23/24 12:05	1
Carbonaceous Biochemical Oxygen Demand 5 (SM 5210 B-2016)	1.0	U	1.0	1.0	mg/L			02/23/24 15:08	1
pH (SW846 9040C)	**7.8**	**HF**	0.1	0.1	SU			02/28/24 10:52	1
Temperature (SW846 9040C)	**25.1**	**HF**	0.1	0.1	Degrees C			02/28/24 10:52	1
Total Organic Carbon (SW846 9060A)	**1.4**		1.0	0.53	mg/L			02/23/24 20:33	1

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill - Anti-Degradation

Job ID: 460-298636-1

Client Sample ID: Clarifying Pond

Lab Sample ID: 460-298636-3

Date Collected: 02/22/24 11:00

Matrix: Water

Date Received: 02/22/24 19:00

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phosphorus as PO4 (SM4500 P E-2011)	0.071	U	0.090	0.071	mg/L		02/28/24 10:00	02/28/24 14:45	1
Phosphorus as P (SM4500 P E-2011)	**0.023**	**J**	0.030	0.023	mg/L		02/28/24 10:00	02/28/24 14:45	1
Nitrogen, Total (EPA Total Nitrogen)	0.50	U	0.50	0.50	mg/L			03/01/24 06:14	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (EPA 350.1)	0.050	U	0.10	0.050	mg/L			03/01/24 09:45	1
Phosphorus as PO4 (SM4500 P E-2011)	**0.15**		0.090	0.071	mg/L		02/28/24 10:00	02/28/24 14:45	1
Phosphorus as P (SM4500 P E-2011)	**0.048**		0.030	0.023	mg/L		02/28/24 10:00	02/28/24 14:45	1

Lab Chronicle

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill - Anti-Degradation

Job ID: 460-298636-1

Client Sample ID: NPDES 001

Date Collected: 02/22/24 08:30
Date Received: 02/22/24 19:00

Lab Sample ID: 460-298636-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		1	960939	OXG	EET EDI	02/23/24 18:54
Total/NA	Analysis	300.0		1	960940	OXG	EET EDI	02/23/24 18:54
Total/NA	Prep	245.1			701990	NVK	EET BUF	02/27/24 11:26
Total/NA	Analysis	245.1		1	702071	NVK	EET BUF	02/27/24 14:41
Dissolved	Filtration	Filtration			477197	UAMX	ELLE	02/27/24 01:20
Dissolved	Prep	3005A			477729	NU9R	ELLE	02/28/24 08:20
Dissolved	Analysis	6020B		1	478562	UCIG	ELLE	02/29/24 17:58
Dissolved	Filtration	FILTRATION			961272	VAD	EET EDI	02/26/24 19:58
Dissolved	Prep	3010A			961273	VAD	EET EDI	02/26/24 20:02
Dissolved	Analysis	6020B		1	961239	FBT	EET EDI	02/26/24 22:09
Total Recoverable	Prep	3005A			476789	NU9R	ELLE	02/26/24 08:00
Total Recoverable	Analysis	6020B		1	478568	UCIG	ELLE	02/29/24 18:38
Total Recoverable	Prep	3005A			824443	RR	EET SAV	02/26/24 07:59
Total Recoverable	Analysis	6020B		1	824692	BWR	EET SAV	02/26/24 14:15
Total/NA	Prep	3010A			961595	JKF	EET EDI	02/28/24 09:03
Total/NA	Analysis	6020B		1	961685	CDC	EET EDI	02/28/24 15:23
Total/NA	Analysis	120.1		1	961872	MMC	EET EDI	02/29/24 12:18
Total/NA	Analysis	2310B-2011		1	961899	RAK	EET EDI	02/29/24 13:59
Total/NA	Analysis	2320B-2011		1	961904	RXA	EET EDI	02/29/24 12:10
Total/NA	Analysis	2540C-2015		1	961557	PLS	EET EDI	02/28/24 07:14
Total/NA	Analysis	2540D-2015		1	961182	PXP	EET EDI	02/26/24 09:24
Dissolved	Filtration	FILTRATION			962051	AXP	EET EDI	03/01/24 09:02
Dissolved	Analysis	350.1		1	962063	AXP	EET EDI	03/01/24 09:42
Total/NA	Analysis	350.1		1	962063	AXP	EET EDI	03/01/24 09:36
Total/NA	Prep	351.2			477769	NLE3	ELLE	02/28/24 08:47 - 02/28/24 11:47 [1]
Total/NA	Analysis	351.2		1	478440	JCG7	ELLE	02/29/24 11:21
Total/NA	Analysis	410.4		1	961854	HTV	EET EDI	02/29/24 14:45
Total/NA	Analysis	4500 O C-2016		1	960922	RXA	EET EDI	02/23/24 11:55
Total/NA	Analysis	5210 B-2016		1	960920	RXA	EET EDI	02/23/24 14:57
Total/NA	Analysis	9040C		1	961646	RXA	EET EDI	02/28/24 10:41
Total/NA	Analysis	9060A		1	961352	MMC	EET EDI	02/26/24 12:24
Dissolved	Filtration	FILTRATION			961686	HTV	EET EDI	02/28/24 09:30
Dissolved	Prep	SM 4500 P B			961687	HTV	EET EDI	02/28/24 10:00
Dissolved	Analysis	SM4500 P E-2011		1	961689	HTV	EET EDI	02/28/24 14:45
Total/NA	Prep	SM 4500 P B			961687	HTV	EET EDI	02/28/24 10:00
Total/NA	Analysis	SM4500 P E-2011		1	961689	HTV	EET EDI	02/28/24 14:45
Total/NA	Analysis	Total Nitrogen		1	962005	TJW	EET EDI	03/01/24 06:14

Lab Chronicle

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill - Anti-Degradation

Job ID: 460-298636-1

Client Sample ID: Upstream

Date Collected: 02/22/24 10:00
Date Received: 02/22/24 19:00

Lab Sample ID: 460-298636-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		1	960939	OXG	EET EDI	02/23/24 19:09
Total/NA	Analysis	300.0		1	960940	OXG	EET EDI	02/23/24 19:09
Total/NA	Prep	245.1			701990	NVK	EET BUF	02/27/24 11:26
Total/NA	Analysis	245.1		1	702071	NVK	EET BUF	02/27/24 14:48
Dissolved	Filtration	Filtration			477197	UAMX	ELLE	02/27/24 01:20
Dissolved	Prep	3005A			477729	NU9R	ELLE	02/28/24 08:20
Dissolved	Analysis	6020B		1	478562	UCIG	ELLE	02/29/24 17:54
Dissolved	Filtration	FILTRATION			961272	VAD	EET EDI	02/26/24 19:58
Dissolved	Prep	3010A			961273	VAD	EET EDI	02/26/24 20:02
Dissolved	Analysis	6020B		1	961239	FBT	EET EDI	02/26/24 22:11
Total Recoverable	Prep	3005A			476789	NU9R	ELLE	02/26/24 08:00
Total Recoverable	Analysis	6020B		1	478568	UCIG	ELLE	02/29/24 18:22
Total Recoverable	Prep	3005A			824443	RR	EET SAV	02/26/24 07:59
Total Recoverable	Analysis	6020B		1	824692	BWR	EET SAV	02/26/24 14:21
Total/NA	Prep	3010A			961595	JKF	EET EDI	02/28/24 09:03
Total/NA	Analysis	6020B		1	961685	CDC	EET EDI	02/28/24 15:26
Total/NA	Analysis	120.1		1	961872	MMC	EET EDI	02/29/24 12:18
Total/NA	Analysis	2310B-2011		1	961899	RAK	EET EDI	02/29/24 13:59
Total/NA	Analysis	2320B-2011		1	961904	RXA	EET EDI	02/29/24 12:22
Total/NA	Analysis	2540C-2015		1	961557	PLS	EET EDI	02/28/24 07:14
Total/NA	Analysis	2540D-2015		1	961182	PXP	EET EDI	02/26/24 09:24
Dissolved	Filtration	FILTRATION			962051	AXP	EET EDI	03/01/24 09:02
Dissolved	Analysis	350.1		1	962063	AXP	EET EDI	03/01/24 09:43
Total/NA	Analysis	350.1		1	962063	AXP	EET EDI	03/01/24 09:37
Total/NA	Prep	351.2			477365	NLE3	ELLE	02/27/24 09:09 - 02/27/24 12:09 [1]
Total/NA	Analysis	351.2		1	477928	JCG7	ELLE	02/28/24 10:45
Total/NA	Analysis	410.4		1	961854	HTV	EET EDI	02/29/24 14:45
Total/NA	Analysis	4500 O C-2016		1	960922	RXA	EET EDI	02/23/24 12:00
Total/NA	Analysis	5210 B-2016		1	960920	RXA	EET EDI	02/23/24 15:03
Total/NA	Analysis	9040C		1	961646	RXA	EET EDI	02/28/24 10:47
Total/NA	Analysis	9060A		1	961018	MMC	EET EDI	02/23/24 19:15
Dissolved	Filtration	FILTRATION			961686	HTV	EET EDI	02/28/24 09:30
Dissolved	Prep	SM 4500 P B			961687	HTV	EET EDI	02/28/24 10:00
Dissolved	Analysis	SM4500 P E-2011		1	961689	HTV	EET EDI	02/28/24 14:45
Total/NA	Prep	SM 4500 P B			961687	HTV	EET EDI	02/28/24 10:00
Total/NA	Analysis	SM4500 P E-2011		1	961689	HTV	EET EDI	02/28/24 14:45
Total/NA	Analysis	Total Nitrogen		1	962005	TJW	EET EDI	03/01/24 06:14

Lab Chronicle

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill - Anti-Degradation

Job ID: 460-298636-1

Client Sample ID: Clarifying Pond

Date Collected: 02/22/24 11:00
Date Received: 02/22/24 19:00

Lab Sample ID: 460-298636-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		1	960939	OXG	EET EDI	02/23/24 19:24
Total/NA	Analysis	300.0		1	960940	OXG	EET EDI	02/23/24 19:24
Total/NA	Prep	245.1			701990	NVK	EET BUF	02/27/24 11:26
Total/NA	Analysis	245.1		1	702071	NVK	EET BUF	02/27/24 14:50
Dissolved	Filtration	Filtration			477197	UAMX	ELLE	02/27/24 01:20
Dissolved	Prep	3005A			477729	NU9R	ELLE	02/28/24 08:20
Dissolved	Analysis	6020B		1	478562	UCIG	ELLE	02/29/24 17:56
Dissolved	Filtration	FILTRATION			961272	VAD	EET EDI	02/26/24 19:58
Dissolved	Prep	3010A			961273	VAD	EET EDI	02/26/24 20:02
Dissolved	Analysis	6020B		1	961239	FBT	EET EDI	02/26/24 22:14
Total Recoverable	Prep	3005A			476798	NU9R	ELLE	02/26/24 07:45
Total Recoverable	Analysis	6020B		1	477888	F7JF	ELLE	02/28/24 11:56
Total Recoverable	Prep	3005A			824443	RR	EET SAV	02/26/24 07:59
Total Recoverable	Analysis	6020B		1	824692	BWR	EET SAV	02/26/24 14:18
Total/NA	Prep	3010A			961595	JKF	EET EDI	02/28/24 09:03
Total/NA	Analysis	6020B		1	961685	CDC	EET EDI	02/28/24 15:28
Total/NA	Analysis	120.1		1	961872	MMC	EET EDI	02/29/24 12:18
Total/NA	Analysis	2310B-2011		1	961899	RAK	EET EDI	02/29/24 14:01
Total/NA	Analysis	2320B-2011		1	961904	RXA	EET EDI	02/29/24 12:28
Total/NA	Analysis	2540C-2015		1	961557	PLS	EET EDI	02/28/24 07:14
Total/NA	Analysis	2540D-2015		1	961182	PXP	EET EDI	02/26/24 09:24
Dissolved	Filtration	FILTRATION			962051	AXP	EET EDI	03/01/24 09:02
Dissolved	Analysis	350.1		1	962063	AXP	EET EDI	03/01/24 09:45
Total/NA	Analysis	350.1		1	962063	AXP	EET EDI	03/01/24 09:39
Total/NA	Prep	351.2			477365	NLE3	ELLE	02/27/24 09:09 - 02/27/24 12:09 [1]
Total/NA	Analysis	351.2		1	477928	JCG7	ELLE	02/28/24 10:51
Total/NA	Analysis	410.4		1	961854	HTV	EET EDI	02/29/24 14:45
Total/NA	Analysis	4500 O C-2016		1	960922	RXA	EET EDI	02/23/24 12:05
Total/NA	Analysis	5210 B-2016		1	960920	RXA	EET EDI	02/23/24 15:08
Total/NA	Analysis	9040C		1	961646	RXA	EET EDI	02/28/24 10:52
Total/NA	Analysis	9060A		1	961018	MMC	EET EDI	02/23/24 20:33
Dissolved	Filtration	FILTRATION			961686	HTV	EET EDI	02/28/24 09:30
Dissolved	Prep	SM 4500 P B			961687	HTV	EET EDI	02/28/24 10:00
Dissolved	Analysis	SM4500 P E-2011		1	961689	HTV	EET EDI	02/28/24 14:45
Total/NA	Prep	SM 4500 P B			961687	HTV	EET EDI	02/28/24 10:00
Total/NA	Analysis	SM4500 P E-2011		1	961689	HTV	EET EDI	02/28/24 14:45
Total/NA	Analysis	Total Nitrogen		1	962005	TJW	EET EDI	03/01/24 06:14

[1] This procedure uses a method stipulated length of time for the process. Both start and end times are displayed.

Laboratory References:

EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600
EET EDI = Eurofins Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900
EET SAV = Eurofins Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858
ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Accreditation/Certification Summary

Client: Heidelberg Materials Northeast LLC
Job ID: 460-298636-1
Project/Site: Rock Hill - Anti-Degradation

Laboratory: Eurofins Edison

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Connecticut	State	PH-0818	09-30-24
Georgia	State	12028 (NJ)	06-30-24
Massachusetts	State	M-NJ312	06-30-24
New Jersey	NELAP	12028	06-30-24
New York	NELAP	11452	04-01-24
Pennsylvania	NELAP	68-00522	02-28-25
Rhode Island	State	LAO00376	12-31-24
USDA	US Federal Programs	P330-20-00244	05-31-24

Laboratory: Eurofins Buffalo

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Arkansas DEQ	State	88-0686	07-06-23 *
Connecticut	State	PH-0568	03-31-24
Florida	NELAP	E87672	06-30-23 *
Georgia	State	10026 (NY)	03-31-24
Georgia	State Program	N/A	03-31-09 *
Illinois	NELAP	200003	09-30-24
Iowa	State	374	03-01-25
Iowa	State Program	374	03-01-09 *
Kansas	NELAP	E-10187	02-01-24 *
Kentucky (UST)	State	108092	04-01-24
Kentucky (WW)	State	KY90029	12-31-23 *
Louisiana	NELAP	02031	06-30-23 *
Louisiana (All)	NELAP	02031	06-30-23 *
Maine	State	NY00044	12-04-24
Maryland	State	294	06-30-24
Massachusetts	State	M-NY044	07-01-24
Michigan	State	9937	04-01-24
Michigan	State Program	9937	04-01-09 *
New Hampshire	NELAP	2973	09-11-19 *
New Hampshire	NELAP	2337	11-17-24
New Jersey	NELAP	NY455	06-30-24
New York	NELAP	10026	03-31-24
Pennsylvania	NELAP	68-00281	08-31-24
Rhode Island	State	LAO00378	12-30-24
Texas	NELAP	T104704412-18-10	07-31-23 *
USDA	US Federal Programs	P330-18-00039	03-25-24
Virginia	NELAP	460185	09-14-24
Washington	State	C784	02-10-25
Wisconsin	State	998310390	08-31-24

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
A2LA	Dept. of Defense ELAP	0001.01	11-30-24
A2LA	ISO/IEC 17025	0001.01	11-30-24
Alabama	State	43200	01-31-25
Alaska	State	PA00009	06-30-24

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Accreditation/Certification Summary

Client: Heidelberg Materials Northeast LLC
Job ID: 460-298636-1
Project/Site: Rock Hill - Anti-Degradation

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC (Continued)

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Arizona	State	AZ0780	03-12-24
Arkansas DEQ	State	88-00660	08-09-24
California	State	2792	01-31-24 *
Colorado	State	PA00009	06-30-24
Connecticut	State	PH-0746	06-30-25
DE Haz. Subst. Cleanup Act (HSCA)	State	019-006 (PA cert)	01-31-25
Florida	NELAP	E87997	06-30-24
Georgia (DW)	State	C048	01-31-24 *
Hawaii	State	N/A	01-31-25
Illinois	NELAP	200027	01-31-25
Iowa	State	361	03-01-24
Kansas	NELAP	E-10151	10-31-24
Kentucky (DW)	State	KY90088	12-31-24
Kentucky (UST)	State	0001.01	11-30-24
Kentucky (WW)	State	KY90088	12-31-23 *
Louisiana (All)	NELAP	02055	06-30-24
Maine	State	2019012	03-12-25
Maryland	State	100	06-30-24
Massachusetts	State	M-PA009	06-30-24
Michigan	State	9930	01-31-25
Minnesota	NELAP	042-999-487	12-31-24
Mississippi	State	023	01-31-25
Missouri	State	450	01-31-25
Montana (DW)	State	0098	01-01-25
Nebraska	State	NE-OS-32-17	01-31-25
New Hampshire	NELAP	2730	01-10-25
New Jersey	NELAP	PA011	06-30-24
New York	NELAP	10670	04-01-24
North Carolina (DW)	State	42705	07-31-24
North Carolina (WW/SW)	State	521	12-31-24
Oklahoma	NELAP	9804	08-31-24
Oregon	NELAP	PA200001	09-11-24
Pennsylvania	NELAP	36-00037	01-28-25
Quebec Ministry of Environment and Fight against Climate Change	PALA	507	09-16-24
Rhode Island	State	LAO00338	12-30-24
South Carolina	State	89002	01-31-24 *
Tennessee	State	02838	01-31-25
Texas	NELAP	T104704194-23-46	08-31-24
USDA	US Federal Programs	525-22-298-19481	10-25-25
Vermont	State	VT - 36037	10-28-24
Virginia	NELAP	460182	06-14-25
Washington	State	C457	04-11-24
West Virginia (DW)	State	9906 C	01-31-25
West Virginia DEP	State	055	07-31-24
Wyoming (UST)	A2LA	0001.01	11-30-24

Laboratory: Eurofins Savannah

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Accreditation/Certification Summary

Client: Heidelberg Materials Northeast LLC
Job ID: 460-298636-1
Project/Site: Rock Hill - Anti-Degradation

Laboratory: Eurofins Savannah (Continued)

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
	AFCEE	SAVLAB	
Alabama	State	41450	06-30-24
ANAB	Dept. of Defense ELAP	L2463	09-22-24
Arkansas (DW)	State	GA00006	06-30-24
California	State	2939	06-30-24
Florida	NELAP	E87052	06-30-24
Georgia	State	E87052	06-30-24
Georgia (DW)	State	803	06-30-24
Guam	State	19-007R	04-17-24
Hawaii	State	<cert No.>	06-30-24
Illinois	NELAP	200022	11-30-24
Indiana	State	C-GA-02	06-30-24
Iowa	State	353	07-01-25
Kentucky (UST)	State	NA	06-30-24
Louisiana	NELAP	30690	06-30-24
Louisiana (All)	NELAP	30690	06-30-24
Louisiana (DW)	State	LA009	12-31-24
Maine	State	GA00006	09-25-24
Maryland	State	250	12-31-24
Massachusetts	State	M-GA006	06-30-24
Michigan	State	9925	06-30-24
Mississippi	State	<cert No.>	06-30-24
Nebraska	State	NE-OS-7-04	06-30-24
New Jersey	NELAP	GA769	06-30-24
New Mexico	State	GA00006	06-30-24
North Carolina (DW)	State	13701	07-31-24
North Carolina (WW/SW)	State	269	12-31-24
Pennsylvania	NELAP	68-00474	06-30-24
Puerto Rico	State	GA00006	01-01-25
South Carolina	State	98001	06-30-24
Tennessee	State	TN02961	06-30-24
Texas	NELAP	T1047004185	11-30-24
Texas	TCEQ Water Supply	T104704185	06-30-24
USDA	US Federal Programs	P330-18-00313	09-03-24
Virginia	NELAP	460161	06-14-24
Wyoming	State	8TMS-L	06-30-24

Method Summary

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill - Anti-Degradation

Job ID: 460-298636-1

Method	Method Description	Protocol	Laboratory
300.0	Anions, Ion Chromatography	EPA	EET EDI
245.1	Mercury (CVAA)	EPA	EET BUF
6020B	Metals (ICP/MS)	SW846	EET EDI
6020B	Metals (ICP/MS)	SW846	EET SAV
6020B	Metals (ICP/MS)	SW846	ELLE
120.1	Conductivity, Specific Conductance	EPA	EET EDI
2310B-2011	Acidity	SM	EET EDI
2320B-2011	Alkalinity, Total	SM	EET EDI
2540C-2015	Total Dissolved Solids (Dried at 180 °C)	SM	EET EDI
2540D-2015	Total Suspended Solids (Dried at 103-105°C)	SM	EET EDI
350.1	Nitrogen, Ammonia	EPA	EET EDI
351.2	Nitrogen, Total Kjeldahl	EPA	ELLE
410.4	COD	EPA	EET EDI
4500 O C-2016	Oxygen, Dissolved	SM	EET EDI
5210 B-2016	BOD, 5-Day	SM	EET EDI
9040C	pH	SW846	EET EDI
9060A	Organic Carbon, Total (TOC)	SW846	EET EDI
SM4500 P E-2011	Phosphorus	SM	EET EDI
Total Nitrogen	Nitrogen, Total	EPA	EET EDI
245.1	Preparation, Mercury	EPA	EET BUF
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	EET SAV
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	ELLE
3010A	Preparation, Total Metals	SW846	EET EDI
351.2	Nitrogen, Total Kjeldahl	EPA	ELLE
FILTRATION	Sample Filtration	None	EET EDI
Filtration	Sample Filtration	None	ELLE
SM 4500 P B	Phosphorous, Total and Ortho	SM	EET EDI

Protocol References:

EPA = US Environmental Protection Agency
None = None
SM = "Standard Methods For The Examination Of Water And Wastewater"
SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600
EET EDI = Eurofins Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900
EET SAV = Eurofins Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858
ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Sample Summary

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill - Anti-Degradation

Job ID: 460-298636-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
460-298636-1	NPDES 001	Water	02/22/24 08:30	02/22/24 19:00
460-298636-2	Upstream	Water	02/22/24 10:00	02/22/24 19:00
460-298636-3	Clarifying Pond	Water	02/22/24 11:00	02/22/24 19:00

Eurofins Edison
777 New Durham Road
Edison, NJ 08817
Phone: 732-549-3900 Fax: 732-549-3679

Chain of Custody Record

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eurofins

Client Information	Sampler	Lab PM: Gilmore, Julie L	Carrier Tracking No(s):	COC No: 460-178636-115848.1
Client Contact: Andrew Gutshall	Phone:	E-Mail: Julie.Gilmore@et.eurofinsus.com	State of Origin:	Page: Page 1 of 2
Company: Heidelberg Materials Northeast LLC	PWSID:			Job #: 298636
Address: 7660 Imperial Way	Due Date Requested:			
City: Allentown	TAT Requested (days):			
State, Zip: PA, 18195	Compliance Project: Δ Yes Δ No			
Phone:	PO #: Purchase Order not required			
Email: andrew.gutshall@heidelbergmaterials.com	WO #:			
Project Name: Rock Hill Anti-Degradation	Project #: 46011424			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:
A HCL, B NaOH, C Zn Acetate, D Nitric Acid, E NaHSO4, F MeOH, G Amchlor, H Ascorbic, I Ice, J DI Water, K EDTA, L EDA, M Hexane, Y [illegible], Z other (specify), Other:

SHORT HOLD

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020B (MOD) Single Element 6020B Metals List	6020B (MOD) Single Element 6020B Metals List	351.2 Local Method	6020B Dissolved Cd/Fe/Zn	6020B (MOD) Total Fe	350.1 410.4, 4500_P_E	120.1 9040C, SM2310B	350.1 4500_P_E, 6020B	2320B (MOD) Alkalinity	6020B (MOD) Total Custom Metals	9060A TOC	2540D, SM5210B_Calc	2540C TDS	Total Number of containers	Special Instructions/Note:
			Preservation Code:		X	X	N	D	S	N	D	S	N	N	N	D	S	N	N	X	
NPDES 001	2/22/24	0830	G	Water																20	1
Basin 1	No Flow no sample			Water																	-
Basin 2	No Flow No sample			Water																	-
Upstream	2/22/24	1000	G	Water																20	2
Clarifying Pond	2/22/24	~~1000~~ 1100	G	Water																20	3
	~~2/22/24~~	~~1100~~																			

460-298636 Chain of Custody

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I II III IV Other (specify)	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	[signature]	2/22/24		[signature]	2/22/24 1223	EETN-KOP
2	[signature]	2-22-24 1540	EETN-KOP	[signature]	2/22	EDA
3	[signature]	2/22 1900	EDA	[signature]	2/22/24 1900	EDTG

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.	Cooler Temperature(s) °C and Other Remarks: 17-17 / 16-16

Ver: 06/08/2021

Eurofins Edison
777 New Durham Road
Edison, NJ 08817
Phone: 732-549-3900 Fax: 732-549-3679

Chain of Custody Record

17
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Client Information	Sampler	Lab PM: Gilmore Julie L	Carrier Tracking No(s):	COC No: 460-178636-115848.2
Client Contact: Andrew Gutshall	Phone:	E-Mail: Julie.Gilmore@et.eurofinsus.com	State of Origin:	Page: Page 2 of 2
Company: Heidelberg Materials Northeast LLC	PWSID:			Job #: 298636
Address: 7660 Imperial Way	Due Date Requested:			
City: Allentown	TAT Requested (days):			
State, Zip: PA, 18195	Compliance Project: Δ Yes Δ No			
Phone:	PO #: Purchase Order not required			
Email: andrew.gutshall@heidelbergmaterials.com	WO #:			
Project Name: Rock Hill Anti-Degradation	Project #: 46011424			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:
A HCL, B NaOH, C Zn Acetate, D Nitric Acid, E NaHSO4, F MeOH, G Amchlor, H Ascorbic Acid, I Ice, J DI Water, K EDTA, L EDA, M Hexane, N None, O AsNaO2, P Na2O4S, Q Na2SO3, R Na2S2O3, S H2SO4, T TSP Dodecahydrate, U Acetone, V MCAA, W pH 4-5, Y Trizma, Z other (specify)
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water S=solid, O=waste/oil BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	300_ORGFM_28D, 300_ORGFMS	245.1 Local Method	6020B Total Aluminum	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	D	D		
NPDES 001	2/22/24	0830	G	Water							1
Basin 1 NO flow No sample				Water							—
Basin 2 NO flow No sample				Water							—
Upstream	2/22/24	1000	G	Water							2
Clarifying Pond	2/22/24	1100	G	Water							3

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I II III IV Other (specify)

Special Instructions/QC Requirements.

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		2/22/24			2/22/24 1223	EETN-KOP
2		2-22-24 1540	EETN-KOP		2/22	EDD
3		2/22 1800	EDD		2/22/24 1900	EETN

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks: 17-1.2/16-1.6

Ver: 06/08/2021

Eurofins **TestAmerica Edison**

Receipt Temperature and pH Log

Job Number: 298636

Number of Coolers: 2 IR Gun # 2

Cooler Temperatures

	RAW	CORRECTED		RAW	CORRECTED		RAW	CORRECTED
Cooler #1:	1.7 °C	1.7 °C	Cooler #4:	°C	°C	Cooler #7:	°C	°C
Cooler #2:	1.6 °C	1.6 °C	Cooler #5:	°C	°C	Cooler #8:	°C	°C
Cooler #3:	°C	°C	Cooler #6:	°C	°C	Cooler #9:	°C	°C

TALS Sample Number	Ammonia (pH<2)	COD (pH<2)	Nitrate Nitrite (pH<2)	Metals* (pH<2)	Hardness (pH<2)	Pest (pH 5-9)	EPH or QAM (pH<2)	Phenols (pH<2)	Sulfide (pH>9)	TKN (pH<2)	TOC (pH<2)	Total Cyanide (pH>12)	Total Phos (pH<2)	Other	Other
1	<2	<2		<2						<2	<2		<2		
2	<2	<2		<2						<2	<2		<2		
3	<2	<2		<2						<2	<2		<2		

If pH adjustments are required record the information below.

Sample No(s) adjusted _____

Preservative Name/Conc. _____ Volume of Preservative used (ml): _____

Lot # of Preservative(s): _____ Expiration Date: _____

The appropriate Project Manager and Department Manager should be notified about the samples which were pH adjusted

** Samples for Metal analysis which are out of compliance must be acidified at least 24 hours prior to analysis.*

Initials: _____ Date: 2/22

Eurofins Edison
777 New Durham Road
Edison, NJ 08817
Phone: 732-549-3900 Fax: 732-549-3679

Chain of Custody Record

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Client Information (Sub Contract Lab)	Sampler:	Lab PM: Gilmore, Julie L	Carrier Tracking No(s):	COC No: 460-70440.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Julie.Gilmore@et.eurofinsus.com	State of Origin: Pennsylvania	Page: Page 1 of 1
Company: Eurofins Lancaster Laboratories Environm		Accreditations Required (See note): NELAP - Pennsylvania		Job #: 460-298636-1
Address: 2425 New Holland Pike, ,	Due Date Requested: 3/7/2024			
City: Lancaster	TAT Requested (days):			
State, Zip: PA, 17601				
Phone: 717-656-2300(Tel)	PO #:			
Email:	WO #:			
Project Name: Rock Hill - Anti-Degradation	Project #: 46011424			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)
Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020B/3005A (MOD) Total Fe	6020B/Filtration_ME Dissolved Cd/Fe/Zn	351.2/351.2_Prep	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
NPDES 001 (460-298636-1)	2/22/24	08:30 Eastern		Water			X	X	X	3	
Upstream (460-298636-2)	2/22/24	10:00 Eastern		Water			X	X	X	3	
Clarifying Pond (460-298636-3)	2/22/24	11:00 Eastern		Water			X	X	X	3	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Northeast, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Northeast, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Northeast, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Northeast, LLC.

Possible Hazard Identification	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 1	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Date/Time	Company		Date/Time	Company
Relinquished by:	2/23/24 1540	ETL	Received by:	2/23/24 1540	ETL
Relinquished by:	2/23/24 1917	ETL	Received by:		
Relinquished by:			Received by:	2/23/24 1917	ETL

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: rqw: 2.6 corr. 2.7

Eurofins Edison
777 New Durham Road
Edison, NJ 08817
Phone: 732-549-3900 Fax: 732-549-3679

Chain of Custody Record

eurofins | Environment Testi

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Gilmore, Julie L	Carrier Tracking No(s):	COC No: 460-70442.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Julie.Gilmore@et.eurofinsus.com	State of Origin: Pennsylvania	Page: Page 1 of 1
Company: Eurofins Environment Testing Northeast,		Accreditations Required (See note): NELAP - Pennsylvania		Job #: 460-298636-1
Address: 10 Hazelwood Drive, ,	Due Date Requested: 3/4/2024			
City: Amherst	TAT Requested (days):			
State, Zip: NY, 14228-2298				
Phone: 716-691-2600(Tel) 716-691-7991(Fax)	PO #:			
Email:	WO #:			
Project Name: Rock Hill - Anti-Degradation	Project #: 46011424			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)
Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	245.1/245.1_Prep	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
NPDES 001 (460-298636-1)	2/22/24	08:30 Eastern		Water			X	1	
Upstream (460-298636-2)	2/22/24	10:00 Eastern		Water			X	1	
Clarifying Pond (460-298636-3)	2/22/24	11:00 Eastern		Water			X	1	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Northeast, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Northeast, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Northeast, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Northeast, LLC.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 1	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:
Relinquished by:	Date/Time: 2/23/24 1900	Company EET	Received by:	Date/Time: 2-24-24 1050	Company TAB
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 2.6 ICE

Eurofins Edison
777 New Durham Road
Edison, NJ 08817
Phone: 732-549-3900 Fax: 732-549-3679

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Gilmore, Julie L	Carrier Tracking No(s):	COC No: 460-70443.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Julie.Gilmore@et.eurofinsus.com	State of Origin: Pennsylvania	Page: Page 1 of 1
Company: Eurofins Environment Testing Southeast,		Accreditations Required (See note): NELAP Pennsylvania		Job #: 460-298636-1
Address: 5102 LaRoche Avenue,	Due Date Requested: 3/5/2024			
City: Savannah	TAT Requested (days):			
State, Zip: GA, 31404				
Phone: 912-354-7858(Tel) 912-352-0165(Fax)	PO #:			
Email:	WO #:			
Project Name: Rock Hill Anti-Degradation	Project #: 46011424			
Site:	SSOW#:			

Preservation Codes:
A HCL, B NaOH, C Zn Acetate, D Nitric Acid, E NaHSO4, F MeOH, G Amchlor, H Ascorbic Acid, I Ice, J DI Water, K EDTA, L EDA, M Hexane, N None, O AsNaO2, P Na2O4S, Q Na2SO3, R Na2S2O3, S H2SO4, T TSP Dodecahydrate, U Acetone, V MCAA, W pH 4-5, Y Trizma, Z other (specify)
Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020B/3005A Total Aluminum	Total Number of Containers	Special Instructions/Note:
			Preservation Code:						
NPDES 001 (460-298636-1)	2/22/24	08:30 Eastern		Water			X	1	
Upstream (460-298636-2)	2/22/24	10:00 Eastern		Water			X	1	
Clarifying Pond (460-298636-3)	2/22/24	11.00 Eastern		Water			X	1	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Northeast, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Northeast, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Northeast, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Northeast, LLC.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV Other (specify) Primary Deliverable Rank: 1	Special Instructions/QC Requirements.

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	2/23/24 1900	FEDEX			
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time: 2/24/24 0952	Company

Custody Seals Intact: Yes No | Custody Seal No.

Cooler Temperature(s) °C and Other Remarks: 2.4/2.4

Login Sample Receipt Checklist

Client: Heidelberg Materials Northeast LLC

Job Number: 460-298636-1

Login Number: 298636
List Number: 1
Creator: Thundathorn, Sukanan 1

List Source: Eurofins Edison

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Heidelberg Materials Northeast LLC

Job Number: 460-298636-1

Login Number: 298636
List Number: 4
Creator: Yeager, Brian A

List Source: Eurofins Buffalo
List Creation: 02/26/24 09:37 AM

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	2.6 ice
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	True	

Login Sample Receipt Checklist

Client: Heidelberg Materials Northeast LLC

Job Number: 460-298636-1

Login Number: 298636
List Number: 2
Creator: Metzger, Katherine A

List Source: Eurofins Lancaster Laboratories Environment Testing, LLC
List Creation: 02/23/24 08:26 PM

Question	Answer	Comment
The cooler's custody seal is intact.	N/A	Not present
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature acceptable,where thermal pres is required(</=6C, not frozen).	True	
Cooler Temperature is recorded.	True	
WV:Container Temp acceptable,where thermal pres is required (</=6C, not frozen).	N/A	
WV: Container Temperature is recorded.	N/A	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the containers received and the COC.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
There is sufficient vol. for all requested analyses.	True	
Is the Field Sampler's name present on COC?	False	Received project as a subcontract.
Sample custody seals are intact.	N/A	Not present.
VOA sample vials do not have headspace >6mm in diameter (none, if from WV)?	N/A	

Login Sample Receipt Checklist

Client: Heidelberg Materials Northeast LLC

Job Number: 460-298636-1

Login Number: 298636
List Number: 3
Creator: Deal, Katelyn

List Source: Eurofins Savannah
List Creation: 02/24/24 12:23 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Lab Results

March 7, 2024

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Katie Murray
Heidelberg Materials Northeast LLC
7660 Imperial Way
Allentown, Pennsylvania 18195

Generated 3/28/2024 3:02:55 PM

JOB DESCRIPTION

Rock Hill-Anti-Degradation

JOB NUMBER

460-299582-1

Eurofins Edison
777 New Durham Road
Edison NJ 08817

See page two for job notes and contact information.

my EOL

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing Northeast, LLC Project Manager.

Authorization



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Authorized for release by
Julie Gilmore, Project Manager I
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Qualifiers

HPLC/IC

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

General Chemistry

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
H	Sample was prepped or analyzed beyond the specified holding time. This does not meet regulatory requirements.
H3	Sample was received and analyzed past holding time. This does not meet regulatory requirements.
HF	Parameter with a holding time of 15 minutes. Test performed by laboratory at client's request. Sample was analyzed outside of hold time.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job Narrative
460-299582-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

- Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

The method detection limit (MDL) is the lowest value detectable by the laboratory for a given analyte as determined by the MDL procedure detailed in EPA 40 CFR 136. Reported MDL values are adjusted for any dilutions and percent moisture (as applicable). The lab is unable to report values below the MDL.

Receipt
The samples were received on 3/7/2024 7:00 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 2.4°C and 4.1°C.

Subcontract Work
Method Osomotic Pressure: This method was subcontracted to Microbac Laboratories, Inc. The subcontract laboratory certification is different from that of the facility issuing the final report. The subcontract report is appended in its entirety.

HPLC/IC
Method 300_ORGFMS: The continuing calibration verification (CCV) associated with batch 460-963097 recovered above the upper control limit for Nitrite as N. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated samples are impacted: NPDES 001 (460-299582-1), Upstream (460-299582-2) and Clarifying Pond (460-299582-3).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Metals
Method 6020B - Dissolved: The following samples were not filtered within 15 minutes of sample collection as required by the method: NPDES 001 (460-299582-1), Upstream (460-299582-2) and Clarifying Pond (460-299582-3). The sample(s) was filtered prior to analysis at the laboratory, and the results have been reported.

Method 6020B - Dissolved: The following samples were not filtered within 15 minutes of sample collection as required by the method: NPDES 001 (460-299582-1), Upstream (460-299582-2) and Clarifying Pond (460-299582-3). The samples were filtered prior to analysis at the laboratory, and the results have been reported.

Method 6020B - Dissolved: The following samples were not filtered and preserved within 15 minutes of sample collection in accordance with 40 CFR Part 136 Table II, Footnote 7, method 6020B. The samples were filtered prior to analysis at the laboratory.

NPDES 001 (460-299582-1), Upstream (460-299582-2) and Clarifying Pond (460-299582-3)

Method 6020B - Dissolved: The following samples were not filtered within 15 minutes of sample collection as required by the method: NPDES 001 (460-299582-1), Upstream (460-299582-2) and Clarifying Pond (460-299582-3). The sample(s) was filtered prior to analysis at the laboratory, and the results have been reported.

Method 6020B - Dissolved: The following samples were not filtered within 15 minutes of sample collection as required by the method: NPDES 001 (460-299582-1), Upstream (460-299582-2) and Clarifying Pond (460-299582-3). The samples were filtered prior to analysis at the laboratory, and the results have been reported.

Job ID: 460-299582-1 (Continued)

Method 6020B - Dissolved: The following samples were not filtered and preserved within 15 minutes of sample collection in accordance with 40 CFR Part 136 Table II, Footnote 7, method 6020B. The samples were filtered prior to analysis at the laboratory.

NPDES 001 (460-299582-1), Upstream (460-299582-2) and Clarifying Pond (460-299582-3)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

General Chemistry
Method 351.2: The method blank associated with preparation batch 410-486261 and analytical batch 410-486827 contained TKN greater than one-half the reporting limit (RL). The sample was reanalyzed and the result was confirmed.

Method 4500_O_C: This analysis is normally performed in the field and has a method-defined holding time of 15 minutes. The following samples has been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe: NPDES 001 (460-299582-1), Upstream (460-299582-2) and Clarifying Pond (460-299582-3).

Method 9040C: This analysis is normally performed in the field and has a method-defined holding time of 15 minutes. The following samples has been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe: NPDES 001 (460-299582-1), Upstream (460-299582-2) and Clarifying Pond (460-299582-3).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Client Sample ID: NPDES 001

Date Collected: 03/07/24 08:30
Date Received: 03/07/24 19:00

Lab Sample ID: 460-299582-1

Matrix: Water

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	0.11	J	0.16	0.070	mg/L			03/08/24 16:33	1
Nitrate Nitrite as N	0.11	J	0.16	0.070	mg/L			03/08/24 16:33	1
Nitrite as N	0.023	U	0.16	0.023	mg/L			03/08/24 16:33	1

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000043	U	0.00020	0.000043	mg/L		03/12/24 11:36	03/13/24 10:25	1

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	5.1		4.0	0.91	ug/L		03/15/24 19:55	03/17/24 15:26	1
Boron	43.8	J	80.0	30.4	ug/L		03/15/24 19:55	03/17/24 15:26	1
Calcium	18400		500	53.6	ug/L		03/15/24 19:55	03/17/24 15:26	1
Copper	3.1	J	4.0	2.5	ug/L		03/15/24 19:55	03/17/24 15:26	1
Lead	0.84	U	1.2	0.84	ug/L		03/15/24 19:55	03/17/24 15:26	1
Magnesium	6330		200	46.9	ug/L		03/15/24 19:55	03/17/24 15:26	1
Manganese	27.3		8.0	1.5	ug/L		03/15/24 19:55	03/17/24 15:26	1
Nickel	0.91	U	4.0	0.91	ug/L		03/15/24 19:55	03/17/24 15:26	1
Potassium	1460		200	112	ug/L		03/15/24 19:55	03/17/24 15:26	1
Selenium	0.59	U	2.5	0.59	ug/L		03/15/24 19:55	03/17/24 15:26	1
Sodium	9110		500	219	ug/L		03/15/24 19:55	03/17/24 15:26	1
Strontium	72.9		4.0	0.50	ug/L		03/15/24 19:55	03/17/24 15:26	1
Zinc	8.2	J	16.0	6.5	ug/L		03/15/24 19:55	03/17/24 15:26	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	269		100	35.0	ug/L		03/10/24 14:42	03/11/24 18:56	1
Iron	521		50.0	20.0	ug/L		03/13/24 07:30	03/13/24 19:46	1

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	121		40.0	19.5	ug/L		03/21/24 18:18	03/21/24 20:31	1
Cadmium	0.15	U	0.50	0.15	ug/L		03/13/24 21:20	03/14/24 19:01	1
Arsenic	0.89	U	2.0	0.89	ug/L		03/21/24 18:18	03/21/24 20:31	1
Iron	185		50.0	20.0	ug/L		03/13/24 21:20	03/14/24 19:01	1
Calcium	18500		500	53.6	ug/L		03/21/24 18:18	03/21/24 20:31	1
Zinc	6.2	J	10.0	4.0	ug/L		03/13/24 21:20	03/14/24 19:01	1
Copper	2.5	U	4.0	2.5	ug/L		03/21/24 18:18	03/21/24 20:31	1
Iron	166		120	58.2	ug/L		03/21/24 18:18	03/21/24 20:31	1
Lead	0.84	U	1.2	0.84	ug/L		03/21/24 18:18	03/21/24 20:31	1
Magnesium	6250		200	46.9	ug/L		03/21/24 18:18	03/21/24 20:31	1
Manganese	7.2	J	8.0	1.5	ug/L		03/21/24 18:18	03/21/24 20:31	1
Nickel	0.91	U	4.0	0.91	ug/L		03/21/24 18:18	03/21/24 20:31	1

Method: SW846 EPA 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	1.3	U	5.0	1.3	ug/L		03/11/24 11:08	03/14/24 18:18	1

Method: SW846 EPA 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	1.3	U	5.0	1.3	ug/L		03/11/24 11:08	03/14/24 18:09	1

Client Sample ID: NPDES 001

Lab Sample ID: 460-299582-1

Date Collected: 03/07/24 08:30

Matrix: Water

Date Received: 03/07/24 19:00

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Resistivity (EPA 120.1)	**0.00503**		0.000100	0.000100	Mohm-cm			03/15/24 15:00	1
Specific Conductance (EPA 120.1)	**199**		1.00	1.00	umhos/cm			03/15/24 15:00	1
Acidity (SM 2310B-2011)	20.0	U	20.0	20.0	mg/L			03/18/24 13:47	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-2011)	**62.3**		5.0	5.0	mg/L			03/14/24 18:18	1
Carbonate Alkalinity as CaCO3 (SM 2320B-2011)	5.0	U	5.0	5.0	mg/L			03/14/24 18:18	1
Alkalinity as CaCO3 to pH 4.5 (SM 2320B-2011)	**62.3**		5.0	5.0	mg/L			03/14/24 18:18	1
Total Dissolved Solids (SM 2540C-2015)	**124**		2.5	2.5	mg/L			03/14/24 07:33	1
Total Suspended Solids (SM 2540D-2015)	**2.6**		2.5	2.5	mg/L			03/14/24 07:51	1
Ammonia (EPA 350.1)	0.050	U	0.10	0.050	mg/L			03/18/24 11:00	1
Total Kjeldahl Nitrogen (EPA 351.2)	**0.65**	**J**	1.0	0.50	mg/L		03/14/24 11:38	03/15/24 12:47	1
Chemical Oxygen Demand (EPA 410.4)	**18.5**		10.0	3.3	mg/L			03/19/24 13:52	1
Oxygen, Dissolved (SM 4500 O C-2016)	**9.4**	**H H3**	1.0	1.0	mg/L			03/10/24 12:13	1
Orthophosphate as P (SM 4500 P E-2011)	0.0050	U	0.030	0.0050	mg/L			03/08/24 20:25	1
Carbonaceous Biochemical Oxygen Demand 5 (SM 5210 B-2016)	**1.1**		1.0	1.0	mg/L			03/08/24 14:42	1
pH (SW846 9040C)	**8.1**	**HF**	0.1	0.1	SU			03/15/24 17:03	1
Temperature (SW846 9040C)	**26.3**	**HF**	0.1	0.1	Degrees C			03/15/24 17:03	1
Total Organic Carbon (SW846 9060A)	**4.2**		1.0	0.53	mg/L			03/13/24 04:40	1
Nitrogen, Total (EPA Total Nitrogen)	**0.76**		0.50	0.50	mg/L			03/20/24 06:55	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (EPA 350.1)	0.050	U	0.10	0.050	mg/L			03/18/24 11:17	1
Orthophosphate as P (SM 4500 P E-2011)	0.0050	U	0.030	0.0050	mg/L			03/08/24 20:25	1

Client Sample ID: Upstream

Lab Sample ID: 460-299582-2

Date Collected: 03/07/24 09:45

Matrix: Water

Date Received: 03/07/24 19:00

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	**0.079**	**J**	0.16	0.070	mg/L			03/08/24 16:48	1
Nitrate Nitrite as N	**0.079**	**J**	0.16	0.070	mg/L			03/08/24 16:48	1
Nitrite as N	0.023	U	0.16	0.023	mg/L			03/08/24 16:48	1

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000043	U	0.00020	0.000043	mg/L		03/12/24 11:36	03/13/24 10:30	1

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**11.7**		4.0	0.91	ug/L		03/15/24 19:55	03/17/24 15:28	1

Client Sample ID: Upstream

Date Collected: 03/07/24 09:45
Date Received: 03/07/24 19:00

Lab Sample ID: 460-299582-2

Matrix: Water

Method: SW846 6020B - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	47.3	J	80.0	30.4	ug/L		03/15/24 19:55	03/17/24 15:28	1
Calcium	24600		500	53.6	ug/L		03/15/24 19:55	03/17/24 15:28	1
Copper	5.6		4.0	2.5	ug/L		03/15/24 19:55	03/17/24 15:28	1
Lead	0.84	U	1.2	0.84	ug/L		03/15/24 19:55	03/17/24 15:28	1
Magnesium	7610		200	46.9	ug/L		03/15/24 19:55	03/17/24 15:28	1
Manganese	90.5		8.0	1.5	ug/L		03/15/24 19:55	03/17/24 15:28	1
Nickel	1.8	J	4.0	0.91	ug/L		03/15/24 19:55	03/17/24 15:28	1
Potassium	1740		200	112	ug/L		03/15/24 19:55	03/17/24 15:28	1
Selenium	0.59	U	2.5	0.59	ug/L		03/15/24 19:55	03/17/24 15:28	1
Sodium	10300		500	219	ug/L		03/15/24 19:55	03/17/24 15:28	1
Strontium	96.3		4.0	0.50	ug/L		03/15/24 19:55	03/17/24 15:28	1
Zinc	7.2	J	16.0	6.5	ug/L		03/15/24 19:55	03/17/24 15:28	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	331		100	35.0	ug/L		03/10/24 14:42	03/11/24 18:52	1
Iron	475		50.0	20.0	ug/L		03/13/24 07:30	03/13/24 19:43	1

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	89.7		40.0	19.5	ug/L		03/21/24 18:18	03/21/24 21:06	1
Cadmium	0.15	U	0.50	0.15	ug/L		03/13/24 21:20	03/14/24 19:03	1
Arsenic	0.89	U	2.0	0.89	ug/L		03/21/24 18:18	03/21/24 21:06	1
Iron	90.4		50.0	20.0	ug/L		03/13/24 21:20	03/14/24 19:03	1
Calcium	25800		500	53.6	ug/L		03/21/24 18:18	03/21/24 21:06	1
Zinc	4.7	J	10.0	4.0	ug/L		03/13/24 21:20	03/14/24 19:03	1
Copper	3.3	J	4.0	2.5	ug/L		03/21/24 18:18	03/21/24 21:06	1
Iron	66.1	J	120	58.2	ug/L		03/21/24 18:18	03/21/24 21:06	1
Lead	0.84	U	1.2	0.84	ug/L		03/21/24 18:18	03/21/24 21:06	1
Magnesium	7810		200	46.9	ug/L		03/21/24 18:18	03/21/24 21:06	1
Manganese	67.4		8.0	1.5	ug/L		03/21/24 18:18	03/21/24 21:06	1
Nickel	0.91	U	4.0	0.91	ug/L		03/21/24 18:18	03/21/24 21:06	1

Method: SW846 EPA 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	4.0	J	5.0	1.3	ug/L		03/11/24 11:08	03/14/24 18:37	1

Method: SW846 EPA 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	2.8	J	5.0	1.3	ug/L		03/11/24 11:08	03/14/24 18:12	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Resistivity (EPA 120.1)	0.00390		0.000100	0.000100	Mohm-cm			03/15/24 15:00	1
Specific Conductance (EPA 120.1)	257		1.00	1.00	umhos/cm			03/15/24 15:00	1
Acidity (SM 2310B-2011)	20.0	U	20.0	20.0	mg/L			03/18/24 13:47	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-2011)	77.4		5.0	5.0	mg/L			03/14/24 18:23	1
Carbonate Alkalinity as CaCO3 (SM 2320B-2011)	5.0	U	5.0	5.0	mg/L			03/14/24 18:23	1

Client Sample ID: Upstream

Lab Sample ID: 460-299582-2

Date Collected: 03/07/24 09:45

Matrix: Water

Date Received: 03/07/24 19:00

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity as CaCO3 to pH 4.5 (SM 2320B-2011)	**77.4**		5.0	5.0	mg/L			03/14/24 18:23	1
Total Dissolved Solids (SM 2540C-2015)	**158**		2.5	2.5	mg/L			03/14/24 07:33	1
Total Suspended Solids (SM 2540D-2015)	2.5	U	2.5	2.5	mg/L			03/14/24 07:51	1
Ammonia (EPA 350.1)	0.050	U	0.10	0.050	mg/L			03/18/24 11:02	1
Total Kjeldahl Nitrogen (EPA 351.2)	**0.62**	**J**	1.0	0.50	mg/L		03/14/24 11:38	03/15/24 12:49	1
Chemical Oxygen Demand (EPA 410.4)	**12.6**		10.0	3.3	mg/L			03/19/24 13:52	1
Oxygen, Dissolved (SM 4500 O C-2016)	**8.0**	**H H3**	1.0	1.0	mg/L			03/10/24 12:15	1
Orthophosphate as P (SM 4500 P E-2011)	0.0050	U	0.030	0.0050	mg/L			03/08/24 20:25	1
Carbonaceous Biochemical Oxygen Demand 5 (SM 5210 B-2016)	**1.0**		1.0	1.0	mg/L			03/08/24 14:54	1
pH (SW846 9040C)	**7.6**	**HF**	0.1	0.1	SU			03/15/24 17:09	1
Temperature (SW846 9040C)	**26.3**	**HF**	0.1	0.1	Degrees C			03/15/24 17:09	1
Total Organic Carbon (SW846 9060A)	**3.6**		1.0	0.53	mg/L			03/13/24 05:06	1
Nitrogen, Total (EPA Total Nitrogen)	**0.86**		0.50	0.50	mg/L			03/20/24 06:55	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (EPA 350.1)	0.050	U	0.10	0.050	mg/L			03/18/24 11:19	1
Orthophosphate as P (SM 4500 P E-2011)	0.0050	U	0.030	0.0050	mg/L			03/08/24 20:25	1

Client Sample ID: Clarifying Pond

Lab Sample ID: 460-299582-3

Date Collected: 03/07/24 10:15

Matrix: Water

Date Received: 03/07/24 19:00

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	**0.27**		0.16	0.070	mg/L			03/08/24 17:03	1
Nitrate Nitrite as N	**0.27**		0.16	0.070	mg/L			03/08/24 17:03	1
Nitrite as N	0.023	U	0.16	0.023	mg/L			03/08/24 17:03	1

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000043	U	0.00020	0.000043	mg/L		03/12/24 11:36	03/13/24 10:32	1

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**2.2**	**J**	4.0	0.91	ug/L		03/15/24 19:55	03/17/24 15:31	1
Boron	**54.2**	**J**	80.0	30.4	ug/L		03/15/24 19:55	03/17/24 15:31	1
Calcium	**16900**		500	53.6	ug/L		03/15/24 19:55	03/17/24 15:31	1
Copper	2.5	U	4.0	2.5	ug/L		03/15/24 19:55	03/17/24 15:31	1
Lead	0.84	U	1.2	0.84	ug/L		03/15/24 19:55	03/17/24 15:31	1
Magnesium	**6010**		200	46.9	ug/L		03/15/24 19:55	03/17/24 15:31	1
Manganese	**12.8**		8.0	1.5	ug/L		03/15/24 19:55	03/17/24 15:31	1

Client Sample ID: Clarifying Pond — **Lab Sample ID: 460-299582-3**
Date Collected: 03/07/24 10:15 — **Matrix: Water**
Date Received: 03/07/24 19:00

Method: SW846 6020B - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nickel	0.91	U	4.0	0.91	ug/L		03/15/24 19:55	03/17/24 15:31	1
Potassium	**1120**		200	112	ug/L		03/15/24 19:55	03/17/24 15:31	1
Selenium	0.59	U	2.5	0.59	ug/L		03/15/24 19:55	03/17/24 15:31	1
Sodium	**3020**		500	219	ug/L		03/15/24 19:55	03/17/24 15:31	1
Strontium	**36.6**		4.0	0.50	ug/L		03/15/24 19:55	03/17/24 15:31	1
Zinc	6.5	U	16.0	6.5	ug/L		03/15/24 19:55	03/17/24 15:31	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**236**		100	35.0	ug/L		03/10/24 14:42	03/11/24 18:40	1
Iron	**279**		50.0	20.0	ug/L		03/13/24 07:30	03/13/24 19:41	1

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	19.5	U	40.0	19.5	ug/L		03/21/24 18:18	03/21/24 21:09	1
Cadmium	0.15	U	0.50	0.15	ug/L		03/13/24 21:20	03/14/24 19:05	1
Arsenic	0.89	U	2.0	0.89	ug/L		03/21/24 18:18	03/21/24 21:09	1
Iron	**53.0**		50.0	20.0	ug/L		03/13/24 21:20	03/14/24 19:05	1
Calcium	**17100**		500	53.6	ug/L		03/21/24 18:18	03/21/24 21:09	1
Zinc	4.0	U	10.0	4.0	ug/L		03/13/24 21:20	03/14/24 19:05	1
Copper	2.5	U	4.0	2.5	ug/L		03/21/24 18:18	03/21/24 21:09	1
Iron	58.2	U	120	58.2	ug/L		03/21/24 18:18	03/21/24 21:09	1
Lead	0.84	U	1.2	0.84	ug/L		03/21/24 18:18	03/21/24 21:09	1
Magnesium	**5980**		200	46.9	ug/L		03/21/24 18:18	03/21/24 21:09	1
Manganese	1.5	U	8.0	1.5	ug/L		03/21/24 18:18	03/21/24 21:09	1
Nickel	0.91	U	4.0	0.91	ug/L		03/21/24 18:18	03/21/24 21:09	1

Method: SW846 EPA 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	1.3	U	5.0	1.3	ug/L		03/11/24 11:08	03/14/24 18:40	1

Method: SW846 EPA 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	1.3	U	5.0	1.3	ug/L		03/11/24 11:08	03/14/24 18:15	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Resistivity (EPA 120.1)	**0.00658**		0.000100	0.000100	Mohm-cm			03/15/24 15:00	1
Specific Conductance (EPA 120.1)	**152**		1.00	1.00	umhos/cm			03/15/24 15:00	1
Acidity (SM 2310B-2011)	20.0	U	20.0	20.0	mg/L			03/18/24 13:47	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-2011)	**63.5**		5.0	5.0	mg/L			03/14/24 18:29	1
Carbonate Alkalinity as CaCO3 (SM 2320B-2011)	5.0	U	5.0	5.0	mg/L			03/14/24 18:29	1
Alkalinity as CaCO3 to pH 4.5 (SM 2320B-2011)	**63.5**		5.0	5.0	mg/L			03/14/24 18:29	1
Total Dissolved Solids (SM 2540C-2015)	**88.0**		2.5	2.5	mg/L			03/14/24 07:33	1
Total Suspended Solids (SM 2540D-2015)	**2.6**		2.6	2.6	mg/L			03/14/24 07:51	1
Ammonia (EPA 350.1)	0.050	U	0.10	0.050	mg/L			03/18/24 11:03	1
Total Kjeldahl Nitrogen (EPA 351.2)	**1.3**	**B**	1.0	0.50	mg/L		03/22/24 13:30	03/25/24 12:14	1

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill-Anti-Degradation

Job ID: 460-299582-1

Client Sample ID: Clarifying Pond
Date Collected: 03/07/24 10:15
Date Received: 03/07/24 19:00

Lab Sample ID: 460-299582-3
Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand (EPA 410.4)	**5.1**	**J**	10.0	3.3	mg/L			03/19/24 13:52	1
Oxygen, Dissolved (SM 4500 O C-2016)	**10.7**	**H H3**	1.0	1.0	mg/L			03/10/24 12:18	1
Orthophosphate as P (SM 4500 P E-2011)	0.0050	U	0.030	0.0050	mg/L			03/08/24 20:25	1
Carbonaceous Biochemical Oxygen Demand 5 (SM 5210 B-2016)	1.0	U	1.0	1.0	mg/L			03/08/24 15:00	1
pH (SW846 9040C)	**7.9**	**HF**	0.1	0.1	SU			03/15/24 17:19	1
Temperature (SW846 9040C)	**26.5**	**HF**	0.1	0.1	Degrees C			03/15/24 17:19	1
Total Organic Carbon (SW846 9060A)	**1.3**		1.0	0.53	mg/L			03/13/24 05:33	1
Nitrogen, Total (EPA Total Nitrogen)	**1.6**		0.50	0.50	mg/L			03/28/24 15:00	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (EPA 350.1)	0.050	U	0.10	0.050	mg/L			03/18/24 11:20	1
Orthophosphate as P (SM 4500 P E-2011)	0.0050	U	0.030	0.0050	mg/L			03/08/24 20:25	1

Lab Chronicle

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill-Anti-Degradation

Job ID: 460-299582-1

Client Sample ID: NPDES 001

Date Collected: 03/07/24 08:30
Date Received: 03/07/24 19:00

Lab Sample ID: 460-299582-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		1	963097	OXG	EET EDI	03/08/24 16:33
Total/NA	Prep	245.1			703392	NVK	EET BUF	03/12/24 11:36
Total/NA	Analysis	245.1		1	703567	NVK	EET BUF	03/13/24 10:25
Dissolved	Filtration	Filtration			483096	UAMX	ELLE	03/13/24 19:22
Dissolved	Prep	3005A			483127	UAMX	ELLE	03/13/24 21:20
Dissolved	Analysis	6020B		1	483585	UCIG	ELLE	03/14/24 19:01
Dissolved	Filtration	FILTRATION			965314	YZH	EET EDI	03/21/24 18:13
Dissolved	Prep	3010A			965316	YZH	EET EDI	03/21/24 18:18
Dissolved	Analysis	6020B		1	965298	YZH	EET EDI	03/21/24 20:31
Total Recoverable	Prep	3005A			482664	NU9R	ELLE	03/13/24 07:30
Total Recoverable	Analysis	6020B		1	483118	UCIG	ELLE	03/13/24 19:46
Total Recoverable	Prep	3005A			826750	RR	EET SAV	03/10/24 14:42
Total Recoverable	Analysis	6020B		1	827008	BWR	EET SAV	03/11/24 18:56
Total/NA	Prep	3010A			964408	GAE	EET EDI	03/15/24 19:55
Total/NA	Analysis	6020B		1	964526	DLE	EET EDI	03/17/24 15:26
Dissolved	Filtration	Filtration			462012	NWW	EET PIT	03/11/24 07:00
Dissolved	Prep	3010A			462030	SJM	EET PIT	03/11/24 11:08
Dissolved	Analysis	EPA 6020B		1	462551	S1Z	EET PIT	03/14/24 18:09
Total/NA	Prep	3010A			462030	SJM	EET PIT	03/11/24 11:08
Total/NA	Analysis	EPA 6020B		1	462551	S1Z	EET PIT	03/14/24 18:18
Total/NA	Analysis	120.1		1	964350	HTV	EET EDI	03/15/24 15:00
Total/NA	Analysis	2310B-2011		1	964648	RAK	EET EDI	03/18/24 13:47
Total/NA	Analysis	2320B-2011		1	964258	AXP	EET EDI	03/14/24 18:18
Total/NA	Analysis	2540C-2015		1	964031	PLS	EET EDI	03/14/24 07:33
Total/NA	Analysis	2540D-2015		1	964033	PLS	EET EDI	03/14/24 07:51
Dissolved	Filtration	FILTRATION			964602	AXP	EET EDI	03/18/24 10:15
Dissolved	Analysis	350.1		1	964617	AXP	EET EDI	03/18/24 11:17
Total/NA	Analysis	350.1		1	964617	AXP	EET EDI	03/18/24 11:00
Total/NA	Prep	351.2			483343	NLE3	ELLE	03/14/24 11:38 - 03/14/24 14:38 [1]
Total/NA	Analysis	351.2		1	483871	JCG7	ELLE	03/15/24 12:47
Total/NA	Analysis	410.4		1	964839	HTV	EET EDI	03/19/24 13:52
Total/NA	Analysis	4500 O C-2016		1	963314	RXA	EET EDI	03/10/24 12:13
Dissolved	Filtration	FILTRATION			963210	VBG	EET EDI	03/08/24 19:58
Dissolved	Analysis	4500 P E-2011		1	963212	VBG	EET EDI	03/08/24 20:25
Total/NA	Analysis	4500 P E-2011		1	963212	VBG	EET EDI	03/08/24 20:25
Total/NA	Analysis	5210 B-2016		1	963166	RXA	EET EDI	03/08/24 14:42
Total/NA	Analysis	9040C		1	964440	RXA	EET EDI	03/15/24 17:03
Total/NA	Analysis	9060A		1	963916	HTV	EET EDI	03/13/24 04:40
Total/NA	Analysis	Total Nitrogen		1	964954	TJW	EET EDI	03/20/24 06:55

Lab Chronicle

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill-Anti-Degradation

Job ID: 460-299582-1

Client Sample ID: Upstream

Date Collected: 03/07/24 09:45
Date Received: 03/07/24 19:00

Lab Sample ID: 460-299582-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		1	963097	OXG	EET EDI	03/08/24 16:48
Total/NA	Prep	245.1			703392	NVK	EET BUF	03/12/24 11:36
Total/NA	Analysis	245.1		1	703567	NVK	EET BUF	03/13/24 10:30
Dissolved	Filtration	Filtration			483096	UAMX	ELLE	03/13/24 19:22
Dissolved	Prep	3005A			483127	UAMX	ELLE	03/13/24 21:20
Dissolved	Analysis	6020B		1	483585	UCIG	ELLE	03/14/24 19:03
Dissolved	Filtration	FILTRATION			965314	YZH	EET EDI	03/21/24 18:13
Dissolved	Prep	3010A			965316	YZH	EET EDI	03/21/24 18:18
Dissolved	Analysis	6020B		1	965298	YZH	EET EDI	03/21/24 21:06
Total Recoverable	Prep	3005A			482664	NU9R	ELLE	03/13/24 07:30
Total Recoverable	Analysis	6020B		1	483118	UCIG	ELLE	03/13/24 19:43
Total Recoverable	Prep	3005A			826750	RR	EET SAV	03/10/24 14:42
Total Recoverable	Analysis	6020B		1	827008	BWR	EET SAV	03/11/24 18:52
Total/NA	Prep	3010A			964408	GAE	EET EDI	03/15/24 19:55
Total/NA	Analysis	6020B		1	964526	DLE	EET EDI	03/17/24 15:28
Dissolved	Filtration	Filtration			462012	NWW	EET PIT	03/11/24 07:00
Dissolved	Prep	3010A			462030	SJM	EET PIT	03/11/24 11:08
Dissolved	Analysis	EPA 6020B		1	462551	S1Z	EET PIT	03/14/24 18:12
Total/NA	Prep	3010A			462030	SJM	EET PIT	03/11/24 11:08
Total/NA	Analysis	EPA 6020B		1	462551	S1Z	EET PIT	03/14/24 18:37
Total/NA	Analysis	120.1		1	964350	HTV	EET EDI	03/15/24 15:00
Total/NA	Analysis	2310B-2011		1	964648	RAK	EET EDI	03/18/24 13:47
Total/NA	Analysis	2320B-2011		1	964258	AXP	EET EDI	03/14/24 18:23
Total/NA	Analysis	2540C-2015		1	964031	PLS	EET EDI	03/14/24 07:33
Total/NA	Analysis	2540D-2015		1	964033	PLS	EET EDI	03/14/24 07:51
Dissolved	Filtration	FILTRATION			964602	AXP	EET EDI	03/18/24 10:16
Dissolved	Analysis	350.1		1	964617	AXP	EET EDI	03/18/24 11:19
Total/NA	Analysis	350.1		1	964617	AXP	EET EDI	03/18/24 11:02
Total/NA	Prep	351.2			483343	NLE3	ELLE	03/14/24 11:38 - 03/14/24 14:38 [1]
Total/NA	Analysis	351.2		1	483871	JCG7	ELLE	03/15/24 12:49
Total/NA	Analysis	410.4		1	964839	HTV	EET EDI	03/19/24 13:52
Total/NA	Analysis	4500 O C-2016		1	963314	RXA	EET EDI	03/10/24 12:15
Dissolved	Filtration	FILTRATION			963210	VBG	EET EDI	03/08/24 19:58
Dissolved	Analysis	4500 P E-2011		1	963212	VBG	EET EDI	03/08/24 20:25
Total/NA	Analysis	4500 P E-2011		1	963212	VBG	EET EDI	03/08/24 20:25
Total/NA	Analysis	5210 B-2016		1	963166	RXA	EET EDI	03/08/24 14:54
Total/NA	Analysis	9040C		1	964440	RXA	EET EDI	03/15/24 17:09
Total/NA	Analysis	9060A		1	963916	HTV	EET EDI	03/13/24 05:06
Total/NA	Analysis	Total Nitrogen		1	964954	TJW	EET EDI	03/20/24 06:55

Client Sample ID: Clarifying Pond

Lab Sample ID: 460-299582-3

Date Collected: 03/07/24 10:15

Matrix: Water

Date Received: 03/07/24 19:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		1	963097	OXG	EET EDI	03/08/24 17:03
Total/NA	Prep	245.1			703392	NVK	EET BUF	03/12/24 11:36
Total/NA	Analysis	245.1		1	703567	NVK	EET BUF	03/13/24 10:32
Dissolved	Filtration	Filtration			483096	UAMX	ELLE	03/13/24 19:22
Dissolved	Prep	3005A			483127	UAMX	ELLE	03/13/24 21:20
Dissolved	Analysis	6020B		1	483585	UCIG	ELLE	03/14/24 19:05
Dissolved	Filtration	FILTRATION			965314	YZH	EET EDI	03/21/24 18:13
Dissolved	Prep	3010A			965316	YZH	EET EDI	03/21/24 18:18
Dissolved	Analysis	6020B		1	965298	YZH	EET EDI	03/21/24 21:09
Total Recoverable	Prep	3005A			482664	NU9R	ELLE	03/13/24 07:30
Total Recoverable	Analysis	6020B		1	483118	UCIG	ELLE	03/13/24 19:41
Total Recoverable	Prep	3005A			826750	RR	EET SAV	03/10/24 14:42
Total Recoverable	Analysis	6020B		1	827008	BWR	EET SAV	03/11/24 18:40
Total/NA	Prep	3010A			964408	GAE	EET EDI	03/15/24 19:55
Total/NA	Analysis	6020B		1	964526	DLE	EET EDI	03/17/24 15:31
Dissolved	Filtration	Filtration			462012	NWW	EET PIT	03/11/24 07:00
Dissolved	Prep	3010A			462030	SJM	EET PIT	03/11/24 11:08
Dissolved	Analysis	EPA 6020B		1	462551	S1Z	EET PIT	03/14/24 18:15
Total/NA	Prep	3010A			462030	SJM	EET PIT	03/11/24 11:08
Total/NA	Analysis	EPA 6020B		1	462551	S1Z	EET PIT	03/14/24 18:40
Total/NA	Analysis	120.1		1	964350	HTV	EET EDI	03/15/24 15:00
Total/NA	Analysis	2310B-2011		1	964648	RAK	EET EDI	03/18/24 13:47
Total/NA	Analysis	2320B-2011		1	964258	AXP	EET EDI	03/14/24 18:29
Total/NA	Analysis	2540C-2015		1	964031	PLS	EET EDI	03/14/24 07:33
Total/NA	Analysis	2540D-2015		1	964033	PLS	EET EDI	03/14/24 07:51
Dissolved	Filtration	FILTRATION			964602	AXP	EET EDI	03/18/24 10:16
Dissolved	Analysis	350.1		1	964617	AXP	EET EDI	03/18/24 11:20
Total/NA	Analysis	350.1		1	964617	AXP	EET EDI	03/18/24 11:03
Total/NA	Prep	351.2			486261	NLE3	ELLE	03/22/24 13:30 - 03/22/24 16:30 [1]
Total/NA	Analysis	351.2		1	486827	JCG7	ELLE	03/25/24 12:14
Total/NA	Analysis	410.4		1	964839	HTV	EET EDI	03/19/24 13:52
Total/NA	Analysis	4500 O C-2016		1	963314	RXA	EET EDI	03/10/24 12:18
Dissolved	Filtration	FILTRATION			963210	VBG	EET EDI	03/08/24 19:58
Dissolved	Analysis	4500 P E-2011		1	963212	VBG	EET EDI	03/08/24 20:25
Total/NA	Analysis	4500 P E-2011		1	963212	VBG	EET EDI	03/08/24 20:25
Total/NA	Analysis	5210 B-2016		1	963166	RXA	EET EDI	03/08/24 15:00
Total/NA	Analysis	9040C		1	964440	RXA	EET EDI	03/15/24 17:19
Total/NA	Analysis	9060A		1	963916	HTV	EET EDI	03/13/24 05:33
Total/NA	Analysis	Total Nitrogen		1	964954	TJW	EET EDI	03/28/24 15:00

[1] This procedure uses a method stipulated length of time for the process. Both start and end times are displayed.

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill-Anti-Degradation

Job ID: 460-299582-1

Laboratory References:

EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

EET EDI = Eurofins Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

EET PIT = Eurofins Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

EET SAV = Eurofins Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Microbac = Marietta, OH, 158 Starlite Drive, Marietta, OH 45750

Accreditation/Certification Summary

Client: Heidelberg Materials Northeast LLC
Job ID: 460-299582-1
Project/Site: Rock Hill-Anti-Degradation

Laboratory: Eurofins Edison

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Connecticut	State	PH-0818	09-30-24
DE Haz. Subst. Cleanup Act (HSCA)	State	N/A	01-02-25
Georgia	State	12028 (NJ)	06-30-24
Massachusetts	State	M-NJ312	06-30-24
New Jersey	NELAP	12028	06-30-24
New York	NELAP	11452	04-01-24
Pennsylvania	NELAP	68-00522	02-28-25
Rhode Island	State	LAO00376	12-31-24
USDA	US Federal Programs	P330-20-00244	05-31-24

Laboratory: Eurofins Buffalo

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Arkansas DEQ	State	88-0686	07-06-23 *
Connecticut	State	PH-0807	03-31-24
Florida	NELAP	E87672	06-30-23 *
Georgia	State	10026 (NY)	03-31-24
Georgia	State Program	N/A	03-31-09 *
Illinois	NELAP	200003	09-30-24
Iowa	State	374	03-01-25
Iowa	State Program	374	03-01-09 *
Kansas	NELAP	E-10187	02-01-25
Kentucky (UST)	State	108092	04-01-24
Kentucky (WW)	State	KY90029	12-31-23 *
Louisiana	NELAP	02031	06-30-23 *
Louisiana (All)	NELAP	02031	06-30-23 *
Maine	State	NY00044	12-04-24
Maryland	State	294	06-30-24
Massachusetts	State	M-NY044	07-01-24
Michigan	State	9937	04-01-24
Michigan	State Program	9937	04-01-09 *
New Hampshire	NELAP	2973	09-11-19 *
New Hampshire	NELAP	2337	11-17-24
New Jersey	NELAP	NY455	06-30-24
New York	NELAP	10026	03-31-24
Pennsylvania	NELAP	68-00281	08-31-24
Rhode Island	State	LAO00378	12-30-24
Texas	NELAP	T104704412-18-10	07-31-23 *
USDA	US Federal Programs	P330-18-00039	03-25-24
Virginia	NELAP	460185	09-14-24
Washington	State	C784	02-10-25
Wisconsin	State	998310390	08-31-24

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
A2LA	Dept. of Defense ELAP	0001.01	11-30-24
A2LA	ISO/IEC 17025	0001.01	11-30-24
Alabama	State	43200	01-31-25

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Client: Heidelberg Materials Northeast LLC
Job ID: 460-299582-1
Project/Site: Rock Hill-Anti-Degradation

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC (Continued)

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alaska	State	PA00009	06-30-24
Alaska (UST)	State	17-027	02-28-25
Arizona	State	AZ0780	03-12-25
Arkansas DEQ	State	88-00660	08-09-24
California	State	2792	11-30-24
Colorado	State	PA00009	06-30-24
Connecticut	State	PH-0746	06-30-25
DE Haz. Subst. Cleanup Act (HSCA)	State	019-006 (PA cert)	01-31-25
Delaware (DW)	State	N/A	01-31-25
Florida	NELAP	E87997	06-30-24
Georgia (DW)	State	C048	01-31-25
Hawaii	State	N/A	01-31-25
Illinois	NELAP	200027	01-31-25
Iowa	State	361	03-01-24 *
Kansas	NELAP	E-10151	10-31-24
Kentucky (DW)	State	KY90088	12-31-24
Kentucky (UST)	State	0001.01	11-30-24
Kentucky (WW)	State	KY90088	12-31-23 *
Louisiana (All)	NELAP	02055	06-30-24
Maine	State	2019012	03-12-25
Maryland	State	100	06-30-24
Massachusetts	State	M-PA009	06-30-24
Michigan	State	9930	01-31-25
Minnesota	NELAP	042-999-487	12-31-24
Mississippi	State	023	01-31-25
Missouri	State	450	01-31-25
Montana (DW)	State	0098	01-01-25
Nebraska	State	NE-OS-32-17	01-31-25
New Hampshire	NELAP	2730	01-10-25
New Jersey	NELAP	PA011	06-30-24
New York	NELAP	10670	04-01-24
North Carolina (DW)	State	42705	07-31-24
North Carolina (WW/SW)	State	521	12-31-24
Oklahoma	NELAP	9804	08-31-24
Oregon	NELAP	PA200001	09-11-24
Pennsylvania	NELAP	36-00037	01-28-25
Quebec Ministry of Environment and Fight against Climate Change	PALA	507	09-16-24
Rhode Island	State	LAO00338	12-30-24
South Carolina	State	89002	01-31-24 *
Tennessee	State	02838	01-31-25
Texas	NELAP	T104704194-23-46	08-31-24
USDA	US Federal Programs	525-22-298-19481	10-25-25
Vermont	State	VT - 36037	10-28-24
Virginia	NELAP	460182	06-14-25
Washington	State	C457	04-11-24
West Virginia (DW)	State	9906 C	01-31-25
West Virginia DEP	State	055	07-31-24
Wyoming	State	8TMS-L	01-31-25
Wyoming (UST)	A2LA	0001.01	11-30-24

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Accreditation/Certification Summary

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill-Anti-Degradation

Job ID: 460-299582-1

Laboratory: Eurofins Pittsburgh

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Arkansas DEQ	State	19-033-0	06-27-24
California	State	2891	04-30-24
Connecticut	State	PH-0688	09-30-24
Florida	NELAP	E871008	06-30-24
Georgia	State	PA 02-00416	04-30-24
Illinois	NELAP	004375	06-30-24
Kansas	NELAP	E-10350	01-31-25
Kentucky (UST)	State	162013	04-30-23 *
Kentucky (WW)	State	KY98043	12-31-23 *
Louisiana	NELAP	04041	06-30-22 *
Louisiana (All)	NELAP	04041	06-30-24
Maine	State	PA00164	03-06-26
Minnesota	NELAP	042-999-482	12-31-24
New Hampshire	NELAP	2030	04-04-24
New Jersey	NELAP	PA005	06-30-24
New York	NELAP	11182	04-01-24
North Carolina (WW/SW)	State	434	12-31-24
North Dakota	State	R-227	04-30-24
Oregon	NELAP	PA-2151	02-06-25
Pennsylvania	NELAP	02-00416	04-30-24
Rhode Island	State	LAO00362	12-31-22 *
South Carolina	State	89014	04-30-25
Texas	NELAP	T104704528	03-31-24
US Fish & Wildlife	US Federal Programs	058448	03-31-24
USDA	US Federal Programs	P330-16-00211	04-11-26
Utah	NELAP	PA001462019-8	05-31-24
Virginia	NELAP	10043	07-14-24
West Virginia DEP	State	142	01-31-25
Wisconsin	State	998027800	08-31-24

Laboratory: Eurofins Savannah

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
	AFCEE	SAVLAB	
Alabama	State	41450	06-30-24
ANAB	Dept. of Defense ELAP	L2463	09-22-24
Arkansas (DW)	State	GA00006	06-30-24
California	State	2939	06-30-24
Florida	NELAP	E87052	06-30-24
Georgia	State	E87052	06-30-24
Georgia (DW)	State	803	06-30-24
Guam	State	19-007R	04-17-24
Hawaii	State	<cert No.>	06-30-24
Illinois	NELAP	200022	11-30-24
Indiana	State	C-GA-02	06-30-24
Iowa	State	353	07-01-25
Kentucky (UST)	State	NA	06-30-24
Louisiana	NELAP	30690	06-30-24
Louisiana (All)	NELAP	30690	06-30-24

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Accreditation/Certification Summary

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill-Anti-Degradation

Job ID: 460-299582-1

Laboratory: Eurofins Savannah (Continued)

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Louisiana (DW)	State	LA009	12-31-24
Maine	State	GA00006	09-25-24
Maryland	State	250	12-31-24
Massachusetts	State	M-GA006	06-30-24
Michigan	State	9925	06-30-24
Mississippi	State	<cert No.>	06-30-24
Nebraska	State	NE-OS-7-04	06-30-24
New Jersey	NELAP	GA769	06-30-24
New Mexico	State	GA00006	06-30-24
North Carolina (DW)	State	13701	07-31-24
North Carolina (WW/SW)	State	269	12-31-24
Pennsylvania	NELAP	68-00474	06-30-24
Puerto Rico	State	GA00006	01-01-25
South Carolina	State	98001	06-30-24
Tennessee	State	TN02961	06-30-24
Texas	NELAP	T1047004185	11-30-24
Texas	TCEQ Water Supply	T104704185	06-30-24
USDA	US Federal Programs	P330-18-00313	09-03-24
Virginia	NELAP	460161	06-14-24
Wyoming	State	8TMS-L	06-30-24

Method Summary

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill-Anti-Degradation

Job ID: 460-299582-1

Method	Method Description	Protocol	Laboratory
300.0	Anions, Ion Chromatography	EPA	EET EDI
245.1	Mercury (CVAA)	EPA	EET BUF
6020B	Metals (ICP/MS)	SW846	EET EDI
6020B	Metals (ICP/MS)	SW846	EET SAV
6020B	Metals (ICP/MS)	SW846	ELLE
EPA 6020B	Metals (ICP/MS)	SW846	EET PIT
120.1	Conductivity, Specific Conductance	EPA	EET EDI
2310B-2011	Acidity	SM	EET EDI
2320B-2011	Alkalinity, Total	SM	EET EDI
2540C-2015	Total Dissolved Solids (Dried at 180 °C)	SM	EET EDI
2540D-2015	Total Suspended Solids (Dried at 103-105°C)	SM	EET EDI
350.1	Nitrogen, Ammonia	EPA	EET EDI
351.2	Nitrogen, Total Kjeldahl	EPA	ELLE
410.4	COD	EPA	EET EDI
4500 O C-2016	Oxygen, Dissolved	SM	EET EDI
4500 P E-2011	Orthophosphate	SM	EET EDI
5210 B-2016	BOD, 5-Day	SM	EET EDI
9040C	pH	SW846	EET EDI
9060A	Organic Carbon, Total (TOC)	SW846	EET EDI
Total Nitrogen	Nitrogen, Total	EPA	EET EDI
Subcontract	Osomotic Pressure	None	Microbac
245.1	Preparation, Mercury	EPA	EET BUF
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	EET SAV
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	ELLE
3010A	Preparation, Total Metals	SW846	EET EDI
3010A	Preparation, Total Metals	SW846	EET PIT
351.2	Nitrogen, Total Kjeldahl	EPA	ELLE
FILTRATION	Sample Filtration	None	EET EDI
Filtration	Sample Filtration	None	EET PIT
Filtration	Sample Filtration	None	ELLE

Protocol References:

EPA = US Environmental Protection Agency

None = None

SM = "Standard Methods For The Examination Of Water And Wastewater"

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

EET EDI = Eurofins Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

EET PIT = Eurofins Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

EET SAV = Eurofins Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Microbac = Marietta, OH, 158 Starlite Drive, Marietta, OH 45750

Sample Summary

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill-Anti-Degradation

Job ID: 460-299582-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
460-299582-1	NPDES 001	Water	03/07/24 08:30	03/07/24 19:00
460-299582-2	Upstream	Water	03/07/24 09:45	03/07/24 19:00
460-299582-3	Clarifying Pond	Water	03/07/24 10:15	03/07/24 19:00

Microbac Laboratories Inc., - Marietta, OH

Client Project ID:

46011424

For:

Julie Gilmore

Eurofins TestAmerica Edison

777 New Durham RD

Edison, NJ 08817

Project State of Origin: Pennsylvania

Project Requested Certification:

Microbac Laboratories Inc., - Marietta, OH	68-01670	PA Department of Environmental Protection

All test results meet the requirements of the QAPP and other applicable contract terms and conditions. Any exceptions are attached to this cover page or addressed in the method narratives presented in the report. All results for soil samples are reported on a 'dry-weight' basis unless specified otherwise. Analytical results for water and wastes are reported on a 'as received' basis unless specified otherwise. A statement of uncertainty for each analysis is available upon request. The reported results are related only to the samples analyzed as received. This laboratory report may be released as a hardcopy and in computer-readable form submitted electronically or on diskette. This laboratory report shall not be reproduced, except in full, without the written approval of Microbac Laboratories, Inc.

Laboratory Project Manager:

Michelle Taylor

Project Manager

Michelle.Taylor@microbac.com

Authorized By:

Michelle Taylor

Project Manager

Issued: 03/13/2024

MICROBAC®

Laboratory Report Number: M4C0751

Client Project ID: 46011424

Cooler Receipt Log

Cooler ID: Default Cooler Temp: 1.7°C

Cooler Inspection Checklist

Ice Present or not required?	Yes
Shipping containers sealed or not required?	Yes
Custody seals intact or not required?	Yes
Chain of Custody (COC) Present?	Yes
COC includes customer information?	Yes
Relinquished and received signature on COC?	Yes
Sample collector identified on COC?	Yes
Sample type identified on COC?	Yes
Correct type of Containers Received	No
Correct number of containers listed on COC?	Yes
Containers Intact?	Yes
COC includes requested analyses?	Yes
Enough sample volume for indicated tests received?	Yes
Sample labels match COC (Name, Date & Time?)	Yes
Samples arrived within hold time?	Yes
Correct preservatives on COC or not required?	Yes
Chemical preservations checked or not required?	Yes
Preservation checks meet method requirements?	Yes
VOA vials have zero headspace, or not recd.?	Yes

Laboratory Report Number: M4C0751

Client Project ID: 46011424

Case Narrative

OP received in 250 poly.

Laboratory Report Number: M4C0751

Client Project ID: 46011424

Sample Notes

PADEP 391-2000-008

A4 **Sample was received with head space.**

Osmotic Pressure

M4C0751-01	NPDES 001 (460-299582-1)	M4C0751-02	Upstream (460-299582-2)
M4C0751-03	Clarifying Pond (460-299582-3)		

A8 **Sample was received in an improper container.**

Osmotic Pressure

M4C0751-01	NPDES 001 (460-299582-1)	M4C0751-02	Upstream (460-299582-2)
M4C0751-03	Clarifying Pond (460-299582-3)		

MICROBAC®

Laboratory Report Number: M4C0751

Client Project ID: 46011424

Microbac Laboratories Inc., - Marietta, OH

CERTIFICATE OF ANALYSIS

Client ID:	NPDES 001 (460-299582-1)			**Collection Date:**	03/07/2024 08:30
Laboratory ID:	M4C0751-01			**Prep Date:**	03/12/2024 14:50
Matrix:	Aqueous			**Analyzed:**	03/12/2024 15:15
Batch / Sequence:	B4C0726 /	**Analytical Method:**	PADEP 391-2000-008	**Calibration:**	NA
Instrument:	OSMOMETER 5004	**Units:**	mOsm/kg	**File ID:**	OsmoticPressure_B4C0726_240312025300.xls
Analyst:	TSD	**Dilution:**	1		

Analyte	CAS Number	Result	MDL	RL	Flag	Qualifier
Osmotic Pressure		8.00	6.00	10.0		A4, A8

MICROBAC®

Laboratory Report Number: M4C0751

Client Project ID: 46011424

Microbac Laboratories Inc., - Marietta, OH

CERTIFICATE OF ANALYSIS

Client ID:	Upstream (460-299582-2)			**Collection Date:**	03/07/2024 09:45
Laboratory ID:	M4C0751-02			**Prep Date:**	03/12/2024 14:50
Matrix:	Aqueous			**Analyzed:**	03/12/2024 15:15
Batch / Sequence:	B4C0726 /	**Analytical Method:**	PADEP 391-2000-008	**Calibration:**	NA
Instrument:	OSMOMETER 5004	**Units:**	mOsm/kg	**File ID:**	OsmoticPressure_B4C0726_240312025300.xls
Analyst:	TSD	**Dilution:**	1		

Analyte	CAS Number	Result	MDL	RL	Flag	Qualifier
Osmotic Pressure		9.00	6.00	10.0		A4, A8

MICROBAC®

Laboratory Report Number: M4C0751

Client Project ID: 46011424

Microbac Laboratories Inc., - Marietta, OH

CERTIFICATE OF ANALYSIS

Client ID:	Clarifying Pond (460-299582-3)			**Collection Date:**	03/07/2024 10:15
Laboratory ID:	M4C0751-03			**Prep Date:**	03/12/2024 14:50
Matrix:	Aqueous			**Analyzed:**	03/12/2024 15:15
Batch / Sequence:	B4C0726 /	**Analytical Method:**	PADEP 391-2000-008	**Calibration:**	NA
Instrument:	OSMOMETER 5004	**Units:**	mOsm/kg	**File ID:**	OsmoticPressure_B4C0726_240312025300.xls
Analyst:	TSD	**Dilution:**	1		

Analyte	CAS Number	Result	MDL	RL	Flag	Qualifier
Osmotic Pressure		7.00	6.00	10.0		A4, A8

Laboratory Report Number: M4C0751

Client Project ID: 46011424

Notes and Definitions

A4: Sample was received with head space.
A8: Sample was received in an improper container.
MDL: Method Detection Limit
RL: Reporting Limit

MICROBAC®

Laboratory Report Number: M4C0751

Client Project ID: 46011424

METHOD BLANKS

Sample ID:	B4C0726-BLK1	**Prep Date:**	03/12/24 14:50	**Matrix:**	Aqueous
Instrument:	OSMOMETER 5004	**Analyzed:**	03/12/24 15:15	**Method:**	PADEP 391-2000-008
File ID:	OsmoticPressure_B4C(	**Sequence:**		**Analyst:**	TSD
Batch:	B4C0726	**Units:**	mOsm/kg	**Calibration:**	

Analyte	Result	MDL	RL	Dilution	Flag	Q
Osmotic Pressure	6.00	6.00	10.0	1	U	

* - Detected in the associated method Blank at a concentration >= RL

MICROBAC®

Laboratory Report Number: M4C0751

Client Project ID: 46011424

BLANK SPIKE / DUPLICATE (BS/BSD)

Method:	PADEP 391-2000-008		**Blank Spike**	**Duplicate**
Batch:	B4C0726	**Spike ID:**	B4C0726-BS1	B4C0726-BSD1
Analyst:	TSD	**Prepared:**	03/12/24 14:50	03/12/24 14:50
Matrix:	Aqueous	**Analyzed:**	03/12/24 15:15	03/12/24 15:15
Units:	mOsm/kg	**File ID:**	OsmoticPressure_B4C0726_2403	OsmoticPressure_B4C0726_2403
Instrument:	OSMOMETER 5004	**Initial/Final:**	1mL/1mL	1mL/1mL
Calibration:				

Analyte	BS Spiked	BS Found	BS %Rec	BSD Spiked	BSD Found	BSD %Rec	%RPD	%Rec Limts	RPD Limit	Q
Osmotic Pressure	290	295	102	290	298	103	1.01	90 - 110	20	

* - Does not meet %Rec acceptance criteria.
- Does not meet RPD acceptance criteria.

Eurofins Edison
777 New Durham Road
Edison, NJ 08817
Phone: 732-549-3900 Fax: 732-549-3679

Chain of Custody Record

eurofins | Environment Testing

3/28/2024

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Gilmore, Julie L	Carrier Tracking No(s):	COC No: 460-70564.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Julie.Gilmore@et.eurofinsus.com	State of Origin: Pennsylvania	Page: Page 1 of 1
Company: Microbac Laboratories, Inc.		Accreditations Required (See note): NELAP - Pennsylvania		Job #: 460-299582-1
Address: 158 Starlite Drive, ,	Due Date Requested: 3/19/2024			
City: Marietta	TAT Requested (days):			
State, Zip: OH, 45750				
Phone: 800-373-4071(Tel)	PO #:			
Email:	WO #:			
Project Name: Rock Hill-Anti-Degradation	Project #: 46011424			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)
Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	SUB (Osmotic Pressure)/ Osmotic Pressure	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
NPDES 001 (460-299582-1)	3/7/24	08:30 Eastern		Water			X	1	
Upstream (460-299582-2)	3/7/24	09:45 Eastern		Water			X	1	
Clarifying Pond (460-299582-3)	3/7/24	10:15 Eastern		Water			X	1	

M 4 C 0 7 5 1
Eurofins TestAmerica Edison
Rec'd: 03/12/2024 10:50
By: Stephanie Murphy Temp: 1.7 (Signature)

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Northeast, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Northeast, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Northeast, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Northeast, LLC.

Possible Hazard Identification	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 1	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	3/11/24 1900	ET&E			
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
				3/12/24 1050	

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

MICROBAC®

Work Order # MUC0757

COOLER TEMP >6° C LOG

SAMPLE ID	Bottle 1 °C	Bottle 2 °C	Bottle 3 °C	Bottle 4 °C	Bottle 5 °C	Bottle 6 °C

3/12/2024 SM

pH Lot # HC321337

pH Exceptions

SAMPLE ID	Bottle 1	Bottle 2	Bottle 3	Bottle 4	Bottle 5	Bottle 6

3/12/2024 SM

PRESERVATIVE EXCEPTIONS

✓ NONE

__ AS NOTED

3/12/2024 SM

Document Control # 1957
Last 04-10-2019

Issued to: Document Master File

Eurofins Edison
777 New Durham Road
Edison, NJ 08817
Phone: 732-549-3900 Fax: 732-549-3679

450-KOP

Chain of Custody Record

4.1 2-4 KOP-2

eurofins | Environment Testing

Client Information	Sampler:	Lab PM: Gilmore, Julie L	Carrier Tracking No(s):	COC No: 460-179139-115848.1
Client Contact: Andrew Gutshall	Phone:	E-Mail: Julie.Gilmore@et.eurofinsus.com	State of Origin:	Page: Page 1 of 2
Company: Heidelberg Materials Northeast LLC	PWSID:			Job #: 299582
Address: 7660 Imperial Way	Due Date Requested:			
City: Allentown	TAT Requested (days):			
State, Zip: PA, 18195	Compliance Project: Δ Yes Δ No			
Phone:	PO #: Purchase Order not required			
Email: andrew.gutshall@heidelbergmaterials.com	WO #:			
Project Name: Rock Hill - Anti-Degradation	Project #: 46011424			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020B - (MOD) Single Element 6020B Metals List	6020B - (MOD) Single Element 6020B Metals List	351.2 - Local Method	6020B - Dissolved Cd/Fe/Zn	6020B - (MOD) Total Fe	350.1, 410.4, 4500_P_E	120.1, 9040C, SM2310B	350.1, 4500_P_E, 6020B	2320B - (MOD) Alkalinity	6020B - (MOD) Total Custom Metals	9060A - TOC	2540D, SM5210B_Calc	2540C - TDS	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	D	S	N	D	S	N	N	N	D	S	N	N		
NPDES 001	3/7/24	0830	G	Water																	1
Basin 1 NO Flow No sample				Water																	—
Basin 2 NO Flow NO Sample				Water																	—
Upstream	3/7/24	0945	G	Water																	2
Clarifying Pond	3/7/24	1015	G	Water																	3

SHORT HOLD

460-299582 Chain of Custody

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

mples are retained longer than 1 month)
b ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		3/7/24 1140			3/7/24 1140	EEN-KOP
2	Relinquished by:	Date/Time: 3-7-24 1700	Company EEN-KOP	Received by:	Date/Time: 3/7	Company EEN
3	Relinquished by: HD	Date/Time: 3/7 1800	Company EEN	Received by:	Date/Time: 3-7-24 1900	Company EEN

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks:

Ver: 06/08/2021

3/28/2024

Eurofins Edison
777 New Durham Road
Edison, NJ 08817
Phone: 732-549-3900 Fax: 732-549-3679

450-KOP

Chain of Custody Record

4.1 °C
2.4 °C KOP-C

eurofins | Environment Testing

Client Information	Sampler:	Lab PM: Gilmore, Julie L	Carrier Tracking No(s):	COC No: 460-179139-115848.2
Client Contact: Andrew Gutshall	Phone:	E-Mail: Julie.Gilmore@et.eurofinsus.com	State of Origin:	Page: Page 2 of 2
Company: Heidelberg Materials Northeast LLC	PWSID:			Job #: 2995 02
Address: 7660 Imperial Way	Due Date Requested:			
City: Allentown	TAT Requested (days):			
State, Zip: PA, 18195	Compliance Project: Δ Yes Δ No			
Phone:	PO #: Purchase Order not required			
Email: andrew.gutshall@heidelbergmaterials.com	WO #:			
Project Name: Rock Hill - Anti-Degradation	Project #: 46011424			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	300_ORGFM_28D, 300_ORGFMS	245.1 - Local Method	6020B - Total Aluminum	4500_O_C Dissolved Oxygen	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	D	D			
NPDES 001	3/7/24	0830	G	Water			✓	✓	✓	✓		1
Basin 1 NO Flow, No sample				Water								—
Basin 2 NO Flow, NO sample				Water								—
Upstream	3/7/24	0945	G	Water			✓	✓	✓	✓		2/3
Clarifying Pond	3/7/24	1015	G	Water			✓	✓	✓	✓		

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		3/7/24 1140			3/7/24 1140	EETN-KOP
2	Relinquished by:	Date/Time: 3-7-24 1700	Company EETN-KOP	Received by:	Date/Time: 3/7	Company EOA
3	Relinquished by:	Date/Time: 3/7 1800	Company EOA	Received by:	Date/Time: 3/7/24 1900	Company EETN

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks:

Ver: 06/08/2021

Eurofins TestAmerica Edison
Receipt Temperature and pH Log

Job Number: 249562

Number of Coolers: 2 IR Gun # 2

Cooler Temperatures

	RAW	CORRECTED		RAW	CORRECTED		RAW	CORRECTED
Cooler #1:	4.1 °C	4.1 °C	Cooler #4:	°C	°C	Cooler #7:	°C	°C
Cooler #2:	2.4 °C	2.4 °C	Cooler #5:	°C	°C	Cooler #8:	°C	°C
Cooler #3:	°C	°C	Cooler #6:	°C	°C	Cooler #9:	°C	°C

TALS Sample Number	Ammonia (pH<2)	COD (pH<2)	Nitrate Nitrite (pH<2)	Metals* (pH<2)	Hardness (pH<2)	Pest (pH 5-9)	EPH or QAM (pH<2)	Phenols (pH<2)	Sulfide (pH>9)	TKN (pH<2)	TOC (pH<2)	Total Cyanide (pH>12)	Total Phos (pH<2)	Other	Other
1	L2	L2		L2						L2	L2				
2	L2	L2		L2						L2	L2				
3	L2	L2		L2						L2	L2				

If pH adjustments are required record the information below:

Sample No(s). adjusted: _____

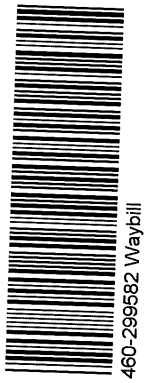
Preservative Name/Conc.: _____ Volume of Preservative used (ml): _____

Lot # of Preservative(s): _____ Expiration Date: _____

~~The appropriate Project Manager and Department Manager should be notified about the samples which were pH adjusted.~~

~~*Samples for Metal analysis which are out of compliance must be acidified at least 24 hours prior to analysis.~~

EDS-WI-038, Rev 4, 06/09/2014 Initials: _____ Date: 3/7



ORIGIN ID:LDJA (732) 549-3900
KENNETH RIVERA
EUROFINS EDISON
777 NEW DURHAM ROAD

EDISON, NJ 08817
UNITED STATES US

SHIP DATE: 08MAR24
ACTWGT: 15.95 LB
CAD: 0619092/CAFE3803

BILL SENDER

TO **SHIPPING/RECEIVING**
EUROFINS ENVIRONMENT TESTING NORTHE
301 ALPHA DRIVE
RIDC PARK
PITTSBURGH PA 15238
(412) 963-7058 REF: 8460-179508
PO: YES

FedEx Express

J241023112201uv

TRK# 0201 **6553 1011 3370**

SATURDAY 12:00P
PRIORITY OVERNIGHT

XO AGCA

15238
PA-US **PIT**

Uncorrected temp 4.8 °C
Thermometer ID 22

CF 0 Initials PM

PT-WI-SR-001 effective 11/8/18

Eurofins Edison
777 New Durham Road
Edison, NJ 08817
Phone 732-549-3900 Fax: 732-549-3679

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler	Lab PM: Gilmore, Julie L	Carrier Tracking No(s)	COC No: 460-70551.1
Client Contact: Shipping/Receiving	Phone	E-Mail: Julie.Gilmore@et.eurofinsus.com	State of Origin: Pennsylvania	Page: Page 1 of 1
Company: Eurofins Environment Testing Northeast,		Accreditations Required (See note): NELAP - Pennsylvania		Job #: 460-299582-1
Address: 301 Alpha Drive, RIDC Park,	Due Date Requested: 3/20/2024			
City: Pittsburgh	TAT Requested (days):			
State, Zip: PA, 15238				
Phone: 412-963-7058(Tel) 412-963-2468(Fax)	PO #:			
Email	WO #:			
Project Name: Rock Hill-Anti-Degradation	Project #: 46011424			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)
Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020B/3010A Total Lithium	6020B/Filtration_ME (MOD) Dissolved Lithium	Total Number of containers	Special Instructions/Note:
		Preservation Code:								
NPDES 001 (460-299582-1)	3/7/24	08 30 Eastern		Water			X	X	2	
Upstream (460-299582-2)	3/7/24	09.45 Eastern		Water			X	X	2	
Clarifying Pond (460-299582-3)	3/7/24	10:15 Eastern		Water			X	X	2	

460-299582 Chain of Custody

Note Since laboratory accreditations are subject to change, Eurofins Environment Testing Northeast, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories This sample shipment is forwarded under chain-of-custody If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Northeast, LLC laboratory or other instructions will be provided Any changes to accreditation status should be brought to Eurofins Environment Testing Northeast, LLC attention immediately If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Northeast, LLC

Possible Hazard Identification: Unconfirmed	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month): ☐ Return To Client ☐ Disposal By Lab ☐ Archive For ____ Months
Deliverable Requested. I, II, III, IV, Other (specify) Primary Deliverable Rank: 1	Special Instructions/QC Requirements:

Empty Kit Relinquished by.	Date:	Time:	Method of Shipment:

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
	3/8/24 1900	EETEL		03/09/24 0950	EPHNE
Relinquished by	Date/Time.	Company	Received by	Date/Time	Company
Relinquished by	Date/Time	Company	Received by	Date/Time.	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks

Eurofins Edison
777 New Durham Road
Edison, NJ 08817
Phone: 732-549-3900 Fax: 732-549-3679

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Gilmore, Julie L	Carrier Tracking No(s):	COC No: 460-70556.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Julie.Gilmore@et.eurofinsus.com	State of Origin: Pennsylvania	Page: Page 1 of 1
Company: Eurofins Lancaster Laboratories Environm		Accreditations Required (See note): NELAP - Pennsylvania		Job #: 460-299582-1
Address: 2425 New Holland Pike, ,	Due Date Requested: 3/21/2024			
City: Lancaster	TAT Requested (days):			
State, Zip: PA, 17601				
Phone: 717-656-2300(Tel)	PO #:			
Email:	WO #:			
Project Name: Rock Hill-Anti-Degradation	Project #: 46011424			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)
Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020B/3005A (MOD) Total Fe	6020B/Filtration_ME Dissolved Cd/Fe/Zn	351.2/351.2_Prep	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
NPDES 001 (460-299582-1)	3/7/24	08:30 Eastern		Water			X	X	X	3	
Upstream (460-299582-2)	3/7/24	09:45 Eastern		Water			X	X	X	3	
Clarifying Pond (460-299582-3)	3/7/24	10:15 Eastern		Water			X	X	X	3	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Northeast, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Northeast, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Northeast, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Northeast, LLC.

Possible Hazard Identification	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 1	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		3/11/24 1640	EET EL		3/11/24 1640	EL
2		3/11/24 1952	EL			
3					3/11/24 1952	EL

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: raw: 1.0 corr: 0.8

Eurofins Edison
777 New Durham Road
Edison, NJ 08817
Phone: 732-549-3900 Fax: 732-549-3679

Chain of Custody Record

eurofins | Environment Testin

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Gilmore, Julie L	Carrier Tracking No(s):	COC No: 460-70552.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Julie.Gilmore@et.eurofinsus.com	State of Origin: Pennsylvania	Page: Page 1 of 1
Company: Eurofins Environment Testing Northeast,		Accreditations Required (See note): NELAP - Pennsylvania		Job #: 460-299582-1
Address: 10 Hazelwood Drive, ,	Due Date Requested: 3/18/2024			
City: Amherst	TAT Requested (days):			
State, Zip: NY, 14228-2298				
Phone: 716-691-2600(Tel) 716-691-7991(Fax)	PO #:			
Email:	WO #:			
Project Name: Rock Hill-Anti-Degradation	Project #: 46011424			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	245.1/245.1_Prep	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
NPDES 001 (460-299582-1)	3/7/24	08:30 Eastern		Water			X	1	
Upstream (460-299582-2)	3/7/24	09:45 Eastern		Water			X	1	
Clarifying Pond (460-299582-3)	3/7/24	10:15 Eastern		Water			X	1	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Northeast, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Northeast, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Northeast, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Northeast, LLC.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 1	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:				
Relinquished by:	Date/Time: 3/8/24 1900	Company EEE	Received by:	Date/Time: 3-9-24 945	Company TAB
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 2.6 ICE

Eurofins Edison
777 New Durham Road
Edison, NJ 08817
Phone: 732-549-3900 Fax: 732-549-3679

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Gilmore, Julie L	Carrier Tracking No(s):	COC No: 460-70553.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Julie.Gilmore@et.eurofinsus.com	State of Origin: Pennsylvania	Page: Page 1 of 1
Company: Eurofins Environment Testing Southeast,		Accreditations Required (See note): NELAP Pennsylvania		Job #: 460-299582-1
Address: 5102 LaRoche Avenue,	Due Date Requested: 3/19/2024			
City: Savannah	TAT Requested (days):			
State, Zip: GA, 31404				
Phone: 912-354-7858(Tel) 912-352-0165(Fax)	PO #:			
Email:	WO #:			
Project Name: Rock Hill-Anti-Degradation	Project #: 46011424			
Site:	SSOW#:			

Analysis Requested

Preservation Codes.
A HCL, B NaOH, C Zn Acetate, D Nitric Acid, E NaHSO4, F MeOH, G Amchlor, H Ascorbic Acid, I Ice, J DI Water, K EDTA, L EDA, M Hexane, N None, O AsNaO2, P Na2O4S, Q Na2SO3, R Na2S2O3, S H2SO4, T TSP Dodecahydrate, U Acetone, V MCAA, W pH 4-5, Y Trizma, Z other (specify)
Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020B/3005A Total Aluminum	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
NPDES 001 (460-299582-1)	3/7/24	08.30 Eastern		Water			X	1	
Upstream (460-299582-2)	3/7/24	09:45 Eastern		Water			X	1	
Clarifying Pond (460-299582-3)	3/7/24	10:15 Eastern		Water			X	1	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Northeast, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Northeast, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Northeast, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Northeast, LLC.

Possible Hazard Identification	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II III, IV Other (specify) Primary Deliverable Rank: 1	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:		
Relinquished by:	Date/Time: 3/8/24 1900	Company: Eurofins	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time: 3/9/24 0933	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.	Cooler Temperature(s) °C and Other Remarks: 1.7 / 1.7

Eurofins Pensacola
3355 McLemore Drive
Pensacola, FL 32514
Phone: 850-474-1001 Fax: 850-478-2671

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Bruzzio, Taylor M	Carrier Tracking No(s):	COC No: 400-347077.13
Client Contact: Shipping/Receiving	Phone:	E-Mail: Taylor.Bruzzio@et.eurofinsus.com	State of Origin: Illinois	Page: Page 13 of 13
Company: Eurofins Environment Testing Southeast,		Accreditations Required (See note): NELAP - Illinois		Job #: 400-252284-1
Address: 5102 LaRoche Avenue, ,	Due Date Requested: 3/12/2024			
City: Savannah	TAT Requested (days):			
State, Zip: GA, 31404				
Phone: 912-354-7858(Tel) 912-352-0165(Fax)	PO #:			
Email:	WO #:			
Project Name: Marsden-Black Jack Mine Site	Project #: 40016516			
Site:	SSOW#:			

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6010D/3050B (MOD) Lead	Moisture	6010D/3005A Lead	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
FB-05 (400-252284-99)	3/6/24	13:15 Central		Water					X	1	
EQ-04 (400-252284-100)	3/5/24	16:45 Central		Water					X	1	
SM-102-2-SD-9-12 (400-252288-1)	3/6/24	12:55 Central		Solid			X	X		1	
DRUM (400-252288-2)	3/6/24	13:40 Central		Water					X	1	
EQ-5 (400-252288-3)	3/6/24	13:15 Central		Water					X	1	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Southeast, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Southeast, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Southeast, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Southeast, LLC.

Possible Hazard Identification	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For _____ Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 4	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	3/8/24 17W	EDS			
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	3/9/24 0933	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 16.0/16.0

Eurofins Pensacola
3355 McLemore Drive
Pensacola, FL 32514
Phone: 850-474-1001 Fax: 850-478-2671

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Bruzzio, Taylor M	Carrier Tracking No(s):	COC No: 400-347077.12
Client Contact: Shipping/Receiving	Phone:	E-Mail: Taylor.Bruzzio@et.eurofinsus.com	State of Origin: Illinois	Page: Page 12 of 13
Company: Eurofins Environment Testing Southeast,		Accreditations Required (See note): NELAP - Illinois		Job #: 400-252284-1
Address: 5102 LaRoche Avenue, ,	Due Date Requested: 3/12/2024			
City: Savannah	TAT Requested (days):			
State, Zip: GA, 31404				
Phone: 912-354-7858(Tel) 912-352-0165(Fax)	PO #:			
Email:	WO #:			
Project Name: Marsden-Black Jack Mine Site	Project #: 40016516			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)
Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6010D/3050B (MOD) Lead	Moisture	6010D/3005A Lead	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
SM-81-1-SD-0-3 (400-252284-90)	3/5/24	09:15 Central		Solid			X	X		1	
SM-81-1-SD-0-3-FD (400-252284-91)	3/5/24	09:15 Central		Solid			X	X		1	
SM-81-1-SD-9-12 (400-252284-92)	3/5/24	09:15 Central		Solid			X	X		1	
SM-81-1-SD-15-18 (400-252284-93)	3/5/24	09:20 Central		Solid			X	X		1	
SM-81-2-SD-0-3 (400-252284-94)	3/5/24	09:35 Central		Solid			X	X		1	
SM-81-2-SD-0-3-FD (400-252284-95)	3/5/24	09:35 Central		Solid			X	X		1	
SM-81-2-SD-9-12 (400-252284-96)	3/5/24	09:40 Central		Solid			X	X		1	
SM-81-2-SD-15-18 (400-252284-97)	3/5/24	09:45 Central		Solid			X	X		1	
FB-04 (400-252284-98)	3/5/24	16:45 Central		Water					X	1	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Southeast, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Southeast, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Southeast, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Southeast, LLC.

Possible Hazard Identification	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 4	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	3/8/24 17W				
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time: 3/9/24 0933	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 16.0/16.0 17.1/17.1

Eurofins Pensacola
3355 McLemore Drive
Pensacola, FL 32514
Phone: 850-474-1001 Fax: 850-478-2671

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Bruzzio, Taylor M	Carrier Tracking No(s):	COC No: 400-347077.11
Client Contact: Shipping/Receiving	Phone:	E-Mail: Taylor.Bruzzio@et.eurofinsus.com	State of Origin: Illinois	Page: Page 11 of 13
Company: Eurofins Environment Testing Southeast,		Accreditations Required (See note): NELAP - Illinois		Job #: 400-252284-1
Address: 5102 LaRoche Avenue, ,	Due Date Requested: 3/12/2024			
City: Savannah	TAT Requested (days):			
State, Zip: GA, 31404				
Phone: 912-354-7858(Tel) 912-352-0165(Fax)	PO #:			
Email:	WO #:			
Project Name: Marsden-Black Jack Mine Site	Project #: 40016516			
Site:	SSOW#:			

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)

Other:

Analysis Requested

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6010D/3050B (MOD) Lead	Moisture	6010D/3005A Lead	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
SM-87-1-SD-0-3 (400-252284-84MS)	3/5/24	11:00 Central	MS	Solid			X	X		1	
SM-87-1-SD-0-3 (400-252284-84MSD)	3/5/24	11:00 Central	MSD	Solid			X	X		1	
SM-87-1-SD-9-12 (400-252284-85)	3/5/24	11:10 Central		Solid			X	X		1	
SM-87-1-SD-15-18 (400-252284-86)	3/5/24	11:10 Central		Solid			X	X		1	
SM-87-2-SD-0-3 (400-252284-87)	3/5/24	10:30 Central		Solid			X	X		1	
SM-87-2-SD-0-3 (400-252284-87MS)	3/5/24	10:30 Central	MS	Solid			X	X		1	
SM-87-2-SD-0-3 (400-252284-87MSD)	3/5/24	10:30 Central	MSD	Solid			X	X		1	
SM-87-2-SD-9-12 (400-252284-88)	3/5/24	10:30 Central		Solid			X	X		1	
SM-87-2-SD-15-18 (400-252284-89)	3/5/24	10:35 Central		Solid			X	X		1	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Southeast, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Southeast, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Southeast, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Southeast, LLC.

Possible Hazard Identification	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 4	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time: 3/8/24 1700	Company EEE	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time: 3/9.24 0933	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 16.0/16.0 17.1/17.1

Eurofins Pensacola
3355 McLemore Drive
Pensacola, FL 32514
Phone: 850-474-1001 Fax: 850-478-2671

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Bruzzio, Taylor M	Carrier Tracking No(s):	COC No: 400-347077.10
Client Contact: Shipping/Receiving	Phone:	E-Mail: Taylor.Bruzzio@et.eurofinsus.com	State of Origin: Illinois	Page: Page 10 of 13
Company: Eurofins Environment Testing Southeast,		Accreditations Required (See note): NELAP - Illinois		Job #: 400-252284-1
Address: 5102 LaRoche Avenue, ,	Due Date Requested: 3/12/2024			
City: Savannah	TAT Requested (days):			
State, Zip: GA, 31404				
Phone: 912-354-7858(Tel) 912-352-0165(Fax)	PO #:			
Email:	WO #:			
Project Name: Marsden-Black Jack Mine Site	Project #: 40016516			
Site:	SSOW#:			

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)

Other:

Analysis Requested

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6010D/3050B (MOD) Lead	Moisture	6010D/3005A Lead	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
SM-89-2-SD-3-6 (400-252284-76)	3/5/24	12:45 Central		Solid			X	X		1	
SM-89-2-SD-6-9 (400-252284-77)	3/5/24	12:45 Central		Solid			X	X		1	
SM-88-1-SD-0-3 (400-252284-78)	3/5/24	11:45 Central		Solid			X	X		1	
SM-88-1-SD-3-6 (400-252284-79)	3/5/24	11:45 Central		Solid			X	X		1	
SM-88-1-SD-6-9 (400-252284-80)	3/5/24	11:45 Central		Solid			X	X		1	
SM-88-2-SD-0-3 (400-252284-81)	3/5/24	11:25 Central		Solid			X	X		1	
SM-88-2-SD-3-6 (400-252284-82)	3/5/24	11:25 Central		Solid			X	X		1	
SM-88-2-SD-6-9 (400-252284-83)	3/5/24	11:25 Central		Solid			X	X		1	
SM-87-1-SD-0-3 (400-252284-84)	3/5/24	11:00 Central		Solid			X	X		1	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Southeast, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Southeast, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Southeast, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Southeast, LLC.

Possible Hazard Identification	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 4	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	3/8/24 1200	EESS			
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time: 3/9/24 0933	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 16.0/16.0 17.1/17.1

Eurofins Pensacola
3355 McLemore Drive
Pensacola, FL 32514
Phone: 850-474-1001 Fax: 850-478-2671

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Bruzzio, Taylor M	Carrier Tracking No(s):	COC No: 400-347077.9
Client Contact: Shipping/Receiving	Phone:	E-Mail: Taylor.Bruzzio@et.eurofinsus.com	State of Origin: Illinois	Page: Page 9 of 13
Company: Eurofins Environment Testing Southeast,		Accreditations Required (See note): NELAP - Illinois		Job #: 400-252284-1
Address: 5102 LaRoche Avenue, ,	Due Date Requested: 3/12/2024			
City: Savannah	TAT Requested (days):			
State, Zip: GA, 31404				
Phone: 912-354-7858(Tel) 912-352-0165(Fax)	PO #:			
Email:	WO #:			
Project Name: Marsden-Black Jack Mine Site	Project #: 40016516			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)
Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6010D/3050B (MOD) Lead	Moisture	6010D/3005A Lead	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
SM-90-2-SD-0-3 (400-252284-67)	3/5/24	13:00 Central		Solid			X	X		1	
SM-90-2-SD-0-3-FD (400-252284-68)	3/5/24	13:00 Central		Solid			X	X		1	
SM-90-2-SD-9-12 (400-252284-69)	3/5/24	13:00 Central		Solid			X	X		1	
SM-90-2-SD-15-18 (400-252284-70)	3/5/24	13:00 Central		Solid			X	X		1	
SM-89-1-SD-0-3 (400-252284-71)	3/5/24	12:20 Central		Solid			X	X		1	
SM-89-1-SD-0-3-FD (400-252284-72)	3/5/24	12:20 Central		Solid			X	X		1	
SM-89-1-SD-3-6 (400-252284-73)	3/5/24	12:20 Central		Solid			X	X		1	
SM-89-1-SD-6-9 (400-252284-74)	3/5/24	12:20 Central		Solid			X	X		1	
SM-89-2-SD-0-3 (400-252284-75)	3/5/24	12:45 Central		Solid			X	X		1	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Southeast, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Southeast, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Southeast, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Southeast, LLC.

Possible Hazard Identification	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 4	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time: 3/8/24 1700	Company EES	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time: 3.9.24 0933	Company

Custody Seals Intact: ∆ Yes ∆ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 16.0/16.0 17.1/17.1

Eurofins Pensacola
3355 McLemore Drive
Pensacola, FL 32514
Phone: 850-474-1001 Fax: 850-478-2671

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Bruzzio, Taylor M	Carrier Tracking No(s):	COC No: 400-347077.8
Client Contact: Shipping/Receiving	Phone:	E-Mail: Taylor.Bruzzio@et.eurofinsus.com	State of Origin: Illinois	Page: Page 8 of 13
Company: Eurofins Environment Testing Southeast,		Accreditations Required (See note): NELAP - Illinois		Job #: 400-252284-1
Address: 5102 LaRoche Avenue,	Due Date Requested: 3/12/2024			
City: Savannah	TAT Requested (days):			
State, Zip: GA, 31404				
Phone: 912-354-7858(Tel) 912-352-0165(Fax)	PO #:			
Email:	WO #:			
Project Name: Marsden-Black Jack Mine Site	Project #: 40016516			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)
Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6010D/3050B (MOD) Lead	Moisture	6010D/3005A Lead	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
SM-91-1-SD-0-3 (400-252284-58)	3/5/24	14:55 Central		Solid			X	X		1	
SM-91-1-SD-6-9 (400-252284-59)	3/5/24	14:55 Central		Solid			X	X		1	
SM-91-1-SD-9-12 (400-252284-60)	3/5/24	14:55 Central		Solid			X	X		1	
SM-91-2-SD-0-3 (400-252284-61)	3/5/24	15:05 Central		Solid			X	X		1	
SM-91-2-SD-6-9 (400-252284-62)	3/5/24	15:05 Central		Solid			X	X		1	
SM-91-2-SD-9-12 (400-252284-63)	3/5/24	15:05 Central		Solid			X	X		1	
SM-90-1-SD-0-3 (400-252284-64)	3/5/24	13:50 Central		Solid			X	X		1	
SM-90-1-SD-9-12 (400-252284-65)	3/5/24	13:50 Central		Solid			X	X		1	
SM-90-1-SD-15-18 (400-252284-66)	3/5/24	14:10 Central		Solid			X	X		1	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Southeast, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Southeast, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Southeast, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Southeast, LLC.

Possible Hazard Identification	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 4	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	3/8/24 17W	EES			
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time: 3/9/24 0933	Company

Custody Seals Intact: ∆ Yes ∆ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 16.0 / 16.0 17.1 / 17.1

Eurofins Pensacola
3355 McLemore Drive
Pensacola, FL 32514
Phone: 850-474-1001 Fax: 850-478-2671

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Bruzzio, Taylor M	Carrier Tracking No(s):	COC No: 400-347077.7
Client Contact: Shipping/Receiving	Phone:	E-Mail: Taylor.Bruzzio@et.eurofinsus.com	State of Origin: Illinois	Page: Page 7 of 13
Company: Eurofins Environment Testing Southeast,		Accreditations Required (See note): NELAP - Illinois		Job #: 400-252284-1
Address: 5102 LaRoche Avenue, ,	Due Date Requested: 3/12/2024			
City: Savannah	TAT Requested (days):			
State, Zip: GA, 31404				
Phone: 912-354-7858(Tel) 912-352-0165(Fax)	PO #:			
Email:	WO #:			
Project Name: Marsden-Black Jack Mine Site	Project #: 40016516			
Site:	SSOW#:			

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify), Other:

Analysis Requested

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6010D/3050B (MOD) Lead	Moisture	6010D/3005A Lead	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
SM-94-2-SD-3-6 (400-252284-49)	3/5/24	15:50 Central		Solid			X	X		1	
SM-94-2-SD-3-6-FD (400-252284-50)	3/5/24	15:50 Central		Solid			X	X		1	
SM-94-2-SD-6-9 (400-252284-51)	3/5/24	15:50 Central		Solid			X	X		1	
SM-92-1-SD-0-3 (400-252284-52)	3/5/24	15:40 Central		Solid			X	X		1	
SM-92-1-SD-3-6 (400-252284-53)	3/5/24	15:40 Central		Solid			X	X		1	
SM-92-1-SD-6-9 (400-252284-54)	3/5/24	15:40 Central		Solid			X	X		1	
SM-92-2-SD-0-3 (400-252284-55)	3/5/24	15:20 Central		Solid			X	X		1	
SM-92-2-SD-3-6 (400-252284-56)	3/5/24	15:20 Central		Solid			X	X		1	
SM-92-2-SD-6-9 (400-252284-57)	3/5/24	15:20 Central		Solid			X	X		1	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Southeast, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Southeast, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Southeast, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Southeast, LLC.

Possible Hazard Identification	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For _____ Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 4	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	3/8/24 1200	EDS			
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time: 3/9/24 0933	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 16.0/16.0 17.1/17.1

Eurofins Pensacola
3355 McLemore Drive
Pensacola, FL 32514
Phone: 850-474-1001 Fax: 850-478-2671

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Bruzzio, Taylor M	Carrier Tracking No(s):	COC No: 400-347077.6
Client Contact: Shipping/Receiving	Phone:	E-Mail: Taylor.Bruzzio@et.eurofinsus.com	State of Origin: Illinois	Page: Page 6 of 13
Company: Eurofins Environment Testing Southeast,		Accreditations Required (See note): NELAP - Illinois		Job #: 400-252284-1
Address: 5102 LaRoche Avenue, ,	Due Date Requested: 3/12/2024			
City: Savannah	TAT Requested (days):			
State, Zip: GA, 31404				
Phone: 912-354-7858(Tel) 912-352-0165(Fax)	PO #:			
Email:	WO #:			
Project Name: Marsden-Black Jack Mine Site	Project #: 40016516			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (Wwwater, Ssolid, Owaste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6010D/3050B (MOD) Lead	Moisture	6010D/3005A Lead	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
SM-95-1-SD-6-9 (400-252284-40)	3/6/24	09:00 Central		Solid			X	X		1	
SM-95-2-SD-0-3 (400-252284-41)	3/6/24	08:40 Central		Solid			X	X		1	
SM-95-2-SD-3-6 (400-252284-42)	3/6/24	08:40 Central		Solid			X	X		1	
SM-95-2-SD-6-9 (400-252284-43)	3/6/24	08:40 Central		Solid			X	X		1	
SM-94-1-SD-0-3 (400-252284-44)	3/5/24	16:00 Central		Solid			X	X		1	
SM-94-1-SD-3-6 (400-252284-45)	3/5/24	16:00 Central		Solid			X	X		1	
SM-94-1-SD-3-6-FD (400-252284-46)	3/5/24	16:00 Central		Solid			X	X		1	
SM-94-1-SD-6-9 (400-252284-47)	3/5/24	16:00 Central		Solid			X	X		1	
SM-94-2-SD-0-3 (400-252284-48)	3/5/24	15:50 Central		Solid			X	X		1	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Southeast, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Southeast, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Southeast, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Southeast, LLC.

Possible Hazard Identification	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For _____ Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 4	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time: 3/8/24 12W	Company EES	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time: 3/9/24 0833	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 16.0/16.0 17.1/17.1

Eurofins Pensacola
3355 McLemore Drive
Pensacola, FL 32514
Phone: 850-474-1001 Fax: 850-478-2671

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Bruzzio, Taylor M	Carrier Tracking No(s):	COC No: 400-347077.5
Client Contact: Shipping/Receiving	Phone:	E-Mail: Taylor.Bruzzio@et.eurofinsus.com	State of Origin: Illinois	Page: Page 5 of 13
Company: Eurofins Environment Testing Southeast,		Accreditations Required (See note): NELAP - Illinois		Job #: 400-252284-1
Address: 5102 LaRoche Avenue, ,	Due Date Requested: 3/12/2024			
City: Savannah	TAT Requested (days):			
State, Zip: GA, 31404				
Phone: 912-354-7858(Tel) 912-352-0165(Fax)	PO #:			
Email:	WO #:			
Project Name: Marsden-Black Jack Mine Site	Project #: 40016516			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6010D/3050B (MOD) Lead	Moisture	6010D/3005A Lead	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
SM-100-2-SD-6-9 (400-252284-31)	3/6/24	09:40 Central		Solid			X	X		1	
SM-98-1-SD-0-3 (400-252284-32)	3/6/24	09:20 Central		Solid			X	X		1	
SM-98-1-SD-3-6 (400-252284-33)	3/6/24	09:20 Central		Solid			X	X		1	
SM-98-1-SD-6-9 (400-252284-34)	3/6/24	09:20 Central		Solid			X	X		1	
SM-98-2-SD-0-3 (400-252284-35)	3/6/24	09:15 Central		Solid			X	X		1	
SM-98-2-SD-3-6 (400-252284-36)	3/6/24	09:15 Central		Solid			X	X		1	
SM-98-2-SD-6-9 (400-252284-37)	3/6/24	09:15 Central		Solid			X	X		1	
SM-95-1-SD-0-3 (400-252284-38)	3/6/24	09:00 Central		Solid			X	X		1	
SM-95-1-SD-3-6 (400-252284-39)	3/6/24	09:00 Central		Solid			X	X		1	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Southeast, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Southeast, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Southeast, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Southeast, LLC.

Possible Hazard Identification	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 4	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:		
Relinquished by:	Date/Time: 3/8/24 17W	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time: 3/9/24 0933	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 16.0/16.0 17.1/17.1

Eurofins Pensacola
3355 McLemore Drive
Pensacola, FL 32514
Phone: 850-474-1001 Fax: 850-478-2671

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Bruzzio, Taylor M	Carrier Tracking No(s):	COC No: 400-347077.4
Client Contact: Shipping/Receiving	Phone:	E-Mail: Taylor.Bruzzio@et.eurofinsus.com	State of Origin: Illinois	Page: Page 4 of 13
Company: Eurofins Environment Testing Southeast,		Accreditations Required (See note): NELAP - Illinois		Job #: 400-252284-1
Address: 5102 LaRoche Avenue, ,	Due Date Requested: 3/12/2024			
City: Savannah	TAT Requested (days):			
State, Zip: GA, 31404				
Phone: 912-354-7858(Tel) 912-352-0165(Fax)	PO #:			
Email:	WO #:			
Project Name: Marsden-Black Jack Mine Site	Project #: 40016516			
Site:	SSOW#:			

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)
Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6010D/3050B (MOD) Lead	Moisture	6010D/3005A Lead	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
SM-101-1-SD-6-9 (400-252284-22)	3/6/24	12:00 Central		Solid			X	X		1	
SM-101-2-SD-0-3 (400-252284-23)	3/6/24	12:10 Central		Solid			X	X		1	
SM-101-2-SD-3-6 (400-252284-24)	3/6/24	12:10 Central		Solid			X	X		1	
SM-101-2-SD-6-9 (400-252284-25)	3/6/24	12:10 Central		Solid			X	X		1	
SM-100-1-SD-0-3 (400-252284-26)	3/6/24	10:00 Central		Solid			X	X		1	
SM-100-1-SD-3-6 (400-252284-27)	3/6/24	10:00 Central		Solid			X	X		1	
SM-100-1-SD-6-9 (400-252284-28)	3/6/24	10:00 Central		Solid			X	X		1	
SM-100-2-SD-0-3 (400-252284-29)	3/6/24	09:40 Central		Solid			X	X		1	
SM-100-2-SD-3-6 (400-252284-30)	3/6/24	09:40 Central		Solid			X	X		1	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Southeast, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Southeast, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Southeast, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Southeast, LLC.

Possible Hazard Identification	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 4	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time: 3/8/24 17W	Company ECS	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time: 3/9/24 0933	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 16.6/16.6 17.1/17.1

Eurofins Pensacola
3355 McLemore Drive
Pensacola, FL 32514
Phone: 850-474-1001 Fax: 850-478-2671

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Bruzzio, Taylor M	Carrier Tracking No(s):	COC No: 400-347077.3
Client Contact: Shipping/Receiving	Phone:	E-Mail: Taylor.Bruzzio@et.eurofinsus.com	State of Origin: Illinois	Page: Page 3 of 13
Company: Eurofins Environment Testing Southeast,		Accreditations Required (See note): NELAP - Illinois		Job #: 400-252284-1
Address: 5102 LaRoche Avenue, ,	Due Date Requested: 3/12/2024			
City: Savannah	TAT Requested (days):			
State, Zip: GA, 31404				
Phone: 912-354-7858(Tel) 912-352-0165(Fax)	PO #:			
Email:	WO #:			
Project Name: Marsden-Black Jack Mine Site	Project #: 40016516			
Site:	SSOW#:			

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)

Other:

Analysis Requested

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6010D/3050B (MOD) Lead	Moisture	6010D/3005A Lead	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
SM-102-1-SD-9-12 (400-252284-15)	3/6/24	12:30 Central		Solid			X	X		1	
SM-102-1-SD-15-18 (400-252284-16)	3/6/24	12:30 Central		Solid			X	X		1	
SM-102-2-SD-0-3 (400-252284-17)	3/6/24	12:55 Central		Solid			X	X		1	
SM-102-2-SD-0-3-FD (400-252284-18)	3/6/24	12:55 Central		Solid			X	X		1	
SM-102-2-SD-15-18 (400-252284-19)	3/6/24	12:55 Central		Solid			X	X		1	
SM-101-1-SD-0-3 (400-252284-20)	3/6/24	12:00 Central		Solid			X	X		1	
SM-101-1-SD-0-3 (400-252284-20MS)	3/6/24	12:00 Central	MS	Solid			X	X		1	
SM-101-1-SD-0-3 (400-252284-20MSD)	3/6/24	12:00 Central	MSD	Solid			X	X		1	
SM-101-1-SD-3-6 (400-252284-21)	3/6/24	12:00 Central		Solid			X	X		1	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Southeast, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Southeast, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Southeast, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Southeast, LLC.

Possible Hazard Identification	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 4	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time: 3/8/24 17W	Company: ETS	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time: 3/9/24 0933	Company

Custody Seals Intact: ∆ Yes ∆ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 16.1/16.1 17.0/17.0

Login Sample Receipt Checklist

Client: Heidelberg Materials Northeast LLC

Job Number: 460-299582-1

Login Number: 299582

List Source: Eurofins Edison

List Number: 1

Creator: Thundathorn, Sukanan 1

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Heidelberg Materials Northeast LLC

Job Number: 460-299582-1

Login Number: 299582
List Number: 4
Creator: Yeager, Brian A

List Source: Eurofins Buffalo
List Creation: 03/11/24 12:12 PM

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	2.8 ICE
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	True	

Login Sample Receipt Checklist

Client: Heidelberg Materials Northeast LLC

Job Number: 460-299582-1

Login Number: 299582
List Number: 5
Creator: Metzger, Katherine A

List Source: Eurofins Lancaster Laboratories Environment Testing, LLC
List Creation: 03/11/24 08:48 PM

Question	Answer	Comment
The cooler's custody seal is intact.	N/A	Not present
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature acceptable,where thermal pres is required(</=6C, not frozen).	True	
Cooler Temperature is recorded.	True	
WV:Container Temp acceptable,where thermal pres is required (</=6C, not frozen).	N/A	
WV: Container Temperature is recorded.	N/A	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the containers received and the COC.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
There is sufficient vol. for all requested analyses.	True	
Is the Field Sampler's name present on COC?	False	Received project as a subcontract.
Sample custody seals are intact.	N/A	Not present.
VOA sample vials do not have headspace >6mm in diameter (none, if from WV)?	N/A	

Login Sample Receipt Checklist

Client: Heidelberg Materials Northeast LLC

Job Number: 460-299582-1

Login Number: 299582
List Number: 2
Creator: Mullins, Plumm A

List Source: Eurofins Pittsburgh
List Creation: 03/09/24 12:24 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Heidelberg Materials Northeast LLC

Job Number: 460-299582-1

Login Number: 299582
List Number: 3
Creator: Stewart, Rendaisha

List Source: Eurofins Savannah
List Creation: 03/09/24 01:08 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Lab Results

March 21, 2024

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Katie Murray
Heidelberg Materials Northeast LLC
7660 Imperial Way
Allentown, Pennsylvania 18195

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JOB DESCRIPTION

Rock Hill - Anti-Degradation

JOB NUMBER

460-300489-1

Eurofins Edison
777 New Durham Road
Edison NJ 08817

See page two for job notes and contact information.

my EOL

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing Northeast, LLC Project Manager.

Authorization



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Authorized for release by
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Definitions/Glossary

Client: Heidelberg Materials Northeast LLC
Job ID: 460-300489-1
Project/Site: Rock Hill - Anti-Degradation

Qualifiers

HPLC/IC

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

General Chemistry

Qualifier	Qualifier Description
H	Sample was prepped or analyzed beyond the specified holding time. This does not meet regulatory requirements.
H3	Sample was received and analyzed past holding time. This does not meet regulatory requirements.
HF	Parameter with a holding time of 15 minutes. Test performed by laboratory at client's request. Sample was analyzed outside of hold time.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job Narrative
460-300489-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

- Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

The method detection limit (MDL) is the lowest value detectable by the laboratory for a given analyte as determined by the MDL procedure detailed in EPA 40 CFR 136. Reported MDL values are adjusted for any dilutions and percent moisture (as applicable). The lab is unable to report values below the MDL.

Receipt
The samples were received on 3/21/2024 7:00 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 2.4°C and 2.9°C.

Subcontract Work
Method Osomotic Pressure: This method was subcontracted to Microbac Laboratories, Inc. The subcontract laboratory certification is different from that of the facility issuing the final report. The subcontract report is appended in its entirety.

HPLC/IC
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Metals
Method 6020B - Dissolved: The following samples were not filtered within 15 minutes of sample collection as required by the method: NPDES 001 (460-300489-1), Upstream (460-300489-2) and Clarifying Pond (460-300489-3). The sample(s) was filtered prior to analysis at the laboratory, and the results have been reported.

Method 6020B - Dissolved: The following samples were not filtered within 15 minutes of sample collection as required by the method: NPDES 001 (460-300489-1), Upstream (460-300489-2) and Clarifying Pond (460-300489-3). The samples were filtered prior to analysis at the laboratory, and the results have been reported.

Method 6020B - Dissolved: The following samples were not filtered and preserved within 15 minutes of sample collection in accordance with 40 CFR Part 136 Table II, Footnote 7, method 6020B. The samples were filtered prior to analysis at the laboratory.

NPDES 001 (460-300489-1), Upstream (460-300489-2) and Clarifying Pond (460-300489-3)

Method 6020B - Dissolved: The following samples were not filtered within 15 minutes of sample collection as required by the method: NPDES 001 (460-300489-1), Upstream (460-300489-2) and Clarifying Pond (460-300489-3). The sample(s) was filtered prior to analysis at the laboratory, and the results have been reported.

Method 6020B - Dissolved: The following samples were not filtered within 15 minutes of sample collection as required by the method: NPDES 001 (460-300489-1), Upstream (460-300489-2) and Clarifying Pond (460-300489-3). The samples were filtered prior to analysis at the laboratory, and the results have been reported.

Method 6020B - Dissolved: The following samples were not filtered and preserved within 15 minutes of sample collection in accordance with 40 CFR Part 136 Table II, Footnote 7, method 6020B. The samples were filtered prior to analysis at the laboratory.

NPDES 001 (460-300489-1), Upstream (460-300489-2) and Clarifying Pond (460-300489-3)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

General Chemistry
Method 4500_O_C: This analysis is normally performed in the field and has a method-defined holding time of 15 minutes. The following samples has been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe: NPDES 001 (460-300489-1), Upstream (460-300489-2) and Clarifying Pond (460-300489-3).

Method 9040C: This analysis is normally performed in the field and has a method-defined holding time of 15 minutes. The following sample has been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe: Clarifying Pond (460-300489-3).

Method 9040C: This analysis is normally performed in the field and has a method-defined holding time of 15 minutes. The following samples has been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe: NPDES 001 (460-300489-1) and Upstream (460-300489-2).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Client Sample ID: NPDES 001

Date Collected: 03/21/24 08:40
Date Received: 03/21/24 19:00

Lab Sample ID: 460-300489-1

Matrix: Water

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide	0.054	U	0.32	0.054	mg/L			03/22/24 18:54	1
Nitrate as N	0.070	U	0.16	0.070	mg/L			03/22/24 18:54	1
Chloride	**7.61**		0.32	0.039	mg/L			03/22/24 18:54	1
Nitrate Nitrite as N	0.070	U	0.16	0.070	mg/L			03/22/24 18:54	1
Nitrite as N	0.023	U	0.16	0.023	mg/L			03/22/24 18:54	1
Sulfate	**9.81**		0.48	0.095	mg/L			03/22/24 18:54	1

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000043	U	0.00020	0.000043	mg/L		03/26/24 09:19	03/26/24 14:02	1

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**4.4**		4.0	0.91	ug/L		03/29/24 18:55	03/30/24 17:29	1
Boron	**51.3**	**J**	80.0	30.4	ug/L		03/29/24 18:55	03/30/24 17:29	1
Calcium	**24400**		500	53.6	ug/L		03/29/24 18:55	03/30/24 17:29	1
Copper	2.5	U	4.0	2.5	ug/L		03/29/24 18:55	03/30/24 17:29	1
Lead	0.84	U	1.2	0.84	ug/L		03/29/24 18:55	03/30/24 17:29	1
Magnesium	**10300**		200	46.9	ug/L		03/29/24 18:55	03/30/24 17:29	1
Manganese	**34.1**		8.0	1.5	ug/L		03/29/24 18:55	03/30/24 17:29	1
Nickel	0.91	U	4.0	0.91	ug/L		03/29/24 18:55	03/30/24 17:29	1
Potassium	**1300**		200	112	ug/L		03/29/24 18:55	03/30/24 17:29	1
Selenium	0.59	U	2.5	0.59	ug/L		03/29/24 18:55	03/30/24 17:29	1
Sodium	**5170**		500	219	ug/L		03/29/24 18:55	03/30/24 17:29	1
Strontium	**81.1**		4.0	0.50	ug/L		03/29/24 18:55	03/30/24 17:29	1
Zinc	6.5	U	16.0	6.5	ug/L		03/29/24 18:55	03/30/24 17:29	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	35.0	U	100	35.0	ug/L		03/27/24 05:41	03/27/24 18:07	1
Iron	**304**		50.0	20.0	ug/L		03/25/24 21:00	03/26/24 19:16	1

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	19.5	U	40.0	19.5	ug/L		04/02/24 11:11	04/02/24 13:29	1
Cadmium	0.15	U	0.50	0.15	ug/L		04/02/24 09:40	04/03/24 16:57	1
Arsenic	0.89	U	2.0	0.89	ug/L		04/02/24 11:11	04/02/24 13:29	1
Iron	**65.8**		50.0	20.0	ug/L		04/02/24 09:40	04/03/24 16:57	1
Calcium	**24700**		500	53.6	ug/L		04/02/24 11:11	04/02/24 13:29	1
Zinc	4.0	U	10.0	4.0	ug/L		04/02/24 09:40	04/03/24 16:57	1
Copper	2.5	U	4.0	2.5	ug/L		04/02/24 11:11	04/02/24 13:29	1
Iron	58.2	U	120	58.2	ug/L		04/02/24 11:11	04/02/24 13:29	1
Lead	0.84	U	1.2	0.84	ug/L		04/02/24 11:11	04/02/24 13:29	1
Magnesium	**10400**		200	46.9	ug/L		04/02/24 11:11	04/02/24 13:29	1
Manganese	**3.3**	**J**	8.0	1.5	ug/L		04/02/24 11:11	04/02/24 13:29	1
Nickel	0.91	U	4.0	0.91	ug/L		04/02/24 11:11	04/02/24 13:29	1

Method: SW846 EPA 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	1.3	U	5.0	1.3	ug/L		04/02/24 06:30	04/03/24 13:42	1

Client Sample ID: NPDES 001

Lab Sample ID: 460-300489-1

Date Collected: 03/21/24 08:40

Matrix: Water

Date Received: 03/21/24 19:00

Method: SW846 EPA 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	1.3	U	5.0	1.3	ug/L		04/02/24 06:30	04/03/24 14:41	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Resistivity (EPA 120.1)	**0.00421**		0.000100	0.000100	Mohm-cm			04/02/24 17:21	1
Specific Conductance (EPA 120.1)	**238**		1.00	1.00	umhos/cm			04/02/24 17:21	1
Acidity (SM 2310B-2011)	20.0	U	20.0	20.0	mg/L			04/03/24 14:52	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-2011)	**95.7**		5.0	5.0	mg/L			03/29/24 17:14	1
Carbonate Alkalinity as CaCO3 (SM 2320B-2011)	5.0	U	5.0	5.0	mg/L			03/29/24 17:14	1
Alkalinity as CaCO3 to pH 4.5 (SM 2320B-2011)	**95.7**		5.0	5.0	mg/L			03/29/24 17:14	1
Total Dissolved Solids (SM 2540C-2015)	**162**		2.5	2.5	mg/L			03/27/24 14:00	1
Total Suspended Solids (SM 2540D-2015)	**2.9**		2.5	2.5	mg/L			03/28/24 11:53	1
Ammonia (EPA 350.1)	0.050	U	0.10	0.050	mg/L			04/02/24 09:10	1
Total Kjeldahl Nitrogen (EPA 351.2)	**0.59**	**J**	1.0	0.50	mg/L		03/29/24 12:40	04/01/24 12:18	1
Chemical Oxygen Demand (EPA 410.4)	**6.8**	**J**	10.0	3.3	mg/L			03/24/24 16:45	1
Oxygen, Dissolved (SM 4500 O C-2016)	**9.0**	**H H3**	1.0	1.0	mg/L			03/22/24 13:39	1
Carbonaceous Biochemical Oxygen Demand 5 (SM 5210 B-2016)	1.0	U	1.0	1.0	mg/L			03/22/24 12:00	1
pH (SW846 9040C)	**7.9**	**HF**	0.1	0.1	SU			03/30/24 12:33	1
Temperature (SW846 9040C)	**24.7**	**HF**	0.1	0.1	Degrees C			03/30/24 12:33	1
Total Organic Carbon (SW846 9060A)	**1.9**		1.0	0.53	mg/L			04/04/24 01:59	1
Phosphorus as PO4 (SM4500 P E-2011)	**0.19**		0.090	0.071	mg/L		04/06/24 10:30	04/06/24 16:00	1
Phosphorus as P (SM4500 P E-2011)	**0.063**		0.030	0.023	mg/L		04/06/24 10:30	04/06/24 16:00	1
Nitrogen, Total (EPA Total Nitrogen)	**0.59**		0.50	0.50	mg/L			04/02/24 18:50	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (EPA 350.1)	0.050	U	0.10	0.050	mg/L			04/02/24 09:16	1
Phosphorus as PO4 (SM4500 P E-2011)	**0.15**		0.090	0.071	mg/L		04/06/24 10:30	04/06/24 16:00	1
Phosphorus as P (SM4500 P E-2011)	**0.049**		0.030	0.023	mg/L		04/06/24 10:30	04/06/24 16:00	1

Client Sample ID: Upstream

Lab Sample ID: 460-300489-2

Date Collected: 03/21/24 09:20

Matrix: Water

Date Received: 03/21/24 19:00

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide	0.054	U	0.32	0.054	mg/L			03/22/24 19:09	1
Nitrate as N	0.070	U	0.16	0.070	mg/L			03/22/24 19:09	1
Chloride	**12.3**		0.32	0.039	mg/L			03/22/24 19:09	1
Nitrate Nitrite as N	0.070	U	0.16	0.070	mg/L			03/22/24 19:09	1

Client Sample ID: Upstream
Date Collected: 03/21/24 09:20
Date Received: 03/21/24 19:00

Lab Sample ID: 460-300489-2
Matrix: Water

Method: EPA 300.0 - Anions, Ion Chromatography (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrite as N	0.023	U	0.16	0.023	mg/L			03/22/24 19:09	1
Sulfate	**5.24**		0.48	0.095	mg/L			03/22/24 19:09	1

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000043	U	0.00020	0.000043	mg/L		03/26/24 09:19	03/26/24 14:04	1

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**11.5**		4.0	0.91	ug/L		03/29/24 18:55	03/30/24 17:31	1
Boron	**40.2**	**J**	80.0	30.4	ug/L		03/29/24 18:55	03/30/24 17:31	1
Calcium	**30100**		500	53.6	ug/L		03/29/24 18:55	03/30/24 17:31	1
Copper	**2.7**	**J**	4.0	2.5	ug/L		03/29/24 18:55	03/30/24 17:31	1
Lead	0.84	U	1.2	0.84	ug/L		03/29/24 18:55	03/30/24 17:31	1
Magnesium	**10600**		200	46.9	ug/L		03/29/24 18:55	03/30/24 17:31	1
Manganese	**17.2**		8.0	1.5	ug/L		03/29/24 18:55	03/30/24 17:31	1
Nickel	**1.7**	**J**	4.0	0.91	ug/L		03/29/24 18:55	03/30/24 17:31	1
Potassium	**1250**		200	112	ug/L		03/29/24 18:55	03/30/24 17:31	1
Selenium	0.59	U	2.5	0.59	ug/L		03/29/24 18:55	03/30/24 17:31	1
Sodium	**4470**		500	219	ug/L		03/29/24 18:55	03/30/24 17:31	1
Strontium	**113**		4.0	0.50	ug/L		03/29/24 18:55	03/30/24 17:31	1
Zinc	6.5	U	16.0	6.5	ug/L		03/29/24 18:55	03/30/24 17:31	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	35.0	U	100	35.0	ug/L		03/27/24 05:41	03/27/24 18:03	1
Iron	**88.4**		50.0	20.0	ug/L		03/25/24 21:00	03/26/24 19:20	1

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	19.5	U	40.0	19.5	ug/L		04/02/24 11:11	04/02/24 13:32	1
Cadmium	0.15	U	0.50	0.15	ug/L		04/02/24 09:40	04/03/24 16:59	1
Arsenic	0.89	U	2.0	0.89	ug/L		04/02/24 11:11	04/02/24 13:32	1
Iron	**20.6**	**J**	50.0	20.0	ug/L		04/02/24 09:40	04/03/24 16:59	1
Calcium	**30600**		500	53.6	ug/L		04/02/24 11:11	04/02/24 13:32	1
Zinc	4.0	U	10.0	4.0	ug/L		04/02/24 09:40	04/03/24 16:59	1
Copper	2.5	U	4.0	2.5	ug/L		04/02/24 11:11	04/02/24 13:32	1
Iron	58.2	U	120	58.2	ug/L		04/02/24 11:11	04/02/24 13:32	1
Lead	0.84	U	1.2	0.84	ug/L		04/02/24 11:11	04/02/24 13:32	1
Magnesium	**10900**		200	46.9	ug/L		04/02/24 11:11	04/02/24 13:32	1
Manganese	**12.1**		8.0	1.5	ug/L		04/02/24 11:11	04/02/24 13:32	1
Nickel	0.91	U	4.0	0.91	ug/L		04/02/24 11:11	04/02/24 13:32	1

Method: SW846 EPA 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	**18.9**		5.0	1.3	ug/L		04/02/24 06:30	04/03/24 13:59	1

Method: SW846 EPA 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	**7.0**		5.0	1.3	ug/L		04/02/24 06:30	04/03/24 14:44	1

Client Sample ID: Upstream

Lab Sample ID: 460-300489-2

Date Collected: 03/21/24 09:20

Matrix: Water

Date Received: 03/21/24 19:00

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Resistivity (EPA 120.1)	**0.00373**		0.000100	0.000100	Mohm-cm			04/02/24 17:21	1
Specific Conductance (EPA 120.1)	**268**		1.00	1.00	umhos/cm			04/02/24 17:21	1
Acidity (SM 2310B-2011)	20.0	U	20.0	20.0	mg/L			04/03/24 14:52	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-2011)	**108**		5.0	5.0	mg/L			03/29/24 17:20	1
Carbonate Alkalinity as CaCO3 (SM 2320B-2011)	5.0	U	5.0	5.0	mg/L			03/29/24 17:20	1
Alkalinity as CaCO3 to pH 4.5 (SM 2320B-2011)	**108**		5.0	5.0	mg/L			03/29/24 17:20	1
Total Dissolved Solids (SM 2540C-2015)	**183**		2.5	2.5	mg/L			03/27/24 14:00	1
Total Suspended Solids (SM 2540D-2015)	2.5	U	2.5	2.5	mg/L			03/28/24 11:53	1
Ammonia (EPA 350.1)	0.050	U	0.10	0.050	mg/L			04/02/24 09:11	1
Total Kjeldahl Nitrogen (EPA 351.2)	**0.55**	**J**	1.0	0.50	mg/L		03/29/24 12:40	04/01/24 12:20	1
Chemical Oxygen Demand (EPA 410.4)	**9.0**	**J**	10.0	3.3	mg/L			03/24/24 16:45	1
Oxygen, Dissolved (SM 4500 O C-2016)	**6.4**	**H H3**	1.0	1.0	mg/L			03/22/24 13:42	1
Carbonaceous Biochemical Oxygen Demand 5 (SM 5210 B-2016)	1.0	U	1.0	1.0	mg/L			03/22/24 12:15	1
pH (SW846 9040C)	**7.7**	**HF**	0.1	0.1	SU			03/30/24 12:38	1
Temperature (SW846 9040C)	**24.7**	**HF**	0.1	0.1	Degrees C			03/30/24 12:38	1
Total Organic Carbon (SW846 9060A)	**3.0**		1.0	0.53	mg/L			04/04/24 02:24	1
Phosphorus as PO4 (SM4500 P E-2011)	**0.089**	**J**	0.090	0.071	mg/L		04/06/24 10:30	04/06/24 16:00	1
Phosphorus as P (SM4500 P E-2011)	**0.029**	**J**	0.030	0.023	mg/L		04/06/24 10:30	04/06/24 16:00	1
Nitrogen, Total (EPA Total Nitrogen)	**0.55**		0.50	0.50	mg/L			04/02/24 18:50	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (EPA 350.1)	0.050	U	0.10	0.050	mg/L			04/02/24 09:17	1
Phosphorus as PO4 (SM4500 P E-2011)	**0.081**	**J**	0.090	0.071	mg/L		04/06/24 10:30	04/06/24 16:00	1
Phosphorus as P (SM4500 P E-2011)	**0.026**	**J**	0.030	0.023	mg/L		04/06/24 10:30	04/06/24 16:00	1

Client Sample ID: Clarifying Pond

Lab Sample ID: 460-300489-3

Date Collected: 03/21/24 10:00

Matrix: Water

Date Received: 03/21/24 19:00

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide	0.054	U	0.32	0.054	mg/L			03/22/24 19:24	1
Nitrate as N	**0.16**		0.16	0.070	mg/L			03/22/24 19:24	1
Chloride	**1.22**		0.32	0.039	mg/L			03/22/24 19:24	1
Nitrate Nitrite as N	**0.16**		0.16	0.070	mg/L			03/22/24 19:24	1
Nitrite as N	0.023	U	0.16	0.023	mg/L			03/22/24 19:24	1
Sulfate	**5.51**		0.48	0.095	mg/L			03/22/24 19:24	1

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill - Anti-Degradation

Job ID: 460-300489-1

Client Sample ID: Clarifying Pond
Date Collected: 03/21/24 10:00
Date Received: 03/21/24 19:00

Lab Sample ID: 460-300489-3
Matrix: Water

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000043	U	0.00020	0.000043	mg/L		03/26/24 09:19	03/26/24 14:05	1

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**5.6**		4.0	0.91	ug/L		03/29/24 18:55	03/30/24 17:34	1
Boron	**53.6**	**J**	80.0	30.4	ug/L		03/29/24 18:55	03/30/24 17:34	1
Calcium	**19800**		500	53.6	ug/L		03/29/24 18:55	03/30/24 17:34	1
Copper	**5.3**		4.0	2.5	ug/L		03/29/24 18:55	03/30/24 17:34	1
Lead	**1.0**	**J**	1.2	0.84	ug/L		03/29/24 18:55	03/30/24 17:34	1
Magnesium	**7170**		200	46.9	ug/L		03/29/24 18:55	03/30/24 17:34	1
Manganese	**93.1**		8.0	1.5	ug/L		03/29/24 18:55	03/30/24 17:34	1
Nickel	**2.6**	**J**	4.0	0.91	ug/L		03/29/24 18:55	03/30/24 17:34	1
Potassium	**1150**		200	112	ug/L		03/29/24 18:55	03/30/24 17:34	1
Selenium	0.59	U	2.5	0.59	ug/L		03/29/24 18:55	03/30/24 17:34	1
Sodium	**3310**		500	219	ug/L		03/29/24 18:55	03/30/24 17:34	1
Strontium	**47.0**		4.0	0.50	ug/L		03/29/24 18:55	03/30/24 17:34	1
Zinc	6.5	U	16.0	6.5	ug/L		03/29/24 18:55	03/30/24 17:34	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**810**		100	35.0	ug/L		03/27/24 05:41	03/27/24 18:11	1
Iron	**2530**		50.0	20.0	ug/L		03/25/24 21:00	03/26/24 19:18	1

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	19.5	U	40.0	19.5	ug/L		04/02/24 11:16	04/02/24 13:34	1
Cadmium	0.15	U	0.50	0.15	ug/L		04/02/24 09:40	04/03/24 16:36	1
Arsenic	0.89	U	2.0	0.89	ug/L		04/02/24 11:16	04/02/24 13:34	1
Iron	**36.7**	**J**	50.0	20.0	ug/L		04/02/24 09:40	04/03/24 16:36	1
Calcium	**18800**		500	53.6	ug/L		04/02/24 11:16	04/02/24 13:34	1
Zinc	4.0	U	10.0	4.0	ug/L		04/02/24 09:40	04/03/24 16:36	1
Copper	2.5	U	4.0	2.5	ug/L		04/02/24 11:16	04/02/24 13:34	1
Iron	58.2	U	120	58.2	ug/L		04/02/24 11:16	04/02/24 13:34	1
Lead	0.84	U	1.2	0.84	ug/L		04/02/24 11:16	04/02/24 13:34	1
Magnesium	**6620**		200	46.9	ug/L		04/02/24 11:16	04/02/24 13:34	1
Manganese	**17.3**		8.0	1.5	ug/L		04/02/24 11:16	04/02/24 13:34	1
Nickel	0.91	U	4.0	0.91	ug/L		04/02/24 11:16	04/02/24 13:34	1

Method: SW846 EPA 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	**2.7**	**J**	5.0	1.3	ug/L		04/02/24 06:30	04/03/24 13:56	1

Method: SW846 EPA 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	1.3	U	5.0	1.3	ug/L		04/02/24 06:30	04/03/24 14:46	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Resistivity (EPA 120.1)	**0.00600**		0.000100	0.000100	Mohm-cm			04/02/24 17:21	1
Specific Conductance (EPA 120.1)	**167**		1.00	1.00	umhos/cm			04/02/24 17:21	1
Acidity (SM 2310B-2011)	20.0	U	20.0	20.0	mg/L			04/03/24 14:54	1

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill - Anti-Degradation

Job ID: 460-300489-1

Client Sample ID: Clarifying Pond
Date Collected: 03/21/24 10:00
Date Received: 03/21/24 19:00

Lab Sample ID: 460-300489-3
Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3 (SM 2320B-2011)	**71.7**		5.0	5.0	mg/L			03/29/24 17:26	1
Carbonate Alkalinity as CaCO3 (SM 2320B-2011)	5.0	U	5.0	5.0	mg/L			03/29/24 17:26	1
Alkalinity as CaCO3 to pH 4.5 (SM 2320B-2011)	**71.7**		5.0	5.0	mg/L			03/29/24 17:26	1
Total Dissolved Solids (SM 2540C-2015)	**106**		2.5	2.5	mg/L			03/27/24 14:00	1
Total Suspended Solids (SM 2540D-2015)	**45.4**		5.0	5.0	mg/L			03/28/24 11:53	1
Ammonia (EPA 350.1)	0.050	U	0.10	0.050	mg/L			04/02/24 09:13	1
Total Kjeldahl Nitrogen (EPA 351.2)	0.50	U	1.0	0.50	mg/L		03/29/24 12:40	04/01/24 12:25	1
Chemical Oxygen Demand (EPA 410.4)	**13.5**		10.0	3.3	mg/L			03/24/24 16:45	1
Oxygen, Dissolved (SM 4500 O C-2016)	**9.5**	**H H3**	1.0	1.0	mg/L			03/22/24 13:45	1
Carbonaceous Biochemical Oxygen Demand 5 (SM 5210 B-2016)	1.0	U	1.0	1.0	mg/L			03/22/24 12:30	1
pH (SW846 9040C)	**7.8**	**HF**	0.1	0.1	SU			03/29/24 11:03	1
Temperature (SW846 9040C)	**25.2**	**HF**	0.1	0.1	Degrees C			03/29/24 11:03	1
Total Organic Carbon (SW846 9060A)	**1.5**		1.0	0.53	mg/L			04/03/24 23:51	1
Phosphorus as PO4 (SM4500 P E-2011)	**0.10**		0.090	0.071	mg/L		04/06/24 10:30	04/06/24 16:00	1
Phosphorus as P (SM4500 P E-2011)	**0.033**		0.030	0.023	mg/L		04/06/24 10:30	04/06/24 16:00	1
Nitrogen, Total (EPA Total Nitrogen)	0.50	U	0.50	0.50	mg/L			04/02/24 18:50	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (EPA 350.1)	0.050	U	0.10	0.050	mg/L			04/02/24 09:19	1
Phosphorus as PO4 (SM4500 P E-2011)	0.071	U	0.090	0.071	mg/L		04/06/24 10:30	04/06/24 16:00	1
Phosphorus as P (SM4500 P E-2011)	0.023	U	0.030	0.023	mg/L		04/06/24 10:30	04/06/24 16:00	1

Lab Chronicle

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill - Anti-Degradation

Job ID: 460-300489-1

Client Sample ID: NPDES 001

Date Collected: 03/21/24 08:40
Date Received: 03/21/24 19:00

Lab Sample ID: 460-300489-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		1	965512	OXG	EET EDI	03/22/24 18:54
Total/NA	Analysis	300.0		1	965513	OXG	EET EDI	03/22/24 18:54
Total/NA	Prep	245.1			705005	ESB	EET BUF	03/26/24 09:19
Total/NA	Analysis	245.1		1	705097	ESB	EET BUF	03/26/24 14:02
Dissolved	Filtration	Filtration			487916	UAMX	ELLE	03/28/24 00:32
Dissolved	Prep	3005A			489443	NU9R	ELLE	04/02/24 09:40
Dissolved	Analysis	6020B		1	490446	UCIG	ELLE	04/03/24 16:57
Dissolved	Filtration	FILTRATION			967176	LBD	EET EDI	04/02/24 11:07
Dissolved	Prep	3010A			967178	LBD	EET EDI	04/02/24 11:11
Dissolved	Analysis	6020B		1	967199	LBD	EET EDI	04/02/24 13:29
Total Recoverable	Prep	3005A			486916	UAMX	ELLE	03/25/24 21:00
Total Recoverable	Analysis	6020B		1	487428	UCIG	ELLE	03/26/24 19:16
Total Recoverable	Prep	3005A			829812	RR	EET SAV	03/27/24 05:41
Total Recoverable	Analysis	6020B		1	830045	BWR	EET SAV	03/27/24 18:07
Total/NA	Prep	3010A			966728	GAE	EET EDI	03/29/24 18:55
Total/NA	Analysis	6020B		1	966842	DLE	EET EDI	03/30/24 17:29
Dissolved	Filtration	Filtration			463934	SJM	EET PIT	03/29/24 07:43
Dissolved	Prep	3010A			463986	NWW	EET PIT	04/02/24 06:30
Dissolved	Analysis	EPA 6020B		1	464385	MRG	EET PIT	04/03/24 14:41
Total/NA	Prep	3010A			463986	NWW	EET PIT	04/02/24 06:30
Total/NA	Analysis	EPA 6020B		1	464385	MRG	EET PIT	04/03/24 13:42
Total/NA	Analysis	120.1		1	967226	MMC	EET EDI	04/02/24 17:21
Total/NA	Analysis	2310B-2011		1	967442	RAK	EET EDI	04/03/24 14:52
Total/NA	Analysis	2320B-2011		1	966793	RXA	EET EDI	03/29/24 17:14
Total/NA	Analysis	2540C-2015		1	966201	HTV	EET EDI	03/27/24 14:00
Total/NA	Analysis	2540D-2015		1	966409	PXP	EET EDI	03/28/24 11:53
Dissolved	Filtration	FILTRATION			967149	AXP	EET EDI	04/02/24 08:36
Dissolved	Analysis	350.1		1	967166	AXP	EET EDI	04/02/24 09:16
Total/NA	Analysis	350.1		1	967166	AXP	EET EDI	04/02/24 09:10
Total/NA	Prep	351.2			488646	NLE3	ELLE	03/29/24 12:40 - 03/29/24 15:40 [1]
Total/NA	Analysis	351.2		1	489645	JCG7	ELLE	04/01/24 12:18
Total/NA	Analysis	410.4		1	965689	HTV	EET EDI	03/24/24 16:45
Total/NA	Analysis	4500 O C-2016		1	965502	PLS	EET EDI	03/22/24 13:39
Total/NA	Analysis	5210 B-2016		1	965473	PXP	EET EDI	03/22/24 12:00
Total/NA	Analysis	9040C		1	966813	RXA	EET EDI	03/30/24 12:33
Total/NA	Analysis	9060A		1	967659	MMC	EET EDI	04/04/24 01:59
Dissolved	Prep	SM 4500 P B			968157	HTV	EET EDI	04/06/24 10:30
Dissolved	Filtration	FILTRATION			968154	HTV	EET EDI	04/06/24 14:00
Dissolved	Analysis	SM4500 P E-2011		1	968159	HTV	EET EDI	04/06/24 16:00
Total/NA	Prep	SM 4500 P B			968157	HTV	EET EDI	04/06/24 10:30
Total/NA	Analysis	SM4500 P E-2011		1	968159	HTV	EET EDI	04/06/24 16:00
Total/NA	Analysis	Total Nitrogen		1	966946	TJW	EET EDI	04/02/24 18:50

Lab Chronicle

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill - Anti-Degradation

Job ID: 460-300489-1

Client Sample ID: Upstream

Date Collected: 03/21/24 09:20
Date Received: 03/21/24 19:00

Lab Sample ID: 460-300489-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		1	965512	OXG	EET EDI	03/22/24 19:09
Total/NA	Analysis	300.0		1	965513	OXG	EET EDI	03/22/24 19:09
Total/NA	Prep	245.1			705005	ESB	EET BUF	03/26/24 09:19
Total/NA	Analysis	245.1		1	705097	ESB	EET BUF	03/26/24 14:04
Dissolved	Filtration	Filtration			487916	UAMX	ELLE	03/28/24 00:32
Dissolved	Prep	3005A			489443	NU9R	ELLE	04/02/24 09:40
Dissolved	Analysis	6020B		1	490446	UCIG	ELLE	04/03/24 16:59
Dissolved	Filtration	FILTRATION			967176	LBD	EET EDI	04/02/24 11:07
Dissolved	Prep	3010A			967178	LBD	EET EDI	04/02/24 11:11
Dissolved	Analysis	6020B		1	967199	LBD	EET EDI	04/02/24 13:32
Total Recoverable	Prep	3005A			486916	UAMX	ELLE	03/25/24 21:00
Total Recoverable	Analysis	6020B		1	487428	UCIG	ELLE	03/26/24 19:20
Total Recoverable	Prep	3005A			829812	RR	EET SAV	03/27/24 05:41
Total Recoverable	Analysis	6020B		1	830045	BWR	EET SAV	03/27/24 18:03
Total/NA	Prep	3010A			966728	GAE	EET EDI	03/29/24 18:55
Total/NA	Analysis	6020B		1	966842	DLE	EET EDI	03/30/24 17:31
Dissolved	Filtration	Filtration			463934	SJM	EET PIT	03/29/24 07:43
Dissolved	Prep	3010A			463986	NWW	EET PIT	04/02/24 06:30
Dissolved	Analysis	EPA 6020B		1	464385	MRG	EET PIT	04/03/24 14:44
Total/NA	Prep	3010A			463986	NWW	EET PIT	04/02/24 06:30
Total/NA	Analysis	EPA 6020B		1	464385	MRG	EET PIT	04/03/24 13:59
Total/NA	Analysis	120.1		1	967226	MMC	EET EDI	04/02/24 17:21
Total/NA	Analysis	2310B-2011		1	967442	RAK	EET EDI	04/03/24 14:52
Total/NA	Analysis	2320B-2011		1	966793	RXA	EET EDI	03/29/24 17:20
Total/NA	Analysis	2540C-2015		1	966201	HTV	EET EDI	03/27/24 14:00
Total/NA	Analysis	2540D-2015		1	966409	PXP	EET EDI	03/28/24 11:53
Dissolved	Filtration	FILTRATION			967149	AXP	EET EDI	04/02/24 08:36
Dissolved	Analysis	350.1		1	967166	AXP	EET EDI	04/02/24 09:17
Total/NA	Analysis	350.1		1	967166	AXP	EET EDI	04/02/24 09:11
Total/NA	Prep	351.2			488646	NLE3	ELLE	03/29/24 12:40 - 03/29/24 15:40 [1]
Total/NA	Analysis	351.2		1	489645	JCG7	ELLE	04/01/24 12:20
Total/NA	Analysis	410.4		1	965689	HTV	EET EDI	03/24/24 16:45
Total/NA	Analysis	4500 O C-2016		1	965502	PLS	EET EDI	03/22/24 13:42
Total/NA	Analysis	5210 B-2016		1	965473	PXP	EET EDI	03/22/24 12:15
Total/NA	Analysis	9040C		1	966813	RXA	EET EDI	03/30/24 12:38
Total/NA	Analysis	9060A		1	967659	MMC	EET EDI	04/04/24 02:24
Dissolved	Prep	SM 4500 P B			968157	HTV	EET EDI	04/06/24 10:30
Dissolved	Filtration	FILTRATION			968154	HTV	EET EDI	04/06/24 14:00
Dissolved	Analysis	SM4500 P E-2011		1	968159	HTV	EET EDI	04/06/24 16:00
Total/NA	Prep	SM 4500 P B			968157	HTV	EET EDI	04/06/24 10:30
Total/NA	Analysis	SM4500 P E-2011		1	968159	HTV	EET EDI	04/06/24 16:00
Total/NA	Analysis	Total Nitrogen		1	966946	TJW	EET EDI	04/02/24 18:50

Lab Chronicle

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill - Anti-Degradation

Job ID: 460-300489-1

Client Sample ID: Clarifying Pond

Date Collected: 03/21/24 10:00
Date Received: 03/21/24 19:00

Lab Sample ID: 460-300489-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		1	965512	OXG	EET EDI	03/22/24 19:24
Total/NA	Analysis	300.0		1	965513	OXG	EET EDI	03/22/24 19:24
Total/NA	Prep	245.1			705005	ESB	EET BUF	03/26/24 09:19
Total/NA	Analysis	245.1		1	705097	ESB	EET BUF	03/26/24 14:05
Dissolved	Filtration	Filtration			487916	UAMX	ELLE	03/28/24 00:32
Dissolved	Prep	3005A			489443	NU9R	ELLE	04/02/24 09:40
Dissolved	Analysis	6020B		1	490446	UCIG	ELLE	04/03/24 16:36
Dissolved	Filtration	FILTRATION			967176	LBD	EET EDI	04/02/24 11:07
Dissolved	Prep	3010A			967178	LBD	EET EDI	04/02/24 11:16
Dissolved	Analysis	6020B		1	967199	LBD	EET EDI	04/02/24 13:34
Total Recoverable	Prep	3005A			486916	UAMX	ELLE	03/25/24 21:00
Total Recoverable	Analysis	6020B		1	487428	UCIG	ELLE	03/26/24 19:18
Total Recoverable	Prep	3005A			829812	RR	EET SAV	03/27/24 05:41
Total Recoverable	Analysis	6020B		1	830045	BWR	EET SAV	03/27/24 18:11
Total/NA	Prep	3010A			966728	GAE	EET EDI	03/29/24 18:55
Total/NA	Analysis	6020B		1	966842	DLE	EET EDI	03/30/24 17:34
Dissolved	Filtration	Filtration			463934	SJM	EET PIT	03/29/24 07:43
Dissolved	Prep	3010A			463986	NWW	EET PIT	04/02/24 06:30
Dissolved	Analysis	EPA 6020B		1	464385	MRG	EET PIT	04/03/24 14:46
Total/NA	Prep	3010A			463986	NWW	EET PIT	04/02/24 06:30
Total/NA	Analysis	EPA 6020B		1	464385	MRG	EET PIT	04/03/24 13:56
Total/NA	Analysis	120.1		1	967226	MMC	EET EDI	04/02/24 17:21
Total/NA	Analysis	2310B-2011		1	967442	RAK	EET EDI	04/03/24 14:54
Total/NA	Analysis	2320B-2011		1	966793	RXA	EET EDI	03/29/24 17:26
Total/NA	Analysis	2540C-2015		1	966201	HTV	EET EDI	03/27/24 14:00
Total/NA	Analysis	2540D-2015		1	966409	PXP	EET EDI	03/28/24 11:53
Dissolved	Filtration	FILTRATION			967149	AXP	EET EDI	04/02/24 08:36
Dissolved	Analysis	350.1		1	967166	AXP	EET EDI	04/02/24 09:19
Total/NA	Analysis	350.1		1	967166	AXP	EET EDI	04/02/24 09:13
Total/NA	Prep	351.2			488646	NLE3	ELLE	03/29/24 12:40 - 03/29/24 15:40 [1]
Total/NA	Analysis	351.2		1	489645	JCG7	ELLE	04/01/24 12:25
Total/NA	Analysis	410.4		1	965689	HTV	EET EDI	03/24/24 16:45
Total/NA	Analysis	4500 O C-2016		1	965502	PLS	EET EDI	03/22/24 13:45
Total/NA	Analysis	5210 B-2016		1	965473	PXP	EET EDI	03/22/24 12:30
Total/NA	Analysis	9040C		1	966664	RXA	EET EDI	03/29/24 11:03
Total/NA	Analysis	9060A		1	967659	MMC	EET EDI	04/03/24 23:51
Dissolved	Prep	SM 4500 P B			968157	HTV	EET EDI	04/06/24 10:30
Dissolved	Filtration	FILTRATION			968154	HTV	EET EDI	04/06/24 14:00
Dissolved	Analysis	SM4500 P E-2011		1	968159	HTV	EET EDI	04/06/24 16:00
Total/NA	Prep	SM 4500 P B			968157	HTV	EET EDI	04/06/24 10:30
Total/NA	Analysis	SM4500 P E-2011		1	968159	HTV	EET EDI	04/06/24 16:00
Total/NA	Analysis	Total Nitrogen		1	966946	TJW	EET EDI	04/02/24 18:50

[1] This procedure uses a method stipulated length of time for the process. Both start and end times are displayed.

Lab Chronicle

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill - Anti-Degradation

Job ID: 460-300489-1

Laboratory References:

EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

EET EDI = Eurofins Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

EET PIT = Eurofins Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

EET SAV = Eurofins Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Microbac = Marietta, OH, 158 Starlite Drive, Marietta, OH 45750

Accreditation/Certification Summary

Client: Heidelberg Materials Northeast LLC
Job ID: 460-300489-1
Project/Site: Rock Hill - Anti-Degradation

Laboratory: Eurofins Edison

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Connecticut	State	PH-0818	09-30-24
DE Haz. Subst. Cleanup Act (HSCA)	State	N/A	01-02-25
Georgia	State	12028 (NJ)	06-30-24
Massachusetts	State	M-NJ312	06-30-24
New Jersey	NELAP	12028	06-30-24
New York	NELAP	11452	04-01-25
Pennsylvania	NELAP	68-00522	02-28-25
Rhode Island	State	LAO00376	12-31-24
USDA	US Federal Programs	P330-20-00244	05-31-24

Laboratory: Eurofins Buffalo

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Arkansas DEQ	State	88-0686	07-06-23 *
Connecticut	State	PH-0807	03-31-24
Florida	NELAP	E87672	06-30-23 *
Georgia	State	10026 (NY)	03-31-24
Georgia	State Program	N/A	03-31-09 *
Illinois	NELAP	200003	09-30-24
Iowa	State	374	03-01-25
Iowa	State Program	374	03-01-09 *
Kansas	NELAP	E-10187	02-01-25
Kentucky (UST)	State	108092	04-01-24
Kentucky (WW)	State	KY90029	12-31-24
Louisiana	NELAP	02031	06-30-23 *
Louisiana (All)	NELAP	02031	06-30-23 *
Maine	State	NY00044	12-04-24
Maryland	State	294	06-30-24
Massachusetts	State	M-NY044	07-01-24
Michigan	State	9937	04-01-24
Michigan	State Program	9937	04-01-09 *
New Hampshire	NELAP	2973	09-11-19 *
New Hampshire	NELAP	2337	11-17-24
New Jersey	NELAP	NY455	06-30-24
New York	NELAP	10026	03-31-24
Pennsylvania	NELAP	68-00281	08-31-24
Rhode Island	State	LAO00378	12-30-24
Texas	NELAP	T104704412-18-10	07-31-23 *
Virginia	NELAP	460185	09-14-24
Washington	State	C784	02-10-25
Wisconsin	State	998310390	08-31-24

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
A2LA	Dept. of Defense ELAP	0001.01	11-30-24
A2LA	ISO/IEC 17025	0001.01	11-30-24
Alabama	State	43200	01-31-25
Alaska	State	PA00009	06-30-24

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Accreditation/Certification Summary

Client: Heidelberg Materials Northeast LLC
Job ID: 460-300489-1
Project/Site: Rock Hill - Anti-Degradation

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC (Continued)

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alaska (UST)	State	17-027	02-28-25
Arizona	State	AZ0780	03-12-25
Arkansas DEQ	State	88-00660	08-09-24
California	State	2792	11-30-24
Colorado	State	PA00009	06-30-24
Connecticut	State	PH-0746	06-30-25
DE Haz. Subst. Cleanup Act (HSCA)	State	019-006 (PA cert)	01-31-25
Delaware (DW)	State	N/A	01-31-25
Florida	NELAP	E87997	06-30-25
Georgia (DW)	State	C048	01-31-25
Hawaii	State	N/A	01-31-25
Illinois	NELAP	200027	01-31-25
Iowa	State	361	03-01-24 *
Kansas	NELAP	E-10151	10-31-24
Kentucky (DW)	State	KY90088	12-31-24
Kentucky (UST)	State	0001.01	11-30-24
Kentucky (WW)	State	KY90088	12-31-23 *
Louisiana (All)	NELAP	02055	06-30-24
Maine	State	2019012	03-12-25
Maryland	State	100	06-30-24
Massachusetts	State	M-PA009	06-30-24
Michigan	State	9930	01-31-25
Minnesota	NELAP	042-999-487	12-31-24
Mississippi	State	023	01-31-25
Missouri	State	450	01-31-25
Montana (DW)	State	0098	01-01-25
Nebraska	State	NE-OS-32-17	01-31-25
New Hampshire	NELAP	2730	01-10-25
New Jersey	NELAP	PA011	06-30-24
New York	NELAP	10670	04-01-25
North Carolina (DW)	State	42705	07-31-24
North Carolina (WW/SW)	State	521	12-31-24
Oklahoma	NELAP	9804	08-31-24
Oregon	NELAP	PA200001	09-11-24
Pennsylvania	NELAP	36-00037	01-31-25
Quebec Ministry of Environment and Fight against Climate Change	PALA	507	09-16-24
Rhode Island	State	LAO00338	12-30-24
South Carolina	State	89002	01-31-24 *
Tennessee	State	02838	01-31-25
Texas	NELAP	T104704194-23-46	08-31-24
USDA	US Federal Programs	525-22-298-19481	10-25-25
Vermont	State	VT - 36037	10-28-24
Virginia	NELAP	460182	06-14-25
Washington	State	C457	04-11-24
West Virginia (DW)	State	9906 C	01-31-25
West Virginia DEP	State	055	07-31-24
Wyoming	State	8TMS-L	01-31-25
Wyoming (UST)	A2LA	0001.01	11-30-24

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Accreditation/Certification Summary

Client: Heidelberg Materials Northeast LLC
Job ID: 460-300489-1
Project/Site: Rock Hill - Anti-Degradation

Laboratory: Eurofins Pittsburgh

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Arkansas DEQ	State	19-033-0	06-27-24
California	State	2891	04-30-24
Connecticut	State	PH-0688	09-30-24
Florida	NELAP	E871008	06-30-24
Georgia	State	PA 02-00416	04-30-25
Illinois	NELAP	004375	06-30-24
Kansas	NELAP	E-10350	01-31-25
Kentucky (UST)	State	162013	04-30-23 *
Kentucky (WW)	State	KY98043	12-31-24
Louisiana	NELAP	04041	06-30-22 *
Louisiana (All)	NELAP	04041	06-30-24
Maine	State	PA00164	03-06-26
Minnesota	NELAP	042-999-482	12-31-24
New Hampshire	NELAP	2030	04-04-24
New Jersey	NELAP	PA005	06-30-24
New York	NELAP	11182	04-01-25
North Carolina (WW/SW)	State	434	12-31-24
North Dakota	State	R-227	04-30-24
Oregon	NELAP	PA-2151	02-06-25
Pennsylvania	NELAP	02-00416	04-30-25
Rhode Island	State	LAO00362	12-31-22 *
South Carolina	State	89014	04-30-25
Texas	NELAP	T104704528	03-31-24 *
US Fish & Wildlife	US Federal Programs	058448	03-31-24 *
USDA	US Federal Programs	P330-16-00211	04-11-26
Utah	NELAP	PA001462019-8	05-31-24
Virginia	NELAP	10043	07-14-24
West Virginia DEP	State	142	01-31-25
Wisconsin	State	998027800	08-31-24

Laboratory: Eurofins Savannah

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
	AFCEE	SAVLAB	
Alabama	State	41450	06-30-24
ANAB	Dept. of Defense ELAP	L2463	09-22-24
Arkansas (DW)	State	GA00006	06-30-24
California	State	2939	06-30-24
Florida	NELAP	E87052	06-30-24
Georgia	State	E87052	06-30-24
Georgia (DW)	State	803	06-30-24
Guam	State	19-007R	04-17-24
Hawaii	State	<cert No.>	06-30-24
Illinois	NELAP	200022	11-30-24
Indiana	State	C-GA-02	06-30-24
Iowa	State	353	07-01-25
Kentucky (UST)	State	NA	06-30-24
Louisiana	NELAP	30690	06-30-24
Louisiana (All)	NELAP	30690	06-30-24

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Eurofins Edison

Accreditation/Certification Summary

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill - Anti-Degradation

Job ID: 460-300489-1

Laboratory: Eurofins Savannah (Continued)

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Louisiana (DW)	State	LA009	12-31-24
Maine	State	GA00006	09-25-24
Maryland	State	250	12-31-24
Massachusetts	State	M-GA006	06-30-24
Michigan	State	9925	06-30-24
Mississippi	State	<cert No.>	06-30-24
Nebraska	State	NE-OS-7-04	06-30-24
New Jersey	NELAP	GA769	06-30-24
New Mexico	State	GA00006	06-30-24
North Carolina (DW)	State	13701	07-31-24
North Carolina (WW/SW)	State	269	12-31-24
Pennsylvania	NELAP	68-00474	06-30-24
Puerto Rico	State	GA00006	01-01-25
South Carolina	State	98001	06-30-24
Tennessee	State	TN02961	06-30-24
Texas	NELAP	T1047004185	11-30-24
Texas	TCEQ Water Supply	T104704185	06-30-24
USDA	US Federal Programs	P330-18-00313	09-03-24
Virginia	NELAP	460161	06-14-24
Wyoming	State	8TMS-L	06-30-24

Method Summary

Client: Heidelberg Materials Northeast LLC
Job ID: 460-300489-1
Project/Site: Rock Hill - Anti-Degradation

Method	Method Description	Protocol	Laboratory
300.0	Anions, Ion Chromatography	EPA	EET EDI
245.1	Mercury (CVAA)	EPA	EET BUF
6020B	Metals (ICP/MS)	SW846	EET EDI
6020B	Metals (ICP/MS)	SW846	EET SAV
6020B	Metals (ICP/MS)	SW846	ELLE
EPA 6020B	Metals (ICP/MS)	SW846	EET PIT
120.1	Conductivity, Specific Conductance	EPA	EET EDI
2310B-2011	Acidity	SM	EET EDI
2320B-2011	Alkalinity, Total	SM	EET EDI
2540C-2015	Total Dissolved Solids (Dried at 180 °C)	SM	EET EDI
2540D-2015	Total Suspended Solids (Dried at 103-105°C)	SM	EET EDI
350.1	Nitrogen, Ammonia	EPA	EET EDI
351.2	Nitrogen, Total Kjeldahl	EPA	ELLE
410.4	COD	EPA	EET EDI
4500 O C-2016	Oxygen, Dissolved	SM	EET EDI
5210 B-2016	BOD, 5-Day	SM	EET EDI
9040C	pH	SW846	EET EDI
9060A	Organic Carbon, Total (TOC)	SW846	EET EDI
SM4500 P E-2011	Phosphorus	SM	EET EDI
Total Nitrogen	Nitrogen, Total	EPA	EET EDI
Subcontract	Osomotic Pressure	None	Microbac
245.1	Preparation, Mercury	EPA	EET BUF
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	EET SAV
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	ELLE
3010A	Preparation, Total Metals	SW846	EET EDI
3010A	Preparation, Total Metals	SW846	EET PIT
351.2	Nitrogen, Total Kjeldahl	EPA	ELLE
FILTRATION	Sample Filtration	None	EET EDI
Filtration	Sample Filtration	None	EET PIT
Filtration	Sample Filtration	None	ELLE
SM 4500 P B	Phosphorous, Total and Ortho	SM	EET EDI

Protocol References:

EPA = US Environmental Protection Agency

None = None

SM = "Standard Methods For The Examination Of Water And Wastewater"

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

EET EDI = Eurofins Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

EET PIT = Eurofins Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

EET SAV = Eurofins Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Microbac = Marietta, OH, 158 Starlite Drive, Marietta, OH 45750

Sample Summary

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill - Anti-Degradation

Job ID: 460-300489-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
460-300489-1	NPDES 001	Water	03/21/24 08:40	03/21/24 19:00
460-300489-2	Upstream	Water	03/21/24 09:20	03/21/24 19:00
460-300489-3	Clarifying Pond	Water	03/21/24 10:00	03/21/24 19:00

Microbac Laboratories Inc., - Marietta, OH

Client Project ID:

46011424

For:

Julie Gilmore

Eurofins Environment Testing Northeast, LLC

777 New Durham RD

Edison, NJ 08817

Project State of Origin: Pennsylvania

Project Requested Certification:

Microbac Laboratories Inc., - Marietta, OH	68-01670	PA Department of Environmental Protection

All test results meet the requirements of the QAPP and other applicable contract terms and conditions. Any exceptions are attached to this cover page or addressed in the method narratives presented in the report. All results for soil samples are reported on a 'dry-weight' basis unless specified otherwise. Analytical results for water and wastes are reported on a 'as received' basis unless specified otherwise. A statement of uncertainty for each analysis is available upon request. The reported results are related only to the samples analyzed as received. This laboratory report may be released as a hardcopy and in computer-readable form submitted electronically or on diskette. This laboratory report shall not be reproduced, except in full, without the written approval of Microbac Laboratories, Inc.

Laboratory Project Manager:

Michelle Taylor

Project Manager

Michelle.Taylor@microbac.com

Authorized By:

Michelle Taylor

Project Manager

Issued: 03/27/2024

MICROBAC®

Laboratory Report Number: M4C1762

Client Project ID: 46011424

Cooler Receipt Log

Cooler ID: Default Cooler Temp: 1.1°C

Cooler Inspection Checklist

Ice Present or not required?	Yes
Shipping containers sealed or not required?	Yes
Custody seals intact or not required?	Yes
Chain of Custody (COC) Present?	Yes
COC includes customer information?	Yes
Relinquished and received signature on COC?	Yes
Sample collector identified on COC?	Yes
Sample type identified on COC?	Yes
Correct type of Containers Received	No
Correct number of containers listed on COC?	Yes
Containers Intact?	Yes
COC includes requested analyses?	Yes
Enough sample volume for indicated tests received?	Yes
Sample labels match COC (Name, Date & Time?)	Yes
Samples arrived within hold time?	Yes
Correct preservatives on COC or not required?	Yes
Chemical preservations checked or not required?	Yes
Preservation checks meet method requirements?	Yes
VOA vials have zero headspace, or not recd.?	Yes

Case Narrative

OP received in 250 poly

Laboratory Report Number: M4C1762

Client Project ID: 46011424

Sample Notes

PADEP 391-2000-008

A4 **Sample was received with head space.**

Osmotic Pressure

M4C1762-01	NPDES 001 (460-300489-1)	M4C1762-02	Upstream (460-300489-2)
M4C1762-03	Clarifying Pond (460-300489-3)		

A8 **Sample was received in an improper container.**

Osmotic Pressure

M4C1762-01	NPDES 001 (460-300489-1)	M4C1762-02	Upstream (460-300489-2)
M4C1762-03	Clarifying Pond (460-300489-3)		

MICROBAC®

Laboratory Report Number: M4C1762

Client Project ID: 46011424

Microbac Laboratories Inc., - Marietta, OH

CERTIFICATE OF ANALYSIS

Client ID:	NPDES 001 (460-300489-1)			**Collection Date:**	03/21/2024 08:40
Laboratory ID:	M4C1762-01			**Prep Date:**	03/26/2024 14:32
Matrix:	Aqueous			**Analyzed:**	03/26/2024 15:39
Batch / Sequence:	B4C1490 /	**Analytical Method:**	PADEP 391-2000-008	**Calibration:**	NA
Instrument:	OSMOMETER 5004	**Units:**	mOsm/kg	**File ID:**	OsmoticPressure_B4C1490_240326023528.xls
Analyst:	TTB	**Dilution:**	1		

Analyte	CAS Number	Result	MDL	RL	Flag	Qualifier
Osmotic Pressure		8.00	6.00	10.0		A4, A8

MICROBAC®

Laboratory Report Number: M4C1762

Client Project ID: 46011424

Microbac Laboratories Inc., - Marietta, OH

CERTIFICATE OF ANALYSIS

Client ID:	Upstream (460-300489-2)			**Collection Date:**	03/21/2024 09:20
Laboratory ID:	M4C1762-02			**Prep Date:**	03/26/2024 14:32
Matrix:	Aqueous			**Analyzed:**	03/26/2024 15:39
Batch / Sequence:	B4C1490 /	**Analytical Method:**	PADEP 391-2000-008	**Calibration:**	NA
Instrument:	OSMOMETER 5004	**Units:**	mOsm/kg	**File ID:**	OsmoticPressure_B4C1490_240326023528.xls
Analyst:	TTB	**Dilution:**	1		

Analyte	CAS Number	Result	MDL	RL	Flag	Qualifier
Osmotic Pressure		**11.0**	6.00	10.0		A4, A8

MICROBAC®

Laboratory Report Number: M4C1762

Client Project ID: 46011424

Microbac Laboratories Inc., - Marietta, OH

CERTIFICATE OF ANALYSIS

Client ID:	Clarifying Pond (460-300489-3)			**Collection Date:**	03/21/2024 10:00
Laboratory ID:	M4C1762-03			**Prep Date:**	03/26/2024 14:32
Matrix:	Aqueous			**Analyzed:**	03/26/2024 15:39
Batch / Sequence:	B4C1490 /	**Analytical Method:**	PADEP 391-2000-008	**Calibration:**	NA
Instrument:	OSMOMETER 5004	**Units:**	mOsm/kg	**File ID:**	OsmoticPressure_B4C1490_240326023528.xls
Analyst:	TTB	**Dilution:**	1		

Analyte	CAS Number	Result	MDL	RL	Flag	Qualifier
Osmotic Pressure		**10.0**	6.00	10.0		A4, A8

Laboratory Report Number: M4C1762

Client Project ID: 46011424

Notes and Definitions

A4: Sample was received with head space.
A8: Sample was received in an improper container.
MDL: Method Detection Limit
RL: Reporting Limit

MICROBAC®

Laboratory Report Number: M4C1762

Client Project ID: 46011424

METHOD BLANKS

Sample ID:	B4C1490-BLK1	**Prep Date:**	03/26/24 14:32	**Matrix:**	Aqueous
Instrument:	OSMOMETER 5004	**Analyzed:**	03/26/24 15:39	**Method:**	PADEP 391-2000-008
File ID:	OsmoticPressure_B4C	**Sequence:**		**Analyst:**	TTB
Batch:	B4C1490	**Units:**	mOsm/kg	**Calibration:**	

Analyte	Result	MDL	RL	Dilution	Flag	Q
Osmotic Pressure	6.00	6.00	10.0	1	U	

* - Detected in the associated method Blank at a concentration >= RL

Laboratory Report Number: M4C1762

Client Project ID: 46011424

BLANK SPIKE / DUPLICATE (BS/BSD)

Method:	PADEP 391-2000-008		**Blank Spike**	**Duplicate**
Batch:	B4C1490	**Spike ID:**	B4C1490-BS1	B4C1490-BSD1
Analyst:	TTB	**Prepared:**	03/26/24 14:32	03/26/24 14:32
Matrix:	Aqueous	**Analyzed:**	03/26/24 15:39	03/26/24 15:39
Units:	mOsm/kg	**File ID:**	OsmoticPressure_B4C1490_2403	OsmoticPressure_B4C1490_2403
Instrument:	OSMOMETER 5004	**Initial/Final:**	1mL/1mL	1mL/1mL
Calibration:				

Analyte	BS Spiked	BS Found	BS %Rec	BSD Spiked	BSD Found	BSD %Rec	%RPD	%Rec Limts	RPD Limit	Q
Osmotic Pressure	290	304	105	290	305	105	0.328	90 - 110	20	

* - Does not meet %Rec acceptance criteria.
- Does not meet RPD acceptance criteria.

Eurofins Edison
777 New Durham Road
Edison, NJ 08817
Phone: 732-549-3900 Fax: 732-549-3679

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Gilmore, Julie L	Carrier Tracking No(s):	COC No: 460-70771.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Julie.Gilmore@et.eurofinsus.com	State of Origin: Pennsylvania	Page: Page 1 of 1
Company: Microbac Laboratories, Inc.		Accreditations Required (See note): NELAP - Pennsylvania		Job #: 460-300489-1
Address: 158 Starlite Drive, ,	Due Date Requested: 4/2/2024			
City: Marietta	TAT Requested (days):			
State, Zip: OH, 45750				
Phone: 800-373-4071(Tel)	PO #:			
Email:	WO #:			
Project Name: Rock Hill - Anti-Degradation	Project #: 46011424			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL
B - NaOH
C - Zn Acetate
D - Nitric Acid
E - NaHSO4
F - MeOH
G - Amchlor
H - Ascorbic Acid
I - Ice
J - DI Water
K - EDTA
L - EDA
M - Hexane
N - None
O - AsNaO2
P - Na2O4S
Q - Na2SO3
R - Na2S2O3
S - H2SO4
T - TSP Dodecahydrate
U - Acetone
V - MCAA
W - pH 4-5
Y - Trizma
Z - other (specify)
Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	SUB (Osmotic Pressure); Osmotic Pressure	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
NPDES 001 (460-300489-1)	3/21/24	08:40 Eastern		Water			X	1	
Upstream (460-300489-2)	3/21/24	09:20 Eastern		Water			X	1	
Clarifying Pond (460-300489-3)	3/21/24	10:00 Eastern		Water			X	1	

M 4 C 1 7 6 2
Eurofins Environment Testing Northeast, LLC
Rec'd: 03/26/2024 12:00
By: Stephanie Murphy Temp: 1.1 (Signature)

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Northeast, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Northeast, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Northeast, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Northeast, LLC.

Possible Hazard Identification	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* ____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 1	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time: 3/25/24 1800	Company: EEE	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by: Stephanie Murphy	Date/Time: 3/26/24 1200	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 06/08/2021

MICROBAC®

Work Order # MUC1762

COOLER TEMP >6° C LOG

SAMPLE ID	Bottle 1 °C	Bottle 2 °C	Bottle 3 °C	Bottle 4 °C	Bottle 5 °C	Bottle 6 °C

3/26/2024 SM

pH Lot # 41321337

pH Exceptions

SAMPLE ID	Bottle 1	Bottle 2	Bottle 3	Bottle 4	Bottle 5	Bottle 6

3/26/2024 SM

PRESERVATIVE EXCEPTIONS

✓ NONE

AS NOTED

3/26/2024 SM

Document Control # 1957
Last 04-10-2019

Issued to: Document Master File

Eurofins Edison
777 New Durham Road
Edison, NJ 08817
Phone: 732-549-3900 Fax: 732-549-3679

Chain of Custody Record

eurofins

24 - 29 1 of 2

Client Information	Sampler: Craig Snkler	Lab PM: Gilmore, Julie L	Carrier Tracking No(s):	COC No: 460-178636-115848.1
Client Contact: Andrew Gutshall	Phone: 215-766-1211	E-Mail: Julie.Gilmore@et.eurofinsus.com	State of Origin: PA	Page: Page 1 of 2
Company: Heidelberg Materials Northeast LLC	PWSID:			Job #: 300489
Address: 7660 Imperial Way	Due Date Requested:			
City: Allentown	TAT Requested (days): 10			
State, Zip: PA, 18195	Compliance Project: Δ Yes Δ No			
Phone:	PO #: Purchase Order not required			
Email: andrew.gutshall@heidelbergmaterials.com	WO #:			
Project Name: Rock Hill Anti-Degradation	Project #: 46011424			
Site: Rock Hill	SSOW#:			

Analysis Requested

Preservation Codes:
A HCL, B NaOH, C Zn Acetate, D Nitric Acid, E NaHSO4, F MeOH, G Amchlor, H Ascorbic Acid, I Ice, J DI Water, K EDTA, L EDA, M Hexane, N None, O AsNaO2, P Na2O4S, Q Na2SO3, R Na2S2O3, S H2SO4, T TSP Dodecahydrate, U Acetone, V MCAA, W pH 4-5, Y Trizma, Z other (specify)
Other

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020B (MOD) Single Element 6020B Metals List	6020B (MOD) Single Element 6020B Metals List	351.2 Local Method	Dissolved Cd/Fe/Zn	6020B (MOD) Total Fe	350.1 410.4, 4500_P_E	120.1 9040C, SM2310B	350.1 4500_P_E, 6020B	2320B (MOD) Alkalinity	6020B (MOD) Total Custom Metals	9060A TOC	2540D, SM5210B_Calc	2540C TDS	Total Number of containers	Special Instructions/Note:
				Preservation Code:			N	D	S	N	D	S	N	N	N	D	S	N	N		
NPDES 001	3/21/24	0840	G	Water			1	1	1	1	1	1	2	1	1	1	1	2	1		1
Basin 1	—	—	—	Water																	—
Basin 2	—	—	—	Water																	—
Upstream	3/21/24	0920	G	Water			1	1	1	1	1	1	2	1	1	1	1	2	1		2
Clarifying Pond	3/21/24	1000	G	Water			1	1	1	1	1	1	2	1	1	1	1	2	1		3

460-300489 Chain of Custody

SHO HO T

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I II III IV Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	Craig Snkler	3/21/24 / 1130	EARTHRES		3/21/24 1130	EETN-608
2		3-21-24 1930	EETN-608		3/21	ETA
3		3/21 1900	ETA	Bhavin	3/21 19:00	ETA

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks:

Ver: 06/08/2021

Eurofins Edison
777 New Durham Road
Edison, NJ 08817
Phone: 732-549-3900 Fax: 732-549-3679

Chain of Custody Record

2.4 - 2.9 KOP 2

eurofins

Client Information	Sampler: Craig Sinkler	Lab PM: Gilmore, Julie L	Carrier Tracking No(s):	COC No: 460-178636-115848.2
Client Contact: Andrew Gutshall	Phone: 215-766-1211	E-Mail: Julie.Gilmore@et.eurofinsus.com	State of Origin: PA	Page: Page 2 of 2
Company: Heidelberg Materials Northeast LLC	PWSID:			Job #: 300489
Address: 7660 Imperial Way	Due Date Requested:			
City: Allentown	TAT Requested (days): 10			
State, Zip: PA, 18195	Compliance Project: Δ Yes Δ No			
Phone:	PO #: Purchase Order not required			
Email: andrew.gutshall@heidelbergmaterials.com	WO #:			
Project Name: Rock Hill Anti-Degradation	Project #: 46011424			
Site: Rock Hill	SSOW#:			

Analysis Requested

Preservation Codes:

A HCL, B NaOH, C Zn Acetate, D Nitric Acid, E NaHSO4, F MeOH, G Amchlor, H Ascorbic Acid, I Ice, J DI Water, K EDTA, L EDA, M Hexane, N None, O AsNaO2, P Na2O4S, Q Na2SO3, R Na2S2O3, S H2SO4, T TSP Dodecahydrate, U Acetone, V MCAA, W pH 4-5, Y Trizma, Z other (specify)

Other

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	300_ORGFM_28D, 300_ORGFMS	245.1 Local Method	6020B Total Aluminum	Extra 250mL plastic - Organic Acid	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	D	D			
NPDES 001	3/21/24	0840	G	Water			1	1	1	1		1
Basin 1	—	—	—	Water								—
Basin 2	—	—	—	Water								—
Upstream	3/21/24	0920	G	Water			1	1	1	1		2
Clarifying Pond	3/21/24	1000	G	Water			1	1	1	1		3

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I II III IV Other (specify)

Special Instructions/QC Requirements.

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		3/21/24 / 1130	EARTHRES		3/21/24 1130	EETN-KOP
2		3-21-24 1730	EETN-KOP		3/21	ETA
3		3/24 1900	ETA		3/24 19:02	ETA

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.

Cooler Temperature(s) °C and Other Remarks:

Ver: 06/08/2021

Eurofins Edison
777 New Durham Road
Edison, NJ 08817
Phone: 732-549-3900 Fax: 732-549-3679

Chain of Custody Record

eurofins | Environment Testing

Client Information	Sampler: Craig Sinkler	Lab PM: Gilmore, Julie L	Carrier Tracking No(s):	COC No: 460-179638-115849.1
Client Contact: Andrew Gutshall	Phone: 215-766-1211	E-Mail: Julie.Gilmore@et.eurofinsus.com	State of Origin: PA	Page: Page 1 of 1
Company: Heidelberg Materials Northeast LLC	PWSID:			Job #: 300489
Address: 7660 Imperial Way	Due Date Requested:			
City: Allentown	TAT Requested (days): 10			
State, Zip: PA, 18195	Compliance Project: Δ Yes Δ No			
Phone:	PO #: Purchase Order not required			
Email: andrew.gutshall@heidelbergmaterials.com	WO #:			
Project Name: Rock Hill Anti-Degradation Diss Oxy	Project #: 46011424			
Site: Rock Hill	SSOW#:			

Analysis Requested

Preservation Codes:
A HCL, B NaOH, C Zn Acetate, D Nitric Acid, E NaHSO4, F MeOH, G Amchlor, H Ascorbic Acid, I Ice, J DI Water, K EDTA, L EDA, M Hexane, N None, O AsNaO2, P Na2O4S, Q Na2SO3, R Na2S2O3, S H2SO4, T TSP Dodecahydrate, U Acetone, V MCAA, W pH 4-5, Y Trizma, Z other (specify)
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	4500_O_C Dissolved Oxygen	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N		
NPDES 001	3/21/24	0840	G	Water			1		1
Basin 1	—	—	—	Water			—		—
Basin 2	—	—	—	Water			—		—
Upstream	3/21/24	0920	G	Water			1		2
Clarifying Pond	3/21/24	1000	G	Water			1		3

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	Craig Sinkler	3/21/24 / 1130	EARTHRES	[illegible]	3/21/24 1130	EETN-KOP
2	[illegible]	3-21-24 1730	EETN-KOP	HD	3/21	ETA
3	HD	3/21 1800	ETA	Blanto	3/21 19:00	ETA

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.	Cooler Temperature(s) °C and Other Remarks:

Ver: 06/08/2021

Eurofins TestAmerica Edison
Receipt Temperature and pH Log

Job Number: 300489

Number of Coolers: 2 IR Gun # 2

Cooler Temperatures

	RAW	CORRECTED		RAW	CORRECTED		RAW	CORRECTED
Cooler #1:	2.4 °C	2.4 °C	Cooler #4:	°C	°C	Cooler #7:	°C	°C
Cooler #2:	2.9 °C	2.9 °C	Cooler #5:	°C	°C	Cooler #8:	°C	°C
Cooler #3:	°C	°C	Cooler #6:	°C	°C	Cooler #9:	°C	°C

TALS Sample Number	Ammonia (pH<2)	COD (pH<2)	Nitrate Nitrite (pH<2)	Metals * (pH<2)	Hardness (pH<2)	Pest (pH 5-9)	EPH or QAM (pH<2)	Phenols (pH<2)	Sulfide (pH>9)	TKN (pH<2)	TOC (pH<2)	Total Cyanide (pH≥12)	Total Phos (pH<2)	Other	Other
1	<2	<2		<2						<2	<2				

If pH adjustments are required record the information below:

Sample No(s). adjusted: _____

Preservative Name/Conc.: _____ Volume of Preservative used (ml): _____

Lot # of Preservative(s): _____ Expiration Date: _____

~~The appropriate Project Manager and Department Manager should be notified about the samples which were pH adjusted.~~

~~Samples for Metal analysis which are out of compliance must be acidified at least 24 hours prior to analysis.~~

Initials: LD Date: 3/21

Eurofins Edison
777 New Durham Road
Edison, NJ 08817
Phone: 732-549-3900 Fax: 732-549-3679

Met 8EE
16CC

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler	Lab PM: Gilmore, Julie L	Carrier Tracking No(s)	COC No: 460-70779 1
Client Contact: Shipping/Receiving	Phone	E-Mail: Julie.Gilmore@et.eurofinsus.com	State of Origin: Pennsylvania	Page: Page 1 of 1
Company: Eurofins Environment Testing Northeast,		Accreditations Required (See note): NELAP - Pennsylvania		Job #: 460-300489-1
Address: 301 Alpha Drive, RIDC Park,	Due Date Requested: 4/3/2024			
City: Pittsburgh	TAT Requested (days):			
State, Zip: PA, 15238				
Phone: 412-963-7058(Tel) 412-963-2468(Fax)	PO #:			
Email	WO #:			
Project Name: Rock Hill - Anti-Degradation	Project #: 46011424			
Site	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL
B - NaOH
C - Zn Acetate
D - Nitric Acid
E - NaHSO4
F - MeOH
G - Amchlor
H - Ascorbic Acid
I - Ice
J - DI Water
K - EDTA
L - EDA
M - Hexane
N - None
O - AsNaO2
P - Na2O4S
Q - Na2SO3
R - Na2S2O3
S - H2SO4
T - TSP Dodecahydrate
U - Acetone
V - MCAA
W - pH 4-5
Y - Trizma
Z - other (specify)
Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020B/3010A Total Lithium	6020B/Filtration_ME (MOD) Dissolved Lithium	Total Number of containers	Special Instructions/Note:
			Preservation Code:							
NPDES 001 (460-300489-1)	3/21/24	08 40 Eastern		Water			X	X	2	
Upstream (460-300489-2)	3/21/24	09.20 Eastern		Water			X	X	2	
Clarifying Pond (460-300489-3)	3/21/24	10.00 Eastern		Water			X	X	2	

460-300489 Chain of Custody

Note Since laboratory accreditations are subject to change, Eurofins Environment Testing Northeast, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories This sample shipment is forwarded under chain-of-custody If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Northeast, LLC laboratory or other instructions will be provided Any changes to accreditation status should be brought to Eurofins Environment Testing Northeast, LLC attention immediately If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Northeast, LLC

Possible Hazard Identification	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)***
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested. I, II, III, IV, Other (specify) Primary Deliverable Rank: 1	Special Instructions/QC Requirements

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time	Company	Received by:	Date/Time	Company
Ken	3/26/24 1800	EE		3-27-24 0955	Eurofins
Relinquished by:	Date/Time	Company	Received by:	Date/Time	Company
Relinquished by:	Date/Time	Company	Received by:	Date/Time	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No..	Cooler Temperature(s) °C and Other Remarks

Ver: 06/08/2021

Eurofins Edison
777 New Durham Road
Edison, NJ 08817
Phone: 732-549-3900 Fax: 732-549-3679

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Gilmore, Julie L	Carrier Tracking No(s):	COC No: 460-70710.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Julie.Gilmore@et.eurofinsus.com	State of Origin: Pennsylvania	Page: Page 1 of 1
Company: Eurofins Lancaster Laboratories Environm		Accreditations Required (See note): NELAP - Pennsylvania		Job #: 460-300489-1
Address: 2425 New Holland Pike, ,	Due Date Requested: 4/4/2024			
City: Lancaster	TAT Requested (days):			
State, Zip: PA, 17601				
Phone: 717-656-2300(Tel)	PO #:			
Email:	WO #:			
Project Name: Rock Hill - Anti-Degradation	Project #: 46011424			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020B/3005A (MOD) Total Fe	6020B/Filtration_ME Dissolved Cd/Fe/Zn	351.2/351.2_Prep	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
NPDES 001 (460-300489-1)	3/21/24	08:40 Eastern		Water			X	X	X	3	
Upstream (460-300489-2)	3/21/24	09:20 Eastern		Water			X	X	X	3	
Clarifying Pond (460-300489-3)	3/21/24	10:00 Eastern		Water			X	X	X	3	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Northeast, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Northeast, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Northeast, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Northeast, LLC.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 1	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		3/22/24 1645			3/22/24 1645	
2		3/22/24 1953				
3					3/22/24 1953	

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: raw: 0.4 corr: 0.5

Ver: 06/08/2021

Eurofins Edison
777 New Durham Road
Edison, NJ 08817
Phone: 732-549-3900 Fax: 732-549-3679

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Gilmore, Julie L	Carrier Tracking No(s):	COC No: 460-70734.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Julie.Gilmore@et.eurofinsus.com	State of Origin: Pennsylvania	Page: Page 1 of 1
Company: Eurofins Environment Testing Northeast,		Accreditations Required (See note): NELAP - Pennsylvania		Job #: 460-300489-1
Address: 10 Hazelwood Drive, ,	Due Date Requested: 4/1/2024			
City: Amherst	TAT Requested (days):			
State, Zip: NY, 14228-2298				
Phone: 716-691-2600(Tel) 716-691-7991(Fax)	PO #:			
Email:	WO #:			
Project Name: Rock Hill - Anti-Degradation	Project #: 46011424			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)
Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	245.1/245.1_Prep	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
NPDES 001 (460-300489-1)	3/21/24	08:40 Eastern		Water			X	1	
Upstream (460-300489-2)	3/21/24	09:20 Eastern		Water			X	1	
Clarifying Pond (460-300489-3)	3/21/24	10:00 Eastern		Water			X	1	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Northeast, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Northeast, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Northeast, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Northeast, LLC.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 1	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:			
Relinquished by:	Date/Time: 3/22/24 1800	Company: EETE	Received by:	Date/Time: 3/23/24 1000	Company: ET VA
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 2.7 # ICE

Ver: 06/08/2021

Eurofins Edison
777 New Durham Road
Edison, NJ 08817
Phone: 732-549-3900 Fax: 732-549-3679

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Gilmore, Julie L	Carrier Tracking No(s):	COC No: 460-70770.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Julie.Gilmore@et.eurofinsus.com	State of Origin: Pennsylvania	Page: Page 1 of 1
Company: Eurofins Environment Testing Southeast,		Accreditations Required (See note): NELAP - Pennsylvania		Job #: 460-300489-1
Address: 5102 LaRoche Avenue, ,	Due Date Requested: 4/2/2024			
City: Savannah	TAT Requested (days):			
State, Zip: GA, 31404				
Phone: 912-354-7858(Tel) 912-352-0165(Fax)	PO #:			
Email:	WO #:			
Project Name: Rock Hill - Anti-Degradation	Project #: 46011424			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020B/3005A Total Aluminum	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
NPDES 001 (460-300489-1)	3/21/24	08:40 Eastern		Water			X	1	
Upstream (460-300489-2)	3/21/24	09:20 Eastern		Water			X	1	
Clarifying Pond (460-300489-3)	3/21/24	10:00 Eastern		Water			X	1	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Northeast, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Northeast, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Northeast, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Northeast, LLC.

Possible Hazard Identification	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 1	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	3/25/24 1800			3.26.24 1105	
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: ∆ Yes ∆ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:
		3.4/3.4

Login Sample Receipt Checklist

Client: Heidelberg Materials Northeast LLC

Job Number: 460-300489-1

Login Number: 300489

List Source: Eurofins Edison

List Number: 1

Creator: Casallas, Angela C

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Heidelberg Materials Northeast LLC

Job Number: 460-300489-1

Login Number: 300489
List Number: 3
Creator: Kolb, Chris M

List Source: Eurofins Buffalo
List Creation: 03/25/24 11:13 AM

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	2.7 IR GUN #! ICE
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	True	

Login Sample Receipt Checklist

Client: Heidelberg Materials Northeast LLC

Job Number: 460-300489-1

Login Number: 300489
List Number: 2
Creator: Metzger, Katherine A

List Source: Eurofins Lancaster Laboratories Environment Testing, LLC
List Creation: 03/22/24 08:53 PM

Question	Answer	Comment
The cooler's custody seal is intact.	N/A	Not present
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature acceptable,where thermal pres is required(</=6C, not frozen).	True	
Cooler Temperature is recorded.	True	
WV:Container Temp acceptable,where thermal pres is required (</=6C, not frozen).	N/A	
WV: Container Temperature is recorded.	N/A	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the containers received and the COC.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
There is sufficient vol. for all requested analyses.	True	
Is the Field Sampler's name present on COC?	False	Received project as a subcontract.
Sample custody seals are intact.	N/A	Not present.
VOA sample vials do not have headspace >6mm in diameter (none, if from WV)?	N/A	

Login Sample Receipt Checklist

Client: Heidelberg Materials Northeast LLC

Job Number: 460-300489-1

Login Number: 300489
List Number: 5
Creator: Rucker, Keenyn J

List Source: Eurofins Pittsburgh
List Creation: 03/27/24 12:33 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Heidelberg Materials Northeast LLC

Job Number: 460-300489-1

Login Number: 300489
List Number: 4
Creator: Sims, Robert D

List Source: Eurofins Savannah
List Creation: 03/26/24 04:37 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Lab Results

April 4, 2024

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Katie Murray
Heidelberg Materials Northeast LLC
7660 Imperial Way
Allentown, Pennsylvania 18195

Generated 4/24/2024 4:23:08 PM

JOB DESCRIPTION

Rock Hill - Anti-Degradation

JOB NUMBER

460-301434-1

Eurofins Edison
777 New Durham Road
Edison NJ 08817

See page two for job notes and contact information.

my EOL

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing Northeast, LLC Project Manager.

Authorization



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4/24/2024 4:23:08 PM

Authorized for release by
Julie Gilmore, Project Manager I
Julie.Gilmore@et.eurofinsus.com
(484)685-0865

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Qualifiers

HPLC/IC

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

General Chemistry

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
H	Sample was prepped or analyzed beyond the specified holding time. This does not meet regulatory requirements.
H3	Sample was received and analyzed past holding time. This does not meet regulatory requirements.
HF	Parameter with a holding time of 15 minutes. Test performed by laboratory at client's request. Sample was analyzed outside of hold time.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job Narrative
460-301434-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

- Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

The method detection limit (MDL) is the lowest value detectable by the laboratory for a given analyte as determined by the MDL procedure detailed in EPA 40 CFR 136. Reported MDL values are adjusted for any dilutions and percent moisture (as applicable). The lab is unable to report values below the MDL.

Receipt
The samples were received on 4/4/2024 7:00 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 3 coolers at receipt time were 1.4°C, 2.8°C and 3.0°C.

Subcontract Work
Method Osomotic Pressure: This method was subcontracted to Microbac Laboratories, Inc. The subcontract laboratory certification is different from that of the facility issuing the final report. The subcontract report is appended in its entirety.

HPLC/IC
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Metals
Method 6020B - Dissolved: The following samples were not filtered within 15 minutes of sample collection as required by the method: NPDES 001 (460-301434-1), Basin 1 (460-301434-2), Basin 2 (460-301434-3), Upstream (460-301434-4) and Clarifying Pond (460-301434-5). The sample(s) was filtered prior to analysis at the laboratory, and the results have been reported.

Method 6020B - Dissolved: The following samples were not filtered within 15 minutes of sample collection as required by the method: NPDES 001 (460-301434-1), Basin 1 (460-301434-2), Basin 2 (460-301434-3), Upstream (460-301434-4) and Clarifying Pond (460-301434-5). The sample(s) was filtered prior to analysis at the laboratory, and the results have been reported.

Method 6020B - Dissolved: The following samples were not filtered and preserved within 15 minutes of sample collection in accordance with 40 CFR Part 136 Table II, Footnote 7, method 6020B. The samples were filtered prior to analysis at the laboratory.

NPDES 001 (460-301434-1), Basin 1 (460-301434-2), Basin 2 (460-301434-3), Upstream (460-301434-4) and Clarifying Pond (460-301434-5)

Method 6020B - Dissolved: The following samples were not filtered within 15 minutes of sample collection as required by the method: NPDES 001 (460-301434-1), Basin 1 (460-301434-2), Basin 2 (460-301434-3), Upstream (460-301434-4) and Clarifying Pond (460-301434-5). The sample(s) was filtered prior to analysis at the laboratory, and the results have been reported.

Method 6020B - Dissolved: The following samples were not filtered within 15 minutes of sample collection as required by the method: NPDES 001 (460-301434-1), Basin 1 (460-301434-2), Basin 2 (460-301434-3), Upstream (460-301434-4) and Clarifying Pond (460-301434-5). The sample(s) was filtered prior to analysis at the laboratory, and the results have been reported.

Method 6020B - Dissolved: The following samples were not filtered and preserved within 15 minutes of sample collection in accordance with 40 CFR Part 136 Table II, Footnote 7, method 6020B. The samples were filtered prior to analysis at the laboratory.

NPDES 001 (460-301434-1), Basin 1 (460-301434-2), Basin 2 (460-301434-3), Upstream (460-301434-4) and Clarifying Pond (460-301434-5)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

General Chemistry
Method 4500_O_C: This analysis is normally performed in the field and has a method-defined holding time of 15 minutes. The following samples has been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe: NPDES 001 (460-301434-1), Basin 1 (460-301434-2), Basin 2 (460-301434-3), Upstream (460-301434-4) and Clarifying Pond (460-301434-5).

Method 9040C: This analysis is normally performed in the field and has a method-defined holding time of 15 minutes. The following samples has been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe: NPDES 001 (460-301434-1), Basin 1 (460-301434-2), Basin 2 (460-301434-3), Upstream (460-301434-4) and Clarifying Pond (460-301434-5).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Client Sample ID: NPDES 001
Lab Sample ID: 460-301434-1

Date Collected: 04/04/24 08:30
Matrix: Water

Date Received: 04/04/24 19:00

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide	0.054	U	0.32	0.054	mg/L			04/05/24 17:48	1
Nitrate as N	**0.12**	**J**	0.16	0.070	mg/L			04/05/24 17:48	1
Chloride	**3.09**		0.32	0.039	mg/L			04/05/24 17:48	1
Nitrate Nitrite as N	**0.19**		0.16	0.070	mg/L			04/05/24 17:48	1
Nitrite as N	**0.065**	**J F1**	0.16	0.023	mg/L			04/05/24 17:48	1
Sulfate	**5.02**		0.48	0.095	mg/L			04/05/24 17:48	1

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**4.2**		4.0	0.91	ug/L		04/10/24 11:42	04/11/24 13:24	1
Boron	30.4	U	80.0	30.4	ug/L		04/10/24 11:42	04/11/24 13:24	1
Calcium	**11300**		500	53.6	ug/L		04/10/24 11:42	04/11/24 13:24	1
Copper	**3.4**	**J**	4.0	2.5	ug/L		04/10/24 11:42	04/11/24 13:24	1
Lead	0.84	U	1.2	0.84	ug/L		04/10/24 11:42	04/11/24 13:24	1
Magnesium	**4150**		200	46.9	ug/L		04/10/24 11:42	04/11/24 13:24	1
Manganese	**19.7**		8.0	1.5	ug/L		04/10/24 11:42	04/11/24 13:24	1
Nickel	0.91	U	4.0	0.91	ug/L		04/10/24 11:42	04/11/24 13:24	1
Potassium	**1140**		200	112	ug/L		04/10/24 11:42	04/11/24 13:24	1
Selenium	0.59	U	2.5	0.59	ug/L		04/10/24 11:42	04/11/24 13:24	1
Sodium	**3360**		500	219	ug/L		04/10/24 11:42	04/11/24 13:24	1
Strontium	**43.2**		4.0	0.50	ug/L		04/10/24 11:42	04/11/24 13:24	1
Zinc	6.5	U	16.0	6.5	ug/L		04/10/24 11:42	04/11/24 13:24	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**583**		100	35.0	ug/L		04/10/24 06:40	04/10/24 20:10	1
Iron	**2100**		50.0	20.0	ug/L		04/11/24 07:50	04/16/24 16:59	1

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**89.2**		40.0	19.5	ug/L		04/11/24 09:03	04/11/24 11:55	1
Cadmium	0.15	U	0.50	0.15	ug/L		04/17/24 08:35	04/18/24 08:56	1
Arsenic	0.89	U	2.0	0.89	ug/L		04/11/24 09:03	04/11/24 11:55	1
Iron	**160**		50.0	20.0	ug/L		04/17/24 08:35	04/18/24 08:56	1
Calcium	**11800**		500	53.6	ug/L		04/11/24 09:03	04/11/24 11:55	1
Zinc	**5.0**	**J**	10.0	4.0	ug/L		04/17/24 08:35	04/18/24 08:56	1
Copper	2.5	U	4.0	2.5	ug/L		04/11/24 09:03	04/11/24 11:55	1
Iron	**112**	**J**	120	58.2	ug/L		04/11/24 09:03	04/11/24 11:55	1
Lead	0.84	U	1.2	0.84	ug/L		04/11/24 09:03	04/11/24 11:55	1
Magnesium	**4260**		200	46.9	ug/L		04/11/24 09:03	04/11/24 11:55	1
Manganese	**2.0**	**J**	8.0	1.5	ug/L		04/11/24 09:03	04/11/24 11:55	1
Nickel	0.91	U	4.0	0.91	ug/L		04/11/24 09:03	04/11/24 11:55	1

Method: SW846 EPA 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	1.3	U	5.0	1.3	ug/L		04/12/24 06:00	04/18/24 17:01	1

Method: SW846 EPA 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	1.3	U	5.0	1.3	ug/L		04/12/24 06:00	04/18/24 16:47	1

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill - Anti-Degradation

Job ID: 460-301434-1

Client Sample ID: NPDES 001

Lab Sample ID: 460-301434-1

Date Collected: 04/04/24 08:30

Matrix: Water

Date Received: 04/04/24 19:00

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Resistivity (EPA 120.1)	0.00852		0.000100	0.000100	Mohm-cm			04/10/24 13:45	1
Specific Conductance (EPA 120.1)	117		1.00	1.00	umhos/cm			04/10/24 13:45	1
Acidity (SM 2310B-2011)	20.0	U	20.0	20.0	mg/L			04/15/24 12:29	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-2011)	42.8		5.0	5.0	mg/L			04/08/24 12:35	1
Carbonate Alkalinity as CaCO3 (SM 2320B-2011)	5.0	U	5.0	5.0	mg/L			04/08/24 12:35	1
Alkalinity as CaCO3 to pH 4.5 (SM 2320B-2011)	42.8		5.0	5.0	mg/L			04/08/24 12:35	1
Total Dissolved Solids (SM 2540C-2015)	93.0		2.5	2.5	mg/L			04/11/24 10:53	1
Total Suspended Solids (SM 2540D-2015)	2.6		2.5	2.5	mg/L			04/11/24 08:44	1
Ammonia (EPA 350.1)	0.050	U	0.10	0.050	mg/L			04/16/24 15:30	1
Total Kjeldahl Nitrogen (EPA 351.2)	0.54	J	1.0	0.50	mg/L		04/12/24 12:30	04/15/24 12:50	1
Chemical Oxygen Demand (EPA 410.4)	13.5	F1	10.0	3.3	mg/L			04/15/24 18:08	1
Oxygen, Dissolved (SM 4500 O C-2016)	10.7	H H3	1.0	1.0	mg/L			04/08/24 16:50	1
Carbonaceous Biochemical Oxygen Demand 5 (SM 5210 B-2016)	1.4		1.0	1.0	mg/L			04/05/24 16:45	1
pH (SW846 9040C)	7.7	HF	0.1	0.1	SU			04/10/24 14:06	1
Temperature (SW846 9040C)	25.8	HF	0.1	0.1	Degrees C			04/10/24 14:06	1
Total Organic Carbon (SW846 9060A)	3.0		1.0	0.53	mg/L			04/10/24 02:08	1
Phosphorus as PO4 (SM4500 P E-2011)	0.073	J F1	0.090	0.071	mg/L		04/22/24 11:30	04/22/24 14:15	1
Phosphorus as P (SM4500 P E-2011)	0.024	J	0.030	0.023	mg/L		04/22/24 11:30	04/22/24 14:15	1
Nitrogen, Total (EPA Total Nitrogen)	0.73		0.50	0.50	mg/L			04/17/24 05:57	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (EPA 350.1)	0.050	U	0.10	0.050	mg/L			04/16/24 15:38	1
Phosphorus as PO4 (SM4500 P E-2011)	0.085	J	0.090	0.071	mg/L		04/22/24 11:30	04/22/24 14:15	1
Phosphorus as P (SM4500 P E-2011)	0.028	J	0.030	0.023	mg/L		04/22/24 11:30	04/22/24 14:15	1

Client Sample ID: Basin 1

Lab Sample ID: 460-301434-2

Date Collected: 04/04/24 10:15

Matrix: Water

Date Received: 04/04/24 19:00

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide	0.054	U	0.32	0.054	mg/L			04/05/24 18:03	1
Nitrate as N	0.070	U	0.16	0.070	mg/L			04/05/24 18:03	1
Chloride	4.28		0.32	0.039	mg/L			04/05/24 18:03	1
Nitrate Nitrite as N	0.13	J	0.16	0.070	mg/L			04/05/24 18:03	1
Nitrite as N	0.061	J	0.16	0.023	mg/L			04/05/24 18:03	1
Sulfate	6.64		0.48	0.095	mg/L			04/05/24 18:03	1

Client Sample ID: Basin 1

Date Collected: 04/04/24 10:15
Date Received: 04/04/24 19:00

Lab Sample ID: 460-301434-2

Matrix: Water

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**2.8**	**J**	4.0	0.91	ug/L		04/10/24 11:42	04/11/24 13:26	1
Boron	**42.6**	**J**	80.0	30.4	ug/L		04/10/24 11:42	04/11/24 13:26	1
Calcium	**20500**		500	53.6	ug/L		04/10/24 11:42	04/11/24 13:26	1
Copper	**2.8**	**J**	4.0	2.5	ug/L		04/10/24 11:42	04/11/24 13:26	1
Lead	0.84	U	1.2	0.84	ug/L		04/10/24 11:42	04/11/24 13:26	1
Magnesium	**9780**		200	46.9	ug/L		04/10/24 11:42	04/11/24 13:26	1
Manganese	**34.9**		8.0	1.5	ug/L		04/10/24 11:42	04/11/24 13:26	1
Nickel	0.91	U	4.0	0.91	ug/L		04/10/24 11:42	04/11/24 13:26	1
Potassium	**938**		200	112	ug/L		04/10/24 11:42	04/11/24 13:26	1
Selenium	0.59	U	2.5	0.59	ug/L		04/10/24 11:42	04/11/24 13:26	1
Sodium	**4290**		500	219	ug/L		04/10/24 11:42	04/11/24 13:26	1
Strontium	**56.9**		4.0	0.50	ug/L		04/10/24 11:42	04/11/24 13:26	1
Zinc	**9.9**	**J**	16.0	6.5	ug/L		04/10/24 11:42	04/11/24 13:26	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**189**		100	35.0	ug/L		04/10/24 06:40	04/10/24 20:22	1
Iron	**1330**		50.0	20.0	ug/L		04/11/24 07:50	04/16/24 17:01	1

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	19.5	U	40.0	19.5	ug/L		04/11/24 09:03	04/11/24 11:57	1
Cadmium	0.15	U	0.50	0.15	ug/L		04/17/24 08:35	04/18/24 08:58	1
Arsenic	0.89	U	2.0	0.89	ug/L		04/11/24 09:03	04/11/24 11:57	1
Iron	**39.7**	**J**	50.0	20.0	ug/L		04/17/24 08:35	04/18/24 08:58	1
Calcium	**19800**		500	53.6	ug/L		04/11/24 09:03	04/11/24 11:57	1
Zinc	**6.3**	**J**	10.0	4.0	ug/L		04/17/24 08:35	04/18/24 08:58	1
Copper	2.5	U	4.0	2.5	ug/L		04/11/24 09:03	04/11/24 11:57	1
Iron	58.2	U	120	58.2	ug/L		04/11/24 09:03	04/11/24 11:57	1
Lead	0.84	U	1.2	0.84	ug/L		04/11/24 09:03	04/11/24 11:57	1
Magnesium	**9370**		200	46.9	ug/L		04/11/24 09:03	04/11/24 11:57	1
Manganese	**7.0**	**J**	8.0	1.5	ug/L		04/11/24 09:03	04/11/24 11:57	1
Nickel	0.91	U	4.0	0.91	ug/L		04/11/24 09:03	04/11/24 11:57	1

Method: SW846 EPA 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	1.3	U	5.0	1.3	ug/L		04/12/24 06:00	04/18/24 17:21	1

Method: SW846 EPA 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	1.3	U	5.0	1.3	ug/L		04/12/24 06:00	04/18/24 16:50	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Resistivity (EPA 120.1)	**0.00495**		0.000100	0.000100	Mohm-cm			04/10/24 13:45	1
Specific Conductance (EPA 120.1)	**202**		1.00	1.00	umhos/cm			04/10/24 13:45	1
Acidity (SM 2310B-2011)	20.0	U	20.0	20.0	mg/L			04/15/24 12:29	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-2011)	**83.9**		5.0	5.0	mg/L			04/08/24 12:41	1
Carbonate Alkalinity as CaCO3 (SM 2320B-2011)	5.0	U	5.0	5.0	mg/L			04/08/24 12:41	1

Client Sample ID: Basin 1

Date Collected: 04/04/24 10:15
Date Received: 04/04/24 19:00

Lab Sample ID: 460-301434-2

Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity as CaCO3 to pH 4.5 (SM 2320B-2011)	83.9		5.0	5.0	mg/L			04/08/24 12:41	1
Total Dissolved Solids (SM 2540C-2015)	135		2.5	2.5	mg/L			04/11/24 10:53	1
Total Suspended Solids (SM 2540D-2015)	3.3		2.5	2.5	mg/L			04/11/24 08:44	1
Ammonia (EPA 350.1)	0.050	U	0.10	0.050	mg/L			04/16/24 15:32	1
Total Kjeldahl Nitrogen (EPA 351.2)	0.51	J	1.0	0.50	mg/L		04/15/24 13:24	04/16/24 13:38	1
Chemical Oxygen Demand (EPA 410.4)	6.6	J	10.0	3.3	mg/L			04/15/24 18:08	1
Oxygen, Dissolved (SM 4500 O C-2016)	10.5	H H3	1.0	1.0	mg/L			04/08/24 17:00	1
Carbonaceous Biochemical Oxygen Demand 5 (SM 5210 B-2016)	1.2		1.0	1.0	mg/L			04/05/24 16:50	1
pH (SW846 9040C)	8.0	HF	0.1	0.1	SU			04/10/24 14:12	1
Temperature (SW846 9040C)	25.5	HF	0.1	0.1	Degrees C			04/10/24 14:12	1
Total Organic Carbon (SW846 9060A)	1.7		1.0	0.53	mg/L			04/09/24 23:59	1
Phosphorus as PO4 (SM4500 P E-2011)	0.071	U	0.090	0.071	mg/L		04/22/24 11:30	04/22/24 14:15	1
Phosphorus as P (SM4500 P E-2011)	0.023	U	0.030	0.023	mg/L		04/22/24 11:30	04/22/24 14:15	1
Nitrogen, Total (EPA Total Nitrogen)	0.64		0.50	0.50	mg/L			04/17/24 05:57	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (EPA 350.1)	0.050	U	0.10	0.050	mg/L			04/16/24 15:51	1
Phosphorus as PO4 (SM4500 P E-2011)	0.073	J F1	0.090	0.071	mg/L		04/22/24 11:30	04/22/24 14:15	1
Phosphorus as P (SM4500 P E-2011)	0.024	J	0.030	0.023	mg/L		04/22/24 11:30	04/22/24 14:15	1

Client Sample ID: Basin 2

Date Collected: 04/04/24 09:45
Date Received: 04/04/24 19:00

Lab Sample ID: 460-301434-3

Matrix: Water

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide	0.054	U	0.32	0.054	mg/L			04/05/24 18:18	1
Nitrate as N	0.14	J	0.16	0.070	mg/L			04/05/24 18:18	1
Chloride	1.47		0.32	0.039	mg/L			04/05/24 18:18	1
Nitrate Nitrite as N	0.20		0.16	0.070	mg/L			04/05/24 18:18	1
Nitrite as N	0.060	J	0.16	0.023	mg/L			04/05/24 18:18	1
Sulfate	7.84		0.48	0.095	mg/L			04/05/24 18:18	1

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	2.0	J	4.0	0.91	ug/L		04/10/24 11:42	04/11/24 13:28	1
Boron	30.4	U	80.0	30.4	ug/L		04/10/24 11:42	04/11/24 13:28	1
Calcium	17100		500	53.6	ug/L		04/10/24 11:42	04/11/24 13:28	1
Copper	3.4	J	4.0	2.5	ug/L		04/10/24 11:42	04/11/24 13:28	1
Lead	0.84	U	1.2	0.84	ug/L		04/10/24 11:42	04/11/24 13:28	1

Client Sample ID: Basin 2
Date Collected: 04/04/24 09:45
Date Received: 04/04/24 19:00

Lab Sample ID: 460-301434-3
Matrix: Water

Method: SW846 6020B - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Magnesium	**8040**		200	46.9	ug/L		04/10/24 11:42	04/11/24 13:28	1
Manganese	**37.1**		8.0	1.5	ug/L		04/10/24 11:42	04/11/24 13:28	1
Nickel	0.91	U	4.0	0.91	ug/L		04/10/24 11:42	04/11/24 13:28	1
Potassium	**1270**		200	112	ug/L		04/10/24 11:42	04/11/24 13:28	1
Selenium	0.59	U	2.5	0.59	ug/L		04/10/24 11:42	04/11/24 13:28	1
Sodium	**2600**		500	219	ug/L		04/10/24 11:42	04/11/24 13:28	1
Strontium	**44.1**		4.0	0.50	ug/L		04/10/24 11:42	04/11/24 13:28	1
Zinc	6.5	U	16.0	6.5	ug/L		04/10/24 11:42	04/11/24 13:28	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**320**		100	35.0	ug/L		04/10/24 06:40	04/10/24 20:26	1
Iron	**1420**		50.0	20.0	ug/L		04/11/24 07:50	04/16/24 17:03	1

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**23.8**	**J**	40.0	19.5	ug/L		04/11/24 09:03	04/11/24 12:12	1
Cadmium	0.15	U	0.50	0.15	ug/L		04/17/24 08:35	04/18/24 09:00	1
Arsenic	0.89	U	2.0	0.89	ug/L		04/11/24 09:03	04/11/24 12:12	1
Iron	**38.7**	**J**	50.0	20.0	ug/L		04/17/24 08:35	04/18/24 09:00	1
Calcium	**16200**		500	53.6	ug/L		04/11/24 09:03	04/11/24 12:12	1
Zinc	4.0	U	10.0	4.0	ug/L		04/17/24 08:35	04/18/24 09:00	1
Copper	2.5	U	4.0	2.5	ug/L		04/11/24 09:03	04/11/24 12:12	1
Iron	58.2	U	120	58.2	ug/L		04/11/24 09:03	04/11/24 12:12	1
Lead	0.84	U	1.2	0.84	ug/L		04/11/24 09:03	04/11/24 12:12	1
Magnesium	**7540**		200	46.9	ug/L		04/11/24 09:03	04/11/24 12:12	1
Manganese	**3.8**	**J**	8.0	1.5	ug/L		04/11/24 09:03	04/11/24 12:12	1
Nickel	0.91	U	4.0	0.91	ug/L		04/11/24 09:03	04/11/24 12:12	1

Method: SW846 EPA 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	1.3	U	5.0	1.3	ug/L		04/12/24 06:00	04/18/24 17:26	1

Method: SW846 EPA 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	1.3	U	5.0	1.3	ug/L		04/12/24 06:00	04/18/24 16:53	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Resistivity (EPA 120.1)	**0.00607**		0.000100	0.000100	Mohm-cm			04/10/24 13:45	1
Specific Conductance (EPA 120.1)	**165**		1.00	1.00	umhos/cm			04/10/24 13:45	1
Acidity (SM 2310B-2011)	20.0	U	20.0	20.0	mg/L			04/15/24 12:29	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-2011)	**67.9**		5.0	5.0	mg/L			04/08/24 12:47	1
Carbonate Alkalinity as CaCO3 (SM 2320B-2011)	5.0	U	5.0	5.0	mg/L			04/08/24 12:47	1
Alkalinity as CaCO3 to pH 4.5 (SM 2320B-2011)	**67.9**		5.0	5.0	mg/L			04/08/24 12:47	1
Total Dissolved Solids (SM 2540C-2015)	**108**		2.5	2.5	mg/L			04/11/24 10:53	1
Total Suspended Solids (SM 2540D-2015)	**2.8**		2.5	2.5	mg/L			04/11/24 08:44	1

Client Sample ID: Basin 2

Lab Sample ID: 460-301434-3

Date Collected: 04/04/24 09:45

Matrix: Water

Date Received: 04/04/24 19:00

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (EPA 350.1)	0.050	U	0.10	0.050	mg/L			04/16/24 15:33	1
Total Kjeldahl Nitrogen (EPA 351.2)	**0.54**	**J**	1.0	0.50	mg/L		04/15/24 13:24	04/16/24 13:40	1
Chemical Oxygen Demand (EPA 410.4)	**6.0**	**J**	10.0	3.3	mg/L			04/15/24 18:08	1
Oxygen, Dissolved (SM 4500 O C-2016)	**11.1**	**H H3**	1.0	1.0	mg/L			04/08/24 16:55	1
Carbonaceous Biochemical Oxygen Demand 5 (SM 5210 B-2016)	**1.1**		1.0	1.0	mg/L			04/05/24 16:57	1
pH (SW846 9040C)	**8.0**	**HF**	0.1	0.1	SU			04/10/24 14:17	1
Temperature (SW846 9040C)	**25.1**	**HF**	0.1	0.1	Degrees C			04/10/24 14:17	1
Total Organic Carbon (SW846 9060A)	**1.9**		1.0	0.53	mg/L			04/10/24 02:33	1
Phosphorus as PO4 (SM4500 P E-2011)	**0.60**		0.090	0.071	mg/L		04/22/24 11:30	04/22/24 14:15	1
Phosphorus as P (SM4500 P E-2011)	**0.20**		0.030	0.023	mg/L		04/22/24 11:30	04/22/24 14:15	1
Nitrogen, Total (EPA Total Nitrogen)	**0.74**		0.50	0.50	mg/L			04/17/24 05:57	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (EPA 350.1)	0.050	U	0.10	0.050	mg/L			04/16/24 15:52	1
Phosphorus as PO4 (SM4500 P E-2011)	0.071	U	0.090	0.071	mg/L		04/22/24 11:30	04/22/24 14:15	1
Phosphorus as P (SM4500 P E-2011)	0.023	U	0.030	0.023	mg/L		04/22/24 11:30	04/22/24 14:15	1

Client Sample ID: Upstream

Lab Sample ID: 460-301434-4

Date Collected: 04/04/24 10:45

Matrix: Water

Date Received: 04/04/24 19:00

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide	0.054	U	0.32	0.054	mg/L			04/05/24 18:33	1
Nitrate as N	**0.15**	**J**	0.16	0.070	mg/L			04/05/24 18:33	1
Chloride	**4.15**		0.32	0.039	mg/L			04/05/24 18:33	1
Nitrate Nitrite as N	**0.22**		0.16	0.070	mg/L			04/05/24 18:33	1
Nitrite as N	**0.065**	**J**	0.16	0.023	mg/L			04/05/24 18:33	1
Sulfate	**2.96**		0.48	0.095	mg/L			04/05/24 18:33	1

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**11.1**		4.0	0.91	ug/L		04/11/24 19:00	04/12/24 15:42	1
Boron	**50.1**	**J**	80.0	30.4	ug/L		04/11/24 19:00	04/12/24 15:42	1
Calcium	**16800**		500	53.6	ug/L		04/11/24 19:00	04/12/24 15:42	1
Copper	**8.4**		4.0	2.5	ug/L		04/11/24 19:00	04/12/24 15:42	1
Lead	**1.5**		1.2	0.84	ug/L		04/11/24 19:00	04/12/24 15:42	1
Magnesium	**5470**		200	46.9	ug/L		04/11/24 19:00	04/12/24 15:42	1
Manganese	**58.7**		8.0	1.5	ug/L		04/11/24 19:00	04/12/24 15:42	1
Nickel	**2.0**	**J**	4.0	0.91	ug/L		04/11/24 19:00	04/12/24 15:42	1
Potassium	**1440**		200	112	ug/L		04/11/24 19:00	04/12/24 15:42	1
Selenium	0.59	U	2.5	0.59	ug/L		04/11/24 19:00	04/12/24 15:42	1
Sodium	**3640**		500	219	ug/L		04/11/24 19:00	04/12/24 15:42	1

Client Sample ID: Upstream

Date Collected: 04/04/24 10:45
Date Received: 04/04/24 19:00

Lab Sample ID: 460-301434-4
Matrix: Water

Method: SW846 6020B - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Strontium	**64.9**		4.0	0.50	ug/L		04/11/24 19:00	04/12/24 15:42	1
Zinc	**7.7**	**J**	16.0	6.5	ug/L		04/11/24 19:00	04/12/24 15:42	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**539**		100	35.0	ug/L		04/10/24 06:40	04/10/24 20:30	1
Iron	**1050**		50.0	20.0	ug/L		04/11/24 07:50	04/16/24 16:57	1

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**142**		40.0	19.5	ug/L		04/11/24 09:03	04/11/24 12:14	1
Cadmium	0.15	U	0.50	0.15	ug/L		04/17/24 08:35	04/18/24 09:02	1
Arsenic	0.89	U	2.0	0.89	ug/L		04/11/24 09:03	04/11/24 12:14	1
Iron	**180**		50.0	20.0	ug/L		04/17/24 08:35	04/18/24 09:02	1
Calcium	**17100**		500	53.6	ug/L		04/11/24 09:03	04/11/24 12:14	1
Zinc	4.0	U	10.0	4.0	ug/L		04/17/24 08:35	04/18/24 09:02	1
Copper	**4.3**		4.0	2.5	ug/L		04/11/24 09:03	04/11/24 12:14	1
Iron	**127**		120	58.2	ug/L		04/11/24 09:03	04/11/24 12:14	1
Lead	0.84	U	1.2	0.84	ug/L		04/11/24 09:03	04/11/24 12:14	1
Magnesium	**5340**		200	46.9	ug/L		04/11/24 09:03	04/11/24 12:14	1
Manganese	**46.9**		8.0	1.5	ug/L		04/11/24 09:03	04/11/24 12:14	1
Nickel	0.91	U	4.0	0.91	ug/L		04/11/24 09:03	04/11/24 12:14	1

Method: SW846 EPA 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	**8.5**		5.0	1.3	ug/L		04/12/24 06:00	04/18/24 17:32	1

Method: SW846 EPA 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	1.3	U	5.0	1.3	ug/L		04/12/24 06:00	04/18/24 16:56	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Resistivity (EPA 120.1)	**0.00660**		0.000100	0.000100	Mohm-cm			04/10/24 13:45	1
Specific Conductance (EPA 120.1)	**152**		1.00	1.00	umhos/cm			04/10/24 13:45	1
Acidity (SM 2310B-2011)	20.0	U	20.0	20.0	mg/L			04/15/24 12:29	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-2011)	**61.2**		5.0	5.0	mg/L			04/08/24 12:53	1
Carbonate Alkalinity as CaCO3 (SM 2320B-2011)	5.0	U	5.0	5.0	mg/L			04/08/24 12:53	1
Alkalinity as CaCO3 to pH 4.5 (SM 2320B-2011)	**61.2**		5.0	5.0	mg/L			04/08/24 12:53	1
Total Dissolved Solids (SM 2540C-2015)	**104**		2.5	2.5	mg/L			04/11/24 10:53	1
Total Suspended Solids (SM 2540D-2015)	2.5	U	2.5	2.5	mg/L			04/11/24 08:44	1
Ammonia (EPA 350.1)	0.050	U	0.10	0.050	mg/L			04/16/24 15:35	1
Total Kjeldahl Nitrogen (EPA 351.2)	**0.60**	**J**	1.0	0.50	mg/L		04/15/24 13:24	04/16/24 13:42	1
Chemical Oxygen Demand (EPA 410.4)	**4.3**	**J**	10.0	3.3	mg/L			04/15/24 18:08	1
Oxygen, Dissolved (SM 4500 O C-2016)	**8.6**	**H H3**	1.0	1.0	mg/L			04/08/24 17:05	1

Client Sample ID: Upstream
Lab Sample ID: 460-301434-4

Date Collected: 04/04/24 10:45
Matrix: Water
Date Received: 04/04/24 19:00

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbonaceous Biochemical Oxygen Demand 5 (SM 5210 B-2016)	1.0	U	1.0	1.0	mg/L			04/05/24 17:15	1
pH (SW846 9040C)	**7.7**	**HF**	0.1	0.1	SU			04/10/24 14:23	1
Temperature (SW846 9040C)	**25.0**	**HF**	0.1	0.1	Degrees C			04/10/24 14:23	1
Total Organic Carbon (SW846 9060A)	**3.2**		1.0	0.53	mg/L			04/10/24 02:58	1
Phosphorus as PO4 (SM4500 P E-2011)	0.071	U	0.090	0.071	mg/L		04/22/24 11:30	04/22/24 14:15	1
Phosphorus as P (SM4500 P E-2011)	0.023	U	0.030	0.023	mg/L		04/22/24 11:30	04/22/24 14:15	1
Nitrogen, Total (EPA Total Nitrogen)	**0.82**		0.50	0.50	mg/L			04/17/24 05:57	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (EPA 350.1)	0.050	U	0.10	0.050	mg/L			04/16/24 15:54	1
Phosphorus as PO4 (SM4500 P E-2011)	0.071	U	0.090	0.071	mg/L		04/22/24 11:30	04/22/24 14:15	1
Phosphorus as P (SM4500 P E-2011)	0.023	U	0.030	0.023	mg/L		04/22/24 11:30	04/22/24 14:15	1

Client Sample ID: Clarifying Pond
Lab Sample ID: 460-301434-5

Date Collected: 04/04/24 11:15
Matrix: Water
Date Received: 04/04/24 19:00

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide	0.054	U	0.32	0.054	mg/L			04/05/24 18:48	1
Nitrate as N	**0.17**		0.16	0.070	mg/L			04/05/24 18:48	1
Chloride	**0.70**		0.32	0.039	mg/L			04/05/24 18:48	1
Nitrate Nitrite as N	**0.24**		0.16	0.070	mg/L			04/05/24 18:48	1
Nitrite as N	**0.063**	**J**	0.16	0.023	mg/L			04/05/24 18:48	1
Sulfate	**3.70**		0.48	0.095	mg/L			04/05/24 18:48	1

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**2.9**	**J**	4.0	0.91	ug/L		04/10/24 11:42	04/11/24 13:31	1
Boron	30.4	U	80.0	30.4	ug/L		04/10/24 11:42	04/11/24 13:31	1
Calcium	**12300**		500	53.6	ug/L		04/10/24 11:42	04/11/24 13:31	1
Copper	**3.7**	**J**	4.0	2.5	ug/L		04/10/24 11:42	04/11/24 13:31	1
Lead	0.84	U	1.2	0.84	ug/L		04/10/24 11:42	04/11/24 13:31	1
Magnesium	**4330**		200	46.9	ug/L		04/10/24 11:42	04/11/24 13:31	1
Manganese	**17.8**		8.0	1.5	ug/L		04/10/24 11:42	04/11/24 13:31	1
Nickel	0.91	U	4.0	0.91	ug/L		04/10/24 11:42	04/11/24 13:31	1
Potassium	**914**		200	112	ug/L		04/10/24 11:42	04/11/24 13:31	1
Selenium	0.59	U	2.5	0.59	ug/L		04/10/24 11:42	04/11/24 13:31	1
Sodium	**1930**		500	219	ug/L		04/10/24 11:42	04/11/24 13:31	1
Strontium	**30.7**		4.0	0.50	ug/L		04/10/24 11:42	04/11/24 13:31	1
Zinc	6.5	U	16.0	6.5	ug/L		04/10/24 11:42	04/11/24 13:31	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**746**		100	35.0	ug/L		04/10/24 06:40	04/10/24 20:34	1
Iron	**710**		50.0	20.0	ug/L		04/11/24 07:50	04/16/24 15:53	1

Client Sample ID: Clarifying Pond

Date Collected: 04/04/24 11:15
Date Received: 04/04/24 19:00

Lab Sample ID: 460-301434-5
Matrix: Water

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**55.0**		40.0	19.5	ug/L		04/11/24 09:03	04/11/24 12:17	1
Cadmium	0.15	U	0.50	0.15	ug/L		04/22/24 08:50	04/23/24 12:18	1
Arsenic	0.89	U	2.0	0.89	ug/L		04/11/24 09:03	04/11/24 12:17	1
Iron	20.0	U	50.0	20.0	ug/L		04/22/24 08:50	04/23/24 12:18	1
Calcium	**12400**		500	53.6	ug/L		04/11/24 09:03	04/11/24 12:17	1
Zinc	4.0	U	10.0	4.0	ug/L		04/22/24 08:50	04/23/24 12:18	1
Copper	2.5	U	4.0	2.5	ug/L		04/11/24 09:03	04/11/24 12:17	1
Iron	58.2	U	120	58.2	ug/L		04/11/24 09:03	04/11/24 12:17	1
Lead	0.84	U	1.2	0.84	ug/L		04/11/24 09:03	04/11/24 12:17	1
Magnesium	**4290**		200	46.9	ug/L		04/11/24 09:03	04/11/24 12:17	1
Manganese	**4.3**	**J**	8.0	1.5	ug/L		04/11/24 09:03	04/11/24 12:17	1
Nickel	0.91	U	4.0	0.91	ug/L		04/11/24 09:03	04/11/24 12:17	1

Method: SW846 EPA 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	1.3	U	5.0	1.3	ug/L		04/12/24 06:00	04/18/24 17:38	1

Method: SW846 EPA 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	1.3	U	5.0	1.3	ug/L		04/12/24 06:00	04/18/24 16:58	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Resistivity (EPA 120.1)	**0.00878**		0.000100	0.000100	Mohm-cm			04/10/24 13:45	1
Specific Conductance (EPA 120.1)	**114**		1.00	1.00	umhos/cm			04/10/24 13:45	1
Acidity (SM 2310B-2011)	20.0	U	20.0	20.0	mg/L			04/15/24 12:31	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-2011)	**48.2**		5.0	5.0	mg/L			04/08/24 12:59	1
Carbonate Alkalinity as CaCO3 (SM 2320B-2011)	5.0	U	5.0	5.0	mg/L			04/08/24 12:59	1
Alkalinity as CaCO3 to pH 4.5 (SM 2320B-2011)	**48.2**		5.0	5.0	mg/L			04/08/24 12:59	1
Total Dissolved Solids (SM 2540C-2015)	**71.0**		2.5	2.5	mg/L			04/11/24 10:53	1
Total Suspended Solids (SM 2540D-2015)	**4.9**		2.5	2.5	mg/L			04/11/24 08:44	1
Ammonia (EPA 350.1)	0.050	U	0.10	0.050	mg/L			04/16/24 15:36	1
Total Kjeldahl Nitrogen (EPA 351.2)	0.50	U	1.0	0.50	mg/L		04/15/24 13:24	04/16/24 13:44	1
Chemical Oxygen Demand (EPA 410.4)	**6.3**	**J**	10.0	3.3	mg/L			04/15/24 18:08	1
Oxygen, Dissolved (SM 4500 O C-2016)	**10.6**	**H**	1.0	1.0	mg/L			04/08/24 17:10	1
Carbonaceous Biochemical Oxygen Demand 5 (SM 5210 B-2016)	1.0	U	1.0	1.0	mg/L			04/05/24 17:04	1
pH (SW846 9040C)	**7.8**	**HF**	0.1	0.1	SU			04/10/24 14:28	1
Temperature (SW846 9040C)	**25.2**	**HF**	0.1	0.1	Degrees C			04/10/24 14:28	1
Total Organic Carbon (SW846 9060A)	**1.2**		1.0	0.53	mg/L			04/10/24 03:23	1
Phosphorus as PO4 (SM4500 P E-2011)	0.071	U	0.090	0.071	mg/L		04/22/24 11:30	04/22/24 14:15	1
Phosphorus as P (SM4500 P E-2011)	0.023	U	0.030	0.023	mg/L		04/22/24 11:30	04/22/24 14:15	1
Nitrogen, Total (EPA Total Nitrogen)	0.50	U	0.50	0.50	mg/L			04/17/24 05:57	1

Client: Heidelberg Materials Northeast LLC
Job ID: 460-301434-1
Project/Site: Rock Hill - Anti-Degradation

Client Sample ID: Clarifying Pond
Lab Sample ID: 460-301434-5
Date Collected: 04/04/24 11:15
Matrix: Water
Date Received: 04/04/24 19:00

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (EPA 350.1)	0.050	U	0.10	0.050	mg/L			04/16/24 15:55	1
Phosphorus as PO4 (SM4500 P E-2011)	0.071	U	0.090	0.071	mg/L		04/22/24 11:30	04/22/24 14:15	1
Phosphorus as P (SM4500 P E-2011)	0.023	U	0.030	0.023	mg/L		04/22/24 11:30	04/22/24 14:15	1

Lab Chronicle

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill - Anti-Degradation

Job ID: 460-301434-1

Client Sample ID: NPDES 001

Date Collected: 04/04/24 08:30
Date Received: 04/04/24 19:00

Lab Sample ID: 460-301434-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		1	967979	SZK	EET EDI	04/05/24 17:48
Total/NA	Analysis	300.0		1	967981	SZK	EET EDI	04/05/24 17:48
Dissolved	Filtration	Filtration			494699	UAMX	ELLE	04/16/24 11:36
Dissolved	Prep	3005A			495025	UAMX	ELLE	04/17/24 08:35
Dissolved	Analysis	6020B		1	495819	F7JF	ELLE	04/18/24 08:56
Dissolved	Filtration	FILTRATION			968981	CDC	EET EDI	04/11/24 08:54
Dissolved	Prep	3010A			968985	CDC	EET EDI	04/11/24 09:03
Dissolved	Analysis	6020B		1	969026	CDC	EET EDI	04/11/24 11:55
Total Recoverable	Prep	3005A			492692	UAMX	ELLE	04/11/24 07:50
Total Recoverable	Analysis	6020B		1	494992	UCIG	ELLE	04/16/24 16:59
Total Recoverable	Prep	3005A			832171	RR	EET SAV	04/10/24 06:40
Total Recoverable	Analysis	6020B		1	832422	BWR	EET SAV	04/10/24 20:10
Total/NA	Prep	3010A			968793	NNW	EET EDI	04/10/24 11:42
Total/NA	Analysis	6020B		1	969021	FBT	EET EDI	04/11/24 13:24
Dissolved	Filtration	Filtration			465103	NWW	EET PIT	04/11/24 09:40
Dissolved	Prep	3010A			465129	NWW	EET PIT	04/12/24 06:00
Dissolved	Analysis	EPA 6020B		1	465868	S1Z	EET PIT	04/18/24 16:47
Total/NA	Prep	3010A			465129	NWW	EET PIT	04/12/24 06:00
Total/NA	Analysis	EPA 6020B		1	465868	S1Z	EET PIT	04/18/24 17:01
Total/NA	Analysis	120.1		1	968815	HTV	EET EDI	04/10/24 13:45
Total/NA	Analysis	2310B-2011		1	969616	RAK	EET EDI	04/15/24 12:29
Total/NA	Analysis	2320B-2011		1	968376	RXA	EET EDI	04/08/24 12:35
Total/NA	Analysis	2540C-2015		1	969003	PLS	EET EDI	04/11/24 10:53
Total/NA	Analysis	2540D-2015		1	968978	PLS	EET EDI	04/11/24 08:44
Dissolved	Filtration	FILTRATION			969802	AXP	EET EDI	04/16/24 13:57
Dissolved	Analysis	350.1		1	969826	AXP	EET EDI	04/16/24 15:38
Total/NA	Analysis	350.1		1	969826	AXP	EET EDI	04/16/24 15:30
Total/NA	Prep	351.2			493719	NLE3	ELLE	04/12/24 12:30 - 04/12/24 15:30 [1]
Total/NA	Analysis	351.2		1	494298	JCG7	ELLE	04/15/24 12:50
Total/NA	Analysis	410.4		1	969678	HTV	EET EDI	04/15/24 18:08
Total/NA	Analysis	4500 O C-2016		1	968419	RXA	EET EDI	04/08/24 16:50
Total/NA	Analysis	5210 B-2016		1	968009	RXA	EET EDI	04/05/24 16:45
Total/NA	Analysis	9040C		1	968831	RXA	EET EDI	04/10/24 14:06
Total/NA	Analysis	9060A		1	968743	MMC	EET EDI	04/10/24 02:08
Dissolved	Filtration	FILTRATION			970901	HTV	EET EDI	04/22/24 10:30
Dissolved	Prep	SM 4500 P B			970912	HTV	EET EDI	04/22/24 11:30
Dissolved	Analysis	SM4500 P E-2011		1	970914	HTV	EET EDI	04/22/24 14:15
Total/NA	Prep	SM 4500 P B			970912	HTV	EET EDI	04/22/24 11:30
Total/NA	Analysis	SM4500 P E-2011		1	970914	HTV	EET EDI	04/22/24 14:15
Total/NA	Analysis	Total Nitrogen		1	969933	TJW	EET EDI	04/17/24 05:57

Client Sample ID: Basin 1

Date Collected: 04/04/24 10:15
Date Received: 04/04/24 19:00

Lab Sample ID: 460-301434-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		1	967979	SZK	EET EDI	04/05/24 18:03
Total/NA	Analysis	300.0		1	967981	SZK	EET EDI	04/05/24 18:03
Dissolved	Filtration	Filtration			494699	UAMX	ELLE	04/16/24 11:36
Dissolved	Prep	3005A			495025	UAMX	ELLE	04/17/24 08:35
Dissolved	Analysis	6020B		1	495819	F7JF	ELLE	04/18/24 08:58
Dissolved	Filtration	FILTRATION			968981	CDC	EET EDI	04/11/24 08:54
Dissolved	Prep	3010A			968985	CDC	EET EDI	04/11/24 09:03
Dissolved	Analysis	6020B		1	969026	CDC	EET EDI	04/11/24 11:57
Total Recoverable	Prep	3005A			492692	UAMX	ELLE	04/11/24 07:50
Total Recoverable	Analysis	6020B		1	494992	UCIG	ELLE	04/16/24 17:01
Total Recoverable	Prep	3005A			832171	RR	EET SAV	04/10/24 06:40
Total Recoverable	Analysis	6020B		1	832422	BWR	EET SAV	04/10/24 20:22
Total/NA	Prep	3010A			968793	NNW	EET EDI	04/10/24 11:42
Total/NA	Analysis	6020B		1	969021	FBT	EET EDI	04/11/24 13:26
Dissolved	Filtration	Filtration			465103	NWW	EET PIT	04/11/24 09:40
Dissolved	Prep	3010A			465129	NWW	EET PIT	04/12/24 06:00
Dissolved	Analysis	EPA 6020B		1	465868	S1Z	EET PIT	04/18/24 16:50
Total/NA	Prep	3010A			465129	NWW	EET PIT	04/12/24 06:00
Total/NA	Analysis	EPA 6020B		1	465868	S1Z	EET PIT	04/18/24 17:21
Total/NA	Analysis	120.1		1	968815	HTV	EET EDI	04/10/24 13:45
Total/NA	Analysis	2310B-2011		1	969616	RAK	EET EDI	04/15/24 12:29
Total/NA	Analysis	2320B-2011		1	968376	RXA	EET EDI	04/08/24 12:41
Total/NA	Analysis	2540C-2015		1	969003	PLS	EET EDI	04/11/24 10:53
Total/NA	Analysis	2540D-2015		1	968978	PLS	EET EDI	04/11/24 08:44
Dissolved	Filtration	FILTRATION			969802	AXP	EET EDI	04/16/24 13:57
Dissolved	Analysis	350.1		1	969826	AXP	EET EDI	04/16/24 15:51
Total/NA	Analysis	350.1		1	969826	AXP	EET EDI	04/16/24 15:32
Total/NA	Prep	351.2			494285	NLE3	ELLE	04/15/24 13:24 - 04/15/24 16:24 [1]
Total/NA	Analysis	351.2		1	494825	JCG7	ELLE	04/16/24 13:38
Total/NA	Analysis	410.4		1	969678	HTV	EET EDI	04/15/24 18:08
Total/NA	Analysis	4500 O C-2016		1	968419	RXA	EET EDI	04/08/24 17:00
Total/NA	Analysis	5210 B-2016		1	968009	RXA	EET EDI	04/05/24 16:50
Total/NA	Analysis	9040C		1	968831	RXA	EET EDI	04/10/24 14:12
Total/NA	Analysis	9060A		1	968743	MMC	EET EDI	04/09/24 23:59
Dissolved	Filtration	FILTRATION			970901	HTV	EET EDI	04/22/24 10:30
Dissolved	Prep	SM 4500 P B			970912	HTV	EET EDI	04/22/24 11:30
Dissolved	Analysis	SM4500 P E-2011		1	970914	HTV	EET EDI	04/22/24 14:15
Total/NA	Prep	SM 4500 P B			970912	HTV	EET EDI	04/22/24 11:30
Total/NA	Analysis	SM4500 P E-2011		1	970914	HTV	EET EDI	04/22/24 14:15
Total/NA	Analysis	Total Nitrogen		1	969933	TJW	EET EDI	04/17/24 05:57

Client Sample ID: Basin 2

Date Collected: 04/04/24 09:45
Date Received: 04/04/24 19:00

Lab Sample ID: 460-301434-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		1	967979	SZK	EET EDI	04/05/24 18:18
Total/NA	Analysis	300.0		1	967981	SZK	EET EDI	04/05/24 18:18
Dissolved	Filtration	Filtration			494699	UAMX	ELLE	04/16/24 11:36
Dissolved	Prep	3005A			495025	UAMX	ELLE	04/17/24 08:35
Dissolved	Analysis	6020B		1	495819	F7JF	ELLE	04/18/24 09:00
Dissolved	Filtration	FILTRATION			968981	CDC	EET EDI	04/11/24 08:54
Dissolved	Prep	3010A			968985	CDC	EET EDI	04/11/24 09:03
Dissolved	Analysis	6020B		1	969026	CDC	EET EDI	04/11/24 12:12
Total Recoverable	Prep	3005A			492692	UAMX	ELLE	04/11/24 07:50
Total Recoverable	Analysis	6020B		1	494992	UCIG	ELLE	04/16/24 17:03
Total Recoverable	Prep	3005A			832171	RR	EET SAV	04/10/24 06:40
Total Recoverable	Analysis	6020B		1	832422	BWR	EET SAV	04/10/24 20:26
Total/NA	Prep	3010A			968793	NNW	EET EDI	04/10/24 11:42
Total/NA	Analysis	6020B		1	969021	FBT	EET EDI	04/11/24 13:28
Dissolved	Filtration	Filtration			465103	NWW	EET PIT	04/11/24 09:40
Dissolved	Prep	3010A			465129	NWW	EET PIT	04/12/24 06:00
Dissolved	Analysis	EPA 6020B		1	465868	S1Z	EET PIT	04/18/24 16:53
Total/NA	Prep	3010A			465129	NWW	EET PIT	04/12/24 06:00
Total/NA	Analysis	EPA 6020B		1	465868	S1Z	EET PIT	04/18/24 17:26
Total/NA	Analysis	120.1		1	968815	HTV	EET EDI	04/10/24 13:45
Total/NA	Analysis	2310B-2011		1	969616	RAK	EET EDI	04/15/24 12:29
Total/NA	Analysis	2320B-2011		1	968376	RXA	EET EDI	04/08/24 12:47
Total/NA	Analysis	2540C-2015		1	969003	PLS	EET EDI	04/11/24 10:53
Total/NA	Analysis	2540D-2015		1	968978	PLS	EET EDI	04/11/24 08:44
Dissolved	Filtration	FILTRATION			969802	AXP	EET EDI	04/16/24 13:57
Dissolved	Analysis	350.1		1	969826	AXP	EET EDI	04/16/24 15:52
Total/NA	Analysis	350.1		1	969826	AXP	EET EDI	04/16/24 15:33
Total/NA	Prep	351.2			494285	NLE3	ELLE	04/15/24 13:24 - 04/15/24 16:24 [1]
Total/NA	Analysis	351.2		1	494825	JCG7	ELLE	04/16/24 13:40
Total/NA	Analysis	410.4		1	969678	HTV	EET EDI	04/15/24 18:08
Total/NA	Analysis	4500 O C-2016		1	968419	RXA	EET EDI	04/08/24 16:55
Total/NA	Analysis	5210 B-2016		1	968009	RXA	EET EDI	04/05/24 16:57
Total/NA	Analysis	9040C		1	968831	RXA	EET EDI	04/10/24 14:17
Total/NA	Analysis	9060A		1	968743	MMC	EET EDI	04/10/24 02:33
Dissolved	Filtration	FILTRATION			970901	HTV	EET EDI	04/22/24 10:30
Dissolved	Prep	SM 4500 P B			970912	HTV	EET EDI	04/22/24 11:30
Dissolved	Analysis	SM4500 P E-2011		1	970914	HTV	EET EDI	04/22/24 14:15
Total/NA	Prep	SM 4500 P B			970912	HTV	EET EDI	04/22/24 11:30
Total/NA	Analysis	SM4500 P E-2011		1	970914	HTV	EET EDI	04/22/24 14:15
Total/NA	Analysis	Total Nitrogen		1	969933	TJW	EET EDI	04/17/24 05:57

Client Sample ID: Upstream

Date Collected: 04/04/24 10:45
Date Received: 04/04/24 19:00

Lab Sample ID: 460-301434-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		1	967979	SZK	EET EDI	04/05/24 18:33
Total/NA	Analysis	300.0		1	967981	SZK	EET EDI	04/05/24 18:33
Dissolved	Filtration	Filtration			494699	UAMX	ELLE	04/16/24 11:36
Dissolved	Prep	3005A			495025	UAMX	ELLE	04/17/24 08:35
Dissolved	Analysis	6020B		1	495819	F7JF	ELLE	04/18/24 09:02
Dissolved	Filtration	FILTRATION			968981	CDC	EET EDI	04/11/24 08:54
Dissolved	Prep	3010A			968985	CDC	EET EDI	04/11/24 09:03
Dissolved	Analysis	6020B		1	969026	CDC	EET EDI	04/11/24 12:14
Total Recoverable	Prep	3005A			492692	UAMX	ELLE	04/11/24 07:50
Total Recoverable	Analysis	6020B		1	494992	UCIG	ELLE	04/16/24 16:57
Total Recoverable	Prep	3005A			832171	RR	EET SAV	04/10/24 06:40
Total Recoverable	Analysis	6020B		1	832422	BWR	EET SAV	04/10/24 20:30
Total/NA	Prep	3010A			969114	GAE	EET EDI	04/11/24 19:00
Total/NA	Analysis	6020B		1	969236	FBT	EET EDI	04/12/24 15:42
Dissolved	Filtration	Filtration			465103	NWW	EET PIT	04/11/24 09:40
Dissolved	Prep	3010A			465129	NWW	EET PIT	04/12/24 06:00
Dissolved	Analysis	EPA 6020B		1	465868	S1Z	EET PIT	04/18/24 16:56
Total/NA	Prep	3010A			465129	NWW	EET PIT	04/12/24 06:00
Total/NA	Analysis	EPA 6020B		1	465868	S1Z	EET PIT	04/18/24 17:32
Total/NA	Analysis	120.1		1	968815	HTV	EET EDI	04/10/24 13:45
Total/NA	Analysis	2310B-2011		1	969616	RAK	EET EDI	04/15/24 12:29
Total/NA	Analysis	2320B-2011		1	968376	RXA	EET EDI	04/08/24 12:53
Total/NA	Analysis	2540C-2015		1	969003	PLS	EET EDI	04/11/24 10:53
Total/NA	Analysis	2540D-2015		1	968978	PLS	EET EDI	04/11/24 08:44
Dissolved	Filtration	FILTRATION			969802	AXP	EET EDI	04/16/24 13:57
Dissolved	Analysis	350.1		1	969826	AXP	EET EDI	04/16/24 15:54
Total/NA	Analysis	350.1		1	969826	AXP	EET EDI	04/16/24 15:35
Total/NA	Prep	351.2			494285	NLE3	ELLE	04/15/24 13:24 - 04/15/24 16:24 [1]
Total/NA	Analysis	351.2		1	494825	JCG7	ELLE	04/16/24 13:42
Total/NA	Analysis	410.4		1	969678	HTV	EET EDI	04/15/24 18:08
Total/NA	Analysis	4500 O C-2016		1	968419	RXA	EET EDI	04/08/24 17:05
Total/NA	Analysis	5210 B-2016		1	968009	RXA	EET EDI	04/05/24 17:15
Total/NA	Analysis	9040C		1	968831	RXA	EET EDI	04/10/24 14:23
Total/NA	Analysis	9060A		1	968743	MMC	EET EDI	04/10/24 02:58
Dissolved	Filtration	FILTRATION			970901	HTV	EET EDI	04/22/24 10:30
Dissolved	Prep	SM 4500 P B			970912	HTV	EET EDI	04/22/24 11:30
Dissolved	Analysis	SM4500 P E-2011		1	970914	HTV	EET EDI	04/22/24 14:15
Total/NA	Prep	SM 4500 P B			970912	HTV	EET EDI	04/22/24 11:30
Total/NA	Analysis	SM4500 P E-2011		1	970914	HTV	EET EDI	04/22/24 14:15
Total/NA	Analysis	Total Nitrogen		1	969933	TJW	EET EDI	04/17/24 05:57

Client Sample ID: Clarifying Pond

Date Collected: 04/04/24 11:15
Date Received: 04/04/24 19:00

Lab Sample ID: 460-301434-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		1	967979	SZK	EET EDI	04/05/24 18:48
Total/NA	Analysis	300.0		1	967981	SZK	EET EDI	04/05/24 18:48
Dissolved	Filtration	Filtration			494699	UAMX	ELLE	04/16/24 11:36
Dissolved	Prep	3005A			495026	X3ZX	ELLE	04/22/24 08:50
Dissolved	Analysis	6020B		1	497745	UCIG	ELLE	04/23/24 12:18
Dissolved	Filtration	FILTRATION			968981	CDC	EET EDI	04/11/24 08:54
Dissolved	Prep	3010A			968985	CDC	EET EDI	04/11/24 09:03
Dissolved	Analysis	6020B		1	969026	CDC	EET EDI	04/11/24 12:17
Total Recoverable	Prep	3005A			492692	UAMX	ELLE	04/11/24 07:50
Total Recoverable	Analysis	6020B		1	494992	UCIG	ELLE	04/16/24 15:53
Total Recoverable	Prep	3005A			832171	RR	EET SAV	04/10/24 06:40
Total Recoverable	Analysis	6020B		1	832422	BWR	EET SAV	04/10/24 20:34
Total/NA	Prep	3010A			968793	NNW	EET EDI	04/10/24 11:42
Total/NA	Analysis	6020B		1	969021	FBT	EET EDI	04/11/24 13:31
Dissolved	Filtration	Filtration			465103	NWW	EET PIT	04/11/24 09:40
Dissolved	Prep	3010A			465129	NWW	EET PIT	04/12/24 06:00
Dissolved	Analysis	EPA 6020B		1	465868	S1Z	EET PIT	04/18/24 16:58
Total/NA	Prep	3010A			465129	NWW	EET PIT	04/12/24 06:00
Total/NA	Analysis	EPA 6020B		1	465868	S1Z	EET PIT	04/18/24 17:38
Total/NA	Analysis	120.1		1	968815	HTV	EET EDI	04/10/24 13:45
Total/NA	Analysis	2310B-2011		1	969616	RAK	EET EDI	04/15/24 12:31
Total/NA	Analysis	2320B-2011		1	968376	RXA	EET EDI	04/08/24 12:59
Total/NA	Analysis	2540C-2015		1	969003	PLS	EET EDI	04/11/24 10:53
Total/NA	Analysis	2540D-2015		1	968978	PLS	EET EDI	04/11/24 08:44
Dissolved	Filtration	FILTRATION			969802	AXP	EET EDI	04/16/24 13:57
Dissolved	Analysis	350.1		1	969826	AXP	EET EDI	04/16/24 15:55
Total/NA	Analysis	350.1		1	969826	AXP	EET EDI	04/16/24 15:36
Total/NA	Prep	351.2			494285	NLE3	ELLE	04/15/24 13:24 - 04/15/24 16:24 [1]
Total/NA	Analysis	351.2		1	494825	JCG7	ELLE	04/16/24 13:44
Total/NA	Analysis	410.4		1	969678	HTV	EET EDI	04/15/24 18:08
Total/NA	Analysis	4500 O C-2016		1	968419	RXA	EET EDI	04/08/24 17:10
Total/NA	Analysis	5210 B-2016		1	968009	RXA	EET EDI	04/05/24 17:04
Total/NA	Analysis	9040C		1	968831	RXA	EET EDI	04/10/24 14:28
Total/NA	Analysis	9060A		1	968743	MMC	EET EDI	04/10/24 03:23
Dissolved	Filtration	FILTRATION			970901	HTV	EET EDI	04/22/24 10:30
Dissolved	Prep	SM 4500 P B			970912	HTV	EET EDI	04/22/24 11:30
Dissolved	Analysis	SM4500 P E-2011		1	970914	HTV	EET EDI	04/22/24 14:15
Total/NA	Prep	SM 4500 P B			970912	HTV	EET EDI	04/22/24 11:30
Total/NA	Analysis	SM4500 P E-2011		1	970914	HTV	EET EDI	04/22/24 14:15
Total/NA	Analysis	Total Nitrogen		1	969933	TJW	EET EDI	04/17/24 05:57

[1] This procedure uses a method stipulated length of time for the process. Both start and end times are displayed.

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill - Anti-Degradation

Job ID: 460-301434-1

Laboratory References:

EET EDI = Eurofins Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

EET PIT = Eurofins Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

EET SAV = Eurofins Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Microbac = Marietta, OH, 158 Starlite Drive, Marietta, OH 45750

Accreditation/Certification Summary

Client: Heidelberg Materials Northeast LLC
Job ID: 460-301434-1
Project/Site: Rock Hill - Anti-Degradation

Laboratory: Eurofins Edison

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Connecticut	State	PH-0818	09-30-24
DE Haz. Subst. Cleanup Act (HSCA)	State	N/A	01-02-25
Georgia	State	12028 (NJ)	06-30-24
Massachusetts	State	M-NJ312	06-30-24
New Jersey	NELAP	12028	06-30-24
New York	NELAP	11452	04-01-25
Pennsylvania	NELAP	68-00522	02-28-25
Rhode Island	State	LAO00376	12-31-24
USDA	US Federal Programs	P330-20-00244	05-31-24

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
A2LA	Dept. of Defense ELAP	0001.01	11-30-24
A2LA	ISO/IEC 17025	0001.01	11-30-24
Alabama	State	43200	01-31-25
Alaska	State	PA00009	06-30-24
Alaska (UST)	State	17-027	02-28-25
Arizona	State	AZ0780	03-12-25
Arkansas DEQ	State	88-00660	08-09-24
California	State	2792	11-30-24
Colorado	State	PA00009	06-30-24
Connecticut	State	PH-0746	06-30-25
DE Haz. Subst. Cleanup Act (HSCA)	State	019-006 (PA cert)	01-31-25
Delaware (DW)	State	N/A	01-31-25
Florida	NELAP	E87997	06-30-24
Georgia (DW)	State	C048	01-31-25
Hawaii	State	N/A	01-31-25
Illinois	NELAP	200027	01-31-25
Iowa	State	361	03-01-24 *
Kansas	NELAP	E-10151	10-31-24
Kentucky (DW)	State	KY90088	12-31-24
Kentucky (UST)	State	0001.01	11-30-24
Kentucky (WW)	State	KY90088	12-31-23 *
Louisiana (All)	NELAP	02055	06-30-24
Maine	State	2019012	03-12-25
Maryland	State	100	06-30-25
Massachusetts	State	M-PA009	06-30-24
Michigan	State	9930	01-31-25
Minnesota	NELAP	042-999-487	12-31-24
Mississippi	State	023	01-31-25
Missouri	State	450	01-31-25
Montana (DW)	State	0098	01-01-25
Nebraska	State	NE-OS-32-17	01-31-25
New Hampshire	NELAP	2730	01-10-25
New Jersey	NELAP	PA011	06-30-24
New York	NELAP	10670	04-01-25
North Carolina (DW)	State	42705	07-31-24
North Carolina (WW/SW)	State	521	12-31-24

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Accreditation/Certification Summary

Client: Heidelberg Materials Northeast LLC
Job ID: 460-301434-1
Project/Site: Rock Hill - Anti-Degradation

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC (Continued)

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Oklahoma	NELAP	9804	08-31-24
Oregon	NELAP	PA200001	09-11-24
Pennsylvania	NELAP	36-00037	01-31-25
Quebec Ministry of Environment and Fight against Climate Change	PALA	507	09-16-24
Rhode Island	State	LAO00338	12-30-24
South Carolina	State	89002	01-31-24 *
Tennessee	State	02838	01-31-25
Texas	NELAP	T104704194-23-46	08-31-24
USDA	US Federal Programs	525-22-298-19481	10-25-25
Vermont	State	VT - 36037	10-28-24
Virginia	NELAP	460182	06-14-25
West Virginia (DW)	State	9906 C	01-31-25
West Virginia DEP	State	055	07-31-24
Wyoming	State	8TMS-L	01-31-25
Wyoming (UST)	A2LA	0001.01	11-30-24

Laboratory: Eurofins Pittsburgh

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Arkansas DEQ	State	19-033-0	06-27-24
California	State	2891	04-30-24
Connecticut	State	PH-0688	09-30-24
Florida	NELAP	E871008	06-30-24
Georgia	State	PA 02-00416	04-30-25
Illinois	NELAP	004375	06-30-24
Kansas	NELAP	E-10350	01-31-25
Kentucky (UST)	State	162013	04-30-23 *
Kentucky (WW)	State	KY98043	12-31-24
Louisiana	NELAP	04041	06-30-22 *
Louisiana (All)	NELAP	04041	06-30-24
Maine	State	PA00164	03-06-26
Minnesota	NELAP	042-999-482	12-31-24
New Hampshire	NELAP	2030	04-04-24 *
New Jersey	NELAP	PA005	06-30-24
New York	NELAP	11182	04-01-25
North Carolina (WW/SW)	State	434	12-31-24
North Dakota	State	R-227	04-30-24
Oregon	NELAP	PA-2151	02-06-25
Pennsylvania	NELAP	02-00416	04-30-25
Rhode Island	State	LAO00362	01-01-25
South Carolina	State	89014	04-30-25
Texas	NELAP	T104704528	03-31-25
US Fish & Wildlife	US Federal Programs	058448	03-31-24 *
USDA	US Federal Programs	P330-16-00211	04-11-26
Utah	NELAP	PA001462019-8	05-31-24
Virginia	NELAP	10043	07-14-24
West Virginia DEP	State	142	01-31-25
Wisconsin	State	998027800	08-31-24

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Accreditation/Certification Summary

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill - Anti-Degradation

Job ID: 460-301434-1

Laboratory: Eurofins Savannah

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
	AFCEE	SAVLAB	
Alabama	State	41450	06-30-24
ANAB	Dept. of Defense ELAP	L2463	09-22-24
Arkansas (DW)	State	GA00006	06-30-24
California	State	2939	06-30-24
Florida	NELAP	E87052	06-30-24
Georgia	State	E87052	06-30-24
Georgia (DW)	State	803	06-30-24
Guam	State	19-007R	04-17-24
Hawaii	State	<cert No.>	06-30-24
Illinois	NELAP	200022	11-30-24
Indiana	State	C-GA-02	06-30-24
Iowa	State	353	07-01-25
Kentucky (UST)	State	NA	06-30-24
Louisiana	NELAP	30690	06-30-24
Louisiana (All)	NELAP	30690	06-30-24
Louisiana (DW)	State	LA009	12-31-24
Maine	State	GA00006	09-25-24
Maryland	State	250	12-31-24
Massachusetts	State	M-GA006	06-30-24
Michigan	State	9925	06-30-24
Mississippi	State	<cert No.>	06-30-24
Nebraska	State	NE-OS-7-04	06-30-24
New Jersey	NELAP	GA769	06-30-24
New Mexico	State	GA00006	06-30-24
North Carolina (DW)	State	13701	07-31-24
North Carolina (WW/SW)	State	269	12-31-24
Pennsylvania	NELAP	68-00474	06-30-24
Puerto Rico	State	GA00006	01-01-25
South Carolina	State	98001	06-30-24
Tennessee	State	TN02961	06-30-24
Texas	NELAP	T1047004185	11-30-24
Texas	TCEQ Water Supply	T104704185	06-30-24
USDA	US Federal Programs	P330-18-00313	09-03-24
Virginia	NELAP	460161	06-14-24
Wyoming	State	8TMS-L	06-30-24

Method Summary

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill - Anti-Degradation

Job ID: 460-301434-1

Method	Method Description	Protocol	Laboratory
300.0	Anions, Ion Chromatography	EPA	EET EDI
6020B	Metals (ICP/MS)	SW846	EET EDI
6020B	Metals (ICP/MS)	SW846	EET SAV
6020B	Metals (ICP/MS)	SW846	ELLE
EPA 6020B	Metals (ICP/MS)	SW846	EET PIT
120.1	Conductivity, Specific Conductance	EPA	EET EDI
2310B-2011	Acidity	SM	EET EDI
2320B-2011	Alkalinity, Total	SM	EET EDI
2540C-2015	Total Dissolved Solids (Dried at 180 °C)	SM	EET EDI
2540D-2015	Total Suspended Solids (Dried at 103-105°C)	SM	EET EDI
350.1	Nitrogen, Ammonia	EPA	EET EDI
351.2	Nitrogen, Total Kjeldahl	EPA	ELLE
410.4	COD	EPA	EET EDI
4500 O C-2016	Oxygen, Dissolved	SM	EET EDI
5210 B-2016	BOD, 5-Day	SM	EET EDI
9040C	pH	SW846	EET EDI
9060A	Organic Carbon, Total (TOC)	SW846	EET EDI
SM4500 P E-2011	Phosphorus	SM	EET EDI
Total Nitrogen	Nitrogen, Total	EPA	EET EDI
Subcontract	Osomotic Pressure	None	Microbac
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	EET SAV
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	ELLE
3010A	Preparation, Total Metals	SW846	EET EDI
3010A	Preparation, Total Metals	SW846	EET PIT
351.2	Nitrogen, Total Kjeldahl	EPA	ELLE
FILTRATION	Sample Filtration	None	EET EDI
Filtration	Sample Filtration	None	EET PIT
Filtration	Sample Filtration	None	ELLE
SM 4500 P B	Phosphorous, Total and Ortho	SM	EET EDI

Protocol References:

EPA = US Environmental Protection Agency

None = None

SM = "Standard Methods For The Examination Of Water And Wastewater"

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET EDI = Eurofins Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

EET PIT = Eurofins Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

EET SAV = Eurofins Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Microbac = Marietta, OH, 158 Starlite Drive, Marietta, OH 45750

Sample Summary

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill - Anti-Degradation

Job ID: 460-301434-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
460-301434-1	NPDES 001	Water	04/04/24 08:30	04/04/24 19:00
460-301434-2	Basin 1	Water	04/04/24 10:15	04/04/24 19:00
460-301434-3	Basin 2	Water	04/04/24 09:45	04/04/24 19:00
460-301434-4	Upstream	Water	04/04/24 10:45	04/04/24 19:00
460-301434-5	Clarifying Pond	Water	04/04/24 11:15	04/04/24 19:00

Microbac Laboratories Inc., - Marietta, OH

Client Project ID:

46011424

For:

Julie Gilmore

Eurofins Environment Testing Northeast, LLC

777 New Durham RD

Edison, NJ 08817

Project State of Origin: Pennsylvania

Project Requested Certification:

Microbac Laboratories Inc., - Marietta, OH	68-01670	PA Department of Environmental Protection

All test results meet the requirements of the QAPP and other applicable contract terms and conditions. Any exceptions are attached to this cover page or addressed in the method narratives presented in the report. All results for soil samples are reported on a 'dry-weight' basis unless specified otherwise. Analytical results for water and wastes are reported on a 'as received' basis unless specified otherwise. A statement of uncertainty for each analysis is available upon request. The reported results are related only to the samples analyzed as received. This laboratory report may be released as a hardcopy and in computer-readable form submitted electronically or on diskette. This laboratory report shall not be reproduced, except in full, without the written approval of Microbac Laboratories, Inc.

Laboratory Project Manager:

Michelle Taylor

Project Manager

Michelle.Taylor@microbac.com

Authorized By:

Tia Opel

Client Relationship Manager

Issued: 04/12/2024

MICROBAC®

Laboratory Report Number: M4D0571

Client Project ID: 46011424

Cooler Receipt Log

Cooler ID: Default Cooler Temp: 1.2°C

Cooler Inspection Checklist

Ice Present or not required?	Yes
Shipping containers sealed or not required?	Yes
Custody seals intact or not required?	Yes
Chain of Custody (COC) Present?	Yes
COC includes customer information?	Yes
Relinquished and received signature on COC?	Yes
Sample collector identified on COC?	Yes
Sample type identified on COC?	Yes
Correct type of Containers Received	No
Correct number of containers listed on COC?	Yes
Containers Intact?	Yes
COC includes requested analyses?	Yes
Enough sample volume for indicated tests received?	Yes
Sample labels match COC (Name, Date & Time?)	Yes
Samples arrived within hold time?	Yes
Correct preservatives on COC or not required?	Yes
Chemical preservations checked or not required?	Yes
Preservation checks meet method requirements?	Yes
VOA vials have zero headspace, or not recd.?	Yes

Laboratory Report Number: M4D0571

Client Project ID: 46011424

Sample Notes

PADEP 391-2000-008

A4 **Sample was received with head space.**

Osmotic Pressure

M4D0571-01	NPDES 001 (460-301434-1)	M4D0571-02	Basin 1 (460-301434-2)
M4D0571-03	Basin 2 (460-301434-3)	M4D0571-04	Upstream (460-301434-4)
M4D0571-05	Clarifying Pond (460-3011434-5)		

MICROBAC®

Laboratory Report Number: M4D0571

Client Project ID: 46011424

Microbac Laboratories Inc., - Marietta, OH

CERTIFICATE OF ANALYSIS

Client ID:	NPDES 001 (460-301434-1)			**Collection Date:**	04/04/2024 08:30
Laboratory ID:	M4D0571-01			**Prep Date:**	04/11/2024 13:54
Matrix:	Aqueous			**Analyzed:**	04/11/2024 14:16
Batch / Sequence:	B4D0618 /	**Analytical Method:**	PADEP 391-2000-008	**Calibration:**	NA
Instrument:	OSMOMETER 5004	**Units:**	mOsm/kg	**File ID:**	OsmoticPressure_B4D0618_240411020430.xls
Analyst:	TTB	**Dilution:**	1		

Analyte	CAS Number	Result	MDL	RL	Flag	Qualifier
Osmotic Pressure		ND	6.00	10.0		A4

MICROBAC®

Laboratory Report Number: M4D0571

Client Project ID: 46011424

Microbac Laboratories Inc., - Marietta, OH

CERTIFICATE OF ANALYSIS

Client ID:	Basin 1 (460-301434-2)			**Collection Date:**	04/04/2024 10:15
Laboratory ID:	M4D0571-02			**Prep Date:**	04/11/2024 13:54
Matrix:	Aqueous			**Analyzed:**	04/11/2024 14:16
Batch / Sequence:	B4D0618 /	**Analytical Method:**	PADEP 391-2000-008	**Calibration:**	NA
Instrument:	OSMOMETER 5004	**Units:**	mOsm/kg	**File ID:**	OsmoticPressure_B4D0618_240411020430.xls
Analyst:	TTB	**Dilution:**	1		

Analyte	CAS Number	Result	MDL	RL	Flag	Qualifier
Osmotic Pressure		8.00	6.00	10.0		A4

MICROBAC®

Laboratory Report Number: M4D0571

Client Project ID: 46011424

Microbac Laboratories Inc., - Marietta, OH

CERTIFICATE OF ANALYSIS

Client ID:	Basin 2 (460-301434-3)			**Collection Date:**	04/04/2024 09:45
Laboratory ID:	M4D0571-03			**Prep Date:**	04/11/2024 13:54
Matrix:	Aqueous			**Analyzed:**	04/11/2024 14:16
Batch / Sequence:	B4D0618 /	**Analytical Method:**	PADEP 391-2000-008	**Calibration:**	NA
Instrument:	OSMOMETER 5004	**Units:**	mOsm/kg	**File ID:**	OsmoticPressure_B4D0618_240411020430.xls
Analyst:	TTB	**Dilution:**	1		

Analyte	CAS Number	Result	MDL	RL	Flag	Qualifier
Osmotic Pressure		7.00	6.00	10.0		A4

MICROBAC®

Laboratory Report Number: M4D0571

Client Project ID: 46011424

Microbac Laboratories Inc., - Marietta, OH

CERTIFICATE OF ANALYSIS

Client ID:	Upstream (460-301434-4)			**Collection Date:**	04/04/2024 10:45
Laboratory ID:	M4D0571-04			**Prep Date:**	04/11/2024 13:54
Matrix:	Aqueous			**Analyzed:**	04/11/2024 14:16
Batch / Sequence:	B4D0618 /	**Analytical Method:**	PADEP 391-2000-008	**Calibration:**	NA
Instrument:	OSMOMETER 5004	**Units:**	mOsm/kg	**File ID:**	OsmoticPressure_B4D0618_240411020430.xls
Analyst:	TTB	**Dilution:**	1		

Analyte	CAS Number	Result	MDL	RL	Flag	Qualifier
Osmotic Pressure		ND	6.00	10.0		A4

MICROBAC®

Laboratory Report Number: M4D0571

Client Project ID: 46011424

Microbac Laboratories Inc., - Marietta, OH

CERTIFICATE OF ANALYSIS

Client ID:	Clarifying Pond (460-3011434-5)			**Collection Date:**	04/04/2024 11:15
Laboratory ID:	M4D0571-05			**Prep Date:**	04/11/2024 13:54
Matrix:	Aqueous			**Analyzed:**	04/11/2024 14:16
Batch / Sequence:	B4D0618 /	**Analytical Method:**	PADEP 391-2000-008	**Calibration:**	NA
Instrument:	OSMOMETER 5004	**Units:**	mOsm/kg	**File ID:**	OsmoticPressure_B4D0618_240411020430.xls
Analyst:	TTB	**Dilution:**	1		

Analyte	CAS Number	Result	MDL	RL	Flag	Qualifier
Osmotic Pressure		ND	6.00	10.0		A4

Laboratory Report Number: M4D0571

Client Project ID: 46011424

Notes and Definitions

A4: Sample was received with head space.
MDL: Method Detection Limit
RL: Reporting Limit

Laboratory Report Number: M4D0571

Client Project ID: 46011424

METHOD BLANKS

Sample ID:	B4D0618-BLK1	**Prep Date:**	04/11/24 13:54	**Matrix:**	Aqueous
Instrument:	OSMOMETER 5004	**Analyzed:**	04/11/24 14:16	**Method:**	PADEP 391-2000-008
File ID:	OsmoticPressure_B4D(	**Sequence:**		**Analyst:**	TTB
Batch:	B4D0618	**Units:**	mOsm/kg	**Calibration:**	

Analyte	Result	MDL	RL	Dilution	Flag	Q
Osmotic Pressure	6.00	6.00	10.0	1	U	

* - Detected in the associated method Blank at a concentration >= RL

MICROBAC®

Laboratory Report Number: M4D0571

Client Project ID: 46011424

BLANK SPIKE / DUPLICATE (BS/BSD)

Method:	PADEP 391-2000-008		**Blank Spike**	**Duplicate**
Batch:	B4D0618	**Spike ID:**	B4D0618-BS1	B4D0618-BSD1
Analyst:	TTB	**Prepared:**	04/11/24 13:54	04/11/24 13:54
Matrix:	Aqueous	**Analyzed:**	04/11/24 14:16	04/11/24 14:16
Units:	mOsm/kg	**File ID:**	OsmoticPressure_B4D0618_240	OsmoticPressure_B4D0618_240
Instrument:	OSMOMETER 5004	**Initial/Final:**	1mL/1mL	1mL/1mL
Calibration:				

Analyte	BS Spiked	BS Found	BS %Rec	BSD Spiked	BSD Found	BSD %Rec	%RPD	%Rec Limts	RPD Limit	Q
Osmotic Pressure	290	285	98.3	290	290	100	1.74	90 - 110	20	

* - Does not meet %Rec acceptance criteria.
- Does not meet RPD acceptance criteria.

Eurofins Edison
777 New Durham Road
Edison, NJ 08817
Phone: 732-549-3900 Fax: 732-549-3679

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Gilmore, Julie L	Carrier Tracking No(s):	COC No: 460-70932.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Julie.Gilmore@et.eurofinsus.com	State of Origin: Pennsylvania	Page: Page 1 of 1
Company: Microbac Laboratories, Inc.		Accreditations Required (See note): NELAP - Pennsylvania		Job #: 460-301434-1
Address: 158 Starlite Drive,	Due Date Requested: 4/16/2024			
City: Marietta	TAT Requested (days):			
State, Zip: OH, 45750				
Phone: 800-373-4071(Tel)	PO #:			
Email:	WO #:			
Project Name: Rock Hill - Anti-Degradation	Project #: 46011424			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)
Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	SUB (Osmotic Pressure) Osmotic Pressure	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
NPDES 001 (460-301434-1)	4/4/24	08:30 Eastern		Water			X	1	
Basin 1 (460-301434-2)	4/4/24	10:15 Eastern		Water			X	1	
Basin 2 (460-301434-3)	4/4/24	09:45 Eastern		Water			X	1	
Upstream (460-301434-4)	4/4/24	10:45 Eastern		Water			X	1	
Clarifying Pond (460-301434-5)	4/4/24	11:15 Eastern		Water			X	1	

M 4 D 0 5 7 1

Eurofins Environment Testing Northeast, LLC
Rec'd: 04/09/2024 11:00
By: Stephanie Murphy Temp: 1.2 (Signature)

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Northeast, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Northeast, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Northeast, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Northeast, LLC.

Possible Hazard Identification	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 1	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		4/8/24 1900	EET&E			
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
3	Relinquished by:	Date/Time:	Company	Received by: Stephanie Murphy	Date/Time: 4/9/24 1100	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

MICROBAC®

Work Order # M4D0571

COOLER TEMP >6° C LOG

SAMPLE ID	Bottle 1 °C	Bottle 2 °C	Bottle 3 °C	Bottle 4 °C	Bottle 5 °C	Bottle 6 °C

4/9/2024 SM

pH Lot # HC3249089

pH Exceptions

SAMPLE ID	Bottle 1	Bottle 2	Bottle 3	Bottle 4	Bottle 5	Bottle 6

4/9/2024 SM

PRESERVATIVE EXCEPTIONS

✓ NONE

__ AS NOTED

4/9/2024 SM

Document Control # 1957
Last 04-10-2019

Issued to: Document Master File

Eurofins Edison
777 New Durham Road
Edison, NJ 08817
Phone: 732-549-3900 Fax: 732-549-3679

Chain of Custody Record

30 - 14 ~ 28° KOP 2

eurofins 3014/34

Client Information	Sampler	Lab PM: Gilmore, Julie L	Carrier Tracking No(s):	COC No: 460-180329-115848.1
Client Contact: Andrew Gutshall	Phone:	E-Mail: Julie.Gilmore@et.eurofinsus.com	State of Origin:	Page: Page 1 of 2
Company: Heidelberg Materials Northeast LLC	PWSID:			
Address: 7660 Imperial Way	Due Date Requested:			
City: Allentown	TAT Requested (days):			
State, Zip: PA, 18195	Compliance Project: Δ Yes Δ No			
Phone:	PO #: Purchase Order not required			
Email: andrew.gutshall@heidelbergmaterials.com	WO #:			
Project Name: Rock Hill Anti-Degradation	Project #: 46011424			
Site:	SSOW#:			

460-301434 Chain of Custody

Analysis Requested

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020B (MOD) Single Element 6020B Metals List			6020B (MOD) Single Element 6020B Metals List			351.2 Local Method	6020B Dissolved Cd/Fe/Zn	6020B (MOD) Total Fe		350.1 410.4, 4500_P_E	120.1 9040C, SM2310B	350.1, 4500_P_E, 6020B	2320B (MOD) Alkalinity	6020B (MOD) Total Custom Metals		9060A TOC	2540D, SM5210B_Calc	2540C TDS	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	D	S	N	D	S	N	N	D	S	N	N	N	D	S	N	N		
NPDES 001	4/4/24	0830	G	Water			/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/		1
Basin 1	4/4/24	1195	G	Water			/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/		2
Basin 2	4/4/24	0945	G	Water			/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/		3
Upstream	4/4/24	1045	G	Water			/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/		4
Clarifying Pond	4/4/24	1115	G	Water			/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/		5

G Amchlor
H Ascorbic Acid
I Ice
J DI Water
K EDTA
L EDA
Other

S H2SO4
T TSP Dodecahydrate
U Acetone
V MCAA
W pH 4-5
Y Trizma
Z other (specify)

SHORT HOLD (onth) Months

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are ret
☐ Return To Client ☐ Disposal By Lab ☐ A

Deliverable Requested: I II III IV Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
[signature]	4/7/24 1300		[signature]	4/4/24 1300	EETN-KOP
[signature]	4-4-24 1715	EETN-KOP	[signature]	4/4	ETA
[signature]	4/4 1900	ETA	[signature]	4/4 19'00	ETA

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks:

Ver: 06/08/2021

Eurofins Edison
777 New Durham Road
Edison, NJ 08817
Phone: 732-549-3900 Fax: 732-549-3679

Chain of Custody Record

30 °C
1.4
2.8 Kop 2

eurofins

Client Information	Sampler	Lab PM: Gilmore, Julie L	Carrier Tracking No(s):	COC No: 460-180329-115848.2
Client Contact: Andrew Gutshall	Phone:	E-Mail: Julie.Gilmore@et.eurofinsus.com	State of Origin:	Page: Page 2 of 2
Company: Heidelberg Materials Northeast LLC	PWSID:			Job #: 301439
Address: 7660 Imperial Way	Due Date Requested:			
City: Allentown	TAT Requested (days):			
State, Zip: PA, 18195	Compliance Project: Δ Yes Δ No			
Phone:	PO #: Purchase Order not required			
Email: andrew.gutshall@heidelbergmaterials.com	WO #:			
Project Name: Rock Hill Anti-Degradation	Project #: 46011424			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:
A HCL, B NaOH, C Zn Acetate, D Nitric Acid, E NaHSO4, F MeOH, G Amchlor, H Ascorbic Acid, I Ice, J DI Water, K EDTA, L EDA, M Hexane, N None, O AsNaO2, P Na2O4S, Q Na2SO3, R Na2S2O3, S H2SO4, T TSP Dodecahydrate, U Acetone, V MCAA, W pH 4-5, Y Trizma, Z other (specify)
Other

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	300_ORGFM_28D, 300_ORGFMS	245.1 Local Method	6020B Total Aluminum	45.00_O_C Oxidized Oxygen	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	D	D			
NPDES 001	4/4/24	0830	G	Water			/	/	/	/		1
Basin 1	4/4/24	1015	G	Water			/	/	/	/		2
Basin 2	4/4/24	0945	G	Water			/	/	/	/		3
Upstream	4/4/24	1045	G	Water			/	/	/	/		4
Clarifying Pond	4/4/24	1115	G	Water			/	/	/	/		5

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested. I II III IV Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	4/4/24 1300			4/4/24 1300	EETN-KOP
Relinquished by:	Date/Time: 4-4-24 1715	Company EETN-KOP	Received by:	Date/Time: 4/4	Company EETN
Relinquished by:	Date/Time: 4/4 1900	Company EETN	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.	Cooler Temperature(s) °C and Other Remarks:

Ver: 06/08/2021

Eurofins **TestAmerica Edison**

Receipt Temperature and pH Log

Job Number: 301434

Number of Coolers: 3 **IR Gun #** 2

Cooler Temperatures

	RAW	CORRECTED		RAW	CORRECTED		RAW	CORRECTED
Cooler #1:	3.0 °C	3.0 °C	Cooler #4:	°C	°C	Cooler #7:	°C	°C
Cooler #2:	1.4 °C	1.4 °C	Cooler #5:	°C	°C	Cooler #8:	°C	°C
Cooler #3:	2.8 °C	2.8 °C	Cooler #6:	°C	°C	Cooler #9:	°C	°C

TALS Sample Number	Ammonia (pH<2)	COD (pH<2)	Nitrate Nitrite (pH<2)	Metals (pH<2)	Hardness (pH<2)	Pest (pH 5-9)	EPH or QAM (pH<2)	Phenols (pH<2)	Sulfide (pH>9)	TKN (pH<2)	TOC (pH<2)	Total Cyanide (pH>12)	Total Phos (pH<2)	Other	Other
1	<2			<2						<2	<2		<2		
2	<2			<2						<2	<2		<2		
3	<2			<2						<2	<2		<2		
4	<2			<2						<2	<2		<2		
5	<2			<2						<2	<2		<2		

If pH adjustments are required record the information below.

Sample No(s) adjusted _____

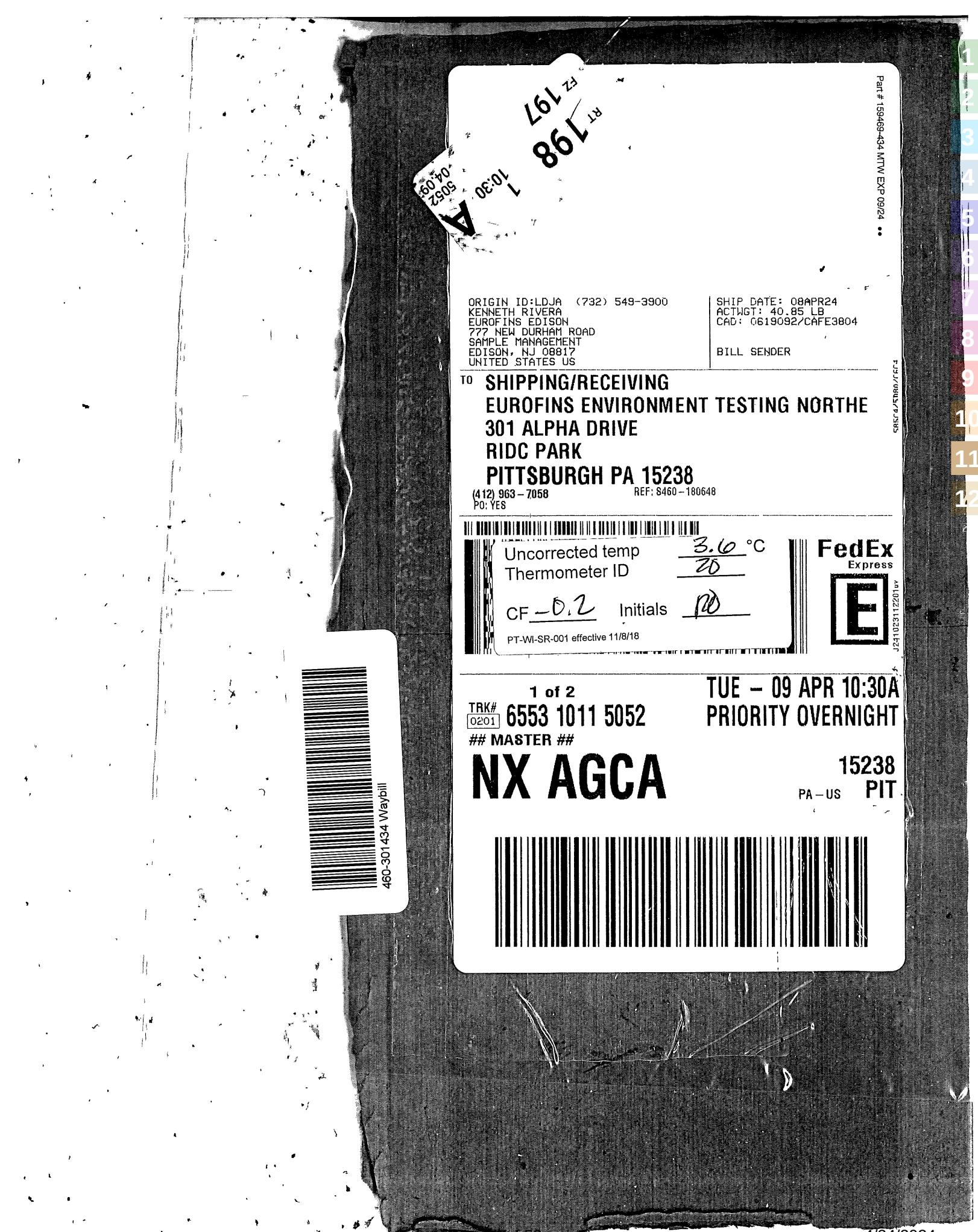
Preservative Name/Conc. _____ Volume of Preservative used (ml): _____

Lot # of Preservative(s): _____ Expiration Date: _____

The appropriate Project Manager and Department Manager should be notified about the samples which were pH adjusted.

Samples for Metal analysis which are out of compliance must be acidified at least 24 hours prior to analysis.

Initials. _____ **Date:** 4/4



Part # 159469-434 MTW EXP 09/24

ORIGIN ID:LDJA (732) 549-3900
KENNETH RIVERA
EUROFINS EDISON
777 NEW DURHAM ROAD
SAMPLE MANAGEMENT
EDISON, NJ 08817
UNITED STATES US

SHIP DATE: 08APR24
ACTWGT: 40.85 LB
CAD: 0619092/CAFE3804

BILL SENDER

TO SHIPPING/RECEIVING
EUROFINS ENVIRONMENT TESTING NORTHE
301 ALPHA DRIVE
RIDC PARK
PITTSBURGH PA 15238
(412) 963-7058
PO: YES
REF: 8460-180648

Uncorrected temp 3.6 °C
Thermometer ID 20
CF -0.2 Initials RD
PT-WI-SR-001 effective 11/8/18

FedEx Express

1 of 2
TRK# 0201 6553 1011 5052
MASTER
NX AGCA

TUE - 09 APR 10:30A
PRIORITY OVERNIGHT
15238
PA - US PIT

460-301434 Waybill

Eurofins Edison
777 New Durham Road
Edison, NJ 08817
Phone 732-549-3900 Fax: 732-549-3679

Method 1PAA

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Gilmore, Julie L	Carrier Tracking No(s):	COC No: 460-70926 1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Julie.Gilmore@et.eurofinsus.com	State of Origin: Pennsylvania	Page: Page 1 of 1
Company: Eurofins Environment Testing Northeast,		Accreditations Required (See note): NELAP - Pennsylvania		Job #: 460-301434-1
Address: 301 Alpha Drive, RIDC Park,	Due Date Requested: 4/17/2024			
City: Pittsburgh	TAT Requested (days):			
State, Zip: PA, 15238				
Phone: 412-963-7058(Tel) 412-963-2468(Fax)	PO #:			
Email:	WO #:			
Project Name: Rock Hill - Anti-Degradation	Project #: 46011424			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)
Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020B/3010A Total Lithium	6020B/Filtration_ME (MOD) Dissolved Lithium	Total Number of containers	Special Instructions/Note:
			Preservation Code:							
NPDES 001 (460-301434-1)	4/4/24	08.30 Eastern		Water			X	X	2	
Basin 1 (460-301434-2)	4/4/24	10.15 Eastern		Water			X	X	2	
Basin 2 (460-301434-3)	4/4/24	09 45 Eastern		Water			X	X	2	
Upstream (460-301434-4)	4/4/24	10:45 Eastern		Water			X	X	2	
Clarifying Pond (460-301434-5)	4/4/24	11.15 Eastern		Water			X	X	2	

460-301434 Chain of Custody

Note Since laboratory accreditations are subject to change, Eurofins Environment Testing Northeast, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories This sample shipment is forwarded under chain-of-custody If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Northeast, LLC laboratory or other instructions will be provided Any changes to accreditation status should be brought to Eurofins Environment Testing Northeast, LLC attention immediately If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Northeast, LLC

Possible Hazard Identification	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)***
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested. I, II, III, IV, Other (specify) Primary Deliverable Rank 1	Special Instructions/QC Requirements.

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time: 4/8/24 1900	Company: Eurofins	Received by:	Date/Time: 4/9/24 0925	Company: Eurofins
Relinquished by:	Date/Time:	Company	Received by:	Date/Time	Company
Relinquished by:	Date/Time	Company	Received by:	Date/Time	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks.

Eurofins Edison
777 New Durham Road
Edison, NJ 08817
Phone: 732-549-3900 Fax: 732-549-3679

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Gilmore, Julie L	Carrier Tracking No(s):	COC No: 460-70924.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Julie.Gilmore@et.eurofinsus.com	State of Origin: Pennsylvania	Page: Page 1 of 1
Company: Eurofins Lancaster Laboratories Environm		Accreditations Required (See note): NELAP - Pennsylvania		Job #: 460-301434-1
Address: 2425 New Holland Pike, ,	Due Date Requested: 4/18/2024			
City: Lancaster	TAT Requested (days):			
State, Zip: PA, 17601				
Phone: 717-656-2300(Tel)	PO #:			
Email:	WO #:			
Project Name: Rock Hill - Anti-Degradation	Project #: 46011424			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	351.2/351.2_Prep	6020B/Filtration_ME Dissolved Cd/Fe/Zn	6020B/3005A (MOD) Total Fe	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
NPDES 001 (460-301434-1)	4/4/24	08:30 Eastern		Water			X	X	X	3	
Basin 1 (460-301434-2)	4/4/24	10:15 Eastern		Water			X	X	X	3	
Basin 2 (460-301434-3)	4/4/24	09:45 Eastern		Water			X	X	X	3	
Upstream (460-301434-4)	4/4/24	10:45 Eastern		Water			X	X	X	3	
Clarifying Pond (460-301434-5)	4/4/24	11:15 Eastern		Water			X	X	X	3	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Northeast, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Northeast, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Northeast, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Northeast, LLC.

Possible Hazard Identification	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 1	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
1		4/8/24 1600	ET		4/8/24 1600	ET
2	BM	4/8/24 1900	ET			
3					4/8/24 1900	ET

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 1.1-2.2/1.2-2.3

777 New Durham Road
Edison, NJ 08817
Phone: 732-549-3900 Fax: 732-549-3679

Chain of Custody Record

eurofins | Environment Testir

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Gilmore, Julie L	Carrier Tracking No(s):	COC No: 460-70943.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Julie.Gilmore@et.eurofinsus.com	State of Origin: Pennsylvania	Page: Page 1 of 1
Company: Eurofins Environment Testing Northeast,		Accreditations Required (See note): NELAP - Pennsylvania		Job #: 460-301434-1
Address: 10 Hazelwood Drive, ,	Due Date Requested: 4/15/2024			
City: Amherst	TAT Requested (days):			
State, Zip: NY, 14228-2298	PO #:			
Phone: 716-691-2600(Tel) 716-691-7991(Fax)	WO #:			
Email:	Project #: 46011424			
Project Name: Rock Hill - Anti-Degradation	SSOW#:			
Site:				

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	245.1/245.1_Prep	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
NPDES 001 (460-301434-1)	4/4/24	08:30 Eastern		Water			X	1	
Basin 1 (460-301434-2)	4/4/24	10:15 Eastern		Water			X	1	
Basin 2 (460-301434-3)	4/4/24	09:45 Eastern		Water			X	1	
Upstream (460-301434-4)	4/4/24	10:45 Eastern		Water			X	1	
Clarifying Pond (460-301434-5)	4/4/24	11:15 Eastern		Water			X	1	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Northeast, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Northeast, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Northeast, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Northeast, LLC.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 1	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:
Relinquished by:	Date/Time: 4/9/24 1900	Company: FET	Received by:	Date/Time: 04/10/24 1030	Company: TA
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 2.7 # 1 TR

4/24/2024

Eurofins Edison
777 New Durham Road
Edison, NJ 08817
Phone: 732-549-3900 Fax: 732-549-3679

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler	Lab PM: Gilmore, Julie L	Carrier Tracking No(s):	COC No: 460-70931 1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Julie.Gilmore@et.eurofinsus.com	State of Origin: Pennsylvania	Page: Page 1 of 1
Company: Eurofins Environment Testing Southeast,		Accreditations Required (See note): NELAP Pennsylvania		Job #: 460-301434-1
Address: 5102 LaRoche Avenue,	Due Date Requested: 4/16/2024			
City: Savannah	TAT Requested (days):			
State, Zip: GA, 31404				
Phone: 912-354-7858(Tel) 912-352-0165(Fax)	PO #:			
Email:	WO #:			
Project Name: Rock Hill Anti-Degradation	Project #: 46011424			
Site:	SSOW#:			

Analysis Requested

Preservation Codes.

A	HCL	M	Hexane
B	NaOH	N	None
C	Zn Acetate	O	AsNaO2
D	Nitric Acid	P	Na2O4S
E	NaHSO4	Q	Na2SO3
F	MeOH	R	Na2S2O3
G	Amchlor	S	H2SO4
H	Ascorbic Acid	T	TSP Dodecahydrate
I	Ice	U	Acetone
J	DI Water	V	MCAA
K	EDTA	W	pH 4-5
L	EDA	Y	Trizma
		Z	other (specify)

Other

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020B/3005A Total Aluminum	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
NPDES 001 (460-301434-1)	4/4/24	08:30 Eastern		Water			X	1	
Basin 1 (460-301434-2)	4/4/24	10:15 Eastern		Water			X	1	
Basin 2 (460-301434-3)	4/4/24	09:45 Eastern		Water			X	1	
Upstream (460-301434-4)	4/4/24	10:45 Eastern		Water			X	1	
Clarifying Pond (460-301434-5)	4/4/24	11 15 Eastern		Water			X	1	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Northeast, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Northeast, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Northeast, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Northeast, LLC.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV Other (specify) Primary Deliverable Rank: 1	Special Instructions/QC Requirements.

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:		
Relinquished by:	Date/Time: 4/8/24 1900	Company FEDEX	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time: 4/9/24 1028	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.	Cooler Temperature(s) °C and Other Remarks: 2.0

Login Sample Receipt Checklist

Client: Heidelberg Materials Northeast LLC

Job Number: 460-301434-1

Login Number: 301434

List Source: Eurofins Edison

List Number: 1

Creator: Thundathorn, Sukanan 1

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Heidelberg Materials Northeast LLC

Job Number: 460-301434-1

Login Number: 301434
List Number: 2
Creator: Cyms, Carolyn M

List Source: Eurofins Lancaster Laboratories Environment Testing, LLC
List Creation: 04/08/24 05:34 AM

Question	Answer	Comment
The cooler's custody seal is intact.	N/A	Not present
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature acceptable,where thermal pres is required(</=6C, not frozen).	True	
Cooler Temperature is recorded.	True	
WV:Container Temp acceptable,where thermal pres is required (</=6C, not frozen).	N/A	
WV: Container Temperature is recorded.	N/A	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the containers received and the COC.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
There is sufficient vol. for all requested analyses.	True	
Is the Field Sampler's name present on COC?	False	Received project as a subcontract.
Sample custody seals are intact.	N/A	Not present.
VOA sample vials do not have headspace >6mm in diameter (none, if from WV)?	N/A	

Login Sample Receipt Checklist

Client: Heidelberg Materials Northeast LLC

Job Number: 460-301434-1

Login Number: 301434
List Number: 4
Creator: Rucker, Keenyn J

List Source: Eurofins Pittsburgh
List Creation: 04/09/24 06:08 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Heidelberg Materials Northeast LLC

Job Number: 460-301434-1

Login Number: 301434
List Number: 3
Creator: Johnson, Corey M

List Source: Eurofins Savannah
List Creation: 04/09/24 12:42 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Lab Results

April 18, 2024

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Katie Murray
Heidelberg Materials Northeast LLC
7660 Imperial Way
Allentown, Pennsylvania 18195

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JOB DESCRIPTION

Rock Hill Anti-Degradation

JOB NUMBER

460-302385-1

Eurofins Edison
777 New Durham Road
Edison NJ 08817

See page two for job notes and contact information.

my EOL

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing Northeast, LLC Project Manager.

Authorization



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Authorized for release by
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Client: Heidelberg Materials Northeast LLC
Job ID: 460-302385-1
Project/Site: Rock Hill Anti-Degradation

Qualifiers

HPLC/IC

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Metals

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

General Chemistry

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
H	Sample was prepped or analyzed beyond the specified holding time. This does not meet regulatory requirements.
H3	Sample was received and analyzed past holding time. This does not meet regulatory requirements.
HF	Parameter with a holding time of 15 minutes. Test performed by laboratory at client's request. Sample was analyzed outside of hold time.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 460-302385-1 Eurofins Edison

Job Narrative
460-302385-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

- Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

The method detection limit (MDL) is the lowest value detectable by the laboratory for a given analyte as determined by the MDL procedure detailed in EPA 40 CFR 136. Reported MDL values are adjusted for any dilutions and percent moisture (as applicable). The lab is unable to report values below the MDL.

Receipt
The samples were received on 4/18/2024 7:00 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 2.5°C and 3.7°C.

Note: All samples which require thermal preservation are considered acceptable if the arrival temperature is within 2C of the required temperature or method specified range. For samples with a specified temperature of 4C, samples with a temperature ranging from just above freezing temperature of water to 6C shall be acceptable. Samples that are hand delivered immediately following collection may not meet these criteria, however they will be deemed acceptable according to NELAC standards, if there is evidence that the chilling process has begun, such as arrival on ice, etc.

Subcontract Work
Method Osomotic Pressure: This method was subcontracted to Microbac Laboratories, Inc. The subcontract laboratory certification is different from that of the facility issuing the final report. The subcontract report is appended in its entirety.

Method 300.0 - Anions, Ion Chromatography
Samples NPDES 001 (460-302385-1), Upstream (460-302385-2) and Clarifying Pond (460-302385-3) were analyzed for Anions, Ion Chromatography. The samples were analyzed on 4/19/2024.

Method 300.0 - Anions, Ion Chromatography
Samples NPDES 001 (460-302385-1), Upstream (460-302385-2) and Clarifying Pond (460-302385-3) were analyzed for Anions, Ion Chromatography. The samples were prepared on 5/6/2024 and analyzed on 4/19/2024 and 5/6/2024.

Method 6020B - Metals (ICP/MS)
Samples NPDES 001 (460-302385-1), Upstream (460-302385-2) and Clarifying Pond (460-302385-3) were analyzed for Metals (ICP/MS). The samples were prepared on 4/23/2024 and analyzed on 4/25/2024.

Method EPA 6020B - Metals (ICP/MS)
Samples NPDES 001 (460-302385-1), Upstream (460-302385-2) and Clarifying Pond (460-302385-3) were analyzed for Metals (ICP/MS). The samples were prepared on 4/26/2024 and analyzed on 4/29/2024.

Method 6020B - Metals (ICP/MS) - Dissolved
Samples NPDES 001 (460-302385-1), Upstream (460-302385-2) and Clarifying Pond (460-302385-3) were analyzed for Metals (ICP/MS) - Dissolved. The samples were prepared on 4/27/2024 and 5/5/2024 and analyzed on 4/27/2024, 5/1/2024 and 5/6/2024.

The following samples were not filtered within 15 minutes of sample collection as required by the method: NPDES 001 (460-302385-1), Upstream (460-302385-2) and Clarifying Pond (460-302385-3). The sample(s) was filtered prior to analysis at the laboratory, and the results have been reported.

The following samples were not filtered within 15 minutes of sample collection as required by the method: NPDES 001 (460-302385-1), Upstream (460-302385-2) and Clarifying Pond (460-302385-3). The sample were filtered prior to analysis at the

laboratory, and the results have been reported.

The following samples were not filtered and preserved within 15 minutes of sample collection in accordance with 40 CFR Part 136 Table II, Footnote 7, method 6020B. The samples were filtered prior to analysis at the laboratory.

NPDES 001 (460-302385-1), Upstream (460-302385-2) and Clarifying Pond (460-302385-3)

The method blank for preparation batch 460-971777 and 460-971778 and analytical batch 460-971691 contained manganese above the method detection limit. This target analyte concentration was less than half the reporting limit (1/2RL) in the method blank; therefore, re-extraction and re-analysis of samples was not performed.

Method EPA 6020B - Metals (ICP/MS) - Dissolved
Samples NPDES 001 (460-302385-1), Upstream (460-302385-2) and Clarifying Pond (460-302385-3) were analyzed for Metals (ICP/MS) - Dissolved. The samples were prepared on 4/26/2024 and analyzed on 4/29/2024.

The following samples were not filtered within 15 minutes of sample collection as required by the method: NPDES 001 (460-302385-1), Upstream (460-302385-2) and Clarifying Pond (460-302385-3). The sample(s) was filtered prior to analysis at the laboratory, and the results have been reported.

The following samples were not filtered within 15 minutes of sample collection as required by the method: NPDES 001 (460-302385-1), Upstream (460-302385-2) and Clarifying Pond (460-302385-3). The sample were filtered prior to analysis at the laboratory, and the results have been reported.

The following samples were not filtered and preserved within 15 minutes of sample collection in accordance with 40 CFR Part 136 Table II, Footnote 7, method 6020B. The samples were filtered prior to analysis at the laboratory.

NPDES 001 (460-302385-1), Upstream (460-302385-2) and Clarifying Pond (460-302385-3)

The method blank for preparation batch 460-971777 and 460-971778 and analytical batch 460-971691 contained manganese above the method detection limit. This target analyte concentration was less than half the reporting limit (1/2RL) in the method blank; therefore, re-extraction and re-analysis of samples was not performed.

Method 6020B - Metals (ICP/MS) - Total Recoverable
Samples NPDES 001 (460-302385-1), Upstream (460-302385-2) and Clarifying Pond (460-302385-3) were analyzed for Metals (ICP/MS) - Total Recoverable. The samples were prepared on 4/25/2024 and 4/29/2024 and analyzed on 4/25/2024 and 4/30/2024.

Method 120.1 - Conductivity, Specific Conductance
Samples NPDES 001 (460-302385-1), Upstream (460-302385-2) and Clarifying Pond (460-302385-3) were analyzed for Conductivity, Specific Conductance. The samples were analyzed on 4/22/2024.

Method 2320B-2011 - Alkalinity, Total
Samples NPDES 001 (460-302385-1), Upstream (460-302385-2) and Clarifying Pond (460-302385-3) were analyzed for Alkalinity, Total. The samples were analyzed on 4/25/2024.

Method 2540C-2015 - Total Dissolved Solids (Dried at 180 °C)
Samples NPDES 001 (460-302385-1), Upstream (460-302385-2) and Clarifying Pond (460-302385-3) were analyzed for Total Dissolved Solids (Dried at 180 °C). The samples were analyzed on 4/25/2024.

Method 2540D-2015 - Total Suspended Solids (Dried at 103-105°C)
Samples NPDES 001 (460-302385-1), Upstream (460-302385-2) and Clarifying Pond (460-302385-3) were analyzed for Total Suspended Solids (Dried at 103-105°C). The samples were analyzed on 4/25/2024.

Method 350.1 - Nitrogen, Ammonia
Samples NPDES 001 (460-302385-1), Upstream (460-302385-2) and Clarifying Pond (460-302385-3) were analyzed for Nitrogen, Ammonia. The samples were analyzed on 4/26/2024.

Method 350.1 - Nitrogen, Ammonia - Dissolved

Job ID: 460-302385-1 (Continued) Eurofins Edison

Samples NPDES 001 (460-302385-1), Upstream (460-302385-2) and Clarifying Pond (460-302385-3) were analyzed for Nitrogen, Ammonia - Dissolved. The samples were analyzed on 4/26/2024.

Method 351.2 - Nitrogen, Total Kjeldahl
Samples NPDES 001 (460-302385-1), Upstream (460-302385-2) and Clarifying Pond (460-302385-3) were analyzed for Nitrogen, Total Kjeldahl. The samples were prepared on 4/30/2024 and analyzed on 5/1/2024.

Method 410.4 - COD
Samples NPDES 001 (460-302385-1), Upstream (460-302385-2) and Clarifying Pond (460-302385-3) were analyzed for COD. The samples were analyzed on 4/29/2024.

Method 4500 O C-2016 - Oxygen, Dissolved
Samples NPDES 001 (460-302385-1), Upstream (460-302385-2) and Clarifying Pond (460-302385-3) were analyzed for Oxygen, Dissolved. The samples were analyzed on 4/19/2024.

This analysis is normally performed in the field and has a method-defined holding time of 15 minutes. The following samples has been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe: NPDES 001 (460-302385-1), Upstream (460-302385-2) and Clarifying Pond (460-302385-3).

Method SM4500 P E-2011 - Phosphorus
Samples NPDES 001 (460-302385-1), Upstream (460-302385-2) and Clarifying Pond (460-302385-3) were analyzed for Phosphorus. The samples were prepared and analyzed on 5/6/2024.

Method SM4500 P E-2011 - Phosphorus - Dissolved
Samples NPDES 001 (460-302385-1), Upstream (460-302385-2) and Clarifying Pond (460-302385-3) were analyzed for Phosphorus - Dissolved. The samples were prepared and analyzed on 5/6/2024.

Method 4500 P E-2011 - Orthophosphate
Samples NPDES 001 (460-302385-1), Upstream (460-302385-2) and Clarifying Pond (460-302385-3) were analyzed for Orthophosphate. The samples were analyzed on 4/19/2024.

Method 4500 P E-2011 - Orthophosphate - Dissolved
Samples NPDES 001 (460-302385-1), Upstream (460-302385-2) and Clarifying Pond (460-302385-3) were analyzed for Orthophosphate - Dissolved. The samples were analyzed on 4/19/2024.

Method 9040C - pH
Samples NPDES 001 (460-302385-1), Upstream (460-302385-2) and Clarifying Pond (460-302385-3) were analyzed for pH. The samples were analyzed on 4/30/2024.

This analysis is normally performed in the field and has a method-defined holding time of 15 minutes. The following samples has been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe: NPDES 001 (460-302385-1), Upstream (460-302385-2) and Clarifying Pond (460-302385-3).

Method 9060A - Organic Carbon, Total (TOC)
Samples NPDES 001 (460-302385-1), Upstream (460-302385-2) and Clarifying Pond (460-302385-3) were analyzed for Organic Carbon, Total (TOC). The samples were analyzed on 4/22/2024.

Method Total Nitrogen - Nitrogen, Total
Samples NPDES 001 (460-302385-1), Upstream (460-302385-2) and Clarifying Pond (460-302385-3) were analyzed for Nitrogen, Total. The samples were prepared on 5/6/2024 and analyzed on 5/2/2024, 5/5/2024 and 5/6/2024.

Method 2310B-2011 - Acidity
Samples NPDES 001 (460-302385-1), Upstream (460-302385-2) and Clarifying Pond (460-302385-3) were analyzed for Acidity. The samples were analyzed on 4/29/2024.

Method 5210 B-2016 - BOD, 5-Day
Samples NPDES 001 (460-302385-1), Upstream (460-302385-2) and Clarifying Pond (460-302385-3) were analyzed for BOD, 5-Day. The samples were prepared on 5/6/2024 and analyzed on 4/19/2024 and 5/6/2024.

Client Sample ID: NPDES 001
Lab Sample ID: 460-302385-1
Date Collected: 04/18/24 09:00
Matrix: Water
Date Received: 04/18/24 19:00

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide	0.054	U	0.32	0.054	mg/L			04/19/24 13:23	1
Nitrate as N	0.070	U	0.16	0.070	mg/L			04/19/24 13:23	1
Chloride	**4.59**		0.32	0.039	mg/L			04/19/24 13:23	1
Nitrate Nitrite as N	0.070	U	0.16	0.070	mg/L			04/19/24 13:23	1
Nitrite as N	0.023	U	0.16	0.023	mg/L			04/19/24 13:23	1
Sulfate	**9.84**		0.48	0.095	mg/L			04/19/24 13:23	1

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**4.9**		4.0	0.91	ug/L		04/23/24 07:58	04/25/24 11:52	1
Boron	**55.4**	**J**	80.0	30.4	ug/L		04/23/24 07:58	04/25/24 11:52	1
Calcium	**24700**		500	53.6	ug/L		04/23/24 07:58	04/25/24 11:52	1
Copper	2.5	U	4.0	2.5	ug/L		04/23/24 07:58	04/25/24 11:52	1
Lead	0.84	U	1.2	0.84	ug/L		04/23/24 07:58	04/25/24 11:52	1
Magnesium	**9910**		200	46.9	ug/L		04/23/24 07:58	04/25/24 11:52	1
Manganese	**28.4**		8.0	1.5	ug/L		04/23/24 07:58	04/25/24 11:52	1
Nickel	0.91	U	4.0	0.91	ug/L		04/23/24 07:58	04/25/24 11:52	1
Potassium	**1570**		200	112	ug/L		04/23/24 07:58	04/25/24 11:52	1
Selenium	0.59	U	2.5	0.59	ug/L		04/23/24 07:58	04/25/24 11:52	1
Sodium	**5210**		500	219	ug/L		04/23/24 07:58	04/25/24 11:52	1
Strontium	**78.7**		4.0	0.50	ug/L		04/23/24 07:58	04/25/24 11:52	1
Zinc	6.5	U	16.0	6.5	ug/L		04/23/24 07:58	04/25/24 11:52	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	35.0	U	100	35.0	ug/L		04/25/24 07:17	04/25/24 19:21	1
Iron	**343**		50.0	20.0	ug/L		04/29/24 07:00	04/30/24 09:06	1

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**31.7**	**J**	40.0	19.5	ug/L		04/27/24 00:59	04/27/24 02:59	1
Cadmium	0.15	U	0.50	0.15	ug/L		05/05/24 22:00	05/06/24 08:52	1
Arsenic	**22.5**		2.0	0.89	ug/L		04/27/24 00:59	04/27/24 02:59	1
Iron	**59.0**		50.0	20.0	ug/L		05/05/24 22:00	05/06/24 08:52	1
Calcium	**26800**		500	53.6	ug/L		04/27/24 00:59	04/27/24 02:59	1
Zinc	4.0	U	10.0	4.0	ug/L		05/05/24 22:00	05/06/24 08:52	1
Copper	2.5	U	4.0	2.5	ug/L		04/27/24 00:59	04/27/24 02:59	1
Iron	**492**		120	58.2	ug/L		04/27/24 00:59	04/27/24 02:59	1
Lead	0.84	U	1.2	0.84	ug/L		04/27/24 00:59	04/27/24 02:59	1
Magnesium	**9990**		200	46.9	ug/L		04/27/24 00:59	04/27/24 02:59	1
Manganese	**11.0**	**B**	8.0	1.5	ug/L		04/27/24 00:59	04/27/24 02:59	1
Nickel	0.91	U	4.0	0.91	ug/L		04/27/24 00:59	04/27/24 02:59	1

Method: SW846 EPA 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	1.3	U	5.0	1.3	ug/L		04/26/24 09:26	04/29/24 19:03	1

Method: SW846 EPA 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	1.3	U	5.0	1.3	ug/L		04/26/24 08:22	04/29/24 18:49	1

Client Sample ID: NPDES 001

Lab Sample ID: 460-302385-1

Date Collected: 04/18/24 09:00

Matrix: Water

Date Received: 04/18/24 19:00

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Resistivity (EPA 120.1)	**0.00449**		0.000100	0.000100	Mohm-cm			04/22/24 12:45	1
Specific Conductance (EPA 120.1)	**223**		1.00	1.00	umhos/cm			04/22/24 12:45	1
Acidity (SM 2310B-2011)	20.0	U	20.0	20.0	mg/L			04/29/24 15:00	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-2011)	**91.2**		5.0	5.0	mg/L			04/25/24 16:28	1
Carbonate Alkalinity as CaCO3 (SM 2320B-2011)	5.0	U	5.0	5.0	mg/L			04/25/24 16:28	1
Alkalinity as CaCO3 to pH 4.5 (SM 2320B-2011)	**91.2**		5.0	5.0	mg/L			04/25/24 16:28	1
Total Dissolved Solids (SM 2540C-2015)	**253**		2.5	2.5	mg/L			04/25/24 08:47	1
Total Suspended Solids (SM 2540D-2015)	2.6	U	2.6	2.6	mg/L			04/25/24 07:31	1
Ammonia (EPA 350.1)	0.050	U	0.10	0.050	mg/L			04/26/24 11:00	1
Total Kjeldahl Nitrogen (EPA 351.2)	0.50	U	1.0	0.50	mg/L		04/30/24 15:20	05/01/24 10:31	1
Chemical Oxygen Demand (EPA 410.4)	**3.3**	**J**	10.0	3.3	mg/L			04/29/24 18:11	1
Oxygen, Dissolved (SM 4500 O C-2016)	**6.6**	**H H3**	1.0	1.0	mg/L			04/19/24 13:07	1
Orthophosphate as P (SM 4500 P E-2011)	**0.0093**	**J**	0.030	0.0050	mg/L			04/19/24 20:50	1
Carbonaceous Biochemical Oxygen Demand 5 (SM 5210 B-2016)	1.0	U	1.0	1.0	mg/L			04/19/24 11:07	1
pH (SW846 9040C)	**7.7**	**HF**	0.1	0.1	SU			04/30/24 11:29	1
Temperature (SW846 9040C)	**25.8**	**HF**	0.1	0.1	Degrees C			04/30/24 11:29	1
Total Organic Carbon (SW846 9060A)	**2.0**		1.0	0.53	mg/L			04/22/24 13:46	1
Phosphorus as PO4 (SM4500 P E-2011)	**0.27**	**F1**	0.090	0.071	mg/L		05/06/24 08:57	05/06/24 13:51	1
Phosphorus as P (SM4500 P E-2011)	**0.087**	**F1**	0.030	0.023	mg/L		05/06/24 08:57	05/06/24 13:51	1
Nitrogen, Total (EPA Total Nitrogen)	0.50	U	0.50	0.50	mg/L			05/02/24 06:23	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (EPA 350.1)	0.050	U	0.10	0.050	mg/L			04/26/24 11:17	1
Orthophosphate as P (SM 4500 P E-2011)	0.0050	U	0.030	0.0050	mg/L			04/19/24 20:50	1
Phosphorus as PO4 (SM4500 P E-2011)	**0.22**		0.090	0.071	mg/L		05/06/24 08:57	05/06/24 13:51	1
Phosphorus as P (SM4500 P E-2011)	**0.072**		0.030	0.023	mg/L		05/06/24 08:57	05/06/24 13:51	1

Client Sample ID: Upstream

Lab Sample ID: 460-302385-2

Date Collected: 04/18/24 10:00

Matrix: Water

Date Received: 04/18/24 19:00

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide	0.054	U	0.32	0.054	mg/L			04/19/24 13:38	1
Nitrate as N	0.070	U	0.16	0.070	mg/L			04/19/24 13:38	1
Chloride	**7.76**		0.32	0.039	mg/L			04/19/24 13:38	1
Nitrate Nitrite as N	0.070	U	0.16	0.070	mg/L			04/19/24 13:38	1
Nitrite as N	0.023	U	0.16	0.023	mg/L			04/19/24 13:38	1

Client Sample ID: Upstream
Date Collected: 04/18/24 10:00
Date Received: 04/18/24 19:00

Lab Sample ID: 460-302385-2
Matrix: Water

Method: EPA 300.0 - Anions, Ion Chromatography (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**4.04**		0.48	0.095	mg/L			04/19/24 13:38	1

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**13.0**		4.0	0.91	ug/L		04/23/24 07:58	04/25/24 11:55	1
Boron	**47.7**	**J**	80.0	30.4	ug/L		04/23/24 07:58	04/25/24 11:55	1
Calcium	**32300**		500	53.6	ug/L		04/23/24 07:58	04/25/24 11:55	1
Copper	**3.9**	**J**	4.0	2.5	ug/L		04/23/24 07:58	04/25/24 11:55	1
Lead	0.84	U	1.2	0.84	ug/L		04/23/24 07:58	04/25/24 11:55	1
Magnesium	**11000**		200	46.9	ug/L		04/23/24 07:58	04/25/24 11:55	1
Manganese	**62.5**		8.0	1.5	ug/L		04/23/24 07:58	04/25/24 11:55	1
Nickel	**1.4**	**J**	4.0	0.91	ug/L		04/23/24 07:58	04/25/24 11:55	1
Potassium	**1530**		200	112	ug/L		04/23/24 07:58	04/25/24 11:55	1
Selenium	0.59	U	2.5	0.59	ug/L		04/23/24 07:58	04/25/24 11:55	1
Sodium	**4520**		500	219	ug/L		04/23/24 07:58	04/25/24 11:55	1
Strontium	**126**		4.0	0.50	ug/L		04/23/24 07:58	04/25/24 11:55	1
Zinc	6.5	U	16.0	6.5	ug/L		04/23/24 07:58	04/25/24 11:55	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	35.0	U	100	35.0	ug/L		04/25/24 07:17	04/25/24 19:17	1
Iron	**95.9**		50.0	20.0	ug/L		04/29/24 07:00	04/30/24 09:04	1

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	19.5	U	40.0	19.5	ug/L		04/27/24 00:59	05/01/24 20:31	1
Cadmium	0.15	U	0.50	0.15	ug/L		05/05/24 22:00	05/06/24 08:54	1
Arsenic	0.89	U	2.0	0.89	ug/L		04/27/24 00:59	05/01/24 20:31	1
Iron	20.0	U	50.0	20.0	ug/L		05/05/24 22:00	05/06/24 08:54	1
Calcium	**30900**		500	53.6	ug/L		04/27/24 00:59	05/01/24 20:31	1
Zinc	4.0	U	10.0	4.0	ug/L		05/05/24 22:00	05/06/24 08:54	1
Copper	**2.8**	**J**	4.0	2.5	ug/L		04/27/24 00:59	05/01/24 20:31	1
Iron	58.2	U	120	58.2	ug/L		04/27/24 00:59	05/01/24 20:31	1
Lead	0.84	U	1.2	0.84	ug/L		04/27/24 00:59	05/01/24 20:31	1
Magnesium	**10300**		200	46.9	ug/L		04/27/24 00:59	05/01/24 20:31	1
Manganese	1.5	U	8.0	1.5	ug/L		04/27/24 00:59	05/01/24 20:31	1
Nickel	0.91	U	4.0	0.91	ug/L		04/27/24 00:59	05/01/24 20:31	1

Method: SW846 EPA 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	**1.9**	**J**	5.0	1.3	ug/L		04/26/24 09:26	04/29/24 19:06	1

Method: SW846 EPA 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	**2.1**	**J**	5.0	1.3	ug/L		04/26/24 08:22	04/29/24 18:41	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Resistivity (EPA 120.1)	**0.00393**		0.000100	0.000100	Mohm-cm			04/22/24 12:45	1
Specific Conductance (EPA 120.1)	**255**		1.00	1.00	umhos/cm			04/22/24 12:45	1
Acidity (SM 2310B-2011)	20.0	U	20.0	20.0	mg/L			04/29/24 15:00	1

Client Sample ID: Upstream

Lab Sample ID: 460-302385-2

Date Collected: 04/18/24 10:00

Matrix: Water

Date Received: 04/18/24 19:00

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3 (SM 2320B-2011)	**110**		5.0	5.0	mg/L			04/25/24 17:29	1
Carbonate Alkalinity as CaCO3 (SM 2320B-2011)	5.0	U	5.0	5.0	mg/L			04/25/24 17:29	1
Alkalinity as CaCO3 to pH 4.5 (SM 2320B-2011)	**110**		5.0	5.0	mg/L			04/25/24 17:29	1
Total Dissolved Solids (SM 2540C-2015)	**157**		2.5	2.5	mg/L			04/25/24 08:47	1
Total Suspended Solids (SM 2540D-2015)	2.5	U	2.5	2.5	mg/L			04/25/24 07:31	1
Ammonia (EPA 350.1)	0.050	U	0.10	0.050	mg/L			04/26/24 11:01	1
Total Kjeldahl Nitrogen (EPA 351.2)	0.50	U	1.0	0.50	mg/L		04/30/24 15:20	05/01/24 10:33	1
Chemical Oxygen Demand (EPA 410.4)	**11.5**		10.0	3.3	mg/L			04/29/24 18:11	1
Oxygen, Dissolved (SM 4500 O C-2016)	**5.0**	**H H3**	1.0	1.0	mg/L			04/19/24 13:09	1
Orthophosphate as P (SM 4500 P E-2011)	0.0050	U	0.030	0.0050	mg/L			04/19/24 20:50	1
Carbonaceous Biochemical Oxygen Demand 5 (SM 5210 B-2016)	1.0	U	1.0	1.0	mg/L			04/19/24 13:43	1
pH (SW846 9040C)	**7.6**	**HF**	0.1	0.1	SU			04/30/24 11:37	1
Temperature (SW846 9040C)	**25.4**	**HF**	0.1	0.1	Degrees C			04/30/24 11:37	1
Total Organic Carbon (SW846 9060A)	**3.3**		1.0	0.53	mg/L			04/22/24 14:11	1
Phosphorus as PO4 (SM4500 P E-2011)	**0.63**		0.090	0.071	mg/L		05/06/24 08:57	05/06/24 13:51	1
Phosphorus as P (SM4500 P E-2011)	**0.20**		0.030	0.023	mg/L		05/06/24 08:57	05/06/24 13:51	1
Nitrogen, Total (EPA Total Nitrogen)	0.50	U	0.50	0.50	mg/L			05/02/24 06:23	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (EPA 350.1)	0.050	U	0.10	0.050	mg/L			04/26/24 11:18	1
Orthophosphate as P (SM 4500 P E-2011)	0.0050	U	0.030	0.0050	mg/L			04/19/24 20:50	1
Phosphorus as PO4 (SM4500 P E-2011)	**0.43**		0.090	0.071	mg/L		05/06/24 08:57	05/06/24 13:51	1
Phosphorus as P (SM4500 P E-2011)	**0.14**		0.030	0.023	mg/L		05/06/24 08:57	05/06/24 13:51	1

Client Sample ID: Clarifying Pond

Lab Sample ID: 460-302385-3

Date Collected: 04/18/24 10:45

Matrix: Water

Date Received: 04/18/24 19:00

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide	0.054	U	0.32	0.054	mg/L			04/19/24 13:53	1
Nitrate as N	**0.11**	**J**	0.16	0.070	mg/L			04/19/24 13:53	1
Chloride	**1.20**		0.32	0.039	mg/L			04/19/24 13:53	1
Nitrate Nitrite as N	**0.16**		0.16	0.070	mg/L			04/19/24 13:53	1
Nitrite as N	**0.043**	**J**	0.16	0.023	mg/L			04/19/24 13:53	1
Sulfate	**6.44**		0.48	0.095	mg/L			04/19/24 13:53	1

Client Sample ID: Clarifying Pond

Lab Sample ID: 460-302385-3

Date Collected: 04/18/24 10:45

Matrix: Water

Date Received: 04/18/24 19:00

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**3.1**	**J**	4.0	0.91	ug/L		04/23/24 07:58	04/25/24 11:57	1
Boron	**56.3**	**J**	80.0	30.4	ug/L		04/23/24 07:58	04/25/24 11:57	1
Calcium	**18200**		500	53.6	ug/L		04/23/24 07:58	04/25/24 11:57	1
Copper	2.5	U	4.0	2.5	ug/L		04/23/24 07:58	04/25/24 11:57	1
Lead	0.84	U	1.2	0.84	ug/L		04/23/24 07:58	04/25/24 11:57	1
Magnesium	**6680**		200	46.9	ug/L		04/23/24 07:58	04/25/24 11:57	1
Manganese	**33.5**		8.0	1.5	ug/L		04/23/24 07:58	04/25/24 11:57	1
Nickel	0.91	U	4.0	0.91	ug/L		04/23/24 07:58	04/25/24 11:57	1
Potassium	**1230**		200	112	ug/L		04/23/24 07:58	04/25/24 11:57	1
Selenium	0.59	U	2.5	0.59	ug/L		04/23/24 07:58	04/25/24 11:57	1
Sodium	**3400**		500	219	ug/L		04/23/24 07:58	04/25/24 11:57	1
Strontium	**40.6**		4.0	0.50	ug/L		04/23/24 07:58	04/25/24 11:57	1
Zinc	6.5	U	16.0	6.5	ug/L		04/23/24 07:58	04/25/24 11:57	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**209**		100	35.0	ug/L		04/25/24 07:17	04/25/24 18:52	1
Iron	**532**		50.0	20.0	ug/L		04/29/24 07:00	04/30/24 09:08	1

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	19.5	U	40.0	19.5	ug/L		04/27/24 00:59	05/01/24 20:36	1
Cadmium	0.15	U	0.50	0.15	ug/L		05/05/24 22:00	05/06/24 08:56	1
Arsenic	0.89	U	2.0	0.89	ug/L		04/27/24 00:59	05/01/24 20:36	1
Iron	**34.3**	**J**	50.0	20.0	ug/L		05/05/24 22:00	05/06/24 08:56	1
Calcium	**18600**		500	53.6	ug/L		04/27/24 00:59	05/01/24 20:36	1
Zinc	4.0	U	10.0	4.0	ug/L		05/05/24 22:00	05/06/24 08:56	1
Copper	2.5	U	4.0	2.5	ug/L		04/27/24 00:59	05/01/24 20:36	1
Iron	58.2	U	120	58.2	ug/L		04/27/24 00:59	05/01/24 20:36	1
Lead	0.84	U	1.2	0.84	ug/L		04/27/24 00:59	05/01/24 20:36	1
Magnesium	**6380**		200	46.9	ug/L		04/27/24 00:59	05/01/24 20:36	1
Manganese	1.5	U	8.0	1.5	ug/L		04/27/24 00:59	05/01/24 20:36	1
Nickel	0.91	U	4.0	0.91	ug/L		04/27/24 00:59	05/01/24 20:36	1

Method: SW846 EPA 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	1.3	U	5.0	1.3	ug/L		04/26/24 09:26	04/29/24 19:09	1

Method: SW846 EPA 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	1.3	U	5.0	1.3	ug/L		04/26/24 08:22	04/29/24 18:33	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Resistivity (EPA 120.1)	**0.00631**		0.000100	0.000100	Mohm-cm			04/22/24 12:45	1
Specific Conductance (EPA 120.1)	**158**		1.00	1.00	umhos/cm			04/22/24 12:45	1
Acidity (SM 2310B-2011)	20.0	U	20.0	20.0	mg/L			04/29/24 15:02	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-2011)	**66.0**		5.0	5.0	mg/L			04/25/24 17:35	1
Carbonate Alkalinity as CaCO3 (SM 2320B-2011)	5.0	U	5.0	5.0	mg/L			04/25/24 17:35	1

Client Sample ID: Clarifying Pond
Lab Sample ID: 460-302385-3
Date Collected: 04/18/24 10:45
Matrix: Water
Date Received: 04/18/24 19:00

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity as CaCO3 to pH 4.5 (SM 2320B-2011)	66.0		5.0	5.0	mg/L			04/25/24 17:35	1
Total Dissolved Solids (SM 2540C-2015)	115		2.5	2.5	mg/L			04/25/24 08:47	1
Total Suspended Solids (SM 2540D-2015)	11.8		2.5	2.5	mg/L			04/25/24 07:31	1
Ammonia (EPA 350.1)	0.050	U	0.10	0.050	mg/L			04/26/24 11:03	1
Total Kjeldahl Nitrogen (EPA 351.2)	0.50	U	1.0	0.50	mg/L		04/30/24 15:20	05/01/24 10:34	1
Chemical Oxygen Demand (EPA 410.4)	6.0	J	10.0	3.3	mg/L			04/29/24 18:11	1
Oxygen, Dissolved (SM 4500 O C-2016)	7.9	H H3	1.0	1.0	mg/L			04/19/24 13:11	1
Orthophosphate as P (SM 4500 P E-2011)	0.0050	U	0.030	0.0050	mg/L			04/19/24 20:50	1
Carbonaceous Biochemical Oxygen Demand 5 (SM 5210 B-2016)	1.0		1.0	1.0	mg/L			04/19/24 13:43	1
pH (SW846 9040C)	7.7	HF	0.1	0.1	SU			04/30/24 11:43	1
Temperature (SW846 9040C)	25.6	HF	0.1	0.1	Degrees C			04/30/24 11:43	1
Total Organic Carbon (SW846 9060A)	1.3		1.0	0.53	mg/L			04/22/24 14:36	1
Phosphorus as PO4 (SM4500 P E-2011)	0.28		0.090	0.071	mg/L		05/06/24 08:57	05/06/24 13:51	1
Phosphorus as P (SM4500 P E-2011)	0.093		0.030	0.023	mg/L		05/06/24 08:57	05/06/24 13:51	1
Nitrogen, Total (EPA Total Nitrogen)	0.50	U	0.50	0.50	mg/L			05/05/24 06:23	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (EPA 350.1)	0.050	U	0.10	0.050	mg/L			04/26/24 11:20	1
Orthophosphate as P (SM 4500 P E-2011)	0.0050	U	0.030	0.0050	mg/L			04/19/24 20:50	1
Phosphorus as PO4 (SM4500 P E-2011)	0.14		0.090	0.071	mg/L		05/06/24 08:57	05/06/24 13:51	1
Phosphorus as P (SM4500 P E-2011)	0.047		0.030	0.023	mg/L		05/06/24 08:57	05/06/24 13:51	1

Client Sample ID: NPDES 001
Date Collected: 04/18/24 09:00
Date Received: 04/18/24 19:00

Lab Sample ID: 460-302385-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		1	970480	OXG	EET EDI	04/19/24 13:23
Total/NA	Analysis	300.0		1	970482	OXG	EET EDI	04/19/24 13:23
Dissolved	Filtration	Filtration			501673	X3ZX	ELLE	05/03/24 09:00
Dissolved	Prep	3005A			498977	UAMX	ELLE	05/05/24 22:00
Dissolved	Analysis	6020B		1	502504	F7JF	ELLE	05/06/24 08:52
Dissolved	Filtration	FILTRATION			971777	VAD	EET EDI	04/27/24 00:54
Dissolved	Prep	3010A			971778	VAD	EET EDI	04/27/24 00:59
Dissolved	Analysis	6020B		1	971691	FBT	EET EDI	04/27/24 02:59
Total Recoverable	Prep	3005A			498966	X3ZX	ELLE	04/29/24 07:00
Total Recoverable	Analysis	6020B		1	500239	F7JF	ELLE	04/30/24 09:06
Total Recoverable	Prep	3005A			834626	RR	EET SAV	04/25/24 07:17
Total Recoverable	Analysis	6020B		1	834964	BWR	EET SAV	04/25/24 19:21
Total/NA	Prep	3010A			971015	JKF	EET EDI	04/23/24 07:58
Total/NA	Analysis	6020B		1	971497	CDC	EET EDI	04/25/24 11:52
Dissolved	Filtration	Filtration			466417	SJM	EET PIT	04/25/24 07:17
Dissolved	Prep	3010A			466564	SJM	EET PIT	04/26/24 08:22
Dissolved	Analysis	EPA 6020B		1	466883	S1Z	EET PIT	04/29/24 18:49
Total/NA	Prep	3010A			466601	SJM	EET PIT	04/26/24 09:26
Total/NA	Analysis	EPA 6020B		1	466883	S1Z	EET PIT	04/29/24 19:03
Total/NA	Analysis	120.1		1	970882	MMC	EET EDI	04/22/24 12:45
Total/NA	Analysis	2310B-2011		1	972070	RAK	EET EDI	04/29/24 15:00
Total/NA	Analysis	2320B-2011		1	971656	AXP	EET EDI	04/25/24 16:28
Total/NA	Analysis	2540C-2015		1	971455	PLS	EET EDI	04/25/24 08:47
Total/NA	Analysis	2540D-2015		1	971409	PLS	EET EDI	04/25/24 07:31
Dissolved	Filtration	FILTRATION			971664	AXP	EET EDI	04/26/24 10:27
Dissolved	Analysis	350.1		1	971682	AXP	EET EDI	04/26/24 11:17
Total/NA	Analysis	350.1		1	971682	AXP	EET EDI	04/26/24 11:00
Total/NA	Prep	351.2			500386	NLE3	ELLE	04/30/24 15:20 - 04/30/24 18:20 [1]
Total/NA	Analysis	351.2		1	500836	JCG7	ELLE	05/01/24 10:31
Total/NA	Analysis	410.4		1	972096	HTV	EET EDI	04/29/24 18:11
Total/NA	Analysis	4500 O C-2016		1	970536	PLS	EET EDI	04/19/24 13:07
Dissolved	Filtration	FILTRATION			970612	VBG	EET EDI	04/19/24 19:44
Dissolved	Analysis	4500 P E-2011		1	970613	VBG	EET EDI	04/19/24 20:50
Total/NA	Analysis	4500 P E-2011		1	970613	VBG	EET EDI	04/19/24 20:50
Total/NA	Analysis	5210 B-2016		1	970521	PLS	EET EDI	04/19/24 11:07
Total/NA	Analysis	9040C		1	972246	RXA	EET EDI	04/30/24 11:29
Total/NA	Analysis	9060A		1	971020	MMC	EET EDI	04/22/24 13:46
Dissolved	Filtration	FILTRATION			973192	RAK	EET EDI	05/06/24 08:54
Dissolved	Prep	SM 4500 P B			973193	RAK	EET EDI	05/06/24 08:57
Dissolved	Analysis	SM4500 P E-2011		1	973245	RAK	EET EDI	05/06/24 13:51
Total/NA	Prep	SM 4500 P B			973193	RAK	EET EDI	05/06/24 08:57
Total/NA	Analysis	SM4500 P E-2011		1	973245	RAK	EET EDI	05/06/24 13:51
Total/NA	Analysis	Total Nitrogen		1	970801	TJW	EET EDI	05/02/24 06:23

Client Sample ID: Upstream

Date Collected: 04/18/24 10:00
Date Received: 04/18/24 19:00

Lab Sample ID: 460-302385-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		1	970480	OXG	EET EDI	04/19/24 13:38
Total/NA	Analysis	300.0		1	970482	OXG	EET EDI	04/19/24 13:38
Dissolved	Filtration	Filtration			501673	X3ZX	ELLE	05/03/24 09:00
Dissolved	Prep	3005A			498977	UAMX	ELLE	05/05/24 22:00
Dissolved	Analysis	6020B		1	502504	F7JF	ELLE	05/06/24 08:54
Dissolved	Filtration	FILTRATION			971777	VAD	EET EDI	04/27/24 00:54
Dissolved	Prep	3010A			971778	VAD	EET EDI	04/27/24 00:59
Dissolved	Analysis	6020B		1	972430	FBT	EET EDI	05/01/24 20:31
Total Recoverable	Prep	3005A			498966	X3ZX	ELLE	04/29/24 07:00
Total Recoverable	Analysis	6020B		1	500239	F7JF	ELLE	04/30/24 09:04
Total Recoverable	Prep	3005A			834626	RR	EET SAV	04/25/24 07:17
Total Recoverable	Analysis	6020B		1	834964	BWR	EET SAV	04/25/24 19:17
Total/NA	Prep	3010A			971015	JKF	EET EDI	04/23/24 07:58
Total/NA	Analysis	6020B		1	971497	CDC	EET EDI	04/25/24 11:55
Dissolved	Filtration	Filtration			466417	SJM	EET PIT	04/25/24 07:17
Dissolved	Prep	3010A			466564	SJM	EET PIT	04/26/24 08:22
Dissolved	Analysis	EPA 6020B		1	466883	S1Z	EET PIT	04/29/24 18:41
Total/NA	Prep	3010A			466601	SJM	EET PIT	04/26/24 09:26
Total/NA	Analysis	EPA 6020B		1	466883	S1Z	EET PIT	04/29/24 19:06
Total/NA	Analysis	120.1		1	970882	MMC	EET EDI	04/22/24 12:45
Total/NA	Analysis	2310B-2011		1	972070	RAK	EET EDI	04/29/24 15:00
Total/NA	Analysis	2320B-2011		1	971656	AXP	EET EDI	04/25/24 17:29
Total/NA	Analysis	2540C-2015		1	971455	PLS	EET EDI	04/25/24 08:47
Total/NA	Analysis	2540D-2015		1	971409	PLS	EET EDI	04/25/24 07:31
Dissolved	Filtration	FILTRATION			971664	AXP	EET EDI	04/26/24 10:27
Dissolved	Analysis	350.1		1	971682	AXP	EET EDI	04/26/24 11:18
Total/NA	Analysis	350.1		1	971682	AXP	EET EDI	04/26/24 11:01
Total/NA	Prep	351.2			500386	NLE3	ELLE	04/30/24 15:20 - 04/30/24 18:20 [1]
Total/NA	Analysis	351.2		1	500836	JCG7	ELLE	05/01/24 10:33
Total/NA	Analysis	410.4		1	972096	HTV	EET EDI	04/29/24 18:11
Total/NA	Analysis	4500 O C-2016		1	970536	PLS	EET EDI	04/19/24 13:09
Dissolved	Filtration	FILTRATION			970612	VBG	EET EDI	04/19/24 19:44
Dissolved	Analysis	4500 P E-2011		1	970613	VBG	EET EDI	04/19/24 20:50
Total/NA	Analysis	4500 P E-2011		1	970613	VBG	EET EDI	04/19/24 20:50
Total/NA	Analysis	5210 B-2016		1	970521	PLS	EET EDI	04/19/24 13:43
Total/NA	Analysis	9040C		1	972246	RXA	EET EDI	04/30/24 11:37
Total/NA	Analysis	9060A		1	971020	MMC	EET EDI	04/22/24 14:11
Dissolved	Filtration	FILTRATION			973192	RAK	EET EDI	05/06/24 08:54
Dissolved	Prep	SM 4500 P B			973193	RAK	EET EDI	05/06/24 08:57
Dissolved	Analysis	SM4500 P E-2011		1	973245	RAK	EET EDI	05/06/24 13:51
Total/NA	Prep	SM 4500 P B			973193	RAK	EET EDI	05/06/24 08:57
Total/NA	Analysis	SM4500 P E-2011		1	973245	RAK	EET EDI	05/06/24 13:51
Total/NA	Analysis	Total Nitrogen		1	970801	TJW	EET EDI	05/02/24 06:23

Client Sample ID: Clarifying Pond

Date Collected: 04/18/24 10:45
Date Received: 04/18/24 19:00

Lab Sample ID: 460-302385-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		1	970480	OXG	EET EDI	04/19/24 13:53
Total/NA	Analysis	300.0		1	970482	OXG	EET EDI	04/19/24 13:53
Dissolved	Filtration	Filtration			501673	X3ZX	ELLE	05/03/24 09:00
Dissolved	Prep	3005A			498977	UAMX	ELLE	05/05/24 22:00
Dissolved	Analysis	6020B		1	502504	F7JF	ELLE	05/06/24 08:56
Dissolved	Filtration	FILTRATION			971777	VAD	EET EDI	04/27/24 00:54
Dissolved	Prep	3010A			971778	VAD	EET EDI	04/27/24 00:59
Dissolved	Analysis	6020B		1	972430	FBT	EET EDI	05/01/24 20:36
Total Recoverable	Prep	3005A			498966	X3ZX	ELLE	04/29/24 07:00
Total Recoverable	Analysis	6020B		1	500239	F7JF	ELLE	04/30/24 09:08
Total Recoverable	Prep	3005A			834626	RR	EET SAV	04/25/24 07:17
Total Recoverable	Analysis	6020B		1	834964	BWR	EET SAV	04/25/24 18:52
Total/NA	Prep	3010A			971015	JKF	EET EDI	04/23/24 07:58
Total/NA	Analysis	6020B		1	971497	CDC	EET EDI	04/25/24 11:57
Dissolved	Filtration	Filtration			466417	SJM	EET PIT	04/25/24 07:17
Dissolved	Prep	3010A			466564	SJM	EET PIT	04/26/24 08:22
Dissolved	Analysis	EPA 6020B		1	466883	S1Z	EET PIT	04/29/24 18:33
Total/NA	Prep	3010A			466601	SJM	EET PIT	04/26/24 09:26
Total/NA	Analysis	EPA 6020B		1	466883	S1Z	EET PIT	04/29/24 19:09
Total/NA	Analysis	120.1		1	970882	MMC	EET EDI	04/22/24 12:45
Total/NA	Analysis	2310B-2011		1	972070	RAK	EET EDI	04/29/24 15:02
Total/NA	Analysis	2320B-2011		1	971656	AXP	EET EDI	04/25/24 17:35
Total/NA	Analysis	2540C-2015		1	971455	PLS	EET EDI	04/25/24 08:47
Total/NA	Analysis	2540D-2015		1	971409	PLS	EET EDI	04/25/24 07:31
Dissolved	Filtration	FILTRATION			971664	AXP	EET EDI	04/26/24 10:27
Dissolved	Analysis	350.1		1	971682	AXP	EET EDI	04/26/24 11:20
Total/NA	Analysis	350.1		1	971682	AXP	EET EDI	04/26/24 11:03
Total/NA	Prep	351.2			500386	NLE3	ELLE	04/30/24 15:20 - 04/30/24 18:20 [1]
Total/NA	Analysis	351.2		1	500836	JCG7	ELLE	05/01/24 10:34
Total/NA	Analysis	410.4		1	972096	HTV	EET EDI	04/29/24 18:11
Total/NA	Analysis	4500 O C-2016		1	970536	PLS	EET EDI	04/19/24 13:11
Dissolved	Filtration	FILTRATION			970612	VBG	EET EDI	04/19/24 19:44
Dissolved	Analysis	4500 P E-2011		1	970613	VBG	EET EDI	04/19/24 20:50
Total/NA	Analysis	4500 P E-2011		1	970613	VBG	EET EDI	04/19/24 20:50
Total/NA	Analysis	5210 B-2016		1	970521	PLS	EET EDI	04/19/24 13:43
Total/NA	Analysis	9040C		1	972246	RXA	EET EDI	04/30/24 11:43
Total/NA	Analysis	9060A		1	971020	MMC	EET EDI	04/22/24 14:36
Dissolved	Filtration	FILTRATION			973192	RAK	EET EDI	05/06/24 08:54
Dissolved	Prep	SM 4500 P B			973193	RAK	EET EDI	05/06/24 08:57
Dissolved	Analysis	SM4500 P E-2011		1	973245	RAK	EET EDI	05/06/24 13:51
Total/NA	Prep	SM 4500 P B			973193	RAK	EET EDI	05/06/24 08:57
Total/NA	Analysis	SM4500 P E-2011		1	973245	RAK	EET EDI	05/06/24 13:51
Total/NA	Analysis	Total Nitrogen		1	970801	TJW	EET EDI	05/05/24 06:23

Lab Chronicle

Client: Heidelberg Materials Northeast LLC
Job ID: 460-302385-1
Project/Site: Rock Hill Anti-Degradation

[1] This procedure uses a method stipulated length of time for the process. Both start and end times are displayed.

Laboratory References:

EET EDI = Eurofins Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

EET PIT = Eurofins Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

EET SAV = Eurofins Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Microbac = Marietta, OH, 158 Starlite Drive, Marietta, OH 45750

Accreditation/Certification Summary

Client: Heidelberg Materials Northeast LLC
Job ID: 460-302385-1
Project/Site: Rock Hill Anti-Degradation

Laboratory: Eurofins Edison

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Connecticut	State	PH-0818	09-30-24
DE Haz. Subst. Cleanup Act (HSCA)	State	N/A	01-02-25
Georgia	State	12028 (NJ)	06-30-24
Massachusetts	State	M-NJ312	06-30-24
New Jersey	NELAP	12028	06-30-24
New York	NELAP	11452	04-01-25
Pennsylvania	NELAP	68-00522	02-28-25
Rhode Island	State	LAO00376	12-31-24
USDA	US Federal Programs	P330-20-00244	05-31-24

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
A2LA	Dept. of Defense ELAP	0001.01	11-30-24
A2LA	ISO/IEC 17025	0001.01	11-30-24
Alabama	State	43200	01-31-25
Alaska	State	PA00009	06-30-24
Alaska (UST)	State	17-027	02-28-25
Arizona	State	AZ0780	03-12-25
Arkansas DEQ	State	88-00660	08-09-24
California	State	2792	11-30-24
Colorado	State	PA00009	06-30-24
Connecticut	State	PH-0746	06-30-25
DE Haz. Subst. Cleanup Act (HSCA)	State	019-006 (PA cert)	01-31-25
Delaware (DW)	State	N/A	01-31-25
Florida	NELAP	E87997	06-30-24
Georgia (DW)	State	C048	01-31-25
Hawaii	State	N/A	01-31-25
Illinois	NELAP	200027	01-31-25
Iowa	State	361	03-01-24 *
Kansas	NELAP	E-10151	10-31-24
Kentucky (DW)	State	KY90088	12-31-24
Kentucky (UST)	State	0001.01	11-30-24
Kentucky (WW)	State	KY90088	12-31-23 *
Louisiana (All)	NELAP	02055	06-30-24
Maine	State	2019012	03-12-25
Maryland	State	100	06-30-25
Massachusetts	State	M-PA009	06-30-24
Michigan	State	9930	01-31-25
Minnesota	NELAP	042-999-487	12-31-24
Mississippi	State	023	01-31-25
Missouri	State	450	01-31-25
Montana (DW)	State	0098	01-01-25
Nebraska	State	NE-OS-32-17	01-31-25
New Hampshire	NELAP	2730	01-10-25
New Jersey	NELAP	PA011	06-30-24
New York	NELAP	10670	04-01-25
North Carolina (DW)	State	42705	07-31-24
North Carolina (WW/SW)	State	521	12-31-24

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Accreditation/Certification Summary

Client: Heidelberg Materials Northeast LLC
Job ID: 460-302385-1
Project/Site: Rock Hill Anti-Degradation

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC (Continued)

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Oklahoma	NELAP	9804	08-31-24
Oregon	NELAP	PA200001	09-11-24
Pennsylvania	NELAP	36-00037	01-31-25
Quebec Ministry of Environment and Fight against Climate Change	PALA	507	09-16-24
Rhode Island	State	LAO00338	12-30-24
South Carolina	State	89002	01-31-24 *
Tennessee	State	02838	01-31-25
Texas	NELAP	T104704194-23-46	08-31-24
USDA	US Federal Programs	525-22-298-19481	10-25-25
Vermont	State	VT - 36037	10-28-24
Virginia	NELAP	460182	06-14-25
West Virginia (DW)	State	9906 C	01-31-25
West Virginia DEP	State	055	07-31-24
Wyoming	State	8TMS-L	01-31-25
Wyoming (UST)	A2LA	0001.01	11-30-24

Laboratory: Eurofins Pittsburgh

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Arkansas DEQ	State	19-033-0	06-27-24
California	State	2891	04-30-24
Connecticut	State	PH-0688	09-30-24
Florida	NELAP	E871008	06-30-24
Georgia	State	PA 02-00416	04-30-25
Illinois	NELAP	004375	06-30-24
Kansas	NELAP	E-10350	01-31-25
Kentucky (UST)	State	162013	04-30-23 *
Kentucky (WW)	State	KY98043	12-31-24
Louisiana	NELAP	04041	06-30-22 *
Louisiana (All)	NELAP	04041	06-30-24
Maine	State	PA00164	03-06-26
Minnesota	NELAP	042-999-482	12-31-24
New Hampshire	NELAP	2030	04-04-24 *
New Jersey	NELAP	PA005	06-30-24
New York	NELAP	11182	04-01-25
North Carolina (WW/SW)	State	434	12-31-24
North Dakota	State	R-227	04-30-24
Oregon	NELAP	PA-2151	02-06-25
Pennsylvania	NELAP	02-00416	04-30-25
Rhode Island	State	LAO00362	01-01-25
South Carolina	State	89014	04-30-25
Texas	NELAP	T104704528	03-31-25
US Fish & Wildlife	US Federal Programs	058448	03-31-24 *
USDA	US Federal Programs	P330-16-00211	04-11-26
Utah	NELAP	PA001462019-8	05-31-24
Virginia	NELAP	10043	07-14-24
West Virginia DEP	State	142	01-31-25
Wisconsin	State	998027800	08-31-24

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Accreditation/Certification Summary

Client: Heidelberg Materials Northeast LLC
Job ID: 460-302385-1
Project/Site: Rock Hill Anti-Degradation

Laboratory: Eurofins Savannah

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
	AFCEE	SAVLAB	
Alabama	State	41450	06-30-24
ANAB	Dept. of Defense ELAP	L2463	09-22-24
Arkansas (DW)	State	GA00006	06-30-24
California	State	2939	06-30-24
Florida	NELAP	E87052	06-30-24
Georgia	State	E87052	06-30-24
Georgia (DW)	State	803	06-30-24
Hawaii	State	<cert No.>	06-30-24
Illinois	NELAP	200022	11-30-24
Indiana	State	C-GA-02	06-30-24
Iowa	State	353	07-01-25
Kentucky (UST)	State	NA	06-30-24
Louisiana	NELAP	30690	06-30-24
Louisiana (All)	NELAP	30690	06-30-24
Louisiana (DW)	State	LA009	12-31-24
Maine	State	GA00006	09-25-24
Maryland	State	250	12-31-24
Massachusetts	State	M-GA006	06-30-24
Michigan	State	9925	06-30-24
Mississippi	State	<cert No.>	06-30-24
Nebraska	State	NE-OS-7-04	06-30-24
New Jersey	NELAP	GA769	06-30-24
New Mexico	State	GA00006	06-30-24
North Carolina (DW)	State	13701	07-31-24
North Carolina (WW/SW)	State	269	12-31-24
Pennsylvania	NELAP	68-00474	06-30-24
Puerto Rico	State	GA00006	01-01-25
South Carolina	State	98001	06-30-24
Tennessee	State	TN02961	06-30-24
Texas	NELAP	T1047004185	11-30-24
Texas	TCEQ Water Supply	T104704185	06-30-24
USDA	US Federal Programs	P330-18-00313	04-04-27
Virginia	NELAP	460161	06-14-24
Wyoming	State	8TMS-L	06-30-24

Method Summary

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill Anti-Degradation

Job ID: 460-302385-1

Method	Method Description	Protocol	Laboratory
300.0	Anions, Ion Chromatography	EPA	EET EDI
6020B	Metals (ICP/MS)	SW846	EET EDI
6020B	Metals (ICP/MS)	SW846	EET SAV
6020B	Metals (ICP/MS)	SW846	ELLE
EPA 6020B	Metals (ICP/MS)	SW846	EET PIT
120.1	Conductivity, Specific Conductance	EPA	EET EDI
2310B-2011	Acidity	SM	EET EDI
2320B-2011	Alkalinity, Total	SM	EET EDI
2540C-2015	Total Dissolved Solids (Dried at 180 °C)	SM	EET EDI
2540D-2015	Total Suspended Solids (Dried at 103-105°C)	SM	EET EDI
350.1	Nitrogen, Ammonia	EPA	EET EDI
351.2	Nitrogen, Total Kjeldahl	EPA	ELLE
410.4	COD	EPA	EET EDI
4500 O C-2016	Oxygen, Dissolved	SM	EET EDI
4500 P E-2011	Orthophosphate	SM	EET EDI
5210 B-2016	BOD, 5-Day	SM	EET EDI
9040C	pH	SW846	EET EDI
9060A	Organic Carbon, Total (TOC)	SW846	EET EDI
SM4500 P E-2011	Phosphorus	SM	EET EDI
Total Nitrogen	Nitrogen, Total	EPA	EET EDI
Subcontract	Osomotic Pressure	None	Microbac
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	EET SAV
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	ELLE
3010A	Preparation, Total Metals	SW846	EET EDI
3010A	Preparation, Total Metals	SW846	EET PIT
351.2	Nitrogen, Total Kjeldahl	EPA	ELLE
FILTRATION	Sample Filtration	None	EET EDI
Filtration	Sample Filtration	None	EET PIT
Filtration	Sample Filtration	None	ELLE
SM 4500 P B	Phosphorous, Total and Ortho	SM	EET EDI

Protocol References:

EPA = US Environmental Protection Agency

None = None

SM = "Standard Methods For The Examination Of Water And Wastewater"

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET EDI = Eurofins Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

EET PIT = Eurofins Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

EET SAV = Eurofins Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Microbac = Marietta, OH, 158 Starlite Drive, Marietta, OH 45750

Sample Summary

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill Anti-Degradation

Job ID: 460-302385-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
460-302385-1	NPDES 001	Water	04/18/24 09:00	04/18/24 19:00
460-302385-2	Upstream	Water	04/18/24 10:00	04/18/24 19:00
460-302385-3	Clarifying Pond	Water	04/18/24 10:45	04/18/24 19:00

Microbac Laboratories Inc., - Marietta, OH

Client Project ID:

46011424

For:

Julie Gilmore

Eurofins Environment Testing Northeast, LLC

777 New Durham RD

Edison, NJ 08817

Project State of Origin: Pennsylvania

Project Requested Certification:

Microbac Laboratories Inc., - Marietta, OH	68-01670	PA Department of Environmental Protection

All test results meet the requirements of the QAPP and other applicable contract terms and conditions. Any exceptions are attached to this cover page or addressed in the method narratives presented in the report. All results for soil samples are reported on a 'dry-weight' basis unless specified otherwise. Analytical results for water and wastes are reported on a 'as received' basis unless specified otherwise. A statement of uncertainty for each analysis is available upon request. The reported results are related only to the samples analyzed as received. This laboratory report may be released as a hardcopy and in computer-readable form submitted electronically or on diskette. This laboratory report shall not be reproduced, except in full, without the written approval of Microbac Laboratories, Inc.

Laboratory Project Manager:

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Project Manager

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Authorized By:

Michelle Taylor

Project Manager

Issued: 04/26/2024

MICROBAC®

Laboratory Report Number: M4D1751

Client Project ID: 46011424

Cooler Receipt Log

Cooler ID: Default Cooler Temp: 2.2°C

Cooler Inspection Checklist

Ice Present or not required?	Yes
Shipping containers sealed or not required?	Yes
Custody seals intact or not required?	Yes
Chain of Custody (COC) Present?	Yes
COC includes customer information?	Yes
Relinquished and received signature on COC?	Yes
Sample collector identified on COC?	Yes
Sample type identified on COC?	Yes
Correct type of Containers Received	No
Correct number of containers listed on COC?	Yes
Containers Intact?	Yes
COC includes requested analyses?	Yes
Enough sample volume for indicated tests received?	Yes
Sample labels match COC (Name, Date & Time?)	Yes
Samples arrived within hold time?	Yes
Correct preservatives on COC or not required?	Yes
Chemical preservations checked or not required?	Yes
Preservation checks meet method requirements?	Yes
VOA vials have zero headspace, or not recd.?	Yes

Case Narrative

OP received in 250 poly

Laboratory Report Number: M4D1751

Client Project ID: 46011424

Sample Notes

PADEP 391-2000-008

A4 **Sample was received with head space.**

Osmotic Pressure

M4D1751-01	NPDES 001 (460-302385-1)	M4D1751-02	Upstream (460-302385-2)
M4D1751-03	Clarifying Pond (460-302385-3)		

Laboratory Report Number: M4D1751

Client Project ID: 46011424

Microbac Laboratories Inc., - Marietta, OH

CERTIFICATE OF ANALYSIS

Client ID:	NPDES 001 (460-302385-1)			**Collection Date:**	04/18/2024 09:00
Laboratory ID:	M4D1751-01			**Prep Date:**	04/25/2024 15:59
Matrix:	Aqueous			**Analyzed:**	04/25/2024 16:10
Batch / Sequence:	B4D1413 /	**Analytical Method:**	PADEP 391-2000-008	**Calibration:**	NA
Instrument:	OSMOMETER 5004	**Units:**	mOsm/kg	**File ID:**	OsmoticPressure_B4D1413_240425040504.xls
Analyst:	TTB	**Dilution:**	1		

Analyte	CAS Number	Result	MDL	RL	Flag	Qualifier
Osmotic Pressure		ND	6.00	10.0		A4

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Laboratory Report Number: M4D1751

Client Project ID: 46011424

Microbac Laboratories Inc., - Marietta, OH

CERTIFICATE OF ANALYSIS

Client ID:	Upstream (460-302385-2)			**Collection Date:**	04/18/2024 10:00
Laboratory ID:	M4D1751-02			**Prep Date:**	04/25/2024 15:59
Matrix:	Aqueous			**Analyzed:**	04/25/2024 16:10
Batch / Sequence:	B4D1413 /	**Analytical Method:**	PADEP 391-2000-008	**Calibration:**	NA
Instrument:	OSMOMETER 5004	**Units:**	mOsm/kg	**File ID:**	OsmoticPressure_B4D1413_240425040504.xls
Analyst:	TTB	**Dilution:**	1		

Analyte	CAS Number	Result	MDL	RL	Flag	Qualifier
Osmotic Pressure		8.00	6.00	10.0		A4

Laboratory Report Number: M4D1751

Client Project ID: 46011424

Microbac Laboratories Inc., - Marietta, OH

CERTIFICATE OF ANALYSIS

Client ID:	Clarifying Pond (460-302385-3)			**Collection Date:**	04/18/2024 10:45
Laboratory ID:	M4D1751-03			**Prep Date:**	04/25/2024 15:59
Matrix:	Aqueous			**Analyzed:**	04/25/2024 16:10
Batch / Sequence:	B4D1413 /	**Analytical Method:**	PADEP 391-2000-008	**Calibration:**	NA
Instrument:	OSMOMETER 5004	**Units:**	mOsm/kg	**File ID:**	OsmoticPressure_B4D1413_240425040504.xls
Analyst:	TTB	**Dilution:**	1		

Analyte	CAS Number	Result	MDL	RL	Flag	Qualifier
Osmotic Pressure		ND	6.00	10.0		A4

Laboratory Report Number: M4D1751

Client Project ID: 46011424

Notes and Definitions

A4: Sample was received with head space.
MDL: Method Detection Limit
RL: Reporting Limit

MICROBAC®

Laboratory Report Number: M4D1751

Client Project ID: 46011424

METHOD BLANKS

Sample ID:	B4D1413-BLK1	**Prep Date:**	04/25/24 15:59	**Matrix:**	Aqueous
Instrument:	OSMOMETER 5004	**Analyzed:**	04/25/24 16:10	**Method:**	PADEP 391-2000-008
File ID:	OsmoticPressure_B4D'	**Sequence:**		**Analyst:**	TTB
Batch:	B4D1413	**Units:**	mOsm/kg	**Calibration:**	

Analyte	Result	MDL	RL	Dilution	Flag	Q
Osmotic Pressure	6.00	6.00	10.0	1	U	

* - Detected in the associated method Blank at a concentration >= RL

Laboratory Report Number: M4D1751

Client Project ID: 46011424

BLANK SPIKE / DUPLICATE (BS/BSD)

Method:	PADEP 391-2000-008		**Blank Spike**	**Duplicate**
Batch:	B4D1413	**Spike ID:**	B4D1413-BS1	B4D1413-BSD1
Analyst:	TTB	**Prepared:**	04/25/24 15:59	04/25/24 15:59
Matrix:	Aqueous	**Analyzed:**	04/25/24 16:10	04/25/24 16:10
Units:	mOsm/kg	**File ID:**	OsmoticPressure_B4D1413_240	OsmoticPressure_B4D1413_240
Instrument:	OSMOMETER 5004	**Initial/Final:**	1mL/1mL	1mL/1mL
Calibration:				

Analyte	BS Spiked	BS Found	BS %Rec	BSD Spiked	BSD Found	BSD %Rec	%RPD	%Rec Limts	RPD Limit	Q
Osmotic Pressure	290	293	101	290	294	101	0.341	90 - 110	20	

* - Does not meet %Rec acceptance criteria.
- Does not meet RPD acceptance criteria.

Eurofins Edison
777 New Durham Road
Edison, NJ 08817
Phone: 732-549-3900 Fax: 732-549-3679

Chain of Custody Record

eurofins | Environment Testing

5/6/2024

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Gilmore, Julie L	Carrier Tracking No(s):	COC No: 460-71043.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Julie.Gilmore@et.eurofinsus.com	State of Origin: Pennsylvania	Page: Page 1 of 1
Company: Microbac Laboratories, Inc.		Accreditations Required (See note): NELAP - Pennsylvania		Job #: 460-302385-1
Address: 158 Starlite Drive, ,	Due Date Requested: 4/30/2024			
City: Marietta	TAT Requested (days):			
State, Zip: OH, 45750				
Phone: 800-373-4071(Tel)	PO #:			
Email:	WO #:			
Project Name: Rock Hill Anti-Degradation	Project #: 46011424			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:
-

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	SUB (Osomotic Pressure)/ Osomotic Pressure	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
NPDES 001 (460-302385-1)	4/18/24	09:00 Eastern		Water			X	1	
Upstream (460-302385-2)	4/18/24	10:00 Eastern		Water			X	1	
Clarifying Pond (460-302385-3)	4/18/24	10:45 Eastern		Water			X	1	

M 4 D 1 7 5 1

Eurofins Environment Testing Northeast, LLC
Rec'd: 04/24/2024 10:45
By: Stephanie Murphy Temp: 2.2 (Signature)

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Northeast, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Northeast, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Northeast, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Northeast, LLC.

Possible Hazard Identification *Unconfirmed*	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*** ☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* ____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 1	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time: 4/22/24 1900	Company FEDEX	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by: Stephanie Murphy	Date/Time: 4/24/24	Company 1045

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:
	Cooler Temperature(s) °C and Other Remarks:

MICROBAC®

Work Order # M4D1757

COOLER TEMP >6° C LOG

SAMPLE ID	Bottle 1 °C	Bottle 2 °C	Bottle 3 °C	Bottle 4 °C	Bottle 5 °C	Bottle 6 °C

4/24/2024 SM

pH Lot # HC3290B9

pH Exceptions

SAMPLE ID	Bottle 1	Bottle 2	Bottle 3	Bottle 4	Bottle 5	Bottle 6

4/24/2024 SM

PRESERVATIVE EXCEPTIONS

✓ NONE

___ AS NOTED

4/24/2024 SM

Document Control # 1957
Last 04-10-2019

Issued to: Document Master File

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Edison NJ 08817
Phone: 732-549-3900 Fax: 732-549-3679

450-KOP

Chain of Custody Record

eurofins

Client Information	Sampler	Lab PM: Gilmore, Julie L	Carrier Tracking No(s):	COC No: 460-180860-115848.1
Client Contact: Andrew Gutshall	Phone:	E-Mail: Julie.Gilmore@et.eurofinsus.com	State of Origin:	Page: Page 1 of 2
Company: Heidelberg Materials Northeast LLC	PWSID:			Job #: 302385
Address: 7660 Imperial Way	Due Date Requested:			
City: Allentown	TAT Requested (days):			
State, Zip: PA, 18195	Compliance Project: Δ Yes Δ No			
Phone:	PO #: Purchase Order not required			
Email: andrew.gutshall@heidelbergmaterials.com	WO #:			
Project Name: Rock Hill Anti-Degradation	Project #: 46011424			
Site:	SSOW#:			

460-302385 Chain of Custody

I Ice
J DI Water
K EDTA
L EDA
Other:

V MCAA
W pH 4-5
Y Trizma
Z other (specify)

Analysis Requested

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (Wwater, Ssolid, Owaste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020B (MOD) Single Element 6020B Metals List	6020B (MOD) Single Element 6020B Metals List	351.2 Local Method	6020B Dissolved Cd/Fe/Zn	6020B (MOD) Total Fe	350.1 410.4, 4500_P_E	120.1, 9040C, SM2310B	350.1, 4500_P_E, 6020B	2320B (MOD) Alkalinity	6020B (MOD) Total Custom Metals	9060A TOC	2540D, SM5210B_Calc	2540C TDS	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	D	S	N	D	S	N	N	N	D	S	N	N		
NPDES 001	4/18/24	0900	G	Water			/	/	/	/	/	/	/	/	/	/	/	/	/		1
Basin 1 No flow No sample				Water																	
Basin 2 No flow no sample				Water																	
Upstream	4/18/24	1000	G	Water			/	/	/	/	/	/	/	/	/	/	/	/	/		2
Clarifying Pond	4/18/24	1045	G	Water			/	/	/	/	/	/	/	/	/	/	/	/	/		3

SHORT HOLD

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I II III, IV Other (specify)	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	4/18/24			4/18/24 1215	EETN-KOP
Relinquished by:	Date/Time: 4-18-24 1650	Company EETN-KOP	Received by:	Date/Time: 4/18	Company EDF
Relinquished by:	Date/Time: 4/18 1900	Company GTA	Received by:	Date/Time: 4/18 19:00	Company GTA

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.	Cooler Temperature(s) °C and Other Remarks:

Ver: 06/08/2021

5/6/2024

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777 New Durham Road
Edison, NJ 08817
Phone: 732-549-3900 Fax: 732-549-3679

450-KOP

Chain of Custody Record

25
37 KOP2

eurofins

Client Information	Sampler	Lab PM: Gilmore, Julie L	Carrier Tracking No(s):	COC No: 460-180860-115848.2
Client Contact: Andrew Gutshall	Phone:	E-Mail: Julie.Gilmore@et.eurofinsus.com	State of Origin:	Page: Page 2 of 2
Company: Heidelberg Materials Northeast LLC	PWSID:			Job #: 302365
Address: 7660 Imperial Way	Due Date Requested:			
City: Allentown	TAT Requested (days):			
State, Zip: PA, 18195	Compliance Project: Δ Yes Δ No			
Phone:	PO #: Purchase Order not required			
Email: andrew.gutshall@heidelbergmaterials.com	WO #:			
Project Name: Rock Hill Anti-Degradation	Project #: 46011424			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:
A HCL, B NaOH, C Zn Acetate, D Nitric Acid, E NaHSO4, F MeOH, G Amchlor, H Ascorbic Acid, I Ice, J DI Water, K EDTA, L EDA, M Hexane, N None, O AsNaO2, P Na2O4S, Q Na2SO3, R Na2S2O3, S H2SO4, T TSP Dodecahydrate, U Acetone, V MCAA, W pH 4-5, Y Trizma, Z other (specify)
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	300_ORGFM_28D, 300_ORGFMS	245.1 Local Method	6020B Total Aluminum	4500_O_C - Dissolved Oxygen	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	D	D			
NPDES 001	4/18/24	0900	G	Water			1	1	1	1		1
Basin 1 NO flow no sample				Water								1
Basin 2 No flow no sample				Water								1
Upstream	4/18/24	1000	G	Water			1	1	1	1		2
Clarifying Pond	4/18/24	1015	G	Water			1	1	1	1		3

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I II III IV Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		4/18/24			4/18/24 1215	EET-KOP
2		4-18-24 1650	EET-KOP		4/18	ETA
3		4/18 1900	ETA		4/18 19:00	ETA

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks:

Ver: 06/08/2021

Eurofins **TestAmerica Edison**

Receipt Temperature and pH Log

Job Number: 302385

Number of Coolers: 2 IR Gun # 2

Cooler Temperatures

	RAW	CORRECTED		RAW	CORRECTED		RAW	CORRECTED
Cooler #1:	2.5 °C	2.5 °C	Cooler #4:	°C	°C	Cooler #7:	°C	°C
Cooler #2:	3.7 °C	3.7 °C	Cooler #5:	°C	°C	Cooler #8:	°C	°C
Cooler #3:	°C	°C	Cooler #6:	°C	°C	Cooler #9:	°C	°C

TALS Sample Number	Ammonia (pH<2)	COD (pH<2)	Nitrate Nitrite (pH<2)	Metals* (pH<2)	Hardness (pH<2)	Pest (pH 5-9)	EPH or QAM (pH<2)	Phenols (pH<2)	Sulfide (pH>9)	TKN (pH<2)	TOC (pH<2)	Total Cyanide (pH>12)	Total Phos (pH<2)	Other	Other
1	(2)	(2)		(2)							(2)		(2)		
2	(2)	(2)		(2)							(2)		(2)		
3	(2)	(2)		(2)							(2)		(2)		

If pH adjustments are required record the information below*

Sample No(s) adjusted. _____

Preservative Name/Conc. _____ Volume of Preservative used (ml): _____

Lot # of Preservative(s): _____ Expiration Date: _____

The appropriate Project Manager and Department Manager should be notified about the samples which were pH adjusted.

**Samples for Metal analysis which are out of compliance must be acidified at least 24 hours prior to analysis.*

Initials _____ Date: 4/18


Part # 159469-434 MTW EXP 09/24
ORIGIN ID:LDJA (732) 549-3900
KENNETH RIVERA
EUROFINS EDISON
777 NEW DURHAM ROAD
SAMPLE MANAGEMENT
EDISON, NJ 08817
UNITED STATES US
SHIP DATE: 22APR24
ACTWGT: 33.85 LB
CAD: 0619092/CAFE3804
BILL SENDER
TO SHIPPING/RECEIVING
EUROFINS ENVIRONMENT TESTING NO
301 ALPHA DRIVE
RIDC PARK
PITTSBURGH PA 15238
(412) 963-7058
REF: 8460-181120
PO: YES
Uncorrected temp 6.1 °C
Thermometer ID 21
CF -0.9 Initials RO
PT-WI-SR-001 effective 11/8/18
RT 798
FZ 797
6015
04.24
10:30
A
J241023112201uv
TRK# 6553 1011 6015
PRIORITY OVERNIGHT
NX AGCA
15238
PA-US
PIT
4249543 23Apr2024 LDJA 581G6/0FEC/C0B8
460-302385 Waybill

Eurofins Edison
777 New Durham Road
Edison, NJ 08817
Phone 732-549-3900 Fax: 732-549-3679

Met 11CC

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler	Lab PM: Gilmore, Julie L	Carrier Tracking No(s)	COC No: 460-71040.1
Client Contact: Shipping/Receiving	Phone	E-Mail: Julie.Gilmore@et.eurofinsus.com	State of Origin: Pennsylvania	Page: Page 1 of 1
Company: Eurofins Environment Testing Northeast,		Accreditations Required (See note): NELAP - Pennsylvania		Job #: 460-302385-1
Address: 301 Alpha Drive, RIDC Park,	Due Date Requested: 5/1/2024			Preservation Codes: -
City: Pittsburgh	TAT Requested (days):			
State, Zip: PA, 15238				
Phone: 412-963-7058(Tel) 412-963-2468(Fax)	PO #:			
Email	WO #:			
Project Name: Rock Hill Anti-Degradation	Project #: 46011424			Other:
Site	SSOW#:			

Analysis Requested

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020B/3010A Total Lithium	6020B/Filtration_ME (MOD) Dissolved Lithium	Total Number of containers	Special Instructions/Note:
			Preservation Code:							
NPDES 001 (460-302385-1)	4/18/24	09 00 Eastern		Water			X	X	2	
Upstream (460-302385-2)	4/18/24	10.00 Eastern		Water			X	X	2	
Clarifying Pond (460-302385-3)	4/18/24	10.45 Eastern		Water			X	X	2	

460-302385 Chain of Custody

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Northeast, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Northeast, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Northeast, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Northeast, LLC.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 1	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
	[signature]	4/22/24 1900	[illegible]	[signature]	4/24/24 0925	EPITMS
	Relinquished by:	Date/Time	Company	Received by	Date/Time	Company
	Relinquished by:	Date/Time	Company	Received by:	Date/Time	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

5/6/2024

Eurofins Edison
777 New Durham Road
Edison, NJ 08817
Phone: 732-549-3900 Fax: 732-549-3679

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Gilmore, Julie L	Carrier Tracking No(s):	COC No: 460-71036.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Julie.Gilmore@et.eurofinsus.com	State of Origin: Pennsylvania	Page: Page 1 of 1
Company: Eurofins Lancaster Laboratories Environm		Accreditations Required (See note): NELAP - Pennsylvania		Job #: 460-302385-1
Address: 2425 New Holland Pike, ,	Due Date Requested: 5/2/2024			Preservation Codes:
City: Lancaster	TAT Requested (days):			
State, Zip: PA, 17601				
Phone: 717-656-2300(Tel)	PO #:			
Email:	WO #:			
Project Name: Rock Hill Anti-Degradation	Project #: 46011424			
Site:	SSOW#:			Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020B/3005A (MOD) Total Fe	6020B/Filtration_ME Dissolved Cd/Fe/Zn	351.2/351.2_Prep	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
NPDES 001 (460-302385-1)	4/18/24	09:00 Eastern		Water			X	X	X	3	
Upstream (460-302385-2)	4/18/24	10:00 Eastern		Water			X	X	X	3	
Clarifying Pond (460-302385-3)	4/18/24	10:45 Eastern		Water			X	X	X	3	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Northeast, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Northeast, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Northeast, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Northeast, LLC.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 1	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment: 22 @K 2241 4/22/24
Relinquished by:	Date/Time: 4/22/24 1620	Company: ET	Received by:	Date/Time: 4/22/24 1620	Company: ET
Relinquished by:	Date/Time: 4/22/24 1922	Company: ET	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time: 4/22/24 1922	Company: ET

Custody Seals Intact: | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks: raw: 5.3-5.6 cor: 5.2-5.5

777 New Durham Road
Edison, NJ 08817
Phone: 732-549-3900 Fax: 732-549-3679

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Gilmore, Julie L	Carrier Tracking No(s):	COC No: 460-71032.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Julie.Gilmore@et.eurofinsus.com	State of Origin: Pennsylvania	Page: Page 1 of 1
Company: Eurofins Environment Testing Northeast,		Accreditations Required (See note): NELAP - Pennsylvania		Job #: 460-302385-1
Address: 10 Hazelwood Drive, ,	Due Date Requested: 4/29/2024			Preservation Codes: -
City: Amherst	TAT Requested (days):			
State, Zip: NY, 14228-2298				
Phone: 716-691-2600(Tel) 716-691-7991(Fax)	PO #:			
Email:	WO #:			
Project Name: Rock Hill Anti-Degradation	Project #: 46011424			
Site:	SSOW#:			Other:

Analysis Requested

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	245.1/245.1_Prep	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
NPDES 001 (460-302385-1)	4/18/24	09:00 Eastern		Water			X	1	
Upstream (460-302385-2)	4/18/24	10:00 Eastern		Water			X	1	
Clarifying Pond (460-302385-3)	4/18/24	10:45 Eastern		Water			X	1	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Northeast, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Northeast, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Northeast, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Northeast, LLC.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 1	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		4/19/24 1900	ETE			
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
					4-20-24 1030	TAD
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:
		2.5 IR

Eurofins Edison
777 New Durham Road
Edison, NJ 08817
Phone: 732-549-3900 Fax: 732-549-3679

Chain of Custody Record

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Client Information (Sub Contract Lab)	Sampler:	Lab PM: Gilmore, Julie L	Carrier Tracking No(s):	COC No: 460-71042.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Julie.Gilmore@et.eurofinsus.com	State of Origin: Pennsylvania	Page: Page 1 of 1
Company: Eurofins Environment Testing Southeast L		Accreditations Required (See note): NELAP Pennsylvania		Job #: 460-302385-1
Address: 5102 LaRoche Avenue,	Due Date Requested: 4/30/2024			Preservation Codes:
City: Savannah	TAT Requested (days):			
State, Zip: GA, 31404				
Phone: 912-354-7858(Tel) 912-352-0165(Fax)	PO #:			
Email:	WO #:			
Project Name: Rock Hill Anti-Degradation	Project #: 46011424			
Site:	SSOW#:			Other:

Analysis Requested

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020B/3005A Total Aluminum	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
NPDES 001 (460-302385-1)	4/18/24	09:00 Eastern		Water			X	1	
Upstream (460-302385-2)	4/18/24	10:00 Eastern		Water			X	1	
Clarifying Pond (460-302385-3)	4/18/24	10:45 Eastern		Water			X	1	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Northeast, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Northeast, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Northeast, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Northeast, LLC.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV Other (specify) Primary Deliverable Rank: 1	Special Instructions/QC Requirements.

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		4/22/24 1900	FEDEX			
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
3	Relinquished by:	Date/Time:	Company	Received by:	4/24/24 1013	

Custody Seals Intact: Yes No	Custody Seal No.	Cooler Temperature(s) °C and Other Remarks: 14 9/15-0

Login Sample Receipt Checklist

Client: Heidelberg Materials Northeast LLC

Job Number: 460-302385-1

Login Number: 302385

List Source: Eurofins Edison

List Number: 1

Creator: Meyers, Gary

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Heidelberg Materials Northeast LLC

Job Number: 460-302385-1

Login Number: 302385
List Number: 3
Creator: Metzger, Katherine A

List Source: Eurofins Lancaster Laboratories Environment Testing, LLC
List Creation: 04/22/24 08:32 PM

Question	Answer	Comment
The cooler's custody seal is intact.	N/A	Not present
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature acceptable,where thermal pres is required(</=6C, not frozen).	True	
Cooler Temperature is recorded.	True	
WV:Container Temp acceptable,where thermal pres is required (</=6C, not frozen).	N/A	
WV: Container Temperature is recorded.	N/A	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the containers received and the COC.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
There is sufficient vol. for all requested analyses.	True	
Is the Field Sampler's name present on COC?	False	Received project as a subcontract.
Sample custody seals are intact.	N/A	Not present.
VOA sample vials do not have headspace >6mm in diameter (none, if from WV)?	N/A	

Login Sample Receipt Checklist

Client: Heidelberg Materials Northeast LLC

Job Number: 460-302385-1

Login Number: 302385
List Number: 4
Creator: Rucker, Keenyn J

List Source: Eurofins Pittsburgh
List Creation: 04/24/24 02:36 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Heidelberg Materials Northeast LLC

Job Number: 460-302385-1

Login Number: 302385
List Number: 5
Creator: Munro, Caroline

List Source: Eurofins Savannah
List Creation: 04/24/24 04:32 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Lab Results

May 15, 2024

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ANALYTICAL REPORT

PREPARED FOR

Attn: Katie Murray
Heidelberg Materials Northeast LLC
7660 Imperial Way
Allentown, Pennsylvania 18195

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JOB DESCRIPTION

Rock Hill - Anti-Degradation

JOB NUMBER

460-304000-1

Eurofins Edison
777 New Durham Road
Edison NJ 08817

See page two for job notes and contact information.

myEOL

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing Northeast, LLC Project Manager.

Authorization



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Authorized for release by
Julie Gilmore, Project Manager I
Julie.Gilmore@et.eurofinsus.com
(484)685-0865

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Qualifiers

HPLC/IC

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

General Chemistry

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
F1	MS and/or MSD recovery exceeds control limits.
H	Sample was prepped or analyzed beyond the specified holding time. This does not meet regulatory requirements.
H3	Sample was received and analyzed past holding time. This does not meet regulatory requirements.
HF	Parameter with a holding time of 15 minutes. Test performed by laboratory at client's request. Sample was analyzed outside of hold time.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job Narrative
460-304000-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

- Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

The method detection limit (MDL) is the lowest value detectable by the laboratory for a given analyte as determined by the MDL procedure detailed in EPA 40 CFR 136. Reported MDL values are adjusted for any dilutions and percent moisture (as applicable). The lab is unable to report values below the MDL.

Receipt
The samples were received on 5/15/2024 7:00 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 1.6°C and 3.2°C.

Note: All samples which require thermal preservation are considered acceptable if the arrival temperature is within 2C of the required temperature or method specified range. For samples with a specified temperature of 4C, samples with a temperature ranging from just above freezing temperature of water to 6C shall be acceptable. Samples that are hand delivered immediately following collection may not meet these criteria, however they will be deemed acceptable according to NELAC standards, if there is evidence that the chilling process has begun, such as arrival on ice, etc.

Subcontract Work
Method Osomotic Pressure: This method was subcontracted to Microbac Laboratories, Inc. The subcontract laboratory certification is different from that of the facility issuing the final report. The subcontract report is appended in its entirety.

Method 300.0 - Anions, Ion Chromatography
Samples NPDES 001 (460-304000-1), Upstream (460-304000-2) and Clarifying Pond (460-304000-3) were analyzed for Anions, Ion Chromatography. The samples were analyzed on 5/16/2024 and 5/28/2024.

Method 300.0 - Anions, Ion Chromatography
Samples NPDES 001 (460-304000-1), Upstream (460-304000-2) and Clarifying Pond (460-304000-3) were analyzed for Anions, Ion Chromatography. The samples were analyzed on 5/16/2024.

Method 6020B - Metals (ICP/MS)
Samples NPDES 001 (460-304000-1), Upstream (460-304000-2) and Clarifying Pond (460-304000-3) were analyzed for Metals (ICP/MS). The samples were prepared on 5/22/2024 and analyzed on 5/22/2024 and 5/28/2024.

Method 6020B - Metals (ICP/MS) - Dissolved
Samples NPDES 001 (460-304000-1), Upstream (460-304000-2) and Clarifying Pond (460-304000-3) were analyzed for Metals (ICP/MS) - Dissolved. The samples were prepared on 5/16/2024, 5/20/2024, 5/28/2024 and 5/29/2024 and analyzed on 5/17/2024, 5/22/2024, 5/23/2024, 5/29/2024 and 5/30/2024.

The following samples were not filtered within 15 minutes of sample collection as required by the method: NPDES 001 (460-304000-1), Upstream (460-304000-2) and Clarifying Pond (460-304000-3). The sample(s) was filtered prior to analysis at the laboratory, and the results have been reported. This does not meet regulatory requirements.

The following samples were not filtered and preserved within 15 minutes of sample collection in accordance with 40 CFR Part 136 Table II, Footnote 7, method 6020B. The samples were filtered prior to analysis at the laboratory.

NPDES 001 (460-304000-1), Upstream (460-304000-2) and Clarifying Pond (460-304000-3)

Job ID: 460-304000-1 (Continued) Eurofins Edison

The following samples were not filtered within 15 minutes of sample collection as required by the method: NPDES 001 (460-304000-1), Upstream (460-304000-2) and Clarifying Pond (460-304000-3). The sample(s) was filtered prior to analysis at the laboratory, and the results have been reported. This does not meet regulatory requirements.

Method 6020B - Metals (ICP/MS) - Total Recoverable
Samples NPDES 001 (460-304000-1), Upstream (460-304000-2) and Clarifying Pond (460-304000-3) were analyzed for Metals (ICP/MS) - Total Recoverable. The samples were prepared on 5/19/2024 and 5/20/2024 and analyzed on 5/20/2024, 5/22/2024, 5/23/2024 and 5/25/2024.

Method 120.1 - Conductivity, Specific Conductance
Samples NPDES 001 (460-304000-1), Upstream (460-304000-2) and Clarifying Pond (460-304000-3) were analyzed for Conductivity, Specific Conductance. The samples were analyzed on 5/24/2024 and 5/28/2024.

Method 2320B-2011 - Alkalinity, Total
Samples NPDES 001 (460-304000-1), Upstream (460-304000-2) and Clarifying Pond (460-304000-3) were analyzed for Alkalinity, Total. The samples were analyzed on 5/24/2024, 5/25/2024 and 5/28/2024.

Method 2540C-2015 - Total Dissolved Solids (Dried at 180 °C)
Samples NPDES 001 (460-304000-1), Upstream (460-304000-2) and Clarifying Pond (460-304000-3) were analyzed for Total Dissolved Solids (Dried at 180 °C). The samples were analyzed on 5/16/2024.

Method 2540D-2015 - Total Suspended Solids (Dried at 103-105°C)
Samples NPDES 001 (460-304000-1), Upstream (460-304000-2) and Clarifying Pond (460-304000-3) were analyzed for Total Suspended Solids (Dried at 103-105°C). The samples were analyzed on 5/20/2024.

Method 350.1 - Nitrogen, Ammonia
Samples NPDES 001 (460-304000-1), Upstream (460-304000-2) and Clarifying Pond (460-304000-3) were analyzed for Nitrogen, Ammonia. The samples were analyzed on 5/28/2024.

Method 350.1 - Nitrogen, Ammonia - Dissolved
Samples NPDES 001 (460-304000-1), Upstream (460-304000-2) and Clarifying Pond (460-304000-3) were analyzed for Nitrogen, Ammonia - Dissolved. The samples were analyzed on 5/25/2024 and 5/28/2024.

Method 351.2 - Nitrogen, Total Kjeldahl
Samples NPDES 001 (460-304000-1), Upstream (460-304000-2) and Clarifying Pond (460-304000-3) were analyzed for Nitrogen, Total Kjeldahl. The samples were prepared on 5/20/2024 and analyzed on 5/21/2024.

Method 410.4 - COD
Samples NPDES 001 (460-304000-1), Upstream (460-304000-2) and Clarifying Pond (460-304000-3) were analyzed for COD. The samples were analyzed on 5/22/2024.

Method 4500 O C-2016 - Oxygen, Dissolved
Samples NPDES 001 (460-304000-1), Upstream (460-304000-2) and Clarifying Pond (460-304000-3) were analyzed for Oxygen, Dissolved. The samples were analyzed on 5/17/2024 and 5/28/2024.

This analysis is normally performed in the field and has a method-defined holding time of 15 minutes. The following samples has been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe: NPDES 001 (460-304000-1), Upstream (460-304000-2) and Clarifying Pond (460-304000-3).

Method SM4500 P E-2011 - Phosphorus
Samples NPDES 001 (460-304000-1), Upstream (460-304000-2) and Clarifying Pond (460-304000-3) were analyzed for Phosphorus. The samples were prepared on 5/31/2024 and analyzed on 5/28/2024 and 5/31/2024.

Method SM4500 P E-2011 - Phosphorus - Dissolved
Samples NPDES 001 (460-304000-1), Upstream (460-304000-2) and Clarifying Pond (460-304000-3) were analyzed for Phosphorus - Dissolved. The samples were prepared and analyzed on 5/31/2024.

Method 4500 P E-2011 - Orthophosphate

Job ID: 460-304000-1 (Continued) Eurofins Edison

Samples NPDES 001 (460-304000-1), Upstream (460-304000-2) and Clarifying Pond (460-304000-3) were analyzed for Orthophosphate. The samples were analyzed on 5/22/2024.

Method 4500 P E-2011 - Orthophosphate - Dissolved
Samples NPDES 001 (460-304000-1), Upstream (460-304000-2) and Clarifying Pond (460-304000-3) were analyzed for Orthophosphate - Dissolved. The samples were analyzed on 5/22/2024.

Method 9040C - pH
Samples NPDES 001 (460-304000-1), Upstream (460-304000-2) and Clarifying Pond (460-304000-3) were analyzed for pH. The samples were analyzed on 5/23/2024.

This analysis is normally performed in the field and has a method-defined holding time of 15 minutes. The following samples has been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe: NPDES 001 (460-304000-1), Upstream (460-304000-2) and Clarifying Pond (460-304000-3).

Method 9060A - Organic Carbon, Total (TOC)
Samples NPDES 001 (460-304000-1), Upstream (460-304000-2) and Clarifying Pond (460-304000-3) were analyzed for Organic Carbon, Total (TOC). The samples were analyzed on 5/25/2024.

The method blank for analytical batch 460-977063 contained Total Organic Carbon above the method detection limit. This target analyte concentration was less than the reporting limit (RL) in the method blank; therefore, re-extraction and/or re-analysis of samples was not performed.

Method Total Nitrogen - Nitrogen, Total
Samples NPDES 001 (460-304000-1), Upstream (460-304000-2) and Clarifying Pond (460-304000-3) were analyzed for Nitrogen, Total. The samples were analyzed on 5/28/2024.

Method 2310B-2011 - Acidity
Samples NPDES 001 (460-304000-1), Upstream (460-304000-2) and Clarifying Pond (460-304000-3) were analyzed for Acidity. The samples were analyzed on 5/28/2024.

Method 5210 B-2016 - BOD, 5-Day
Samples NPDES 001 (460-304000-1), Upstream (460-304000-2) and Clarifying Pond (460-304000-3) were analyzed for BOD, 5-Day. The samples were analyzed on 5/16/2024 and 5/28/2024.

Client Sample ID: NPDES 001

Date Collected: 05/15/24 09:00
Date Received: 05/15/24 19:00

Lab Sample ID: 460-304000-1

Matrix: Water

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide	0.054	U	0.32	0.054	mg/L			05/16/24 15:04	1
Nitrate as N	**0.13**	**J**	0.16	0.070	mg/L			05/16/24 15:04	1
Chloride	**3.89**		0.32	0.039	mg/L			05/16/24 15:04	1
Nitrate Nitrite as N	**0.13**	**J**	0.16	0.070	mg/L			05/16/24 15:04	1
Nitrite as N	0.023	U	0.16	0.023	mg/L			05/16/24 15:04	1
Sulfate	**6.70**		0.48	0.095	mg/L			05/16/24 15:04	1

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**5.7**		4.0	0.91	ug/L		05/22/24 08:15	05/22/24 17:47	1
Boron	**65.7**	**J**	80.0	30.4	ug/L		05/22/24 08:15	05/22/24 17:47	1
Calcium	**22100**		500	53.6	ug/L		05/22/24 08:15	05/22/24 17:47	1
Copper	2.5	U	4.0	2.5	ug/L		05/22/24 08:15	05/22/24 17:47	1
Lead	0.84	U	1.2	0.84	ug/L		05/22/24 08:15	05/22/24 17:47	1
Magnesium	**9170**		200	46.9	ug/L		05/22/24 08:15	05/22/24 17:47	1
Manganese	**73.6**		8.0	1.5	ug/L		05/22/24 08:15	05/22/24 17:47	1
Nickel	**0.99**	**J**	4.0	0.91	ug/L		05/22/24 08:15	05/22/24 17:47	1
Potassium	**1310**		200	112	ug/L		05/22/24 08:15	05/22/24 17:47	1
Selenium	**0.62**	**J**	2.5	0.59	ug/L		05/22/24 08:15	05/22/24 17:47	1
Sodium	**4850**		500	219	ug/L		05/22/24 08:15	05/22/24 17:47	1
Strontium	**62.5**		4.0	0.50	ug/L		05/22/24 08:15	05/22/24 17:47	1
Zinc	6.5	U	16.0	6.5	ug/L		05/22/24 08:15	05/22/24 17:47	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**43.1**	**J**	100	35.0	ug/L		05/19/24 06:25	05/20/24 16:22	1
Iron	**553**		50.0	20.0	ug/L		05/19/24 21:40	05/25/24 16:09	1
Lithium	1.7	U	8.0	1.7	ug/L		05/20/24 14:00	05/23/24 20:21	1

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	19.5	U	40.0	19.5	ug/L		05/16/24 20:14	05/17/24 02:11	1
Cadmium	0.15	U	0.50	0.15	ug/L		05/29/24 21:10	05/30/24 10:48	1
Lithium	1.7	U	8.0	1.7	ug/L		05/20/24 14:00	05/23/24 20:01	1
Arsenic	0.89	U	2.0	0.89	ug/L		05/16/24 20:14	05/17/24 02:11	1
Iron	20.0	U	50.0	20.0	ug/L		05/29/24 21:10	05/30/24 10:48	1
Calcium	**22500**		500	53.6	ug/L		05/16/24 20:14	05/17/24 02:11	1
Zinc	**4.1**	**J**	10.0	4.0	ug/L		05/29/24 21:10	05/30/24 10:48	1
Copper	2.5	U	4.0	2.5	ug/L		05/16/24 20:14	05/17/24 02:11	1
Iron	**59.7**	**J**	120	58.2	ug/L		05/16/24 20:14	05/17/24 02:11	1
Lead	0.84	U	1.2	0.84	ug/L		05/16/24 20:14	05/17/24 02:11	1
Magnesium	**9290**		200	46.9	ug/L		05/16/24 20:14	05/17/24 02:11	1
Manganese	**2.8**	**J**	8.0	1.5	ug/L		05/16/24 20:14	05/17/24 02:11	1
Nickel	0.91	U	4.0	0.91	ug/L		05/16/24 20:14	05/17/24 02:11	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Resistivity (EPA 120.1)	**0.00462**		0.000100	0.000100	Mohm-cm			05/24/24 12:00	1
Specific Conductance (EPA 120.1)	**217**		1.00	1.00	umhos/cm			05/24/24 12:00	1
Acidity (SM 2310B-2011)	20.0	U	20.0	20.0	mg/L			05/28/24 15:16	1

Client Sample ID: NPDES 001

Lab Sample ID: 460-304000-1

Date Collected: 05/15/24 09:00

Matrix: Water

Date Received: 05/15/24 19:00

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3 (SM 2320B-2011)	**90.9**		5.0	5.0	mg/L			05/24/24 11:38	1
Carbonate Alkalinity as CaCO3 (SM 2320B-2011)	5.0	U	5.0	5.0	mg/L			05/24/24 11:38	1
Alkalinity as CaCO3 to pH 4.5 (SM 2320B-2011)	**90.9**		5.0	5.0	mg/L			05/24/24 11:38	1
Total Dissolved Solids (SM 2540C-2015)	**129**		2.5	2.5	mg/L			05/16/24 12:40	1
Total Suspended Solids (SM 2540D-2015)	**9.8**		2.5	2.5	mg/L			05/20/24 11:39	1
Ammonia (EPA 350.1)	0.050	U F1	0.10	0.050	mg/L			05/28/24 10:10	1
Total Kjeldahl Nitrogen (EPA 351.2)	0.50	U	1.0	0.50	mg/L		05/20/24 16:09	05/21/24 14:12	1
Chemical Oxygen Demand (EPA 410.4)	**3.7**	**J**	10.0	3.3	mg/L			05/22/24 19:15	1
Oxygen, Dissolved (SM 4500 O C-2016)	**6.8**	**H H3**	1.0	1.0	mg/L			05/17/24 14:55	1
Orthophosphate as P (SM 4500 P E-2011)	0.0050	U H	0.030	0.0050	mg/L			05/22/24 22:20	1
Carbonaceous Biochemical Oxygen Demand 5 (SM 5210 B-2016)	1.0	U	1.0	1.0	mg/L			05/16/24 16:30	1
pH (SW846 9040C)	**7.5**	**HF**	0.1	0.1	SU			05/23/24 10:37	1
Temperature (SW846 9040C)	**23.9**	**HF**	0.1	0.1	Degrees C			05/23/24 10:37	1
Total Organic Carbon (SW846 9060A)	**2.7**	**B**	1.0	0.53	mg/L			05/25/24 07:45	1
Phosphorus as PO4 (SM4500 P E-2011)	**0.16**		0.090	0.071	mg/L		05/31/24 10:30	05/31/24 16:30	1
Phosphorus as P (SM4500 P E-2011)	**0.053**		0.030	0.023	mg/L		05/31/24 10:30	05/31/24 16:30	1
Nitrogen, Total (EPA Total Nitrogen)	0.50	U	0.50	0.50	mg/L			05/28/24 11:19	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (EPA 350.1)	0.050	U	0.10	0.050	mg/L			05/28/24 10:28	1
Orthophosphate as P (SM 4500 P E-2011)	0.0050	U H	0.030	0.0050	mg/L			05/22/24 22:20	1
Phosphorus as PO4 (SM4500 P E-2011)	**0.12**	**F1**	0.090	0.071	mg/L		05/31/24 10:30	05/31/24 16:30	1
Phosphorus as P (SM4500 P E-2011)	**0.039**		0.030	0.023	mg/L		05/31/24 10:30	05/31/24 16:30	1

Client Sample ID: Upstream

Lab Sample ID: 460-304000-2

Date Collected: 05/15/24 10:30

Matrix: Water

Date Received: 05/15/24 19:00

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide	0.054	U	0.32	0.054	mg/L			05/16/24 15:19	1
Nitrate as N	**0.18**		0.16	0.070	mg/L			05/16/24 15:19	1
Chloride	**10.2**		0.32	0.039	mg/L			05/16/24 15:19	1
Nitrate Nitrite as N	**0.18**		0.16	0.070	mg/L			05/16/24 15:19	1
Nitrite as N	0.023	U	0.16	0.023	mg/L			05/16/24 15:19	1
Sulfate	**4.33**		0.48	0.095	mg/L			05/16/24 15:19	1

Client Sample ID: Upstream
Lab Sample ID: 460-304000-2
Date Collected: 05/15/24 10:30
Matrix: Water
Date Received: 05/15/24 19:00

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**12.3**		4.0	0.91	ug/L		05/22/24 08:15	05/22/24 17:50	1
Boron	**63.8**	**J**	80.0	30.4	ug/L		05/22/24 08:15	05/22/24 17:50	1
Calcium	**29200**		500	53.6	ug/L		05/22/24 08:15	05/22/24 17:50	1
Copper	**4.7**		4.0	2.5	ug/L		05/22/24 08:15	05/22/24 17:50	1
Lead	0.84	U	1.2	0.84	ug/L		05/22/24 08:15	05/22/24 17:50	1
Magnesium	**9140**		200	46.9	ug/L		05/22/24 08:15	05/22/24 17:50	1
Manganese	**200**		8.0	1.5	ug/L		05/22/24 08:15	05/22/24 17:50	1
Nickel	**2.2**	**J**	4.0	0.91	ug/L		05/22/24 08:15	05/22/24 17:50	1
Potassium	**1910**		200	112	ug/L		05/22/24 08:15	05/22/24 17:50	1
Selenium	**0.59**	**J**	2.5	0.59	ug/L		05/22/24 08:15	05/22/24 17:50	1
Sodium	**6370**		500	219	ug/L		05/22/24 08:15	05/22/24 17:50	1
Strontium	**110**		4.0	0.50	ug/L		05/22/24 08:15	05/22/24 17:50	1
Zinc	6.5	U	16.0	6.5	ug/L		05/22/24 08:15	05/22/24 17:50	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**126**		100	35.0	ug/L		05/19/24 06:25	05/20/24 16:26	1
Iron	**1140**		50.0	20.0	ug/L		05/19/24 21:40	05/25/24 16:11	1
Lithium	**2.3**	**J**	8.0	1.7	ug/L		05/20/24 14:00	05/23/24 20:24	1

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	19.5	U	40.0	19.5	ug/L		05/16/24 20:14	05/17/24 02:13	1
Cadmium	0.15	U	0.50	0.15	ug/L		05/28/24 21:00	05/29/24 16:21	1
Lithium	**3.0**	**J**	8.0	1.7	ug/L		05/20/24 14:00	05/23/24 20:04	1
Arsenic	0.89	U	2.0	0.89	ug/L		05/16/24 20:14	05/17/24 02:13	1
Iron	**22.7**	**J**	50.0	20.0	ug/L		05/28/24 21:00	05/29/24 16:21	1
Calcium	**31200**		500	53.6	ug/L		05/16/24 20:14	05/17/24 02:13	1
Zinc	4.0	U	10.0	4.0	ug/L		05/28/24 21:00	05/29/24 16:21	1
Copper	**3.1**	**J**	4.0	2.5	ug/L		05/16/24 20:14	05/17/24 02:13	1
Iron	58.2	U	120	58.2	ug/L		05/16/24 20:14	05/17/24 02:13	1
Lead	0.84	U	1.2	0.84	ug/L		05/16/24 20:14	05/17/24 02:13	1
Magnesium	**9880**		200	46.9	ug/L		05/16/24 20:14	05/17/24 02:13	1
Manganese	**200**		8.0	1.5	ug/L		05/16/24 20:14	05/17/24 02:13	1
Nickel	0.91	U	4.0	0.91	ug/L		05/16/24 20:14	05/17/24 02:13	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Resistivity (EPA 120.1)	**0.00359**		0.000100	0.000100	Mohm-cm			05/24/24 12:00	1
Specific Conductance (EPA 120.1)	**279**		1.00	1.00	umhos/cm			05/24/24 12:00	1
Acidity (SM 2310B-2011)	20.0	U	20.0	20.0	mg/L			05/28/24 15:16	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-2011)	**112**		5.0	5.0	mg/L			05/24/24 11:44	1
Carbonate Alkalinity as CaCO3 (SM 2320B-2011)	5.0	U	5.0	5.0	mg/L			05/24/24 11:44	1
Alkalinity as CaCO3 to pH 4.5 (SM 2320B-2011)	**112**		5.0	5.0	mg/L			05/24/24 11:44	1
Total Dissolved Solids (SM 2540C-2015)	**166**		2.5	2.5	mg/L			05/16/24 12:40	1
Total Suspended Solids (SM 2540D-2015)	**9.4**		2.5	2.5	mg/L			05/20/24 11:39	1

Client Sample ID: Upstream
Lab Sample ID: 460-304000-2

Date Collected: 05/15/24 10:30
Matrix: Water
Date Received: 05/15/24 19:00

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (EPA 350.1)	0.050	U	0.10	0.050	mg/L			05/28/24 10:12	1
Total Kjeldahl Nitrogen (EPA 351.2)	**0.50**	**J**	1.0	0.50	mg/L		05/20/24 16:09	05/21/24 14:14	1
Chemical Oxygen Demand (EPA 410.4)	**8.5**	**J**	10.0	3.3	mg/L			05/22/24 19:15	1
Oxygen, Dissolved (SM 4500 O C-2016)	**5.3**	**H H3**	1.0	1.0	mg/L			05/17/24 15:00	1
Orthophosphate as P (SM 4500 P E-2011)	0.0050	U H	0.030	0.0050	mg/L			05/22/24 22:20	1
Carbonaceous Biochemical Oxygen Demand 5 (SM 5210 B-2016)	1.0	U	1.0	1.0	mg/L			05/16/24 16:45	1
pH (SW846 9040C)	**7.4**	**HF**	0.1	0.1	SU			05/23/24 10:47	1
Temperature (SW846 9040C)	**24.3**	**HF**	0.1	0.1	Degrees C			05/23/24 10:47	1
Total Organic Carbon (SW846 9060A)	**4.9**	**B**	1.0	0.53	mg/L			05/25/24 09:04	1
Phosphorus as PO4 (SM4500 P E-2011)	0.071	U	0.090	0.071	mg/L		05/31/24 10:30	05/31/24 16:30	1
Phosphorus as P (SM4500 P E-2011)	**0.023**	**J**	0.030	0.023	mg/L		05/31/24 10:30	05/31/24 16:30	1
Nitrogen, Total (EPA Total Nitrogen)	**0.68**		0.50	0.50	mg/L			05/28/24 11:19	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (EPA 350.1)	0.050	U	0.10	0.050	mg/L			05/28/24 10:29	1
Orthophosphate as P (SM 4500 P E-2011)	0.0050	U H	0.030	0.0050	mg/L			05/22/24 22:20	1
Phosphorus as PO4 (SM4500 P E-2011)	0.071	U	0.090	0.071	mg/L		05/31/24 10:30	05/31/24 16:30	1
Phosphorus as P (SM4500 P E-2011)	0.023	U	0.030	0.023	mg/L		05/31/24 10:30	05/31/24 16:30	1

Client Sample ID: Clarifying Pond
Lab Sample ID: 460-304000-3

Date Collected: 05/15/24 11:00
Matrix: Water
Date Received: 05/15/24 19:00

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide	0.054	U	0.32	0.054	mg/L			05/16/24 15:34	1
Nitrate as N	**0.26**		0.16	0.070	mg/L			05/16/24 15:34	1
Chloride	**1.19**		0.32	0.039	mg/L			05/16/24 15:34	1
Nitrate Nitrite as N	**0.26**		0.16	0.070	mg/L			05/16/24 15:34	1
Nitrite as N	0.023	U	0.16	0.023	mg/L			05/16/24 15:34	1
Sulfate	**5.70**		0.48	0.095	mg/L			05/16/24 15:34	1

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**3.9**	**J**	4.0	0.91	ug/L		05/22/24 08:15	05/22/24 17:52	1
Boron	**62.0**	**J**	80.0	30.4	ug/L		05/22/24 08:15	05/22/24 17:52	1
Calcium	**15400**		500	53.6	ug/L		05/22/24 08:15	05/22/24 17:52	1
Copper	**3.4**	**J**	4.0	2.5	ug/L		05/22/24 08:15	05/22/24 17:52	1
Lead	0.84	U	1.2	0.84	ug/L		05/22/24 08:15	05/22/24 17:52	1
Magnesium	**5350**		200	46.9	ug/L		05/22/24 08:15	05/22/24 17:52	1
Manganese	**75.7**		8.0	1.5	ug/L		05/22/24 08:15	05/22/24 17:52	1
Nickel	**1.7**	**J**	4.0	0.91	ug/L		05/22/24 08:15	05/22/24 17:52	1

Client Sample ID: Clarifying Pond — **Lab Sample ID: 460-304000-3**
Date Collected: 05/15/24 11:00 — **Matrix: Water**
Date Received: 05/15/24 19:00

Method: SW846 6020B - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Potassium	**1140**		200	112	ug/L		05/22/24 08:15	05/22/24 17:52	1
Selenium	0.59	U	2.5	0.59	ug/L		05/22/24 08:15	05/22/24 17:52	1
Sodium	**3220**		500	219	ug/L		05/22/24 08:15	05/22/24 17:52	1
Strontium	**27.3**		4.0	0.50	ug/L		05/22/24 08:15	05/22/24 17:52	1
Zinc	6.5	U	16.0	6.5	ug/L		05/22/24 08:15	05/22/24 17:52	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**284**		100	35.0	ug/L		05/19/24 06:25	05/20/24 16:18	1
Iron	**1000**		50.0	20.0	ug/L		05/19/24 21:40	05/25/24 16:13	1
Lithium	1.7	U	8.0	1.7	ug/L		05/20/24 14:00	05/23/24 20:26	1

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	19.5	U	40.0	19.5	ug/L		05/16/24 20:14	05/17/24 02:18	1
Cadmium	0.15	U	0.50	0.15	ug/L		05/28/24 21:00	05/29/24 16:11	1
Lithium	1.7	U	8.0	1.7	ug/L		05/20/24 14:00	05/23/24 20:06	1
Arsenic	0.89	U	2.0	0.89	ug/L		05/16/24 20:14	05/17/24 02:18	1
Iron	**60.2**		50.0	20.0	ug/L		05/28/24 21:00	05/29/24 16:11	1
Calcium	**15700**		500	53.6	ug/L		05/16/24 20:14	05/17/24 02:18	1
Zinc	4.0	U	10.0	4.0	ug/L		05/28/24 21:00	05/29/24 16:11	1
Copper	2.5	U	4.0	2.5	ug/L		05/16/24 20:14	05/17/24 02:18	1
Iron	58.2	U	120	58.2	ug/L		05/16/24 20:14	05/17/24 02:18	1
Lead	0.84	U	1.2	0.84	ug/L		05/16/24 20:14	05/17/24 02:18	1
Magnesium	**5430**		200	46.9	ug/L		05/16/24 20:14	05/17/24 02:18	1
Manganese	**12.7**		8.0	1.5	ug/L		05/16/24 20:14	05/17/24 02:18	1
Nickel	0.91	U	4.0	0.91	ug/L		05/16/24 20:14	05/17/24 02:18	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Resistivity (EPA 120.1)	**0.00715**		0.000100	0.000100	Mohm-cm			05/24/24 12:00	1
Specific Conductance (EPA 120.1)	**140**		1.00	1.00	umhos/cm			05/24/24 12:00	1
Acidity (SM 2310B-2011)	20.0	U	20.0	20.0	mg/L			05/28/24 15:16	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-2011)	**58.2**		5.0	5.0	mg/L			05/24/24 11:50	1
Carbonate Alkalinity as CaCO3 (SM 2320B-2011)	5.0	U	5.0	5.0	mg/L			05/24/24 11:50	1
Alkalinity as CaCO3 to pH 4.5 (SM 2320B-2011)	**58.2**		5.0	5.0	mg/L			05/24/24 11:50	1
Total Dissolved Solids (SM 2540C-2015)	**82.0**		2.5	2.5	mg/L			05/16/24 12:40	1
Total Suspended Solids (SM 2540D-2015)	**7.5**		2.5	2.5	mg/L			05/20/24 11:39	1
Ammonia (EPA 350.1)	0.050	U	0.10	0.050	mg/L			05/28/24 10:24	1
Total Kjeldahl Nitrogen (EPA 351.2)	**1.1**		1.0	0.50	mg/L		05/20/24 16:09	05/21/24 14:16	1
Chemical Oxygen Demand (EPA 410.4)	3.3	U	10.0	3.3	mg/L			05/22/24 19:15	1
Oxygen, Dissolved (SM 4500 O C-2016)	**7.7**	**H**	1.0	1.0	mg/L			05/17/24 15:05	1
Orthophosphate as P (SM 4500 P E-2011)	0.0050	U H	0.030	0.0050	mg/L			05/22/24 22:20	1

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill - Anti-Degradation

Job ID: 460-304000-1

Client Sample ID: Clarifying Pond
Date Collected: 05/15/24 11:00
Date Received: 05/15/24 19:00

Lab Sample ID: 460-304000-3
Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbonaceous Biochemical Oxygen Demand 5 (SM 5210 B-2016)	1.0	U	1.0	1.0	mg/L			05/16/24 16:50	1
pH (SW846 9040C)	**7.6**	**HF**	0.1	0.1	SU			05/23/24 10:53	1
Temperature (SW846 9040C)	**24.4**	**HF**	0.1	0.1	Degrees C			05/23/24 10:53	1
Total Organic Carbon (SW846 9060A)	**1.6**	**B**	1.0	0.53	mg/L			05/25/24 09:30	1
Phosphorus as PO4 (SM4500 P E-2011)	0.071	U	0.090	0.071	mg/L		05/31/24 10:30	05/31/24 16:30	1
Phosphorus as P (SM4500 P E-2011)	0.023	U	0.030	0.023	mg/L		05/31/24 10:30	05/31/24 16:30	1
Nitrogen, Total (EPA Total Nitrogen)	**1.4**		0.50	0.50	mg/L			05/28/24 11:19	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (EPA 350.1)	0.050	U	0.10	0.050	mg/L			05/28/24 10:31	1
Orthophosphate as P (SM 4500 P E-2011)	0.0050	U H	0.030	0.0050	mg/L			05/22/24 22:20	1
Phosphorus as PO4 (SM4500 P E-2011)	0.071	U	0.090	0.071	mg/L		05/31/24 10:30	05/31/24 16:30	1
Phosphorus as P (SM4500 P E-2011)	0.023	U	0.030	0.023	mg/L		05/31/24 10:30	05/31/24 16:30	1

Lab Chronicle

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill - Anti-Degradation

Job ID: 460-304000-1

Client Sample ID: NPDES 001

Date Collected: 05/15/24 09:00
Date Received: 05/15/24 19:00

Lab Sample ID: 460-304000-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		1	975231	OXG	EET EDI	05/16/24 15:04
Total/NA	Analysis	300.0		1	975232	OXG	EET EDI	05/16/24 15:04
Dissolved	Filtration	Filtration			508073	UDL9	ELLE	05/20/24 08:57
Dissolved	Prep	3005A			511726	UAMX	ELLE	05/29/24 21:10
Dissolved	Analysis	6020B		1	511975	F7JF	ELLE	05/30/24 10:48
Dissolved	Filtration	FILTRATION			613654	BN	EET CLE	05/20/24 12:00
Dissolved	Prep	3005A			613655	BN	EET CLE	05/20/24 14:00
Dissolved	Analysis	6020B		1	614280	RKT	EET CLE	05/23/24 20:01
Dissolved	Filtration	FILTRATION			975349	VAD	EET EDI	05/16/24 20:11
Dissolved	Prep	3010A			975350	VAD	EET EDI	05/16/24 20:14
Dissolved	Analysis	6020B		1	975292	JKF	EET EDI	05/17/24 02:11
Total Recoverable	Prep	3005A			507914	UAMX	ELLE	05/19/24 21:40
Total Recoverable	Analysis	6020B		1	510602	S4PD	ELLE	05/25/24 16:09
Total Recoverable	Prep	3005A			613649	TQ6W	EET CLE	05/20/24 14:00
Total Recoverable	Analysis	6020B		1	614280	RKT	EET CLE	05/23/24 20:21
Total Recoverable	Prep	3005A			838690	RR	EET SAV	05/19/24 06:25
Total Recoverable	Analysis	6020B		1	838963	BJB	EET SAV	05/20/24 16:22
Total/NA	Prep	3010A			976210	KXN	EET EDI	05/22/24 08:15
Total/NA	Analysis	6020B		1	976425	JKF	EET EDI	05/22/24 17:47
Total/NA	Analysis	120.1		1	976743	HTV	EET EDI	05/24/24 12:00
Total/NA	Analysis	2310B-2011		1	977130	RAK	EET EDI	05/28/24 15:16
Total/NA	Analysis	2320B-2011		1	976763	RXA	EET EDI	05/24/24 11:38
Total/NA	Analysis	2540C-2015		1	975254	PLS	EET EDI	05/16/24 12:40
Total/NA	Analysis	2540D-2015		1	975878	PLS	EET EDI	05/20/24 11:39
Dissolved	Filtration	FILTRATION			977080	AXP	EET EDI	05/28/24 09:58
Dissolved	Analysis	350.1		1	977116	AXP	EET EDI	05/28/24 10:28
Total/NA	Analysis	350.1		1	977116	AXP	EET EDI	05/28/24 10:10
Total/NA	Prep	351.2			508329	NLE3	ELLE	05/20/24 16:09 - 05/20/24 19:09 [1]
Total/NA	Analysis	351.2		1	508789	JCG7	ELLE	05/21/24 14:12
Total/NA	Analysis	410.4		1	976340	HTV	EET EDI	05/22/24 19:15
Total/NA	Analysis	4500 O C-2016		1	975536	RXA	EET EDI	05/17/24 14:55
Dissolved	Filtration	FILTRATION			976369	VBG	EET EDI	05/22/24 21:15
Dissolved	Analysis	4500 P E-2011		1	976370	VBG	EET EDI	05/22/24 22:20
Total/NA	Analysis	4500 P E-2011		1	976370	VBG	EET EDI	05/22/24 22:20
Total/NA	Analysis	5210 B-2016		1	975301	RXA	EET EDI	05/16/24 16:30
Total/NA	Analysis	9040C		1	976500	RXA	EET EDI	05/23/24 10:37
Total/NA	Analysis	9060A		1	977063	MMC	EET EDI	05/25/24 07:45
Dissolved	Filtration	FILTRATION			977823	HTV	EET EDI	05/31/24 10:00
Dissolved	Prep	SM 4500 P B			977822	HTV	EET EDI	05/31/24 10:30
Dissolved	Analysis	SM4500 P E-2011		1	977825	HTV	EET EDI	05/31/24 16:30
Total/NA	Prep	SM 4500 P B			977822	HTV	EET EDI	05/31/24 10:30
Total/NA	Analysis	SM4500 P E-2011		1	977825	HTV	EET EDI	05/31/24 16:30
Total/NA	Analysis	Total Nitrogen		1	977088	JMP	EET EDI	05/28/24 11:19

Eurofins Edison

Client Sample ID: Upstream

Date Collected: 05/15/24 10:30
Date Received: 05/15/24 19:00

Lab Sample ID: 460-304000-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		1	975231	OXG	EET EDI	05/16/24 15:19
Total/NA	Analysis	300.0		1	975232	OXG	EET EDI	05/16/24 15:19
Dissolved	Filtration	Filtration			508073	UDL9	ELLE	05/20/24 08:57
Dissolved	Prep	3005A			511212	UAMX	ELLE	05/28/24 21:00
Dissolved	Analysis	6020B		1	511693	S4PD	ELLE	05/29/24 16:21
Dissolved	Filtration	FILTRATION			613654	BN	EET CLE	05/20/24 12:00
Dissolved	Prep	3005A			613655	BN	EET CLE	05/20/24 14:00
Dissolved	Analysis	6020B		1	614280	RKT	EET CLE	05/23/24 20:04
Dissolved	Filtration	FILTRATION			975349	VAD	EET EDI	05/16/24 20:11
Dissolved	Prep	3010A			975350	VAD	EET EDI	05/16/24 20:14
Dissolved	Analysis	6020B		1	975292	JKF	EET EDI	05/17/24 02:13
Total Recoverable	Prep	3005A			507914	UAMX	ELLE	05/19/24 21:40
Total Recoverable	Analysis	6020B		1	510602	S4PD	ELLE	05/25/24 16:11
Total Recoverable	Prep	3005A			613649	TQ6W	EET CLE	05/20/24 14:00
Total Recoverable	Analysis	6020B		1	614280	RKT	EET CLE	05/23/24 20:24
Total Recoverable	Prep	3005A			838690	RR	EET SAV	05/19/24 06:25
Total Recoverable	Analysis	6020B		1	838963	BJB	EET SAV	05/20/24 16:26
Total/NA	Prep	3010A			976210	KXN	EET EDI	05/22/24 08:15
Total/NA	Analysis	6020B		1	976425	JKF	EET EDI	05/22/24 17:50
Total/NA	Analysis	120.1		1	976743	HTV	EET EDI	05/24/24 12:00
Total/NA	Analysis	2310B-2011		1	977130	RAK	EET EDI	05/28/24 15:16
Total/NA	Analysis	2320B-2011		1	976763	RXA	EET EDI	05/24/24 11:44
Total/NA	Analysis	2540C-2015		1	975254	PLS	EET EDI	05/16/24 12:40
Total/NA	Analysis	2540D-2015		1	975878	PLS	EET EDI	05/20/24 11:39
Dissolved	Filtration	FILTRATION			977080	AXP	EET EDI	05/28/24 09:58
Dissolved	Analysis	350.1		1	977116	AXP	EET EDI	05/28/24 10:29
Total/NA	Analysis	350.1		1	977116	AXP	EET EDI	05/28/24 10:12
Total/NA	Prep	351.2			508329	NLE3	ELLE	05/20/24 16:09 - 05/20/24 19:09 [1]
Total/NA	Analysis	351.2		1	508789	JCG7	ELLE	05/21/24 14:14
Total/NA	Analysis	410.4		1	976340	HTV	EET EDI	05/22/24 19:15
Total/NA	Analysis	4500 O C-2016		1	975536	RXA	EET EDI	05/17/24 15:00
Dissolved	Filtration	FILTRATION			976369	VBG	EET EDI	05/22/24 21:15
Dissolved	Analysis	4500 P E-2011		1	976370	VBG	EET EDI	05/22/24 22:20
Total/NA	Analysis	4500 P E-2011		1	976370	VBG	EET EDI	05/22/24 22:20
Total/NA	Analysis	5210 B-2016		1	975301	RXA	EET EDI	05/16/24 16:45
Total/NA	Analysis	9040C		1	976500	RXA	EET EDI	05/23/24 10:47
Total/NA	Analysis	9060A		1	977063	MMC	EET EDI	05/25/24 09:04
Dissolved	Filtration	FILTRATION			977823	HTV	EET EDI	05/31/24 10:00
Dissolved	Prep	SM 4500 P B			977822	HTV	EET EDI	05/31/24 10:30
Dissolved	Analysis	SM4500 P E-2011		1	977825	HTV	EET EDI	05/31/24 16:30
Total/NA	Prep	SM 4500 P B			977822	HTV	EET EDI	05/31/24 10:30
Total/NA	Analysis	SM4500 P E-2011		1	977825	HTV	EET EDI	05/31/24 16:30
Total/NA	Analysis	Total Nitrogen		1	977088	JMP	EET EDI	05/28/24 11:19

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill - Anti-Degradation

Job ID: 460-304000-1

Client Sample ID: Clarifying Pond

Date Collected: 05/15/24 11:00
Date Received: 05/15/24 19:00

Lab Sample ID: 460-304000-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		1	975231	OXG	EET EDI	05/16/24 15:34
Total/NA	Analysis	300.0		1	975232	OXG	EET EDI	05/16/24 15:34
Dissolved	Filtration	Filtration			508073	UDL9	ELLE	05/20/24 08:57
Dissolved	Prep	3005A			511212	UAMX	ELLE	05/28/24 21:00
Dissolved	Analysis	6020B		1	511693	S4PD	ELLE	05/29/24 16:11
Dissolved	Filtration	FILTRATION			613654	BN	EET CLE	05/20/24 12:00
Dissolved	Prep	3005A			613655	BN	EET CLE	05/20/24 14:00
Dissolved	Analysis	6020B		1	614280	RKT	EET CLE	05/23/24 20:06
Dissolved	Filtration	FILTRATION			975349	VAD	EET EDI	05/16/24 20:11
Dissolved	Prep	3010A			975350	VAD	EET EDI	05/16/24 20:14
Dissolved	Analysis	6020B		1	975292	JKF	EET EDI	05/17/24 02:18
Total Recoverable	Prep	3005A			507914	UAMX	ELLE	05/19/24 21:40
Total Recoverable	Analysis	6020B		1	510602	S4PD	ELLE	05/25/24 16:13
Total Recoverable	Prep	3005A			613649	TQ6W	EET CLE	05/20/24 14:00
Total Recoverable	Analysis	6020B		1	614280	RKT	EET CLE	05/23/24 20:26
Total Recoverable	Prep	3005A			838690	RR	EET SAV	05/19/24 06:25
Total Recoverable	Analysis	6020B		1	838963	BJB	EET SAV	05/20/24 16:18
Total/NA	Prep	3010A			976210	KXN	EET EDI	05/22/24 08:15
Total/NA	Analysis	6020B		1	976425	JKF	EET EDI	05/22/24 17:52
Total/NA	Analysis	120.1		1	976743	HTV	EET EDI	05/24/24 12:00
Total/NA	Analysis	2310B-2011		1	977130	RAK	EET EDI	05/28/24 15:16
Total/NA	Analysis	2320B-2011		1	976763	RXA	EET EDI	05/24/24 11:50
Total/NA	Analysis	2540C-2015		1	975254	PLS	EET EDI	05/16/24 12:40
Total/NA	Analysis	2540D-2015		1	975878	PLS	EET EDI	05/20/24 11:39
Dissolved	Filtration	FILTRATION			977080	AXP	EET EDI	05/28/24 09:58
Dissolved	Analysis	350.1		1	977116	AXP	EET EDI	05/28/24 10:31
Total/NA	Analysis	350.1		1	977116	AXP	EET EDI	05/28/24 10:24
Total/NA	Prep	351.2			508329	NLE3	ELLE	05/20/24 16:09 - 05/20/24 19:09 [1]
Total/NA	Analysis	351.2		1	508789	JCG7	ELLE	05/21/24 14:16
Total/NA	Analysis	410.4		1	976340	HTV	EET EDI	05/22/24 19:15
Total/NA	Analysis	4500 O C-2016		1	975536	RXA	EET EDI	05/17/24 15:05
Dissolved	Filtration	FILTRATION			976369	VBG	EET EDI	05/22/24 21:15
Dissolved	Analysis	4500 P E-2011		1	976370	VBG	EET EDI	05/22/24 22:20
Total/NA	Analysis	4500 P E-2011		1	976370	VBG	EET EDI	05/22/24 22:20
Total/NA	Analysis	5210 B-2016		1	975301	RXA	EET EDI	05/16/24 16:50
Total/NA	Analysis	9040C		1	976500	RXA	EET EDI	05/23/24 10:53
Total/NA	Analysis	9060A		1	977063	MMC	EET EDI	05/25/24 09:30
Dissolved	Filtration	FILTRATION			977823	HTV	EET EDI	05/31/24 10:00
Dissolved	Prep	SM 4500 P B			977822	HTV	EET EDI	05/31/24 10:30
Dissolved	Analysis	SM4500 P E-2011		1	977825	HTV	EET EDI	05/31/24 16:30
Total/NA	Prep	SM 4500 P B			977822	HTV	EET EDI	05/31/24 10:30
Total/NA	Analysis	SM4500 P E-2011		1	977825	HTV	EET EDI	05/31/24 16:30
Total/NA	Analysis	Total Nitrogen		1	977088	JMP	EET EDI	05/28/24 11:19

Eurofins Edison

Lab Chronicle

Client: Heidelberg Materials Northeast LLC
Job ID: 460-304000-1
Project/Site: Rock Hill - Anti-Degradation

[1] This procedure uses a method stipulated length of time for the process. Both start and end times are displayed.

Laboratory References:

EET CLE = Eurofins Cleveland, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

EET EDI = Eurofins Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

EET SAV = Eurofins Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Microbac = Marietta, OH, 158 Starlite Drive, Marietta, OH 45750

Accreditation/Certification Summary

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill - Anti-Degradation

Job ID: 460-304000-1

Laboratory: Eurofins Edison

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Connecticut	State	PH-0818	09-30-24
DE Haz. Subst. Cleanup Act (HSCA)	State	N/A	01-02-25
Georgia	State	12028 (NJ)	06-30-24
Massachusetts	State	M-NJ312	06-30-24
New Jersey	NELAP	12028	06-30-24
New York	NELAP	11452	04-01-25
Pennsylvania	NELAP	68-00522	02-28-25
Rhode Island	State	LAO00376	12-31-24
USDA	US Federal Programs	525-24-149-77606	05-21-27

Laboratory: Eurofins Cleveland

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
California	State	2927	02-28-25
Georgia	State	4062	02-27-25
Illinois	NELAP	200004	07-31-24
Iowa	State	421	06-01-25
Kentucky (UST)	State	112225	02-27-25
Kentucky (WW)	State	KY98016	12-30-24
Minnesota	NELAP	039-999-348	12-31-24
New Jersey	NELAP	OH001	06-30-24
New York	NELAP	10975	04-02-25
Ohio VAP	State	ORELAP 4062	02-27-25
Oregon	NELAP	4062	02-27-25
Pennsylvania	NELAP	68-00340	08-31-24
Texas	NELAP	T104704517-22-19	08-31-24
USDA	US Federal Programs	P330-18-00281	01-05-27
Virginia	NELAP	460175	09-14-24
West Virginia DEP	State	210	12-31-24

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
A2LA	Dept. of Defense ELAP	0001.01	05-30-24
A2LA	ISO/IEC 17025	0001.01	11-30-24
Alabama	State	43200	01-31-25
Alaska	State	PA00009	06-30-24
Alaska (UST)	State	17-027	02-28-25
Arizona	State	AZ0780	03-12-25
Arkansas DEQ	State	88-00660	08-09-24
California	State	2792	11-30-24
Colorado	State	PA00009	06-30-24
Connecticut	State	PH-0746	06-30-25
DE Haz. Subst. Cleanup Act (HSCA)	State	019-006 (PA cert)	01-31-25
Delaware (DW)	State	N/A	01-31-25
Florida	NELAP	E87997	06-30-24
Georgia (DW)	State	C048	01-31-25
Hawaii	State	N/A	01-31-25
Illinois	NELAP	200027	01-31-25

Accreditation/Certification Summary

Client: Heidelberg Materials Northeast LLC
Job ID: 460-304000-1
Project/Site: Rock Hill - Anti-Degradation

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC (Continued)

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Iowa	State	361	03-01-24 *
Kansas	NELAP	E-10151	10-31-24
Kentucky (DW)	State	KY90088	12-31-24
Kentucky (UST)	State	0001.01	11-30-24
Kentucky (WW)	State	KY90088	12-31-23 *
Louisiana (All)	NELAP	02055	06-30-24
Maine	State	2019012	03-12-25
Maryland	State	100	06-30-25
Massachusetts	State	M-PA009	06-30-24
Michigan	State	9930	01-31-25
Minnesota	NELAP	042-999-487	12-31-24
Mississippi	State	023	01-31-25
Missouri	State	450	01-31-25
Montana (DW)	State	0098	01-01-25
Nebraska	State	NE-OS-32-17	01-31-25
New Hampshire	NELAP	2730	01-10-25
New Jersey	NELAP	PA011	06-30-24
New York	NELAP	10670	04-01-25
North Carolina (DW)	State	42705	07-31-24
North Carolina (WW/SW)	State	521	12-31-24
North Dakota	State	R-205	01-31-24 *
Oklahoma	NELAP	9804	08-31-24
Oregon	NELAP	PA200001	09-11-24
Pennsylvania	NELAP	36-00037	01-31-25
Quebec Ministry of Environment and Fight against Climate Change	PALA	507	09-16-24
Rhode Island	State	LAO00338	12-30-24
South Carolina	State	89002	01-31-24 *
Tennessee	State	02838	01-31-25
Texas	NELAP	T104704194-23-46	08-31-24
USDA	US Federal Programs	525-22-298-19481	10-25-25
Vermont	State	VT - 36037	10-28-24
Virginia	NELAP	460182	06-14-25
Washington	State	C457	04-11-24 *
West Virginia (DW)	State	9906 C	01-31-25
West Virginia DEP	State	055	07-31-25
Wyoming	State	8TMS-L	01-31-25
Wyoming (UST)	A2LA	0001.01	11-30-24

Laboratory: Eurofins Savannah

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
	AFCEE	SAVLAB	
Alabama	State	41450	06-30-24
ANAB	Dept. of Defense ELAP	L2463	09-22-24
Arkansas (DW)	State	GA00006	06-30-24
California	State	2939	06-30-24
Florida	NELAP	E87052	06-30-24
Georgia	State	E87052	06-30-24
Georgia (DW)	State	803	06-30-24

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Client: Heidelberg Materials Northeast LLC
Job ID: 460-304000-1
Project/Site: Rock Hill - Anti-Degradation

Laboratory: Eurofins Savannah (Continued)

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Hawaii	State	<cert No.>	06-30-24
Illinois	NELAP	200022	11-30-24
Indiana	State	C-GA-02	06-30-24
Iowa	State	353	07-01-25
Kentucky (UST)	State	NA	06-30-24
Louisiana	NELAP	30690	06-30-24
Louisiana (All)	NELAP	30690	06-30-24
Louisiana (DW)	State	LA009	12-31-24
Maine	State	GA00006	09-25-24
Maryland	State	250	12-31-24
Massachusetts	State	M-GA006	06-30-24
Michigan	State	9925	06-30-24
Mississippi	State	<cert No.>	06-30-24
Nebraska	State	NE-OS-7-04	06-30-24
New Jersey	NELAP	GA769	06-30-24
New Mexico	State	GA00006	06-30-24
North Carolina (DW)	State	13701	07-31-24
North Carolina (WW/SW)	State	269	12-31-24
Pennsylvania	NELAP	68-00474	06-30-24
Puerto Rico	State	GA00006	01-01-25
South Carolina	State	98001	06-30-24
Tennessee	State	TN02961	06-30-24
Texas	NELAP	T1047004185	11-30-24
Texas	TCEQ Water Supply	T104704185	06-30-24
USDA	US Federal Programs	P330-18-00313	04-04-27
Virginia	NELAP	460161	06-14-24
Wyoming	State	8TMS-L	06-30-24

Method Summary

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill - Anti-Degradation

Job ID: 460-304000-1

Method	Method Description	Protocol	Laboratory
300.0	Anions, Ion Chromatography	EPA	EET EDI
6020B	Metals (ICP/MS)	SW846	EET CLE
6020B	Metals (ICP/MS)	SW846	EET EDI
6020B	Metals (ICP/MS)	SW846	EET SAV
6020B	Metals (ICP/MS)	SW846	ELLE
120.1	Conductivity, Specific Conductance	EPA	EET EDI
2310B-2011	Acidity	SM	EET EDI
2320B-2011	Alkalinity, Total	SM	EET EDI
2540C-2015	Total Dissolved Solids (Dried at 180 °C)	SM	EET EDI
2540D-2015	Total Suspended Solids (Dried at 103-105°C)	SM	EET EDI
350.1	Nitrogen, Ammonia	EPA	EET EDI
351.2	Nitrogen, Total Kjeldahl	EPA	ELLE
410.4	COD	EPA	EET EDI
4500 O C-2016	Oxygen, Dissolved	SM	EET EDI
4500 P E-2011	Orthophosphate	SM	EET EDI
5210 B-2016	BOD, 5-Day	SM	EET EDI
9040C	pH	SW846	EET EDI
9060A	Organic Carbon, Total (TOC)	SW846	EET EDI
SM4500 P E-2011	Phosphorus	SM	EET EDI
Total Nitrogen	Nitrogen, Total	EPA	EET EDI
Subcontract	Osomotic Pressure	None	Microbac
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	EET CLE
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	EET SAV
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	ELLE
3010A	Preparation, Total Metals	SW846	EET EDI
351.2	Nitrogen, Total Kjeldahl	EPA	ELLE
FILTRATION	Sample Filtration	None	EET CLE
FILTRATION	Sample Filtration	None	EET EDI
Filtration	Sample Filtration	None	ELLE
SM 4500 P B	Phosphorous, Total and Ortho	SM	EET EDI

Protocol References:

EPA = US Environmental Protection Agency

None = None

SM = "Standard Methods For The Examination Of Water And Wastewater"

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET CLE = Eurofins Cleveland, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

EET EDI = Eurofins Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

EET SAV = Eurofins Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Microbac = Marietta, OH, 158 Starlite Drive, Marietta, OH 45750

Sample Summary

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill - Anti-Degradation

Job ID: 460-304000-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
460-304000-1	NPDES 001	Water	05/15/24 09:00	05/15/24 19:00
460-304000-2	Upstream	Water	05/15/24 10:30	05/15/24 19:00
460-304000-3	Clarifying Pond	Water	05/15/24 11:00	05/15/24 19:00

Microbac Laboratories Inc., - Marietta, OH

Client Project ID:

46011424

For:

Julie Gilmore

Eurofins Environment Testing Northeast, LLC

777 New Durham RD

Edison, NJ 08817

Project State of Origin: Pennsylvania

Project Requested Certification:

Microbac Laboratories Inc., - Marietta, OH	68-01670	PA Department of Environmental Protection

All test results meet the requirements of the QAPP and other applicable contract terms and conditions. Any exceptions are attached to this cover page or addressed in the method narratives presented in the report. All results for soil samples are reported on a 'dry-weight' basis unless specified otherwise. Analytical results for water and wastes are reported on a 'as received' basis unless specified otherwise. A statement of uncertainty for each analysis is available upon request. The reported results are related only to the samples analyzed as received. This laboratory report may be released as a hardcopy and in computer-readable form submitted electronically or on diskette. This laboratory report shall not be reproduced, except in full, without the written approval of Microbac Laboratories, Inc.

Laboratory Project Manager:

Michelle Taylor

Project Manager

Michelle.Taylor@microbac.com

Authorized By:

Michelle Taylor

Project Manager

Issued: 05/23/2024

MICROBAC®

Laboratory Report Number: M4E1561

Client Project ID: 46011424

Cooler Receipt Log

Cooler ID: Default Cooler Temp: 0.2°C

Cooler Inspection Checklist

Ice Present or not required?	Yes
Shipping containers sealed or not required?	Yes
Custody seals intact or not required?	Yes
Chain of Custody (COC) Present?	Yes
COC includes customer information?	Yes
Relinquished and received signature on COC?	Yes
Sample collector identified on COC?	Yes
Sample type identified on COC?	Yes
Correct type of Containers Received	No
Correct number of containers listed on COC?	Yes
Containers Intact?	Yes
COC includes requested analyses?	Yes
Enough sample volume for indicated tests received?	Yes
Sample labels match COC (Name, Date & Time?)	Yes
Samples arrived within hold time?	Yes
Correct preservatives on COC or not required?	Yes
Chemical preservations checked or not required?	Yes
Preservation checks meet method requirements?	Yes
VOA vials have zero headspace, or not recd.?	Yes

Laboratory Report Number: M4E1561

Client Project ID: 46011424

Sample Notes

PADEP 391-2000-008

A4 **Sample was received with head space.**

Osmotic Pressure

M4E1561-01	NPDES 001 (460-304000-1)	M4E1561-02	Upstream (460-304000-2)
M4E1561-03	Clarifying Pond (460-304000-3)		

MICROBAC®

Laboratory Report Number: M4E1561

Client Project ID: 46011424

Microbac Laboratories Inc., - Marietta, OH

CERTIFICATE OF ANALYSIS

Client ID:	NPDES 001 (460-304000-1)			**Collection Date:**	05/15/2024 09:00
Laboratory ID:	M4E1561-01			**Prep Date:**	05/21/2024 16:02
Matrix:	Aqueous			**Analyzed:**	05/21/2024 16:05
Batch / Sequence:	B4E1269 /	**Analytical Method:**	PADEP 391-2000-008	**Calibration:**	NA
Instrument:	OSMOMETER 5004	**Units:**	mOsm/kg	**File ID:**	OsmoticPressure_B4E1269_240523075426.xls
Analyst:	TTB	**Dilution:**	1		

Analyte	CAS Number	Result	MDL	RL	Flag	Qualifier
Osmotic Pressure		ND	6.00	10.0		A4

MICROBAC®

Laboratory Report Number: M4E1561

Client Project ID: 46011424

Microbac Laboratories Inc., - Marietta, OH

CERTIFICATE OF ANALYSIS

Client ID:	Upstream (460-304000-2)			**Collection Date:**	05/15/2024 10:30
Laboratory ID:	M4E1561-02			**Prep Date:**	05/21/2024 16:02
Matrix:	Aqueous			**Analyzed:**	05/21/2024 16:05
Batch / Sequence:	B4E1269 /	**Analytical Method:**	PADEP 391-2000-008	**Calibration:**	NA
Instrument:	OSMOMETER 5004	**Units:**	mOsm/kg	**File ID:**	OsmoticPressure_B4E1269_240523075426.xls
Analyst:	TTB	**Dilution:**	1		

Analyte	CAS Number	Result	MDL	RL	Flag	Qualifier
Osmotic Pressure		ND	6.00	10.0		A4

MICROBAC®

Laboratory Report Number: M4E1561

Client Project ID: 46011424

Microbac Laboratories Inc., - Marietta, OH

CERTIFICATE OF ANALYSIS

Client ID:	Clarifying Pond (460-304000-3)			**Collection Date:**	05/15/2024 11:00
Laboratory ID:	M4E1561-03			**Prep Date:**	05/21/2024 16:02
Matrix:	Aqueous			**Analyzed:**	05/21/2024 16:05
Batch / Sequence:	B4E1269 /	**Analytical Method:**	PADEP 391-2000-008	**Calibration:**	NA
Instrument:	OSMOMETER 5004	**Units:**	mOsm/kg	**File ID:**	OsmoticPressure_B4E1269_240523075426.xls
Analyst:	TTB	**Dilution:**	1		

Analyte	CAS Number	Result	MDL	RL	Flag	Qualifier
Osmotic Pressure		ND	6.00	10.0		A4

Laboratory Report Number: M4E1561

Client Project ID: 46011424

Notes and Definitions

A4: Sample was received with head space.
MDL: Method Detection Limit
RL: Reporting Limit

MICROBAC®

Laboratory Report Number: M4E1561

Client Project ID: 46011424

METHOD BLANKS

Sample ID:	B4E1269-BLK1	**Prep Date:**	05/21/24 16:02	**Matrix:**	Aqueous
Instrument:	OSMOMETER 5004	**Analyzed:**	05/21/24 16:05	**Method:**	PADEP 391-2000-008
File ID:	OsmoticPressure_B4E´	**Sequence:**		**Analyst:**	TTB
Batch:	B4E1269	**Units:**	mOsm/kg	**Calibration:**	

Analyte	Result	MDL	RL	Dilution	Flag	Q
Osmotic Pressure	6.00	6.00	10.0	1	U	

* - Detected in the associated method Blank at a concentration >= RL

MICROBAC®

Laboratory Report Number: M4E1561

Client Project ID: 46011424

BLANK SPIKE / DUPLICATE (BS/BSD)

Method:	PADEP 391-2000-008		**Blank Spike**	**Duplicate**
Batch:	B4E1269	**Spike ID:**	B4E1269-BS1	B4E1269-BSD1
Analyst:	TTB	**Prepared:**	05/21/24 16:02	05/21/24 16:02
Matrix:	Aqueous	**Analyzed:**	05/21/24 16:05	05/21/24 16:05
Units:	mOsm/kg	**File ID:**	OsmoticPressure_B4E1269_240	OsmoticPressure_B4E1269_240
Instrument:	OSMOMETER 5004	**Initial/Final:**	1mL/1mL	1mL/1mL
Calibration:				

Analyte	BS Spiked	BS Found	BS %Rec	BSD Spiked	BSD Found	BSD %Rec	%RPD	%Rec Limts	RPD Limit	Q
Osmotic Pressure	290	288	99.3	290	284	97.9	1.40	90 - 110	20	

* - Does not meet %Rec acceptance criteria.
- Does not meet RPD acceptance criteria.

Eurofins Edison
777 New Durham Road
Edison, NJ 08817
Phone: 732-549-3900 Fax: 732-549-3679

Chain of Custody Record

eurofins | Environment Testing

5/31/2024

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Gilmore, Julie L	Carrier Tracking No(s):	COC No: 460-71264.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Julie.Gilmore@et.eurofinsus.com	State of Origin: Pennsylvania	Page: Page 1 of 1
Company: Microbac Laboratories, Inc.		Accreditations Required (See note): NELAP - Pennsylvania		Job #: 460-304000-1
Address: 158 Starlite Drive, ,	Due Date Requested: 5/28/2024			
City: Marietta	TAT Requested (days):			
State, Zip: OH, 45750				
Phone: 800-373-4071(Tel)	PO #:			
Email:	WO #:			
Project Name: Rock Hill - Anti-Degradation	Project #: 46011424			
Site:	SSOW#:			

Analysis Requested

Preservation Codes: -

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	SUB (Osomotic Pressure)/ Osomotic Pressure	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
NPDES 001 (460-304000-1)	5/15/24	09:00 Eastern		Water			X	1	
Upstream (460-304000-2)	5/15/24	10:30 Eastern		Water			X	1	
Clarifying Pond (460-304000-3)	5/15/24	11:00 Eastern		Water			X	1	

M 4 E 1 5 6 1

Eurofins Environment Testing Northeast, LLC
Rec'd: 05/21/2024 11:20
By: Stephanie Murphy Temp: 0.2 (Signature)

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Northeast, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Northeast, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Northeast, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Northeast, LLC.

Possible Hazard Identification	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 1	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	5/20/24 1900	ESE			
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by: Stephanie Murphy	Date/Time: 5/21/24 1120	Company

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

MICROBAC®

Work Order # M96154

COOLER TEMP >6° C LOG

SAMPLE ID	Bottle 1 °C	Bottle 2 °C	Bottle 3 °C	Bottle 4 °C	Bottle 5 °C	Bottle 6 °C

5/21/2024 SM

pH Lot # N/A

pH Exceptions

SAMPLE ID	Bottle 1	Bottle 2	Bottle 3	Bottle 4	Bottle 5	Bottle 6

5/21/2024 SM

PRESERVATIVE EXCEPTIONS

✓ NONE

AS NOTED

5/21/2024 SM

Document Control # 1957
Last 04-10-2019

Issued to: Document Master File

Eurofins Edison
777 New Durham Road
Edison, NJ 08817
Phone 732-549-3900 Fax 732-549-3679

450-KOP

Chain of Custody Record

3 2 - KOP 2
1.6

eurofins | Environment Testing

Client Information	Sampler	Lab PM	Carrier Tracking No(s)	COC No
		Gilmore, Julie L		460-181249-115848 1
Client Contact: Andrew Gutshall	Phone	E-Mail: Julie Gilmore@et.eurofinsus com	State of Origin	Page: Page 1 of 2
Company: Heidelberg Materials Northeast LLC	PWSID			Job #: 304000
Address: 7660 Imperial Way	Due Date Requested:			
City: Allentown	TAT Requested (days):			
State, Zip: PA, 18195	Compliance Project: Δ Yes Δ No			
Phone:	PO #: Purchase Order not required			
Email: andrew gutshall@heidelbergmaterials.com	WO #:			
Project Name: Rock Hill - Anti-Degradation	Project #: 46011424			
Site	SSOW#:			

Analysis Requested

Preservation Codes:
N - None
D - HNO3
S - H2SO4

SHORT HOLD

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020B - (MOD) Single Element 6020B Metals List	6020B - (MOD) Single Element 6020B Metals List	351.2 - Local Method	6020B - Dissolved Cd/Fe/Zn	6020B - (MOD) Total Fe	350.1, 410.4, 4500_P_E	120.1, 9040C, SM2310B	350.1, 4500_P_E, 6020B	2320B - (MOD) Alkalinity	6020B - (MOD) Total Custom Metals	9060A - TOC	2540D, SM5210B_Calc	2540C - TDS	Total Number of containers	Special
			Preservation Code:				N	D	S	N	D	S	N	N	N	D	S	N	N		
NPDES 001	5/15/24	0900	G	Water																	1
Basin 1	No flow, no sample			Water																	
Basin 2	NO flow no sample			Water																	
Upstream	5/15/24	1030	G	Water																	2
Clarifying Pond	5/15/24	1100	G	Water																	3

460-304000 Chain of Custody

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested I, II, III, IV, Other (specify)

Special Instructions/QC Requirements

Empty Kit Relinquished by	Date	Time	Method of Shipment:

	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
1		5/15/24			5/15/24 1233	EETN-KOP
2		5-15-24 1705	EETN-KOP		5/15	ETA
3		5/15 1900	ETA		5/15 1900	ETA

Custody Seals Intact. Δ Yes Δ No | Custody Seal No.

Cooler Temperature(s) °C and Other Remarks

Ver: 06/08/2021

Eurofins Edison
777 New Durham Road
Edison, NJ 08817
Phone. 732-549-3900 Fax 732-549-3679

450-KOP

Chain of Custody Record

eurofins

Client Information	Sampler	Lab PM	Carrier Tracking No(s)	COC No
		Gilmore, Julie L		460-181249-115848 2
Client Contact: Andrew Gutshall	Phone	E-Mail: Julie.Gilmore@et.eurofinsus.com	State of Origin	Page: Page 2 of 2
Company: Heidelberg Materials Northeast LLC	PWSID			Job #: 304000
Address: 7660 Imperial Way	Due Date Requested:			
City: Allentown	TAT Requested (days):			
State, Zip: PA, 18195	Compliance Project: Δ Yes Δ No			
Phone	PO #: Purchase Order not required			
Email: andrew.gutshall@heidelbergmaterials.com	WO #:			
Project Name: Rock Hill - Anti-Degradation	Project #: 46011424			
Site	SSOW#:			

Analysis Requested

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	300_ORGFM_28D, 300_ORGFMS	245.1 - Local Method	6020B - Total Aluminum	4500_O_C - Dissolved Oxygen	Total Number of containers	Special Instructions/Note:
Preservation Code:							N	D	D			
NPDES 001	5/15/24	0900	G	Water								1
Basin 1				Water								
Basin 2				Water								
Upstream	5/15/24	1030	G	Water								2
Clarifying Pond	5/15/24	1100	G	Water								3

Preservation Codes: N - None; D - HNO3

Other:

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested I, II, III, IV, Other (specify)

Special Instructions/QC Requirements

Empty Kit Relinquished by	Date	Time	Method of Shipment:

	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
1		5/15/24			5/15/24 1233	EEN-KOP
2		5-15-24 1705	EEN-KOP		5/15	ETA
3		5/15 1900	ETA		5/15 19:00	ETA

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.

Cooler Temperature(s) °C and Other Remarks

Ver: 06/08/2021

TestAmerica Edison
Receipt Temperature and pH Log

Job Number: ~~320~~ 320400 5/16/24

Number of Coolers: 2 IR Gun # 2

Cooler Temperatures

	RAW	CORRECTED		RAW	CORRECTED		RAW	CORRECTED
Cooler #1:	3.2 °C	3.2 °C	Cooler #4:	°C	°C	Cooler #7:	°C	°C
Cooler #2:	1.6 °C	1.6 °C	Cooler #5:	°C	°C	Cooler #8:	°C	°C
Cooler #3:	°C	°C	Cooler #6:	°C	°C	Cooler #9:	°C	°C

TALS Sample Number	Ammonia (pH<2)	COD (pH<2)	Nitrate Nitrite (pH<2)	Metals* (pH<2)	Hardness	Pest (pH 5-9)	EPH or QAM (pH<2)	Phenols (pH<2)	Sulfide (pH>9)	TKN (pH<2)	TOC (pH<2)	Total Cyanide (pH>12)	Total Phos (pH<2)	Other	Other
1	✓	✓		✓						✓	✓		✓		
2	✓	✓		✓						✓	✓		✓		
3	✓	✓		✓						✓	✓		✓		

If pH adjustments are required record the information below:

Sample No(s). adjusted: _____

Preservative Name/Conc.. _____ Volume of Preservative used (ml) _____

Lot # of Preservative(s). _____ Expiration Date: _____

The appropriate Project Manager and Department Manager should be notified about the samples which were pH adjusted.

** Samples for Metal analysis which are out of compliance must be acidified at least 24 hours prior to analysis.*

Initials: _____ Date: 5/15

Eurofins Edison
777 New Durham Road
Edison, NJ 08817
Phone: 732-549-3900 Fax: 732-549-3679

1.1/2.6

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler	Lab PM: Gilmore, Julie L	Carrier Tracking No(s):	COC No: 460-71239.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Julie.Gilmore@et.eurofinsus.com	State of Origin: Pennsylvania	Page: Page 1 of 1
Company: Eurofins Environment Testing North Centr		Accreditations Required (See note): NELAP Pennsylvania		Job #: 460-304000-1
Address: 180 S. Van Buren Avenue,	Due Date Requested: 5/29/2024	Analysis Requested		Preservation Codes:
City: Barberton	TAT Requested (days):			
State, Zip: OH, 44203				
Phone: 330-497-9396(Tel) 330-497-0772(Fax)	PO #:			
Email:	WO #:			
Project Name: Rock Hill Anti-Degradation	Project #: 46011424			
Site:	SSOW#:			Other:

Sample Identification Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020B/3005A (MOD) Total Lithium	6020B/FILTRATION Dissolved Lithium	Total Number of containers	Special Instructions/Note:
			Preservation Code:							
NPDES 001 (460-304000-1)	5/15/24	09:00 Eastern		Water			X	X		
Upstream (460-304000-2)	5/15/24	10:30 Eastern		Water			X	X		
Clarifying Pond (460-304000-3)	5/15/24	11:00 Eastern		Water			X	X		

Gold MO39 5-17-24

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Northeast, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Northeast, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Northeast, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Northeast, LLC.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For ____ Months
Deliverable Requested: I, II, III, IV Other (specify) Primary Deliverable Rank: 1	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	5/16/24 1900	EET	JESSICA RIGDON	5-17-24 1000	EETNC
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Eurofins – Cleveland Sample Receipt Form/Narrative Login # _____
Barberton Facility

Client Eurofins- Edison Site Name _____ Cooler unpacked by DM

Cooler Received on 5-17-24 Opened on 5-17-24

FedEx. 1st Grd (Exp) UPS FAS Waypoint Client Drop Off Eurofins Courier Other _____

Receipt After-hours Drop-off Date/Time _____ Storage Location _____

Eurofins Cooler # EC (Foam Box) Client Cooler Box Other _____

Packing material used (Bubble Wrap) Foam Plastic Bag None Other _____

COOLANT: (Wet Ice) Blue Ice Dry Ice Water None

1 Cooler temperature upon receipt ☐ See Multiple Cooler Form

IR GUN # 19 (CF +1.5 °C) Observed Cooler Temp. 1.1 °C Corrected Cooler Temp. 2.6 °C

2	Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 1	(Yes) No
	-Were the seals on the outside of the cooler(s) signed & dated?	(Yes) No NA
	-Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)?	Yes (No)
	-Were tamper/custody seals intact and uncompromised?	(Yes) No NA
3	Shippers' packing slip attached to the cooler(s)?	(Yes) No
4	Did custody papers accompany the sample(s)?	(Yes) No
5	Were the custody papers relinquished & signed in the appropriate place?	(Yes) No
6	Was/were the person(s) who collected the samples clearly identified on the COC?	Yes (No)
7	Did all bottles arrive in good condition (Unbroken)?	(Yes) No
8	Could all bottle labels (ID/Date/Time) be reconciled with the COC?	(Yes) No
9	For each sample, does the COC specify preservatives (Y(N), # of containers (Y(N)), and sample type of grab/comp(Y(N))?	
10	Were correct bottle(s) used for the test(s) indicated?	(Yes) No
11	Sufficient quantity received to perform indicated analyses?	(Yes) No
12	Are these work share samples and all listed on the COC?	(Yes) No
	If yes, Questions 13-17 have been checked at the originating laboratory	
13	Were all preserved sample(s) at the correct pH upon receipt?	Yes No NA pH Strip Lot# HC439975
14	Were VOAs on the COC?	Yes No
15	Were air bubbles >6 mm in any VOA vials? ● ← Larger than this.	Yes No NA
16	Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # _____	Yes No
17	Was a LL Hg or Me Hg trip blank present? _____	Yes No

Tests that are not checked for pH by Receiving:

VOAs
Oil and Grease
TOC

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other

Concerning _____

18. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES ☐ additional next page | Samples processed by

_____

_____

_____

_____

19 SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.

Sample(s) _____ were received in a broken container

Sample(s) _____ were received with bubble >6 mm in diameter (Notify PM)

20 SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory

Time preserved _____ Preservative(s) added/Lot number(s) _____

VOA Sample Preservation - Date/Time VOAs Frozen _____

1.1/2.6

ORIGIN ID LDJA (732) 549-3900
DIAA NIMER
EUROFINS EDISON
777 NEW DURHAM ROAD

EDISON, NJ 08817
UNITED STATES US

SHIP DATE 16MAY24
ACTWGT: 9 55 LB
CAD: 0619092/CAFE3804

BILL SENDER

TO SAMPLE RECEIVING
EUROFINS CLEVELAND
180 SOUTH VAN BUREN AVE

BARBERTON OH 44203

REF:

INV:
PO:

DEPT:

FedEx
Express

J2410231122011w

FRI - 17 MAY 10:30A
PRIORITY OVERNIGHT

TRK# 0201 6553 1012 1231

NX CAKA

44203
OH-US CLE

7

Eurofins Edison
777 New Durham Road
Edison, NJ 08817
Phone: 732-549-3900 Fax: 732-549-3679

Chain of Custody Record

4.6/4.8

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Gilmore, Julie L	Carrier Tracking No(s):	COC No: 460-71239.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Julie.Gilmore@et.eurofinsus.com	State of Origin: Pennsylvania	Page: Page 1 of 1
Company: Eurofins Environment Testing North Centr		Accreditations Required (See note): NELAP Pennsylvania		Job #: 460-304000-1
Address: 180 S. Van Buren Avenue,	Due Date Requested: 5/29/2024			
City: Barberton	TAT Requested (days):			
State, Zip: OH, 44203				
Phone: 330-497-9396(Tel) 330-497-0772(Fax)	PO #:			
Email:	WO #:			
Project Name: Rock Hill Anti-Degradation	Project #: 46011424			
Site:	SSOW#:			

Sample Identification Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020B/3005A (MOD) Total Lithium	6020B/FILTRATION Dissolved Lithium	Total Number of containers	Special Instructions/Note:
			Preservation Code:							
NPDES 001 (460-304000-1)	5/15/24	09:00 Eastern		Water			X	X	1	
Upstream (460-304000-2)	5/15/24	10:30 Eastern		Water			X	X	1	
Clarifying Pond (460-304000-3)	5/15/24	11:00 Eastern		Water			X	X	1	

Analysis Requested

Preservation Codes.

Other: M41

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Northeast, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Northeast, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Northeast, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Northeast, LLC.

Possible Hazard Identification	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* ____ *Months*
Deliverable Requested: I, II, III, IV Other (specify) Primary Deliverable Rank: 1	Special Instructions/QC Requirements.

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
		5/16/24 1900	EET-C	TAMMY ROYER	5-17-24 1000	EETNC
	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.	Cooler Temperature(s) °C and Other Remarks:

Eurofins – Cleveland Sample Receipt Form/Narrative Login # _____
Barberton Facility

Client ETA Site Name _____ Cooler unpacked by TAMMY ROYER

Cooler Received on 5-17-24 Opened on 5-17-24

FedEx. 1st Grd (Exp) UPS FAS Waypoint Client Drop Off Eurofins Courier Other _____

Receipt After-hours Drop-off Date/Time _____ Storage Location _____

Eurofins Cooler # EC Foam Box Client Cooler Box Other _____

Packing material used. Bubble Wrap Foam Plastic Bag None Other _____

COOLANT: Wet Ice Blue Ice Dry Ice Water None

1 Cooler temperature upon receipt ☐ See Multiple Cooler Form

IR GUN # 17 (CF 0+2 °C) Observed Cooler Temp. 4.6 °C Corrected Cooler Temp 4.8 °C

2	Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 1	Yes No
	-Were the seals on the outside of the cooler(s) signed & dated?	Yes No NA
	-Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)?	Yes No
	-Were tamper/custody seals intact and uncompromised?	Yes No NA
3	Shippers' packing slip attached to the cooler(s)?	Yes No
4.	Did custody papers accompany the sample(s)?	Yes No
5	Were the custody papers relinquished & signed in the appropriate place?	Yes No
6	Was/were the person(s) who collected the samples clearly identified on the COC?	Yes No
7	Did all bottles arrive in good condition (Unbroken)?	Yes No
8	Could all bottle labels (ID/Date/Time) be reconciled with the COC?	Yes No
9	For each sample, does the COC specify preservatives (Y/N), # of containers (Y/N), and sample type of grab/comp(Y/N)?	
10	Were correct bottle(s) used for the test(s) indicated?	Yes No
11	Sufficient quantity received to perform indicated analyses?	Yes No
12	Are these work share samples and all listed on the COC?	Yes No
	If yes, Questions 13 17 have been checked at the originating laboratory	
13	Were all preserved sample(s) at the correct pH upon receipt?	Yes No NA pH Strip Lot# HC439975
14	Were VOAs on the COC?	Yes No
15	Were air bubbles >6 mm in any VOA vials? ● ← Larger than this	Yes No NA
16.	Was a VOA trip blank present in the cooler(s)? Trip Blank Lot #_____	Yes No
17	Was a LL Hg or Me Hg trip blank present? _____	Yes No

Tests that are not checked for pH by Receiving:

VOAs
Oil and Grease
TOC

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other

Concerning _____

18 CHAIN OF CUSTODY & SAMPLE DISCREPANCIES ☐ additional next page | Samples processed by

_____

_____

_____

_____

19 SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired

Sample(s) _____ were received in a broken container

Sample(s) _____ were received with bubble >6 mm in diameter (Notify PM)

20 SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory

Time preserved. _____ Preservative(s) added/Lot number(s) _____

VOA Sample Preservation Date/Time VOAs Frozen _____

SHIPPING/RECEIVING
EUROFINS EATON LABORATORY
180 S. VAN BUREN AVENUE
BARBERTON OH 44203
FedEx Express
FRI - 17 MAY 10:30A
PRIORITY OVERNIGHT
6553 1012 1183
44203
CLE
OH-US
SENDER
SHIP DATE: 16MAY24
ACTWGT: 37.90 LB
CAD: 0619082/CAFE3804
Part # 159469-434 MTW EXP 09/24

Eurofins Edison
777 New Durham Road
Edison, NJ 08817
Phone: 732-549-3900 Fax: 732-549-3679

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Gilmore, Julie L	Carrier Tracking No(s):	COC No: 460-71235.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Julie.Gilmore@et.eurofinsus.com	State of Origin: Pennsylvania	Page: Page 1 of 1
Company: Eurofins Lancaster Laboratories Environm		Accreditations Required (See note): NELAP - Pennsylvania		Job #: 460-304000-1
Address: 2425 New Holland Pike, ,	Due Date Requested: 5/30/2024			
City: Lancaster	TAT Requested (days):			
State, Zip: PA, 17601				
Phone: 717-656-2300(Tel)	PO #:			
Email:	WO #:			
Project Name: Rock Hill - Anti-Degradation	Project #: 46011424			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:
-

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020B/3005A (MOD) Total Fe	6020B/Filtration_ME Dissolved Cd/Fe/Zn	351.2/351.2_Prep	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
NPDES 001 (460-304000-1)	5/15/24	09:00 Eastern		Water			X	X	X	3	
Upstream (460-304000-2)	5/15/24	10:30 Eastern		Water			X	X	X	3	
Clarifying Pond (460-304000-3)	5/15/24	11:00 Eastern		Water			X	X	X	3	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Northeast, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Northeast, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Northeast, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Northeast, LLC.

Possible Hazard Identification	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 1	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
1		5/16/24 1557	ET-EC		5/16/24 1557	
2		5/16/24 1908	ET-EC			
3					5/16/24 1908	ET-EC

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: raw 5.3 corr. 5.4

Eurofins Edison
777 New Durham Road
Edison, NJ 08817
Phone: 732-549-3900 Fax: 732-549-3679

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Gilmore, Julie L	Carrier Tracking No(s):	COC No: 460-71244.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Julie.Gilmore@et.eurofinsus.com	State of Origin: Pennsylvania	Page: Page 1 of 1
Company: Eurofins Environment Testing Southeast L		Accreditations Required (See note): NELAP - Pennsylvania		Job #: 460-304000-1
Address: 5102 LaRoche Avenue, ,	Due Date Requested: 5/28/2024			Preservation Codes: -
City: Savannah	TAT Requested (days):			
State, Zip: GA, 31404				
Phone: 912-354-7858(Tel) 912-352-0165(Fax)	PO #:			
Email:	WO #:			
Project Name: Rock Hill - Anti-Degradation	Project #: 46011424			
Site:	SSOW#:			Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020B/3005A Total Aluminum	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
NPDES 001 (460-304000-1)	5/15/24	09:00 Eastern		Water			X	1	
Upstream (460-304000-2)	5/15/24	10:30 Eastern		Water			X	1	
Clarifying Pond (460-304000-3)	5/15/24	11:00 Eastern		Water			X	1	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Northeast, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Northeast, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Northeast, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Northeast, LLC.

Possible Hazard Identification	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 1	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		5/16/24 1900	EEtSL		5/17/24 1029	
2						
3						

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 2.2 2.3

5/31/2024

Login Sample Receipt Checklist

Client: Heidelberg Materials Northeast LLC

Job Number: 460-304000-1

Login Number: 304000

List Source: Eurofins Edison

List Number: 1

Creator: Rivera, Kenneth

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Heidelberg Materials Northeast LLC

Job Number: 460-304000-1

Login Number: 304000
List Number: 2
Creator: Metzger, Katherine A

List Source: Eurofins Lancaster Laboratories Environment Testing, LLC
List Creation: 05/16/24 08:18 PM

Question	Answer	Comment
The cooler's custody seal is intact.	N/A	Not present
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature acceptable,where thermal pres is required(</=6C, not frozen).	True	
Cooler Temperature is recorded.	True	
WV:Container Temp acceptable,where thermal pres is required (</=6C, not frozen).	N/A	
WV: Container Temperature is recorded.	N/A	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the containers received and the COC.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
There is sufficient vol. for all requested analyses.	True	
Is the Field Sampler's name present on COC?	False	Received project as a subcontract.
Sample custody seals are intact.	N/A	Not present.
VOA sample vials do not have headspace >6mm in diameter (none, if from WV)?	N/A	

Login Sample Receipt Checklist

Client: Heidelberg Materials Northeast LLC

Job Number: 460-304000-1

Login Number: 304000
List Number: 4
Creator: Faught, Timothy

List Source: Eurofins Savannah
List Creation: 05/17/24 04:04 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Lab Results

May 29, 2024

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Katie Murray
Heidelberg Materials Northeast LLC
7660 Imperial Way
Allentown, Pennsylvania 18195

Generated 6/13/2024 5:33:21 PM

JOB DESCRIPTION

Rock Hill Anti-Degradation

JOB NUMBER

460-304810-1

Eurofins Edison
777 New Durham Road
Edison NJ 08817

See page two for job notes and contact information.

my EOL

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing Northeast, LLC Project Manager.

Authorization



Generated
6/13/2024 5:33:21 PM

Authorized for release by
Julie Gilmore, Project Manager I
Julie.Gilmore@et.eurofinsus.com
(484)685-0865

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Client: Heidelberg Materials Northeast LLC
Job ID: 460-304810-1
Project/Site: Rock Hill Anti-Degradation

Qualifiers

HPLC/IC

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

General Chemistry

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
H	Sample was prepped or analyzed beyond the specified holding time. This does not meet regulatory requirements.
H3	Sample was received and analyzed past holding time. This does not meet regulatory requirements.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job Narrative
460-304810-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

- Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

The method detection limit (MDL) is the lowest value detectable by the laboratory for a given analyte as determined by the MDL procedure detailed in EPA 40 CFR 136. Reported MDL values are adjusted for any dilutions and percent moisture (as applicable). The lab is unable to report values below the MDL.

Receipt
The samples were received on 5/29/2024 7:00 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 3 coolers at receipt time were 2.2°C, 2.3°C and 2.8°C.

Note: All samples which require thermal preservation are considered acceptable if the arrival temperature is within 2C of the required temperature or method specified range. For samples with a specified temperature of 4C, samples with a temperature ranging from just above freezing temperature of water to 6C shall be acceptable. Samples that are hand delivered immediately following collection may not meet these criteria, however they will be deemed acceptable according to NELAC standards, if there is evidence that the chilling process has begun, such as arrival on ice, etc.

Receipt Exceptions
The Chain-of-Custody (COC) was incomplete as received and/or improperly completed. No TAT or container totals recorded on the COC.

Subcontract Work
Method Osomotic Pressure: This method was subcontracted to Microbac Laboratories, Inc. The subcontract laboratory certification is different from that of the facility issuing the final report. The subcontract report is appended in its entirety.

Method 300.0 - Anions, Ion Chromatography
Samples NPDES 001 (460-304810-1), Basin 1 (460-304810-2), Basin 2 (460-304810-3), Upstream (460-304810-4) and Clarifying Pond (460-304810-5) were analyzed for Anions, Ion Chromatography. The samples were analyzed on 5/30/2024.

Method 300.0 - Anions, Ion Chromatography
Samples NPDES 001 (460-304810-1), Basin 1 (460-304810-2), Basin 2 (460-304810-3), Upstream (460-304810-4) and Clarifying Pond (460-304810-5) were analyzed for Anions, Ion Chromatography. The samples were analyzed on 5/30/2024.

Method 245.1 - Mercury (CVAA)
Samples NPDES 001 (460-304810-1), Basin 1 (460-304810-2), Basin 2 (460-304810-3), Upstream (460-304810-4) and Clarifying Pond (460-304810-5) were analyzed for Mercury (CVAA). The samples were prepared and analyzed on 6/4/2024.

Method 6020B - Metals (ICP/MS)
Samples NPDES 001 (460-304810-1), Basin 1 (460-304810-2), Basin 2 (460-304810-3), Upstream (460-304810-4) and Clarifying Pond (460-304810-5) were analyzed for Metals (ICP/MS). The samples were prepared on 6/3/2024 and analyzed on 6/6/2024.

Method 6020B - Metals (ICP/MS) - Dissolved
Samples NPDES 001 (460-304810-1), Basin 1 (460-304810-2), Basin 2 (460-304810-3), Upstream (460-304810-4) and Clarifying Pond (460-304810-5) were analyzed for Metals (ICP/MS) - Dissolved. The samples were prepared on 5/31/2024, 6/3/2024 and 6/4/2024 and analyzed on 6/1/2024, 6/4/2024 and 6/10/2024.

The following samples were not filtered within 15 minutes of sample collection as required by the method: NPDES 001 (460-304810-1), Basin 1 (460-304810-2), Basin 2 (460-304810-3), Upstream (460-304810-4) and Clarifying Pond (460-304810-5).

Job ID: 460-304810-1 (Continued) Eurofins Edison

The sample(s) was filtered prior to analysis at the laboratory, and the results have been reported. This does not meet regulatory requirements.

The following samples were not filtered and preserved within 15 minutes of sample collection in accordance with 40 CFR Part 136 Table II, Footnote 7, method 6020B. The samples were filtered prior to analysis at the laboratory.

NPDES 001 (460-304810-1), Basin 1 (460-304810-2), Basin 2 (460-304810-3), Upstream (460-304810-4) and Clarifying Pond (460-304810-5)

The following samples were not filtered within 15 minutes of sample collection as required by the method: NPDES 001 (460-304810-1), Basin 1 (460-304810-2), Basin 2 (460-304810-3), Upstream (460-304810-4) and Clarifying Pond (460-304810-5). The sample(s) was filtered prior to analysis at the laboratory, and the results have been reported. This does not meet regulatory requirements.

Method 6020B - Metals (ICP/MS) - Total Recoverable
Samples NPDES 001 (460-304810-1), Basin 1 (460-304810-2), Basin 2 (460-304810-3), Upstream (460-304810-4) and Clarifying Pond (460-304810-5) were analyzed for Metals (ICP/MS) - Total Recoverable. The samples were prepared on 6/2/2024 and 6/3/2024 and analyzed on 6/3/2024, 6/4/2024 and 6/5/2024.

Method 120.1 - Conductivity, Specific Conductance
Samples NPDES 001 (460-304810-1), Basin 1 (460-304810-2), Basin 2 (460-304810-3), Upstream (460-304810-4) and Clarifying Pond (460-304810-5) were analyzed for Conductivity, Specific Conductance. The samples were analyzed on 6/10/2024 and 6/11/2024.

Method 2320B-2011 - Alkalinity, Total
Samples NPDES 001 (460-304810-1), Basin 1 (460-304810-2), Basin 2 (460-304810-3), Upstream (460-304810-4) and Clarifying Pond (460-304810-5) were analyzed for Alkalinity, Total. The samples were analyzed on 6/5/2024.

Method 2540C-2015 - Total Dissolved Solids (Dried at 180 °C)
Samples NPDES 001 (460-304810-1), Basin 1 (460-304810-2), Basin 2 (460-304810-3), Upstream (460-304810-4) and Clarifying Pond (460-304810-5) were analyzed for Total Dissolved Solids (Dried at 180 °C). The samples were analyzed on 6/3/2024.

Method 2540D-2015 - Total Suspended Solids (Dried at 103-105°C)
Samples NPDES 001 (460-304810-1), Basin 1 (460-304810-2), Basin 2 (460-304810-3), Upstream (460-304810-4) and Clarifying Pond (460-304810-5) were analyzed for Total Suspended Solids (Dried at 103-105°C). The samples were analyzed on 6/1/2024 and 6/3/2024.

Method 350.1 - Nitrogen, Ammonia
Samples NPDES 001 (460-304810-1), Basin 1 (460-304810-2), Basin 2 (460-304810-3), Upstream (460-304810-4) and Clarifying Pond (460-304810-5) were analyzed for Nitrogen, Ammonia. The samples were analyzed on 6/11/2024.

Method 350.1 - Nitrogen, Ammonia - Dissolved
Samples NPDES 001 (460-304810-1), Basin 1 (460-304810-2), Basin 2 (460-304810-3), Upstream (460-304810-4) and Clarifying Pond (460-304810-5) were analyzed for Nitrogen, Ammonia - Dissolved. The samples were analyzed on 6/11/2024.

Method 351.2 - Nitrogen, Total Kjeldahl
Samples NPDES 001 (460-304810-1), Basin 1 (460-304810-2), Basin 2 (460-304810-3), Upstream (460-304810-4) and Clarifying Pond (460-304810-5) were analyzed for Nitrogen, Total Kjeldahl. The samples were prepared on 6/6/2024 and analyzed on 6/7/2024.

Method 410.4 - COD
Samples NPDES 001 (460-304810-1), Basin 1 (460-304810-2), Basin 2 (460-304810-3), Upstream (460-304810-4) and Clarifying Pond (460-304810-5) were analyzed for COD. The samples were analyzed on 6/6/2024.

Method 4500 O C-2016 - Oxygen, Dissolved
Samples NPDES 001 (460-304810-1), Basin 1 (460-304810-2), Basin 2 (460-304810-3), Upstream (460-304810-4) and Clarifying Pond (460-304810-5) were analyzed for Oxygen, Dissolved. The samples were analyzed on 5/31/2024.

This analysis is normally performed in the field and has a method-defined holding time of 15 minutes. The following samples has been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe: NPDES 001

(460-304810-1), Basin 1 (460-304810-2), Basin 2 (460-304810-3), Upstream (460-304810-4) and Clarifying Pond (460-304810-5).

Method SM4500 P E-2011 - Phosphorus
Samples NPDES 001 (460-304810-1), Basin 1 (460-304810-2), Basin 2 (460-304810-3), Upstream (460-304810-4) and Clarifying Pond (460-304810-5) were analyzed for Phosphorus. The samples were prepared and analyzed on 6/12/2024.

Method SM4500 P E-2011 - Phosphorus - Dissolved
Samples NPDES 001 (460-304810-1), Basin 1 (460-304810-2), Basin 2 (460-304810-3), Upstream (460-304810-4) and Clarifying Pond (460-304810-5) were analyzed for Phosphorus - Dissolved. The samples were prepared and analyzed on 6/12/2024.

Method 4500 P E-2011 - Orthophosphate
Samples NPDES 001 (460-304810-1), Basin 1 (460-304810-2), Basin 2 (460-304810-3), Upstream (460-304810-4) and Clarifying Pond (460-304810-5) were analyzed for Orthophosphate. The samples were analyzed on 5/30/2024.

Method 4500 P E-2011 - Orthophosphate - Dissolved
Samples NPDES 001 (460-304810-1), Basin 1 (460-304810-2), Basin 2 (460-304810-3), Upstream (460-304810-4) and Clarifying Pond (460-304810-5) were analyzed for Orthophosphate - Dissolved. The samples were analyzed on 5/30/2024.

Method 9060A - Organic Carbon, Total (TOC)
Samples NPDES 001 (460-304810-1), Basin 1 (460-304810-2), Basin 2 (460-304810-3), Upstream (460-304810-4) and Clarifying Pond (460-304810-5) were analyzed for Organic Carbon, Total (TOC). The samples were analyzed on 6/13/2024.

Method Total Nitrogen - Nitrogen, Total
Samples NPDES 001 (460-304810-1), Basin 1 (460-304810-2), Basin 2 (460-304810-3), Upstream (460-304810-4) and Clarifying Pond (460-304810-5) were analyzed for Nitrogen, Total. The samples were analyzed on 6/11/2024.

Method 2310B-2011 - Acidity
Samples NPDES 001 (460-304810-1), Basin 1 (460-304810-2), Basin 2 (460-304810-3), Upstream (460-304810-4) and Clarifying Pond (460-304810-5) were analyzed for Acidity. The samples were analyzed on 6/10/2024.

Method 5210 B-2016 - BOD, 5-Day
Samples NPDES 001 (460-304810-1), Basin 1 (460-304810-2), Basin 2 (460-304810-3), Upstream (460-304810-4) and Clarifying Pond (460-304810-5) were analyzed for BOD, 5-Day. The samples were analyzed on 5/30/2024.

Client Sample ID: NPDES 001
Date Collected: 05/29/24 08:00
Date Received: 05/29/24 19:00

Lab Sample ID: 460-304810-1
Matrix: Water

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide	0.054	U	0.32	0.054	mg/L			05/30/24 20:11	1
Nitrate as N	**0.083**	**J**	0.16	0.070	mg/L			05/30/24 20:11	1
Chloride	**4.08**		0.32	0.039	mg/L			05/30/24 20:11	1
Nitrate Nitrite as N	**0.083**	**J**	0.16	0.070	mg/L			05/30/24 20:11	1
Nitrite as N	0.047	U	0.16	0.047	mg/L			05/30/24 20:11	1
Sulfate	**5.47**		0.48	0.095	mg/L			05/30/24 20:11	1

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000042	U	0.00020	0.000042	mg/L		06/04/24 10:25	06/04/24 14:19	1

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**5.7**		4.0	0.91	ug/L		06/03/24 08:24	06/06/24 13:59	1
Boron	**68.2**	**J**	80.0	30.4	ug/L		06/03/24 08:24	06/06/24 13:59	1
Calcium	**27100**		500	53.6	ug/L		06/03/24 08:24	06/06/24 13:59	1
Copper	2.5	U	4.0	2.5	ug/L		06/03/24 08:24	06/06/24 13:59	1
Lead	0.84	U	1.2	0.84	ug/L		06/03/24 08:24	06/06/24 13:59	1
Magnesium	**11600**		200	46.9	ug/L		06/03/24 08:24	06/06/24 13:59	1
Manganese	**25.3**		8.0	1.5	ug/L		06/03/24 08:24	06/06/24 13:59	1
Nickel	0.91	U	4.0	0.91	ug/L		06/03/24 08:24	06/06/24 13:59	1
Potassium	**1000**		200	112	ug/L		06/03/24 08:24	06/06/24 13:59	1
Selenium	0.59	U	2.5	0.59	ug/L		06/03/24 08:24	06/06/24 13:59	1
Sodium	**5130**		500	219	ug/L		06/03/24 08:24	06/06/24 13:59	1
Strontium	**74.1**		4.0	0.50	ug/L		06/03/24 08:24	06/06/24 13:59	1
Zinc	6.5	U	16.0	6.5	ug/L		06/03/24 08:24	06/06/24 13:59	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	35.0	U	100	35.0	ug/L		06/03/24 06:17	06/03/24 13:33	1
Iron	**326**		50.0	20.0	ug/L		06/02/24 21:00	06/05/24 19:46	1
Lithium	1.7	U	8.0	1.7	ug/L		06/03/24 14:00	06/04/24 21:11	1

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	19.5	U	40.0	19.5	ug/L		05/31/24 23:49	06/01/24 02:07	1
Cadmium	0.15	U	0.50	0.15	ug/L		06/04/24 21:00	06/10/24 09:12	1
Lithium	1.7	U	8.0	1.7	ug/L		06/03/24 14:00	06/04/24 21:34	1
Arsenic	0.89	U	2.0	0.89	ug/L		05/31/24 23:49	06/01/24 02:07	1
Iron	**103**		50.0	20.0	ug/L		06/04/24 21:00	06/10/24 09:12	1
Calcium	**26000**		500	53.6	ug/L		05/31/24 23:49	06/01/24 02:07	1
Zinc	4.0	U	10.0	4.0	ug/L		06/04/24 21:00	06/10/24 09:12	1
Copper	2.5	U	4.0	2.5	ug/L		05/31/24 23:49	06/01/24 02:07	1
Iron	**59.6**	**J**	120	58.2	ug/L		05/31/24 23:49	06/01/24 02:07	1
Lead	0.84	U	1.2	0.84	ug/L		05/31/24 23:49	06/01/24 02:07	1
Magnesium	**11100**		200	46.9	ug/L		05/31/24 23:49	06/01/24 02:07	1
Manganese	**2.6**	**J**	8.0	1.5	ug/L		05/31/24 23:49	06/01/24 02:07	1
Nickel	0.91	U	4.0	0.91	ug/L		05/31/24 23:49	06/01/24 02:07	1

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill Anti-Degradation

Job ID: 460-304810-1

Client Sample ID: NPDES 001

Lab Sample ID: 460-304810-1

Date Collected: 05/29/24 08:00

Matrix: Water

Date Received: 05/29/24 19:00

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Resistivity (EPA 120.1)	**0.00405**		0.000100	0.000100	Mohm-cm			06/10/24 14:00	1
Specific Conductance (EPA 120.1)	**247**		1.00	1.00	umhos/cm			06/10/24 14:00	1
Acidity (SM 2310B-2011)	20.0	U	20.0	20.0	mg/L			06/10/24 14:58	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-2011)	**106**		5.0	5.0	mg/L			06/05/24 14:44	1
Carbonate Alkalinity as CaCO3 (SM 2320B-2011)	5.0	U	5.0	5.0	mg/L			06/05/24 14:44	1
Alkalinity as CaCO3 to pH 4.5 (SM 2320B-2011)	**106**		5.0	5.0	mg/L			06/05/24 14:44	1
Total Dissolved Solids (SM 2540C-2015)	**146**		2.5	2.5	mg/L			06/03/24 08:40	1
Total Suspended Solids (SM 2540D-2015)	2.5	U	2.5	2.5	mg/L			06/01/24 09:33	1
Ammonia (EPA 350.1)	0.050	U	0.10	0.050	mg/L			06/11/24 14:58	1
Total Kjeldahl Nitrogen (EPA 351.2)	0.50	U	1.0	0.50	mg/L		06/06/24 10:20	06/07/24 13:14	1
Chemical Oxygen Demand (EPA 410.4)	**8.0**	**J**	10.0	3.3	mg/L			06/06/24 19:08	1
Oxygen, Dissolved (SM 4500 O C-2016)	**5.4**	**H H3**	1.0	1.0	mg/L			05/31/24 13:52	1
Orthophosphate as P (SM 4500 P E-2011)	0.0050	U	0.030	0.0050	mg/L			05/30/24 19:15	1
Carbonaceous Biochemical Oxygen Demand 5 (SM 5210 B-2016)	1.0	U	1.0	1.0	mg/L			05/30/24 16:10	1
Total Organic Carbon (SW846 9060A)	**1.6**		1.0	0.53	mg/L			06/13/24 10:59	1
Phosphorus as PO4 (SM4500 P E-2011)	**0.33**		0.090	0.071	mg/L		06/12/24 10:00	06/12/24 15:00	1
Phosphorus as P (SM4500 P E-2011)	**0.11**		0.030	0.023	mg/L		06/12/24 10:00	06/12/24 15:00	1
Nitrogen, Total (EPA Total Nitrogen)	0.50	U	0.50	0.50	mg/L			06/11/24 08:45	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (EPA 350.1)	0.050	U	0.10	0.050	mg/L			06/11/24 15:07	1
Orthophosphate as P (SM 4500 P E-2011)	0.0050	U	0.030	0.0050	mg/L			05/30/24 19:15	1
Phosphorus as PO4 (SM4500 P E-2011)	**0.21**	**F1**	0.090	0.071	mg/L		06/12/24 10:00	06/12/24 15:00	1
Phosphorus as P (SM4500 P E-2011)	**0.067**		0.030	0.023	mg/L		06/12/24 10:00	06/12/24 15:00	1

Client Sample ID: Basin 1

Lab Sample ID: 460-304810-2

Date Collected: 05/29/24 10:30

Matrix: Water

Date Received: 05/29/24 19:00

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide	0.054	U	0.32	0.054	mg/L			05/30/24 20:26	1
Nitrate as N	0.070	U	0.16	0.070	mg/L			05/30/24 20:26	1
Chloride	**6.14**		0.32	0.039	mg/L			05/30/24 20:26	1
Nitrate Nitrite as N	0.070	U	0.16	0.070	mg/L			05/30/24 20:26	1
Nitrite as N	0.047	U	0.16	0.047	mg/L			05/30/24 20:26	1
Sulfate	**5.00**		0.48	0.095	mg/L			05/30/24 20:26	1

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill Anti-Degradation

Job ID: 460-304810-1

Client Sample ID: Basin 1
Date Collected: 05/29/24 10:30
Date Received: 05/29/24 19:00

Lab Sample ID: 460-304810-2
Matrix: Water

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000042	U	0.00020	0.000042	mg/L		06/04/24 10:25	06/04/24 14:21	1

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**4.2**		4.0	0.91	ug/L		06/03/24 08:24	06/06/24 14:01	1
Boron	**87.9**		80.0	30.4	ug/L		06/03/24 08:24	06/06/24 14:01	1
Calcium	**29500**		500	53.6	ug/L		06/03/24 08:24	06/06/24 14:01	1
Copper	2.5	U	4.0	2.5	ug/L		06/03/24 08:24	06/06/24 14:01	1
Lead	0.84	U	1.2	0.84	ug/L		06/03/24 08:24	06/06/24 14:01	1
Magnesium	**13700**		200	46.9	ug/L		06/03/24 08:24	06/06/24 14:01	1
Manganese	**234**		8.0	1.5	ug/L		06/03/24 08:24	06/06/24 14:01	1
Nickel	0.91	U	4.0	0.91	ug/L		06/03/24 08:24	06/06/24 14:01	1
Potassium	**770**		200	112	ug/L		06/03/24 08:24	06/06/24 14:01	1
Selenium	0.59	U	2.5	0.59	ug/L		06/03/24 08:24	06/06/24 14:01	1
Sodium	**6430**		500	219	ug/L		06/03/24 08:24	06/06/24 14:01	1
Strontium	**80.1**		4.0	0.50	ug/L		06/03/24 08:24	06/06/24 14:01	1
Zinc	**10.3**	**J**	16.0	6.5	ug/L		06/03/24 08:24	06/06/24 14:01	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	35.0	U	100	35.0	ug/L		06/03/24 06:17	06/03/24 13:36	1
Iron	**492**		50.0	20.0	ug/L		06/02/24 21:00	06/05/24 19:44	1
Lithium	**2.0**	**J**	8.0	1.7	ug/L		06/03/24 14:00	06/04/24 21:18	1

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	19.5	U	40.0	19.5	ug/L		05/31/24 23:49	06/01/24 02:20	1
Cadmium	0.15	U	0.50	0.15	ug/L		06/04/24 21:00	06/10/24 09:14	1
Lithium	1.7	U	8.0	1.7	ug/L		06/03/24 14:00	06/04/24 21:36	1
Arsenic	0.89	U	2.0	0.89	ug/L		05/31/24 23:49	06/01/24 02:20	1
Iron	**37.5**	**J**	50.0	20.0	ug/L		06/04/24 21:00	06/10/24 09:14	1
Calcium	**28700**		500	53.6	ug/L		05/31/24 23:49	06/01/24 02:20	1
Zinc	4.0	U	10.0	4.0	ug/L		06/04/24 21:00	06/10/24 09:14	1
Copper	2.5	U	4.0	2.5	ug/L		05/31/24 23:49	06/01/24 02:20	1
Iron	58.2	U	120	58.2	ug/L		05/31/24 23:49	06/01/24 02:20	1
Lead	0.84	U	1.2	0.84	ug/L		05/31/24 23:49	06/01/24 02:20	1
Magnesium	**13100**		200	46.9	ug/L		05/31/24 23:49	06/01/24 02:20	1
Manganese	1.5	U	8.0	1.5	ug/L		05/31/24 23:49	06/01/24 02:20	1
Nickel	0.91	U	4.0	0.91	ug/L		05/31/24 23:49	06/01/24 02:20	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Resistivity (EPA 120.1)	**0.00355**		0.000100	0.000100	Mohm-cm			06/10/24 14:00	1
Specific Conductance (EPA 120.1)	**281**		1.00	1.00	umhos/cm			06/10/24 14:00	1
Acidity (SM 2310B-2011)	20.0	U	20.0	20.0	mg/L			06/10/24 14:58	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-2011)	**125**		5.0	5.0	mg/L			06/05/24 14:50	1
Carbonate Alkalinity as CaCO3 (SM 2320B-2011)	5.0	U	5.0	5.0	mg/L			06/05/24 14:50	1
Alkalinity as CaCO3 to pH 4.5 (SM 2320B-2011)	**125**		5.0	5.0	mg/L			06/05/24 14:50	1

Client Sample ID: Basin 1

Lab Sample ID: 460-304810-2

Date Collected: 05/29/24 10:30

Matrix: Water

Date Received: 05/29/24 19:00

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C-2015)	**145**		2.5	2.5	mg/L			06/03/24 08:40	1
Total Suspended Solids (SM 2540D-2015)	**7.8**		2.5	2.5	mg/L			06/01/24 09:33	1
Ammonia (EPA 350.1)	0.050	U	0.10	0.050	mg/L			06/11/24 14:59	1
Total Kjeldahl Nitrogen (EPA 351.2)	0.50	U	1.0	0.50	mg/L		06/06/24 10:20	06/07/24 13:16	1
Chemical Oxygen Demand (EPA 410.4)	**14.4**		10.0	3.3	mg/L			06/06/24 19:08	1
Oxygen, Dissolved (SM 4500 O C-2016)	**7.7**	**H H3**	1.0	1.0	mg/L			05/31/24 13:56	1
Orthophosphate as P (SM 4500 P E-2011)	0.0050	U	0.030	0.0050	mg/L			05/30/24 19:15	1
Carbonaceous Biochemical Oxygen Demand 5 (SM 5210 B-2016)	**1.1**		1.0	1.0	mg/L			05/30/24 16:15	1
Total Organic Carbon (SW846 9060A)	**3.2**		1.0	0.53	mg/L			06/13/24 11:23	1
Phosphorus as PO4 (SM4500 P E-2011)	**0.17**		0.090	0.071	mg/L		06/12/24 10:00	06/12/24 15:00	1
Phosphorus as P (SM4500 P E-2011)	**0.057**		0.030	0.023	mg/L		06/12/24 10:00	06/12/24 15:00	1
Nitrogen, Total (EPA Total Nitrogen)	0.50	U	0.50	0.50	mg/L			06/11/24 08:45	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (EPA 350.1)	0.050	U	0.10	0.050	mg/L			06/11/24 15:08	1
Orthophosphate as P (SM 4500 P E-2011)	0.0050	U	0.030	0.0050	mg/L			05/30/24 19:15	1
Phosphorus as PO4 (SM4500 P E-2011)	0.071	U	0.090	0.071	mg/L		06/12/24 10:00	06/12/24 15:00	1
Phosphorus as P (SM4500 P E-2011)	0.023	U	0.030	0.023	mg/L		06/12/24 10:00	06/12/24 15:00	1

Client Sample ID: Basin 2

Lab Sample ID: 460-304810-3

Date Collected: 05/29/24 09:30

Matrix: Water

Date Received: 05/29/24 19:00

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide	0.054	U	0.32	0.054	mg/L			05/30/24 20:41	1
Nitrate as N	0.070	U	0.16	0.070	mg/L			05/30/24 20:41	1
Chloride	**3.20**		0.32	0.039	mg/L			05/30/24 20:41	1
Nitrate Nitrite as N	0.070	U	0.16	0.070	mg/L			05/30/24 20:41	1
Nitrite as N	0.047	U	0.16	0.047	mg/L			05/30/24 20:41	1
Sulfate	**8.50**		0.48	0.095	mg/L			05/30/24 20:41	1

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000042	U	0.00020	0.000042	mg/L		06/04/24 10:25	06/04/24 14:22	1

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**8.9**		4.0	0.91	ug/L		06/03/24 08:24	06/06/24 14:04	1
Boron	**68.6**	**J**	80.0	30.4	ug/L		06/03/24 08:24	06/06/24 14:04	1
Calcium	**33000**		500	53.6	ug/L		06/03/24 08:24	06/06/24 14:04	1

Client Sample ID: Basin 2
Date Collected: 05/29/24 09:30
Date Received: 05/29/24 19:00

Lab Sample ID: 460-304810-3
Matrix: Water

Method: SW846 6020B - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Copper	2.5	U	4.0	2.5	ug/L		06/03/24 08:24	06/06/24 14:04	1
Lead	0.84	U	1.2	0.84	ug/L		06/03/24 08:24	06/06/24 14:04	1
Magnesium	**16000**		200	46.9	ug/L		06/03/24 08:24	06/06/24 14:04	1
Manganese	**143**		8.0	1.5	ug/L		06/03/24 08:24	06/06/24 14:04	1
Nickel	0.91	U	4.0	0.91	ug/L		06/03/24 08:24	06/06/24 14:04	1
Potassium	**1070**		200	112	ug/L		06/03/24 08:24	06/06/24 14:04	1
Selenium	0.59	U	2.5	0.59	ug/L		06/03/24 08:24	06/06/24 14:04	1
Sodium	**5630**		500	219	ug/L		06/03/24 08:24	06/06/24 14:04	1
Strontium	**85.2**		4.0	0.50	ug/L		06/03/24 08:24	06/06/24 14:04	1
Zinc	6.5	U	16.0	6.5	ug/L		06/03/24 08:24	06/06/24 14:04	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**122**		100	35.0	ug/L		06/03/24 06:17	06/03/24 13:28	1
Iron	**876**		50.0	20.0	ug/L		06/02/24 21:00	06/05/24 19:48	1
Lithium	1.7	U	8.0	1.7	ug/L		06/03/24 14:00	06/04/24 21:21	1

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	19.5	U	40.0	19.5	ug/L		05/31/24 23:49	06/01/24 02:22	1
Cadmium	0.15	U	0.50	0.15	ug/L		06/04/24 21:00	06/10/24 09:16	1
Lithium	1.7	U	8.0	1.7	ug/L		06/03/24 14:00	06/04/24 21:39	1
Arsenic	0.89	U	2.0	0.89	ug/L		05/31/24 23:49	06/01/24 02:22	1
Iron	**145**		50.0	20.0	ug/L		06/04/24 21:00	06/10/24 09:16	1
Calcium	**31700**		500	53.6	ug/L		05/31/24 23:49	06/01/24 02:22	1
Zinc	4.0	U	10.0	4.0	ug/L		06/04/24 21:00	06/10/24 09:16	1
Copper	2.5	U	4.0	2.5	ug/L		05/31/24 23:49	06/01/24 02:22	1
Iron	**159**		120	58.2	ug/L		05/31/24 23:49	06/01/24 02:22	1
Lead	0.84	U	1.2	0.84	ug/L		05/31/24 23:49	06/01/24 02:22	1
Magnesium	**15100**		200	46.9	ug/L		05/31/24 23:49	06/01/24 02:22	1
Manganese	**1.5**	**J**	8.0	1.5	ug/L		05/31/24 23:49	06/01/24 02:22	1
Nickel	0.91	U	4.0	0.91	ug/L		05/31/24 23:49	06/01/24 02:22	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Resistivity (EPA 120.1)	**0.00335**		0.000100	0.000100	Mohm-cm			06/10/24 14:00	1
Specific Conductance (EPA 120.1)	**299**		1.00	1.00	umhos/cm			06/10/24 14:00	1
Acidity (SM 2310B-2011)	20.0	U	20.0	20.0	mg/L			06/10/24 14:58	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-2011)	**136**		5.0	5.0	mg/L			06/05/24 14:56	1
Carbonate Alkalinity as CaCO3 (SM 2320B-2011)	5.0	U	5.0	5.0	mg/L			06/05/24 14:56	1
Alkalinity as CaCO3 to pH 4.5 (SM 2320B-2011)	**136**		5.0	5.0	mg/L			06/05/24 14:56	1
Total Dissolved Solids (SM 2540C-2015)	**188**		2.5	2.5	mg/L			06/03/24 08:40	1
Total Suspended Solids (SM 2540D-2015)	**18.4**		3.3	3.3	mg/L			06/03/24 07:25	1
Ammonia (EPA 350.1)	0.050	U	0.10	0.050	mg/L			06/11/24 15:01	1
Total Kjeldahl Nitrogen (EPA 351.2)	**1.1**		1.0	0.50	mg/L		06/06/24 10:20	06/07/24 13:18	1
Chemical Oxygen Demand (EPA 410.4)	**17.9**		10.0	3.3	mg/L			06/06/24 19:08	1

Client Sample ID: Basin 2

Lab Sample ID: 460-304810-3

Date Collected: 05/29/24 09:30

Matrix: Water

Date Received: 05/29/24 19:00

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oxygen, Dissolved (SM 4500 O C-2016)	**7.1**	**H H3**	1.0	1.0	mg/L			05/31/24 14:00	1
Orthophosphate as P (SM 4500 P E-2011)	0.0050	U	0.030	0.0050	mg/L			05/30/24 19:15	1
Carbonaceous Biochemical Oxygen Demand 5 (SM 5210 B-2016)	**1.3**		1.0	1.0	mg/L			05/30/24 16:25	1
Total Organic Carbon (SW846 9060A)	**3.5**		1.0	0.53	mg/L			06/13/24 13:12	1
Phosphorus as PO4 (SM4500 P E-2011)	0.071	U	0.090	0.071	mg/L		06/12/24 10:00	06/12/24 15:00	1
Phosphorus as P (SM4500 P E-2011)	0.023	U	0.030	0.023	mg/L		06/12/24 10:00	06/12/24 15:00	1
Nitrogen, Total (EPA Total Nitrogen)	0.50	U	0.50	0.50	mg/L			06/11/24 08:45	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (EPA 350.1)	0.050	U	0.10	0.050	mg/L			06/11/24 15:21	1
Orthophosphate as P (SM 4500 P E-2011)	0.0050	U	0.030	0.0050	mg/L			05/30/24 19:15	1
Phosphorus as PO4 (SM4500 P E-2011)	0.14	U	0.18	0.14	mg/L		06/12/24 10:00	06/12/24 15:00	1
Phosphorus as P (SM4500 P E-2011)	0.046	U	0.060	0.046	mg/L		06/12/24 10:00	06/12/24 15:00	1

Client Sample ID: Upstream

Lab Sample ID: 460-304810-4

Date Collected: 05/29/24 11:00

Matrix: Water

Date Received: 05/29/24 19:00

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide	0.054	U	0.32	0.054	mg/L			05/30/24 20:56	1
Nitrate as N	0.070	U	0.16	0.070	mg/L			05/30/24 20:56	1
Chloride	**7.82**		0.32	0.039	mg/L			05/30/24 20:56	1
Nitrate Nitrite as N	0.070	U	0.16	0.070	mg/L			05/30/24 20:56	1
Nitrite as N	0.047	U	0.16	0.047	mg/L			05/30/24 20:56	1
Sulfate	**11.9**		0.48	0.095	mg/L			05/30/24 20:56	1

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000042	U	0.00020	0.000042	mg/L		06/04/24 10:25	06/04/24 14:23	1

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**17.3**		4.0	0.91	ug/L		06/03/24 08:24	06/06/24 14:06	1
Boron	**65.0**	**J**	80.0	30.4	ug/L		06/03/24 08:24	06/06/24 14:06	1
Calcium	**43100**		500	53.6	ug/L		06/03/24 08:24	06/06/24 14:06	1
Copper	**2.5**	**J**	4.0	2.5	ug/L		06/03/24 08:24	06/06/24 14:06	1
Lead	0.84	U	1.2	0.84	ug/L		06/03/24 08:24	06/06/24 14:06	1
Magnesium	**14600**		200	46.9	ug/L		06/03/24 08:24	06/06/24 14:06	1
Manganese	**900**		8.0	1.5	ug/L		06/03/24 08:24	06/06/24 14:06	1
Nickel	**3.1**	**J**	4.0	0.91	ug/L		06/03/24 08:24	06/06/24 14:06	1
Potassium	**1490**		200	112	ug/L		06/03/24 08:24	06/06/24 14:06	1
Selenium	0.59	U	2.5	0.59	ug/L		06/03/24 08:24	06/06/24 14:06	1
Sodium	**5210**		500	219	ug/L		06/03/24 08:24	06/06/24 14:06	1

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill Anti-Degradation

Job ID: 460-304810-1

Client Sample ID: Upstream

Date Collected: 05/29/24 11:00
Date Received: 05/29/24 19:00

Lab Sample ID: 460-304810-4

Matrix: Water

Method: SW846 6020B - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Strontium	**173**		4.0	0.50	ug/L		06/03/24 08:24	06/06/24 14:06	1
Zinc	6.5	U	16.0	6.5	ug/L		06/03/24 08:24	06/06/24 14:06	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	35.0	U	100	35.0	ug/L		06/03/24 06:17	06/03/24 13:25	1
Iron	**807**		50.0	20.0	ug/L		06/02/24 21:00	06/05/24 19:50	1
Lithium	**3.0**	**J**	8.0	1.7	ug/L		06/03/24 14:00	06/04/24 21:24	1

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	19.5	U	40.0	19.5	ug/L		05/31/24 23:49	06/01/24 02:25	1
Cadmium	0.15	U	0.50	0.15	ug/L		06/04/24 21:00	06/10/24 09:18	1
Lithium	**3.3**	**J**	8.0	1.7	ug/L		06/03/24 14:00	06/04/24 21:42	1
Arsenic	0.89	U	2.0	0.89	ug/L		05/31/24 23:49	06/01/24 02:25	1
Iron	**67.1**		50.0	20.0	ug/L		06/04/24 21:00	06/10/24 09:18	1
Calcium	**42000**		500	53.6	ug/L		05/31/24 23:49	06/01/24 02:25	1
Zinc	**4.9**	**J**	10.0	4.0	ug/L		06/04/24 21:00	06/10/24 09:18	1
Copper	2.5	U	4.0	2.5	ug/L		05/31/24 23:49	06/01/24 02:25	1
Iron	**103**	**J**	120	58.2	ug/L		05/31/24 23:49	06/01/24 02:25	1
Lead	0.84	U	1.2	0.84	ug/L		05/31/24 23:49	06/01/24 02:25	1
Magnesium	**14400**		200	46.9	ug/L		05/31/24 23:49	06/01/24 02:25	1
Manganese	**754**		8.0	1.5	ug/L		05/31/24 23:49	06/01/24 02:25	1
Nickel	**1.9**	**J**	4.0	0.91	ug/L		05/31/24 23:49	06/01/24 02:25	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Resistivity (EPA 120.1)	**0.00287**		0.000100	0.000100	Mohm-cm			06/10/24 14:00	1
Specific Conductance (EPA 120.1)	**349**		1.00	1.00	umhos/cm			06/10/24 14:00	1
Acidity (SM 2310B-2011)	20.0	U	20.0	20.0	mg/L			06/10/24 14:58	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-2011)	**151**		5.0	5.0	mg/L			06/05/24 15:13	1
Carbonate Alkalinity as CaCO3 (SM 2320B-2011)	5.0	U	5.0	5.0	mg/L			06/05/24 15:13	1
Alkalinity as CaCO3 to pH 4.5 (SM 2320B-2011)	**151**		5.0	5.0	mg/L			06/05/24 15:13	1
Total Dissolved Solids (SM 2540C-2015)	**206**		2.5	2.5	mg/L			06/03/24 08:40	1
Total Suspended Solids (SM 2540D-2015)	**29.4**		2.5	2.5	mg/L			06/03/24 07:25	1
Ammonia (EPA 350.1)	0.050	U	0.10	0.050	mg/L			06/11/24 15:02	1
Total Kjeldahl Nitrogen (EPA 351.2)	0.50	U	1.0	0.50	mg/L		06/06/24 10:20	06/07/24 11:13	1
Chemical Oxygen Demand (EPA 410.4)	**13.1**		10.0	3.3	mg/L			06/06/24 19:08	1
Oxygen, Dissolved (SM 4500 O C-2016)	**4.5**	**H**	1.0	1.0	mg/L			05/31/24 14:04	1
Orthophosphate as P (SM 4500 P E-2011)	0.0050	U	0.030	0.0050	mg/L			05/30/24 19:15	1
Carbonaceous Biochemical Oxygen Demand 5 (SM 5210 B-2016)	1.0	U	1.0	1.0	mg/L			05/30/24 16:30	1
Total Organic Carbon (SW846 9060A)	**4.1**		1.0	0.53	mg/L			06/13/24 13:37	1

Client Sample ID: Upstream
Lab Sample ID: 460-304810-4

Date Collected: 05/29/24 11:00
Matrix: Water
Date Received: 05/29/24 19:00

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phosphorus as PO4 (SM4500 P E-2011)	**0.17**		0.090	0.071	mg/L		06/12/24 10:00	06/12/24 15:00	1
Phosphorus as P (SM4500 P E-2011)	**0.057**		0.030	0.023	mg/L		06/12/24 10:00	06/12/24 15:00	1
Nitrogen, Total (EPA Total Nitrogen)	0.50	U	0.50	0.50	mg/L			06/11/24 08:45	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (EPA 350.1)	0.050	U	0.10	0.050	mg/L			06/11/24 15:22	1
Orthophosphate as P (SM 4500 P E-2011)	0.0050	U	0.030	0.0050	mg/L			05/30/24 19:15	1
Phosphorus as PO4 (SM4500 P E-2011)	0.071	U	0.090	0.071	mg/L		06/12/24 10:00	06/12/24 15:00	1
Phosphorus as P (SM4500 P E-2011)	0.023	U	0.030	0.023	mg/L		06/12/24 10:00	06/12/24 15:00	1

Client Sample ID: Clarifying Pond
Lab Sample ID: 460-304810-5

Date Collected: 05/29/24 11:30
Matrix: Water
Date Received: 05/29/24 19:00

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide	0.054	U	0.32	0.054	mg/L			05/30/24 21:11	1
Nitrate as N	**0.15**	**J**	0.16	0.070	mg/L			05/30/24 21:11	1
Chloride	**1.04**		0.32	0.039	mg/L			05/30/24 21:11	1
Nitrate Nitrite as N	**0.15**	**J**	0.16	0.070	mg/L			05/30/24 21:11	1
Nitrite as N	0.047	U	0.16	0.047	mg/L			05/30/24 21:11	1
Sulfate	**5.18**		0.48	0.095	mg/L			05/30/24 21:11	1

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000042	U	0.00020	0.000042	mg/L		06/04/24 10:25	06/04/24 14:27	1

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**3.3**	**J**	4.0	0.91	ug/L		06/03/24 08:24	06/06/24 14:09	1
Boron	**62.4**	**J**	80.0	30.4	ug/L		06/03/24 08:24	06/06/24 14:09	1
Calcium	**17400**		500	53.6	ug/L		06/03/24 08:24	06/06/24 14:09	1
Copper	2.5	U	4.0	2.5	ug/L		06/03/24 08:24	06/06/24 14:09	1
Lead	0.84	U	1.2	0.84	ug/L		06/03/24 08:24	06/06/24 14:09	1
Magnesium	**6050**		200	46.9	ug/L		06/03/24 08:24	06/06/24 14:09	1
Manganese	**54.9**		8.0	1.5	ug/L		06/03/24 08:24	06/06/24 14:09	1
Nickel	0.91	U	4.0	0.91	ug/L		06/03/24 08:24	06/06/24 14:09	1
Potassium	**1000**		200	112	ug/L		06/03/24 08:24	06/06/24 14:09	1
Selenium	0.59	U	2.5	0.59	ug/L		06/03/24 08:24	06/06/24 14:09	1
Sodium	**3510**		500	219	ug/L		06/03/24 08:24	06/06/24 14:09	1
Strontium	**33.5**		4.0	0.50	ug/L		06/03/24 08:24	06/06/24 14:09	1
Zinc	6.5	U	16.0	6.5	ug/L		06/03/24 08:24	06/06/24 14:09	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**130**		100	35.0	ug/L		06/03/24 06:17	06/03/24 13:30	1
Iron	**462**		50.0	20.0	ug/L		06/02/24 21:00	06/05/24 19:42	1

Client Sample ID: Clarifying Pond
Lab Sample ID: 460-304810-5
Date Collected: 05/29/24 11:30
Matrix: Water
Date Received: 05/29/24 19:00

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	1.7	U	8.0	1.7	ug/L		06/03/24 14:00	06/04/24 21:26	1

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	19.5	U	40.0	19.5	ug/L		05/31/24 23:49	06/01/24 02:30	1
Cadmium	0.15	U	0.50	0.15	ug/L		06/04/24 21:00	06/10/24 09:20	1
Lithium	1.7	U	8.0	1.7	ug/L		06/03/24 14:00	06/04/24 21:49	1
Arsenic	0.89	U	2.0	0.89	ug/L		05/31/24 23:49	06/01/24 02:30	1
Iron	**90.2**		50.0	20.0	ug/L		06/04/24 21:00	06/10/24 09:20	1
Calcium	**17800**		500	53.6	ug/L		05/31/24 23:49	06/01/24 02:30	1
Zinc	4.0	U	10.0	4.0	ug/L		06/04/24 21:00	06/10/24 09:20	1
Copper	2.5	U	4.0	2.5	ug/L		05/31/24 23:49	06/01/24 02:30	1
Iron	**90.6**	**J**	120	58.2	ug/L		05/31/24 23:49	06/01/24 02:30	1
Lead	0.84	U	1.2	0.84	ug/L		05/31/24 23:49	06/01/24 02:30	1
Magnesium	**6140**		200	46.9	ug/L		05/31/24 23:49	06/01/24 02:30	1
Manganese	**50.4**		8.0	1.5	ug/L		05/31/24 23:49	06/01/24 02:30	1
Nickel	0.91	U	4.0	0.91	ug/L		05/31/24 23:49	06/01/24 02:30	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Resistivity (EPA 120.1)	**0.00668**		0.000100	0.000100	Mohm-cm			06/11/24 11:30	1
Specific Conductance (EPA 120.1)	**150**		1.00	1.00	umhos/cm			06/11/24 11:30	1
Acidity (SM 2310B-2011)	20.0	U	20.0	20.0	mg/L			06/10/24 14:58	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-2011)	**62.7**		5.0	5.0	mg/L			06/05/24 15:19	1
Carbonate Alkalinity as CaCO3 (SM 2320B-2011)	5.0	U	5.0	5.0	mg/L			06/05/24 15:19	1
Alkalinity as CaCO3 to pH 4.5 (SM 2320B-2011)	**62.7**		5.0	5.0	mg/L			06/05/24 15:19	1
Total Dissolved Solids (SM 2540C-2015)	**78.0**		2.5	2.5	mg/L			06/03/24 08:40	1
Total Suspended Solids (SM 2540D-2015)	**7.8**		2.5	2.5	mg/L			06/03/24 07:25	1
Ammonia (EPA 350.1)	0.050	U	0.10	0.050	mg/L			06/11/24 15:04	1
Total Kjeldahl Nitrogen (EPA 351.2)	0.50	U	1.0	0.50	mg/L		06/06/24 10:20	06/07/24 11:23	1
Chemical Oxygen Demand (EPA 410.4)	**6.7**	**J**	10.0	3.3	mg/L			06/06/24 19:08	1
Oxygen, Dissolved (SM 4500 O C-2016)	**4.4**	**H**	1.0	1.0	mg/L			05/31/24 14:08	1
Orthophosphate as P (SM 4500 P E-2011)	0.0050	U	0.030	0.0050	mg/L			05/30/24 19:15	1
Carbonaceous Biochemical Oxygen Demand 5 (SM 5210 B-2016)	1.0	U	1.0	1.0	mg/L			05/30/24 16:35	1
Total Organic Carbon (SW846 9060A)	**1.1**		1.0	0.53	mg/L			06/13/24 14:02	1
Phosphorus as PO4 (SM4500 P E-2011)	0.071	U F1	0.090	0.071	mg/L		06/12/24 10:00	06/12/24 15:00	1
Phosphorus as P (SM4500 P E-2011)	0.023	U	0.030	0.023	mg/L		06/12/24 10:00	06/12/24 15:00	1
Nitrogen, Total (EPA Total Nitrogen)	0.50	U	0.50	0.50	mg/L			06/11/24 08:45	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (EPA 350.1)	0.050	U	0.10	0.050	mg/L			06/11/24 15:24	1

Client: Heidelberg Materials Northeast LLC
Job ID: 460-304810-1
Project/Site: Rock Hill Anti-Degradation

Client Sample ID: Clarifying Pond
Lab Sample ID: 460-304810-5
Date Collected: 05/29/24 11:30
Matrix: Water
Date Received: 05/29/24 19:00

General Chemistry - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Orthophosphate as P (SM 4500 P E-2011)	0.0050	U	0.030	0.0050	mg/L			05/30/24 19:15	1
Phosphorus as PO4 (SM4500 P E-2011)	0.071	U	0.090	0.071	mg/L		06/12/24 10:00	06/12/24 15:00	1
Phosphorus as P (SM4500 P E-2011)	0.023	U	0.030	0.023	mg/L		06/12/24 10:00	06/12/24 15:00	1

Lab Chronicle

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill Anti-Degradation

Job ID: 460-304810-1

Client Sample ID: NPDES 001

Date Collected: 05/29/24 08:00
Date Received: 05/29/24 19:00

Lab Sample ID: 460-304810-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		1	977576	OXG	EET EDI	05/30/24 20:11
Total/NA	Analysis	300.0		1	977577	OXG	EET EDI	05/30/24 20:11
Total/NA	Prep	245.1			714284	ESB	EET BUF	06/04/24 10:25
Total/NA	Analysis	245.1		1	714365	ESB	EET BUF	06/04/24 14:19
Dissolved	Filtration	Filtration			512840	UDL9	ELLE	06/03/24 07:38
Dissolved	Prep	3005A			513463	UAMX	ELLE	06/04/24 21:00
Dissolved	Analysis	6020B		1	515542	F7JF	ELLE	06/10/24 09:12
Dissolved	Filtration	FILTRATION			615259	BN	EET CLE	06/03/24 12:15
Dissolved	Prep	3005A			615260	BN	EET CLE	06/03/24 14:00
Dissolved	Analysis	6020B		1	615494	RKT	EET CLE	06/04/24 21:34
Dissolved	Filtration	FILTRATION			977870	VAD	EET EDI	05/31/24 23:46
Dissolved	Prep	3010A			977871	VAD	EET EDI	05/31/24 23:49
Dissolved	Analysis	6020B		1	977798	JKF	EET EDI	06/01/24 02:07
Total Recoverable	Prep	3005A			512729	UAMX	ELLE	06/02/24 21:00
Total Recoverable	Analysis	6020B		1	514175	UCIG	ELLE	06/05/24 19:46
Total Recoverable	Prep	3005A			615260	BN	EET CLE	06/03/24 14:00
Total Recoverable	Analysis	6020B		1	615494	RKT	EET CLE	06/04/24 21:11
Total Recoverable	Prep	3005A			840739	RR	EET SAV	06/03/24 06:17
Total Recoverable	Analysis	6020B		1	840983	BWR	EET SAV	06/03/24 13:33
Total/NA	Prep	3010A			978099	KXN	EET EDI	06/03/24 08:24
Total/NA	Analysis	6020B		1	978751	JKF	EET EDI	06/06/24 13:59
Total/NA	Analysis	120.1		1	979347	HTV	EET EDI	06/10/24 14:00
Total/NA	Analysis	2310B-2011		1	979337	RAK	EET EDI	06/10/24 14:58
Total/NA	Analysis	2320B-2011		1	978578	RXA	EET EDI	06/05/24 14:44
Total/NA	Analysis	2540C-2015		1	978108	PLS	EET EDI	06/03/24 08:40
Total/NA	Analysis	2540D-2015		1	977922	RXA	EET EDI	06/01/24 09:33
Dissolved	Filtration	FILTRATION			979532	AXP	EET EDI	06/11/24 14:05
Dissolved	Analysis	350.1		1	979553	AXP	EET EDI	06/11/24 15:07
Total/NA	Analysis	350.1		1	979553	AXP	EET EDI	06/11/24 14:58
Total/NA	Prep	351.2			514401	NLE3	ELLE	06/06/24 10:20 - 06/06/24 13:20 [1]
Total/NA	Analysis	351.2		1	515015	JCG7	ELLE	06/07/24 13:14
Total/NA	Analysis	410.4		1	978831	HTV	EET EDI	06/06/24 19:08
Total/NA	Analysis	4500 O C-2016		1	977773	PLS	EET EDI	05/31/24 13:52
Dissolved	Filtration	FILTRATION			977624	HTV	EET EDI	05/30/24 19:00
Dissolved	Analysis	4500 P E-2011		1	977627	HTV	EET EDI	05/30/24 19:15
Total/NA	Analysis	4500 P E-2011		1	977627	HTV	EET EDI	05/30/24 19:15
Total/NA	Analysis	5210 B-2016		1	977570	RXA	EET EDI	05/30/24 16:10
Total/NA	Analysis	9060A		1	979996	MMC	EET EDI	06/13/24 10:59
Dissolved	Filtration	FILTRATION			979807	HTV	EET EDI	06/12/24 10:00
Dissolved	Prep	SM 4500 P B			979808	HTV	EET EDI	06/12/24 10:00
Dissolved	Analysis	SM4500 P E-2011		1	979811	HTV	EET EDI	06/12/24 15:00
Total/NA	Prep	SM 4500 P B			979808	HTV	EET EDI	06/12/24 10:00
Total/NA	Analysis	SM4500 P E-2011		1	979811	HTV	EET EDI	06/12/24 15:00

Eurofins Edison

Lab Chronicle

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill Anti-Degradation

Job ID: 460-304810-1

Client Sample ID: NPDES 001

Lab Sample ID: 460-304810-1

Date Collected: 05/29/24 08:00

Matrix: Water

Date Received: 05/29/24 19:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Total Nitrogen		1	979483	JMP	EET EDI	06/11/24 08:45

Client Sample ID: Basin 1

Lab Sample ID: 460-304810-2

Date Collected: 05/29/24 10:30

Matrix: Water

Date Received: 05/29/24 19:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		1	977576	OXG	EET EDI	05/30/24 20:26
Total/NA	Analysis	300.0		1	977577	OXG	EET EDI	05/30/24 20:26
Total/NA	Prep	245.1			714284	ESB	EET BUF	06/04/24 10:25
Total/NA	Analysis	245.1		1	714365	ESB	EET BUF	06/04/24 14:21
Dissolved	Filtration	Filtration			512840	UDL9	ELLE	06/03/24 07:38
Dissolved	Prep	3005A			513463	UAMX	ELLE	06/04/24 21:00
Dissolved	Analysis	6020B		1	515542	F7JF	ELLE	06/10/24 09:14
Dissolved	Filtration	FILTRATION			615259	BN	EET CLE	06/03/24 12:15
Dissolved	Prep	3005A			615260	BN	EET CLE	06/03/24 14:00
Dissolved	Analysis	6020B		1	615494	RKT	EET CLE	06/04/24 21:36
Dissolved	Filtration	FILTRATION			977870	VAD	EET EDI	05/31/24 23:46
Dissolved	Prep	3010A			977871	VAD	EET EDI	05/31/24 23:49
Dissolved	Analysis	6020B		1	977798	JKF	EET EDI	06/01/24 02:20
Total Recoverable	Prep	3005A			512729	UAMX	ELLE	06/02/24 21:00
Total Recoverable	Analysis	6020B		1	514175	UCIG	ELLE	06/05/24 19:44
Total Recoverable	Prep	3005A			615260	BN	EET CLE	06/03/24 14:00
Total Recoverable	Analysis	6020B		1	615494	RKT	EET CLE	06/04/24 21:18
Total Recoverable	Prep	3005A			840739	RR	EET SAV	06/03/24 06:17
Total Recoverable	Analysis	6020B		1	840983	BWR	EET SAV	06/03/24 13:36
Total/NA	Prep	3010A			978099	KXN	EET EDI	06/03/24 08:24
Total/NA	Analysis	6020B		1	978751	JKF	EET EDI	06/06/24 14:01
Total/NA	Analysis	120.1		1	979347	HTV	EET EDI	06/10/24 14:00
Total/NA	Analysis	2310B-2011		1	979337	RAK	EET EDI	06/10/24 14:58
Total/NA	Analysis	2320B-2011		1	978578	RXA	EET EDI	06/05/24 14:50
Total/NA	Analysis	2540C-2015		1	978108	PLS	EET EDI	06/03/24 08:40
Total/NA	Analysis	2540D-2015		1	977922	RXA	EET EDI	06/01/24 09:33
Dissolved	Filtration	FILTRATION			979532	AXP	EET EDI	06/11/24 14:05
Dissolved	Analysis	350.1		1	979553	AXP	EET EDI	06/11/24 15:08
Total/NA	Analysis	350.1		1	979553	AXP	EET EDI	06/11/24 14:59
Total/NA	Prep	351.2			514401	NLE3	ELLE	06/06/24 10:20 - 06/06/24 13:20 [1]
Total/NA	Analysis	351.2		1	515015	JCG7	ELLE	06/07/24 13:16
Total/NA	Analysis	410.4		1	978831	HTV	EET EDI	06/06/24 19:08
Total/NA	Analysis	4500 O C-2016		1	977773	PLS	EET EDI	05/31/24 13:56
Dissolved	Filtration	FILTRATION			977624	HTV	EET EDI	05/30/24 19:00
Dissolved	Analysis	4500 P E-2011		1	977627	HTV	EET EDI	05/30/24 19:15
Total/NA	Analysis	4500 P E-2011		1	977627	HTV	EET EDI	05/30/24 19:15

Lab Chronicle

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill Anti-Degradation

Job ID: 460-304810-1

Client Sample ID: Basin 1

Lab Sample ID: 460-304810-2

Date Collected: 05/29/24 10:30

Matrix: Water

Date Received: 05/29/24 19:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	5210 B-2016		1	977570	RXA	EET EDI	05/30/24 16:15
Total/NA	Analysis	9060A		1	979996	MMC	EET EDI	06/13/24 11:23
Dissolved	Filtration	FILTRATION			979807	HTV	EET EDI	06/12/24 10:00
Dissolved	Prep	SM 4500 P B			979808	HTV	EET EDI	06/12/24 10:00
Dissolved	Analysis	SM4500 P E-2011		1	979811	HTV	EET EDI	06/12/24 15:00
Total/NA	Prep	SM 4500 P B			979808	HTV	EET EDI	06/12/24 10:00
Total/NA	Analysis	SM4500 P E-2011		1	979811	HTV	EET EDI	06/12/24 15:00
Total/NA	Analysis	Total Nitrogen		1	979483	JMP	EET EDI	06/11/24 08:45

Client Sample ID: Basin 2

Lab Sample ID: 460-304810-3

Date Collected: 05/29/24 09:30

Matrix: Water

Date Received: 05/29/24 19:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		1	977576	OXG	EET EDI	05/30/24 20:41
Total/NA	Analysis	300.0		1	977577	OXG	EET EDI	05/30/24 20:41
Total/NA	Prep	245.1			714284	ESB	EET BUF	06/04/24 10:25
Total/NA	Analysis	245.1		1	714365	ESB	EET BUF	06/04/24 14:22
Dissolved	Filtration	Filtration			512840	UDL9	ELLE	06/03/24 07:38
Dissolved	Prep	3005A			513463	UAMX	ELLE	06/04/24 21:00
Dissolved	Analysis	6020B		1	515542	F7JF	ELLE	06/10/24 09:16
Dissolved	Filtration	FILTRATION			615259	BN	EET CLE	06/03/24 12:15
Dissolved	Prep	3005A			615260	BN	EET CLE	06/03/24 14:00
Dissolved	Analysis	6020B		1	615494	RKT	EET CLE	06/04/24 21:39
Dissolved	Filtration	FILTRATION			977870	VAD	EET EDI	05/31/24 23:46
Dissolved	Prep	3010A			977871	VAD	EET EDI	05/31/24 23:49
Dissolved	Analysis	6020B		1	977798	JKF	EET EDI	06/01/24 02:22
Total Recoverable	Prep	3005A			512729	UAMX	ELLE	06/02/24 21:00
Total Recoverable	Analysis	6020B		1	514175	UCIG	ELLE	06/05/24 19:48
Total Recoverable	Prep	3005A			615260	BN	EET CLE	06/03/24 14:00
Total Recoverable	Analysis	6020B		1	615494	RKT	EET CLE	06/04/24 21:21
Total Recoverable	Prep	3005A			840739	RR	EET SAV	06/03/24 06:17
Total Recoverable	Analysis	6020B		1	840983	BWR	EET SAV	06/03/24 13:28
Total/NA	Prep	3010A			978099	KXN	EET EDI	06/03/24 08:24
Total/NA	Analysis	6020B		1	978751	JKF	EET EDI	06/06/24 14:04
Total/NA	Analysis	120.1		1	979347	HTV	EET EDI	06/10/24 14:00
Total/NA	Analysis	2310B-2011		1	979337	RAK	EET EDI	06/10/24 14:58
Total/NA	Analysis	2320B-2011		1	978578	RXA	EET EDI	06/05/24 14:56
Total/NA	Analysis	2540C-2015		1	978108	PLS	EET EDI	06/03/24 08:40
Total/NA	Analysis	2540D-2015		1	978092	PLS	EET EDI	06/03/24 07:25
Dissolved	Filtration	FILTRATION			979532	AXP	EET EDI	06/11/24 14:05
Dissolved	Analysis	350.1		1	979553	AXP	EET EDI	06/11/24 15:21
Total/NA	Analysis	350.1		1	979553	AXP	EET EDI	06/11/24 15:01

Client Sample ID: Basin 2

Lab Sample ID: 460-304810-3

Date Collected: 05/29/24 09:30

Matrix: Water

Date Received: 05/29/24 19:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	351.2			514401	NLE3	ELLE	06/06/24 10:20 - 06/06/24 13:20 [1]
Total/NA	Analysis	351.2		1	515015	JCG7	ELLE	06/07/24 13:18
Total/NA	Analysis	410.4		1	978831	HTV	EET EDI	06/06/24 19:08
Total/NA	Analysis	4500 O C-2016		1	977773	PLS	EET EDI	05/31/24 14:00
Dissolved	Filtration	FILTRATION			977624	HTV	EET EDI	05/30/24 19:00
Dissolved	Analysis	4500 P E-2011		1	977627	HTV	EET EDI	05/30/24 19:15
Total/NA	Analysis	4500 P E-2011		1	977627	HTV	EET EDI	05/30/24 19:15
Total/NA	Analysis	5210 B-2016		1	977570	RXA	EET EDI	05/30/24 16:25
Total/NA	Analysis	9060A		1	979996	MMC	EET EDI	06/13/24 13:12
Dissolved	Filtration	FILTRATION			979807	HTV	EET EDI	06/12/24 10:00
Dissolved	Prep	SM 4500 P B			979808	HTV	EET EDI	06/12/24 10:00
Dissolved	Analysis	SM4500 P E-2011		1	979811	HTV	EET EDI	06/12/24 15:00
Total/NA	Prep	SM 4500 P B			979808	HTV	EET EDI	06/12/24 10:00
Total/NA	Analysis	SM4500 P E-2011		1	979811	HTV	EET EDI	06/12/24 15:00
Total/NA	Analysis	Total Nitrogen		1	979483	JMP	EET EDI	06/11/24 08:45

Client Sample ID: Upstream

Lab Sample ID: 460-304810-4

Date Collected: 05/29/24 11:00

Matrix: Water

Date Received: 05/29/24 19:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		1	977576	OXG	EET EDI	05/30/24 20:56
Total/NA	Analysis	300.0		1	977577	OXG	EET EDI	05/30/24 20:56
Total/NA	Prep	245.1			714284	ESB	EET BUF	06/04/24 10:25
Total/NA	Analysis	245.1		1	714365	ESB	EET BUF	06/04/24 14:23
Dissolved	Filtration	Filtration			512840	UDL9	ELLE	06/03/24 07:38
Dissolved	Prep	3005A			513463	UAMX	ELLE	06/04/24 21:00
Dissolved	Analysis	6020B		1	515542	F7JF	ELLE	06/10/24 09:18
Dissolved	Filtration	FILTRATION			615259	BN	EET CLE	06/03/24 12:15
Dissolved	Prep	3005A			615260	BN	EET CLE	06/03/24 14:00
Dissolved	Analysis	6020B		1	615494	RKT	EET CLE	06/04/24 21:42
Dissolved	Filtration	FILTRATION			977870	VAD	EET EDI	05/31/24 23:46
Dissolved	Prep	3010A			977871	VAD	EET EDI	05/31/24 23:49
Dissolved	Analysis	6020B		1	977798	JKF	EET EDI	06/01/24 02:25
Total Recoverable	Prep	3005A			512729	UAMX	ELLE	06/02/24 21:00
Total Recoverable	Analysis	6020B		1	514175	UCIG	ELLE	06/05/24 19:50
Total Recoverable	Prep	3005A			615260	BN	EET CLE	06/03/24 14:00
Total Recoverable	Analysis	6020B		1	615494	RKT	EET CLE	06/04/24 21:24
Total Recoverable	Prep	3005A			840739	RR	EET SAV	06/03/24 06:17
Total Recoverable	Analysis	6020B		1	840983	BWR	EET SAV	06/03/24 13:25
Total/NA	Prep	3010A			978099	KXN	EET EDI	06/03/24 08:24
Total/NA	Analysis	6020B		1	978751	JKF	EET EDI	06/06/24 14:06
Total/NA	Analysis	120.1		1	979347	HTV	EET EDI	06/10/24 14:00
Total/NA	Analysis	2310B-2011		1	979337	RAK	EET EDI	06/10/24 14:58

Client Sample ID: Upstream

Lab Sample ID: 460-304810-4

Date Collected: 05/29/24 11:00

Matrix: Water

Date Received: 05/29/24 19:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	2320B-2011		1	978578	RXA	EET EDI	06/05/24 15:13
Total/NA	Analysis	2540C-2015		1	978108	PLS	EET EDI	06/03/24 08:40
Total/NA	Analysis	2540D-2015		1	978092	PLS	EET EDI	06/03/24 07:25
Dissolved	Filtration	FILTRATION			979532	AXP	EET EDI	06/11/24 14:05
Dissolved	Analysis	350.1		1	979553	AXP	EET EDI	06/11/24 15:22
Total/NA	Analysis	350.1		1	979553	AXP	EET EDI	06/11/24 15:02
Total/NA	Prep	351.2			514401	NLE3	ELLE	06/06/24 10:20 - 06/06/24 13:20 [1]
Total/NA	Analysis	351.2		1	515015	JCG7	ELLE	06/07/24 11:13
Total/NA	Analysis	410.4		1	978831	HTV	EET EDI	06/06/24 19:08
Total/NA	Analysis	4500 O C-2016		1	977773	PLS	EET EDI	05/31/24 14:04
Dissolved	Filtration	FILTRATION			977624	HTV	EET EDI	05/30/24 19:00
Dissolved	Analysis	4500 P E-2011		1	977627	HTV	EET EDI	05/30/24 19:15
Total/NA	Analysis	4500 P E-2011		1	977627	HTV	EET EDI	05/30/24 19:15
Total/NA	Analysis	5210 B-2016		1	977570	RXA	EET EDI	05/30/24 16:30
Total/NA	Analysis	9060A		1	979996	MMC	EET EDI	06/13/24 13:37
Dissolved	Filtration	FILTRATION			979807	HTV	EET EDI	06/12/24 10:00
Dissolved	Prep	SM 4500 P B			979808	HTV	EET EDI	06/12/24 10:00
Dissolved	Analysis	SM4500 P E-2011		1	979811	HTV	EET EDI	06/12/24 15:00
Total/NA	Prep	SM 4500 P B			979808	HTV	EET EDI	06/12/24 10:00
Total/NA	Analysis	SM4500 P E-2011		1	979811	HTV	EET EDI	06/12/24 15:00
Total/NA	Analysis	Total Nitrogen		1	979483	JMP	EET EDI	06/11/24 08:45

Client Sample ID: Clarifying Pond

Lab Sample ID: 460-304810-5

Date Collected: 05/29/24 11:30

Matrix: Water

Date Received: 05/29/24 19:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		1	977576	OXG	EET EDI	05/30/24 21:11
Total/NA	Analysis	300.0		1	977577	OXG	EET EDI	05/30/24 21:11
Total/NA	Prep	245.1			714285	ESB	EET BUF	06/04/24 10:25
Total/NA	Analysis	245.1		1	714365	ESB	EET BUF	06/04/24 14:27
Dissolved	Filtration	Filtration			512840	UDL9	ELLE	06/03/24 07:38
Dissolved	Prep	3005A			513463	UAMX	ELLE	06/04/24 21:00
Dissolved	Analysis	6020B		1	515542	F7JF	ELLE	06/10/24 09:20
Dissolved	Filtration	FILTRATION			615259	BN	EET CLE	06/03/24 12:15
Dissolved	Prep	3005A			615260	BN	EET CLE	06/03/24 14:00
Dissolved	Analysis	6020B		1	615494	RKT	EET CLE	06/04/24 21:49
Dissolved	Filtration	FILTRATION			977870	VAD	EET EDI	05/31/24 23:46
Dissolved	Prep	3010A			977871	VAD	EET EDI	05/31/24 23:49
Dissolved	Analysis	6020B		1	977798	JKF	EET EDI	06/01/24 02:30
Total Recoverable	Prep	3005A			512729	UAMX	ELLE	06/02/24 21:00
Total Recoverable	Analysis	6020B		1	514175	UCIG	ELLE	06/05/24 19:42
Total Recoverable	Prep	3005A			615260	BN	EET CLE	06/03/24 14:00
Total Recoverable	Analysis	6020B		1	615494	RKT	EET CLE	06/04/24 21:26

Lab Chronicle

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill Anti-Degradation

Job ID: 460-304810-1

Client Sample ID: Clarifying Pond

Date Collected: 05/29/24 11:30
Date Received: 05/29/24 19:00

Lab Sample ID: 460-304810-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			840739	RR	EET SAV	06/03/24 06:17
Total Recoverable	Analysis	6020B		1	840983	BWR	EET SAV	06/03/24 13:30
Total/NA	Prep	3010A			978099	KXN	EET EDI	06/03/24 08:24
Total/NA	Analysis	6020B		1	978751	JKF	EET EDI	06/06/24 14:09
Total/NA	Analysis	120.1		1	979524	HTV	EET EDI	06/11/24 11:30
Total/NA	Analysis	2310B-2011		1	979337	RAK	EET EDI	06/10/24 14:58
Total/NA	Analysis	2320B-2011		1	978578	RXA	EET EDI	06/05/24 15:19
Total/NA	Analysis	2540C-2015		1	978108	PLS	EET EDI	06/03/24 08:40
Total/NA	Analysis	2540D-2015		1	978092	PLS	EET EDI	06/03/24 07:25
Dissolved	Filtration	FILTRATION			979532	AXP	EET EDI	06/11/24 14:05
Dissolved	Analysis	350.1		1	979553	AXP	EET EDI	06/11/24 15:24
Total/NA	Analysis	350.1		1	979553	AXP	EET EDI	06/11/24 15:04
Total/NA	Prep	351.2			514401	NLE3	ELLE	06/06/24 10:20 - 06/06/24 13:20 [1]
Total/NA	Analysis	351.2		1	515015	JCG7	ELLE	06/07/24 11:23
Total/NA	Analysis	410.4		1	978831	HTV	EET EDI	06/06/24 19:08
Total/NA	Analysis	4500 O C-2016		1	977773	PLS	EET EDI	05/31/24 14:08
Dissolved	Filtration	FILTRATION			977624	HTV	EET EDI	05/30/24 19:00
Dissolved	Analysis	4500 P E-2011		1	977627	HTV	EET EDI	05/30/24 19:15
Total/NA	Analysis	4500 P E-2011		1	977627	HTV	EET EDI	05/30/24 19:15
Total/NA	Analysis	5210 B-2016		1	977570	RXA	EET EDI	05/30/24 16:35
Total/NA	Analysis	9060A		1	979996	MMC	EET EDI	06/13/24 14:02
Dissolved	Filtration	FILTRATION			979807	HTV	EET EDI	06/12/24 10:00
Dissolved	Prep	SM 4500 P B			979808	HTV	EET EDI	06/12/24 10:00
Dissolved	Analysis	SM4500 P E-2011		1	979811	HTV	EET EDI	06/12/24 15:00
Total/NA	Prep	SM 4500 P B			979808	HTV	EET EDI	06/12/24 10:00
Total/NA	Analysis	SM4500 P E-2011		1	979811	HTV	EET EDI	06/12/24 15:00
Total/NA	Analysis	Total Nitrogen		1	979483	JMP	EET EDI	06/11/24 08:45

[1] This procedure uses a method stipulated length of time for the process. Both start and end times are displayed.

Laboratory References:

EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

EET CLE = Eurofins Cleveland, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

EET EDI = Eurofins Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

EET SAV = Eurofins Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Microbac = Marietta, OH, 158 Starlite Drive, Marietta, OH 45750

Accreditation/Certification Summary

Client: Heidelberg Materials Northeast LLC
Job ID: 460-304810-1
Project/Site: Rock Hill Anti-Degradation

Laboratory: Eurofins Edison

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Connecticut	State	PH-0818	09-30-24
DE Haz. Subst. Cleanup Act (HSCA)	State	N/A	01-02-25
Georgia	State	12028 (NJ)	06-30-24
Massachusetts	State	M-NJ312	06-30-24
New Jersey	NELAP	12028	06-30-24
New York	NELAP	11452	04-01-25
Pennsylvania	NELAP	68-00522	02-28-25
Rhode Island	State	LAO00376	12-31-24
USDA	US Federal Programs	525-24-149-77606	05-21-27

Laboratory: Eurofins Buffalo

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Arkansas DEQ	State	88-0686	07-06-24
Connecticut	State	PH-0807	03-31-25
Florida	NELAP	E87672	06-30-23 *
Georgia	State	10026 (NY)	03-31-25
Georgia	State Program	N/A	03-31-09 *
Illinois	NELAP	200003	09-30-24
Iowa	State	374	03-01-25
Iowa	State Program	374	03-01-09 *
Kansas	NELAP	E-10187	02-01-25
Kentucky (UST)	State	108092	04-01-24 *
Kentucky (WW)	State	KY90029	12-31-24
Louisiana	NELAP	02031	06-30-23 *
Louisiana (All)	NELAP	02031	06-30-23 *
Maine	State	NY00044	12-04-24
Maryland	State	294	06-30-24
Massachusetts	State	M-NY044	07-01-24
Michigan	State	9937	03-31-25
Michigan	State Program	9937	04-01-09 *
New Hampshire	NELAP	2973	09-11-19 *
New Hampshire	NELAP	2337	11-17-24
New Jersey	NELAP	NY455	06-30-24
New York	NELAP	10026	06-11-24
Pennsylvania	NELAP	68-00281	08-31-24
Rhode Island	State	LAO00378	12-30-24
Texas	NELAP	T104704412-18-10	07-31-23 *
Virginia	NELAP	460185	09-14-24
Washington	State	C784	02-10-25
Wisconsin	State	998310390	08-31-24

Laboratory: Eurofins Cleveland

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
California	State	2927	02-28-25
Georgia	State	4062	02-27-25
Illinois	NELAP	200004	07-31-24
Iowa	State	421	06-01-25

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Accreditation/Certification Summary

Client: Heidelberg Materials Northeast LLC
Job ID: 460-304810-1
Project/Site: Rock Hill Anti-Degradation

Laboratory: Eurofins Cleveland (Continued)

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Kentucky (UST)	State	112225	02-27-25
Kentucky (WW)	State	KY98016	12-30-24
Minnesota	NELAP	039-999-348	12-31-24
New Jersey	NELAP	OH001	06-30-24
New York	NELAP	10975	04-02-25
Ohio VAP	State	ORELAP 4062	02-27-25
Oregon	NELAP	4062	02-27-25
Pennsylvania	NELAP	68-00340	08-31-24
Texas	NELAP	T104704517-22-19	08-31-24
USDA	US Federal Programs	P330-18-00281	01-05-27
Virginia	NELAP	460175	09-14-24
West Virginia DEP	State	210	12-31-24

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
A2LA	Dept. of Defense ELAP	0001.01	11-30-24
A2LA	ISO/IEC 17025	0001.01	11-30-24
Alabama	State	43200	01-31-25
Alaska	State	PA00009	06-30-24
Alaska (UST)	State	17-027	02-28-25
Arizona	State	AZ0780	03-12-25
Arkansas DEQ	State	88-00660	08-09-24
California	State	2792	11-30-24
Colorado	State	PA00009	06-30-24
Connecticut	State	PH-0746	06-30-25
DE Haz. Subst. Cleanup Act (HSCA)	State	019-006 (PA cert)	01-31-25
Delaware (DW)	State	N/A	01-31-25
Florida	NELAP	E87997	06-30-24
Georgia (DW)	State	C048	01-31-25
Hawaii	State	N/A	01-31-25
Illinois	NELAP	200027	01-31-25
Iowa	State	361	03-01-24 *
Kansas	NELAP	E-10151	10-31-24
Kentucky (DW)	State	KY90088	12-31-24
Kentucky (UST)	State	0001.01	11-30-24
Kentucky (WW)	State	KY90088	12-31-24
Louisiana (All)	NELAP	02055	06-30-24
Maine	State	2019012	03-12-25
Maryland	State	100	06-30-25
Massachusetts	State	M-PA009	06-30-25
Michigan	State	9930	01-31-25
Minnesota	NELAP	042-999-487	12-31-24
Mississippi	State	023	01-31-25
Missouri	State	450	01-31-25
Montana (DW)	State	0098	01-01-25
Nebraska	State	NE-OS-32-17	01-31-25
New Hampshire	NELAP	2730	01-10-25
New Jersey	NELAP	PA011	06-30-24

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Accreditation/Certification Summary

Client: Heidelberg Materials Northeast LLC
Job ID: 460-304810-1
Project/Site: Rock Hill Anti-Degradation

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC (Continued)

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
New York	NELAP	10670	04-01-25
North Carolina (DW)	State	42705	07-31-24
North Carolina (WW/SW)	State	521	12-31-24
North Dakota	State	R-205	01-31-24 *
Oklahoma	NELAP	9804	08-31-24
Oregon	NELAP	PA200001	09-11-24
Pennsylvania	NELAP	36-00037	01-31-25
Quebec Ministry of Environment and Fight against Climate Change	PALA	507	09-16-24
Rhode Island	State	LAO00338	12-30-24
South Carolina	State	89002	01-31-25
Tennessee	State	02838	01-31-25
Texas	NELAP	T104704194-23-46	08-31-24
USDA	US Federal Programs	525-22-298-19481	10-25-25
Vermont	State	VT - 36037	10-28-24
Virginia	NELAP	460182	06-14-25
Washington	State	C457	04-11-24 *
West Virginia (DW)	State	9906 C	01-31-25
West Virginia DEP	State	055	07-31-25
Wyoming	State	8TMS-L	01-31-25
Wyoming (UST)	A2LA	0001.01	11-30-24

Laboratory: Eurofins Savannah

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
	AFCEE	SAVLAB	
Alabama	State	41450	06-30-24
ANAB	Dept. of Defense ELAP	L2463	09-22-24
Arkansas (DW)	State	GA00006	06-30-24
California	State	2939	06-30-24
Florida	NELAP	E87052	06-30-24
Georgia	State	E87052	06-30-24
Georgia (DW)	State	803	06-30-24
Hawaii	State	<cert No.>	06-30-24
Illinois	NELAP	200022	11-30-24
Indiana	State	C-GA-02	06-30-24
Iowa	State	353	07-01-25
Kentucky (UST)	State	NA	06-30-24
Louisiana	NELAP	30690	06-30-24
Louisiana (All)	NELAP	30690	06-30-24
Louisiana (DW)	State	LA009	12-31-24
Maine	State	GA00006	09-25-24
Maryland	State	250	12-31-24
Massachusetts	State	M-GA006	06-30-24
Michigan	State	9925	06-30-24
Mississippi	State	<cert No.>	06-30-24
Nebraska	State	NE-OS-7-04	06-30-24
New Jersey	NELAP	GA769	06-30-24
New Mexico	State	GA00006	06-30-24
North Carolina (DW)	State	13701	07-31-24

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Accreditation/Certification Summary

Client: Heidelberg Materials Northeast LLC
Job ID: 460-304810-1
Project/Site: Rock Hill Anti-Degradation

Laboratory: Eurofins Savannah (Continued)

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
North Carolina (WW/SW)	State	269	12-31-24
Pennsylvania	NELAP	68-00474	06-30-24
Puerto Rico	State	GA00006	01-01-25
South Carolina	State	98001	06-30-24
Tennessee	State	TN02961	06-30-24
Texas	NELAP	T1047004185	11-30-24
Texas	TCEQ Water Supply	T104704185	06-30-24
USDA	US Federal Programs	P330-18-00313	04-04-27
Virginia	NELAP	460161	06-14-24
Wyoming	State	8TMS-L	06-30-24

Method Summary

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill Anti-Degradation

Job ID: 460-304810-1

Method	Method Description	Protocol	Laboratory
300.0	Anions, Ion Chromatography	EPA	EET EDI
245.1	Mercury (CVAA)	EPA	EET BUF
6020B	Metals (ICP/MS)	SW846	EET CLE
6020B	Metals (ICP/MS)	SW846	EET EDI
6020B	Metals (ICP/MS)	SW846	EET SAV
6020B	Metals (ICP/MS)	SW846	ELLE
120.1	Conductivity, Specific Conductance	EPA	EET EDI
2310B-2011	Acidity	SM	EET EDI
2320B-2011	Alkalinity, Total	SM	EET EDI
2540C-2015	Total Dissolved Solids (Dried at 180 °C)	SM	EET EDI
2540D-2015	Total Suspended Solids (Dried at 103-105°C)	SM	EET EDI
350.1	Nitrogen, Ammonia	EPA	EET EDI
351.2	Nitrogen, Total Kjeldahl	EPA	ELLE
410.4	COD	EPA	EET EDI
4500 O C-2016	Oxygen, Dissolved	SM	EET EDI
4500 P E-2011	Orthophosphate	SM	EET EDI
5210 B-2016	BOD, 5-Day	SM	EET EDI
9060A	Organic Carbon, Total (TOC)	SW846	EET EDI
SM4500 P E-2011	Phosphorus	SM	EET EDI
Total Nitrogen	Nitrogen, Total	EPA	EET EDI
Subcontract	Osomotic Pressure	None	Microbac
245.1	Preparation, Mercury	EPA	EET BUF
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	EET CLE
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	EET SAV
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	ELLE
3010A	Preparation, Total Metals	SW846	EET EDI
351.2	Nitrogen, Total Kjeldahl	EPA	ELLE
FILTRATION	Sample Filtration	None	EET CLE
FILTRATION	Sample Filtration	None	EET EDI
Filtration	Sample Filtration	None	ELLE
SM 4500 P B	Phosphorous, Total and Ortho	SM	EET EDI

Protocol References:

EPA = US Environmental Protection Agency

None = None

SM = "Standard Methods For The Examination Of Water And Wastewater"

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

EET CLE = Eurofins Cleveland, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

EET EDI = Eurofins Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

EET SAV = Eurofins Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Microbac = Marietta, OH, 158 Starlite Drive, Marietta, OH 45750

Sample Summary

Client: Heidelberg Materials Northeast LLC
Job ID: 460-304810-1
Project/Site: Rock Hill Anti-Degradation

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
460-304810-1	NPDES 001	Water	05/29/24 08:00	05/29/24 19:00
460-304810-2	Basin 1	Water	05/29/24 10:30	05/29/24 19:00
460-304810-3	Basin 2	Water	05/29/24 09:30	05/29/24 19:00
460-304810-4	Upstream	Water	05/29/24 11:00	05/29/24 19:00
460-304810-5	Clarifying Pond	Water	05/29/24 11:30	05/29/24 19:00

MICROBAC®

Microbac Laboratories Inc., - Marietta, OH

Client Project ID:

46011424

For:

Julie Gilmore

Eurofins Environment Testing Northeast, LLC

777 New Durham RD

Edison, NJ 08817

Project State of Origin: Pennsylvania

Project Requested Certification:

Microbac Laboratories Inc., - Marietta, OH	68-01670	PA Department of Environmental Protection

All test results meet the requirements of the QAPP and other applicable contract terms and conditions. Any exceptions are attached to this cover page or addressed in the method narratives presented in the report. All results for soil samples are reported on a 'dry-weight' basis unless specified otherwise. Analytical results for water and wastes are reported on a 'as received' basis unless specified otherwise. A statement of uncertainty for each analysis is available upon request. The reported results are related only to the samples analyzed as received. This laboratory report may be released as a hardcopy and in computer-readable form submitted electronically or on diskette. This laboratory report shall not be reproduced, except in full, without the written approval of Microbac Laboratories, Inc.

Laboratory Project Manager:

Michelle Taylor

Michelle Taylor

Project Manager

Michelle.Taylor@microbac.com

Authorized By:

Michelle Taylor

Michelle Taylor

Project Manager

Issued: 06/06/2024

MICROBAC®

Laboratory Report Number: M4F0127

Client Project ID: 46011424

Cooler Receipt Log

Cooler ID: Default Cooler Temp: 5.1°C

Cooler Inspection Checklist

Ice Present or not required?	Yes
Shipping containers sealed or not required?	Yes
Custody seals intact or not required?	Yes
Chain of Custody (COC) Present?	Yes
COC includes customer information?	Yes
Relinquished and received signature on COC?	Yes
Sample collector identified on COC?	Yes
Sample type identified on COC?	Yes
Correct type of Containers Received	No
Correct number of containers listed on COC?	Yes
Containers Intact?	Yes
COC includes requested analyses?	Yes
Enough sample volume for indicated tests received?	Yes
Sample labels match COC (Name, Date & Time?)	Yes
Samples arrived within hold time?	Yes
Correct preservatives on COC or not required?	Yes
Chemical preservations checked or not required?	Yes
Preservation checks meet method requirements?	Yes
VOA vials have zero headspace, or not recd.?	Yes

Laboratory Report Number: M4F0127

Client Project ID: 46011424

Sample Notes

PADEP 391-2000-008

A4 **Sample was received with head space.**

Osmotic Pressure

M4F0127-01	NPDES 001 (460-304810-1)	M4F0127-02	Basin 1 (460-304810-2)
M4F0127-03	Basin 2 (460-304810-3)	M4F0127-04	Upstream (460-304810-4)
M4F0127-05	Clarifying Pond (460-304810-5)		

MICROBAC®

Laboratory Report Number: M4F0127

Client Project ID: 46011424

Microbac Laboratories Inc., - Marietta, OH

CERTIFICATE OF ANALYSIS

Client ID:	NPDES 001 (460-304810-1)			**Collection Date:**	05/29/2024 08:00
Laboratory ID:	M4F0127-01			**Prep Date:**	06/05/2024 15:30
Matrix:	Aqueous			**Analyzed:**	06/05/2024 15:33
Batch / Sequence:	B4F0214 /	**Analytical Method:**	PADEP 391-2000-008	**Calibration:**	NA
Instrument:	OSMOMETER 5004	**Units:**	mOsm/kg	**File ID:**	OsmoticPressure_B4F0214_240605033320.xls
Analyst:	TTB	**Dilution:**	1		

Analyte	CAS Number	Result	MDL	RL	Flag	Qualifier
Osmotic Pressure		8.00	6.00	10.0		A4

MICROBAC®

Laboratory Report Number: M4F0127

Client Project ID: 46011424

Microbac Laboratories Inc., - Marietta, OH

CERTIFICATE OF ANALYSIS

Client ID:	Basin 1 (460-304810-2)			**Collection Date:**	05/29/2024 10:30
Laboratory ID:	M4F0127-02			**Prep Date:**	06/05/2024 15:30
Matrix:	Aqueous			**Analyzed:**	06/05/2024 15:33
Batch / Sequence:	B4F0214 /	**Analytical Method:**	PADEP 391-2000-008	**Calibration:**	NA
Instrument:	OSMOMETER 5004	**Units:**	mOsm/kg	**File ID:**	OsmoticPressure_B4F0214_240605033320.xls
Analyst:	TTB	**Dilution:**	1		

Analyte	CAS Number	Result	MDL	RL	Flag	Qualifier
Osmotic Pressure		**10.0**	6.00	10.0		A4

MICROBAC®

Laboratory Report Number: M4F0127

Client Project ID: 46011424

Microbac Laboratories Inc., - Marietta, OH

CERTIFICATE OF ANALYSIS

Client ID:	Basin 2 (460-304810-3)			**Collection Date:**	05/29/2024 09:30
Laboratory ID:	M4F0127-03			**Prep Date:**	06/05/2024 15:30
Matrix:	Aqueous			**Analyzed:**	06/05/2024 15:33
Batch / Sequence:	B4F0214 /	**Analytical Method:**	PADEP 391-2000-008	**Calibration:**	NA
Instrument:	OSMOMETER 5004	**Units:**	mOsm/kg	**File ID:**	OsmoticPressure_B4F0214_240605033320.xls
Analyst:	TTB	**Dilution:**	1		

Analyte	CAS Number	Result	MDL	RL	Flag	Qualifier
Osmotic Pressure		**10.0**	6.00	10.0		A4

MICROBAC®

Laboratory Report Number: M4F0127

Client Project ID: 46011424

Microbac Laboratories Inc., - Marietta, OH

CERTIFICATE OF ANALYSIS

Client ID:	Upstream (460-304810-4)			**Collection Date:**	05/29/2024 11:00
Laboratory ID:	M4F0127-04			**Prep Date:**	06/05/2024 15:30
Matrix:	Aqueous			**Analyzed:**	06/05/2024 15:33
Batch / Sequence:	B4F0214 /	**Analytical Method:**	PADEP 391-2000-008	**Calibration:**	NA
Instrument:	OSMOMETER 5004	**Units:**	mOsm/kg	**File ID:**	OsmoticPressure_B4F0214_240605033320.xls
Analyst:	TTB	**Dilution:**	1		

Analyte	CAS Number	Result	MDL	RL	Flag	Qualifier
Osmotic Pressure		**10.0**	6.00	10.0		A4

MICROBAC®

Laboratory Report Number: M4F0127

Client Project ID: 46011424

Microbac Laboratories Inc., - Marietta, OH

CERTIFICATE OF ANALYSIS

Client ID:	Clarifying Pond (460-304810-5)			**Collection Date:**	05/29/2024 11:30
Laboratory ID:	M4F0127-05			**Prep Date:**	06/05/2024 15:30
Matrix:	Aqueous			**Analyzed:**	06/05/2024 15:33
Batch / Sequence:	B4F0214 /	**Analytical Method:**	PADEP 391-2000-008	**Calibration:**	NA
Instrument:	OSMOMETER 5004	**Units:**	mOsm/kg	**File ID:**	OsmoticPressure_B4F0214_240605033320.xls
Analyst:	TTB	**Dilution:**	1		

Analyte	CAS Number	Result	MDL	RL	Flag	Qualifier
Osmotic Pressure		7.00	6.00	10.0		A4

Laboratory Report Number: M4F0127

Client Project ID: 46011424

Notes and Definitions

A4: Sample was received with head space.
MDL: Method Detection Limit
RL: Reporting Limit

MICROBAC®

Laboratory Report Number: M4F0127

Client Project ID: 46011424

METHOD BLANKS

Sample ID:	B4F0214-BLK1	**Prep Date:**	06/05/24 15:30	**Matrix:**	Aqueous
Instrument:	OSMOMETER 5004	**Analyzed:**	06/05/24 15:33	**Method:**	PADEP 391-2000-008
File ID:	OsmoticPressure_B4F(	**Sequence:**		**Analyst:**	TTB
Batch:	B4F0214	**Units:**	mOsm/kg	**Calibration:**	

Analyte	Result	MDL	RL	Dilution	Flag	Q
Osmotic Pressure	6.00	6.00	10.0	1	U	

* - Detected in the associated method Blank at a concentration >= RL

MICROBAC®

Laboratory Report Number: M4F0127

Client Project ID: 46011424

BLANK SPIKE / DUPLICATE (BS/BSD)

Method:	PADEP 391-2000-008		**Blank Spike**	**Duplicate**
Batch:	B4F0214	**Spike ID:**	B4F0214-BS1	B4F0214-BSD1
Analyst:	TTB	**Prepared:**	06/05/24 15:30	06/05/24 15:30
Matrix:	Aqueous	**Analyzed:**	06/05/24 15:33	06/05/24 15:33
Units:	mOsm/kg	**File ID:**	OsmoticPressure_B4F0214_2406	OsmoticPressure_B4F0214_2406
Instrument:	OSMOMETER 5004	**Initial/Final:**	1mL/1mL	1mL/1mL
Calibration:				

Analyte	BS Spiked	BS Found	BS %Rec	BSD Spiked	BSD Found	BSD %Rec	%RPD	%Rec Limts	RPD Limit	Q
Osmotic Pressure	290	294	101	290	294	101	0.00	90 - 110	20	

* - Does not meet %Rec acceptance criteria.
- Does not meet RPD acceptance criteria.

Eurofins Edison
777 New Durham Road
Edison, NJ 08817
Phone: 732-549-3900 Fax: 732-549-3679

Chain of Custody Record

eurofins | Environment Testing

6/13/2024

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Gilmore, Julie L	Carrier Tracking No(s):	COC No: 460-71363.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Julie.Gilmore@et.eurofinsus.com	State of Origin: Pennsylvania	Page: Page 1 of 1
Company: Microbac Laboratories, Inc.		Accreditations Required (See note): NELAP - Pennsylvania		Job #: 460-304810-1
Address: 158 Starlite Drive, ,	Due Date Requested: 6/10/2024	Analysis Requested		Preservation Codes:
City: Marietta	TAT Requested (days):			
State, Zip: OH, 45750				
Phone: 800-373-4071(Tel)	PO #:			
Email:	WO #:			
Project Name: Rock Hill Anti-Degradation	Project #: 46011424			Other:
Site:	SSOW#:			

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	SUB (Osomotic Pressure)/ Osomotic Pressure	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
NPDES 001 (460-304810-1)	5/29/24	08:00 Eastern		Water			X	1	
Basin 1 (460-304810-2)	5/29/24	10:30 Eastern		Water			X	1	
Basin 2 (460-304810-3)	5/29/24	09:30 Eastern		Water			X	1	
Upstream (460-304810-4)	5/29/24	11:00 Eastern		Water			X	1	
Clarifying Pond (460-304810-5)	5/29/24	11:30 Eastern		Water			X	1	

M 4 F 0 1 2 7

Eurofins Environment Testing Northeast, LLC
Rec'd: 06/04/2024 10:50
By: Stephanie Murphy Temp: 5.1 (Signature)

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Northeast, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Northeast, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Northeast, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Northeast, LLC.

Possible Hazard Identification	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 1	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time: 6/3/24 1900	Company EET	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by: Stephanie Murphy	Date/Time: 6/4/2024 1050	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 5.1

MICROBAC®

Work Order # M4A0127

COOLER TEMP >6° C LOG

SAMPLE ID	Bottle 1 °C	Bottle 2 °C	Bottle 3 °C	Bottle 4 °C	Bottle 5 °C	Bottle 6 °C

6/4/2024 SM

pH Lot # 10174

pH Exceptions

SAMPLE ID	Bottle 1	Bottle 2	Bottle 3	Bottle 4	Bottle 5	Bottle 6

6/4/2024 SM

PRESERVATIVE EXCEPTIONS

NONE

AS NOTED

6/4/2024 SM

Document Control # 1957
Last 04-10-2019

Issued to: Document Master File

Eurofins Edison
777 New Durham Road
Edison, NJ 08817
Phone: 732-549-3900 Fax: 732-549-3679

450-KOP

Chain of Custody Record

eurofins

Client Information	Sampler	Lab PM: Gilmore, Julie L	Carrier Tracking No(s):	COC No: 460-182307 115848.1
Client Contact: Andrew Gutshall	Phone:	E-Mail: Julie.Gilmore@et.eurofinsus.com	State of Origin:	Page: Page 1 of 2
Company: Heidelberg Materials Northeast LLC	PWSID:			Job #: 304810
Address: 7660 Imperial Way	Due Date Requested:			
City: Allentown	TAT Requested (days):			
State, Zip: PA, 18195	Compliance Project: Δ Yes Δ No			
Phone:	PO #: Purchase Order not required			
Email: andrew.gutshall@heidelbergmaterials.com	WO #:			
Project Name: Rock Hill Anti-Degradation	Project #: 46011424			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:
N None
D HNO3
S H2SO4

SHORT HOLD

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020B (MOD) Single Element 6020B Metals List			6020B (MOD) Single Element 6020B Metals List			351.2 Local Method	6020B Dissolved Cd/Fe/Zn	6020B (MOD) Total Fe	350.1 410.4, 4500_P_E	120.1, 9040C, SM2310B	350.1 4500_P_E, 6020B	2320B (MOD) Alkalinity	6020B (MOD) Total Custom Metals		9060A TOC	2540D, SM5210B_Calc	2540C TDS	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	D	S	N	D	S	N	N	D	N	N	N	N	N	D	S	N	N		
NPDES 001	5/29/24	0800	G	Water																						1
Basin 1	5/29/24	1030	G	Water																						2
Basin 2	5/29/24	0930	G	Water																						3
Upstream	5/29/24	1106	G	Water																						4
Clarifying Pond	5/29/24	1130	G	Water																						5

460-304810 Chain of Custody

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I II III IV Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		5/29/24			5/29/24 1307	EET-KOP
2		5-29-24 1800	EET-KOP		5/29	EEA
3		5/29 1900	EEA		5/29/24 1900	EEA

Custody Seals Intact: Δ Yes Δ No

Custody Seal No.

Cooler Temperature(s) °C and Other Remarks:

Ver 04/02/2024

Eurofins Edison
777 New Durham Road
Edison NJ 08817
Phone: 732-549-3900 Fax: 732-549-3679

450-KOP

Chain of Custody Record

28
23
22
KOP 2

eurofins

Client Information	Sampler	Lab PM: Gilmore, Julie L	Carrier Tracking No(s):	COC No: 460-182307-115848.2
Client Contact: Andrew Gutshall	Phone:	E-Mail: Julie.Gilmore@et.eurofinsus.com	State of Origin:	Page: Page 2 of 2
Company: Heidelberg Materials Northeast LLC	PWSID:	Analysis Requested		Job #: 30480

Address: 7660 Imperial Way	Due Date Requested:	Preservation Codes: N None; D HNO3
City: Allentown	TAT Requested (days):	
State, Zip: PA, 18195	Compliance Project: Δ Yes Δ No	
Phone:	PO #: Purchase Order not required	
Email: andrew.gutshall@heidelbergmaterials.com	WO #:	
Project Name: Rock Hill Anti-Degradation	Project #: 46011424	
Site:	SSOW#:	Other

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	300_ORGFM_28D, 300_ORGFMS	245.1 Local Method	6020B Total Aluminum	46500_O_C Dissolved Oxygen	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	D	D			
NPDES 001	5/29/24	0800	G	Water			1	1	1	1		-1
Basin 1	5/29/24	1030	G	Water			1	1	1	1		-2
Basin 2	5/29/24	0930	G	Water			1	1	1	1		-3
Upstream	5/29/24	1100	G	Water			1	1	1	1		-4
Clarifying Pond	5/29/24	1130	G	Water			1	1	1	1		-5

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I II, III IV Other (specify)

Special Instructions/QC Requirements.

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Date/Time	Company		Date/Time	Company
Relinquished by:	5/29/24		Received by:	5/29/24 1307	ETN-KOP
Relinquished by:	5-29-24 1800	ETN-KOP	Received by:	5/29	ETA
Relinquished by:	5/29 1800	ETA	Received by:	5/29/24 1900	ETA

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.	Cooler Temperature(s) °C and Other Remarks:

Ver 04/02/2024

TestAmerica Edison
Receipt Temperature and pH Log

Job Number: 304810

Number of Coolers: 3 IR Gun #: Kop-2

Cooler Temperatures

	RAW	CORRECTED		RAW	CORRECTED		RAW	CORRECTED
Cooler #1:	2.6 °C	2.6 °C	Cooler #4:	°C	°C	Cooler #7:	°C	°C
Cooler #2:	2.3 °C	2.3 °C	Cooler #5:	°C	°C	Cooler #8:	°C	°C
Cooler #3:	2.2 °C	2.2 °C	Cooler #6:	°C	°C	Cooler #9:	°C	°C

TALS Sample Number	Ammonia (pH<2)	COD (pH<2)	Nitrate Nitrite (pH<2)	Metals* (pH<2)	Hardness (pH<2)	Pest (pH 5-9)	EPH or QAM (pH<2)	Phenols (pH<2)	Sulfide (pH>9)	TKN (pH<2)	TOC (pH<2)	Total Cyanide (pH>12)	Total Phos (pH<2)	Other	Other
1	<2	<2		<2						<2	<2		<2		
2	<2	<2		<2						<2	<2		<2		
3	<2	<2		<2						<2	<2		<2		
4	<2	<2		<2						<2	<2		<2		
5	<2	<2		<2						<2	<2		<2		

If pH adjustments are required record the information below.

Sample No(s). adjusted: _____

Preservative Name/Conc.: _____ Volume of Preservative used (ml): _____

Lot # of Preservative(s): _____ Expiration Date: _____

The appropriate Project Manager and Department Manager should be notified about the samples which were pH adjusted.

Samples for Metal analysis which are out of compliance must be acidified at least 24 hours prior to analysis.

Initials: HD Date: 5/29/24

Eurofins Edison
777 New Durham Road
Edison, NJ 08817
Phone: 732-549-3900 Fax: 732-549-3679

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Gilmore, Julie L	Carrier Tracking No(s):	COC No: 460-71333.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Julie.Gilmore@et.eurofinsus.com	State of Origin: Pennsylvania	Page: Page 1 of 1
Company: Eurofins Lancaster Laboratories Environm		Accreditations Required (See note): NELAP - Pennsylvania		Job #: 460-304810-1
Address: 2425 New Holland Pike, ,	Due Date Requested: 6/12/2024			
City: Lancaster	TAT Requested (days):			
State, Zip: PA, 17601				
Phone: 717-656-2300(Tel)	PO #:			
Email:	WO #:			
Project Name: Rock Hill	Project #: 46011424			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:
-

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020B/3005A (MOD) Total Fe	6020B/Filtration_ME Dissolved Cd/Fe/Zn	351.2/361.2_Prep	Total Number of containers	Special Instructions/Note:
NPDES 001 (460-304810-1)	5/29/24	08:00 Eastern		Water			X	X	X	3	
Basin 1 (460-304810-2)	5/29/24	10:30 Eastern		Water			X	X	X	3	
Basin 2 (460-304810-3)	5/29/24	09:30 Eastern		Water			X	X	X	3	
Upstream (460-304810-4)	5/29/24	11:00 Eastern		Water			X	X	X	3	
Clarifying Pond (460-304810-5)	5/29/24	11:30 Eastern		Water			X	X	X	3	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Northeast, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Northeast, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Northeast, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Northeast, LLC.

Possible Hazard Identification	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 1	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
1		5/30/24 1626	ET		5/30/24 1626	ET
2		5/30/24 1925	ET			
3					5/30/24 1925	ET

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: raw 1.9 corr: 1.9

777 New Durham Road
Edison, NJ 08817
Phone: 732-549-3900 Fax: 732-549-3679

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Gilmore, Julie L	Carrier Tracking No(s):	COC No: 460-71350.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Julie.Gilmore@et.eurofinsus.com	State of Origin: Pennsylvania	Page: Page 1 of 1
Company: Eurofins Environment Testing Northeast,		Accreditations Required (See note): NELAP - Pennsylvania		Job #: 460-304810-1
Address: 10 Hazelwood Drive, ,	Due Date Requested: 6/7/2024			
City: Amherst	TAT Requested (days):			
State, Zip: NY, 14228-2298				
Phone: 716-691-2600(Tel) 716-691-7991(Fax)	PO #:			
Email:	WO #:			
Project Name: Rock Hill Anti-Degradation	Project #: 46011424			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:
-

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	245.1/245.1_Prep	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
NPDES 001 (460-304810-1)	5/29/24	08:00 Eastern		Water			X	1	
Basin 1 (460-304810-2)	5/29/24	10:30 Eastern		Water			X	1	
Basin 2 (460-304810-3)	5/29/24	09:30 Eastern		Water			X	1	
Upstream (460-304810-4)	5/29/24	11:00 Eastern		Water			X	1	
Clarifying Pond (460-304810-5)	5/29/24	11:30 Eastern		Water			X	1	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Northeast, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Northeast, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Northeast, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Northeast, LLC.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 1	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	5/31/24 1900	EEN			
Relinquished by:	Date/Time:	Company	Received by:	Date/Time: 6-1-24 1030	Company FAB
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 2.1 ICE

Login Sample Receipt Checklist

Client: Heidelberg Materials Northeast LLC

Job Number: 460-304810-1

Login Number: 304810

List Source: Eurofins Edison

List Number: 1

Creator: Thundathorn, Sukanan 1

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	False	Refer to Job Narrative for details.
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	N/A	
Samples do not require splitting or compositing.	N/A	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Heidelberg Materials Northeast LLC

Job Number: 460-304810-1

Login Number: 304810
List Number: 5
Creator: Yeager, Brian A

List Source: Eurofins Buffalo
List Creation: 06/03/24 11:58 AM

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	2.7 ICE
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	True	

Login Sample Receipt Checklist

Client: Heidelberg Materials Northeast LLC

Job Number: 460-304810-1

Login Number: 304810
List Number: 2
Creator: Metzger, Katherine A

List Source: Eurofins Lancaster Laboratories Environment Testing, LLC
List Creation: 05/30/24 08:55 PM

Question	Answer	Comment
The cooler's custody seal is intact.	N/A	Not present
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature acceptable,where thermal pres is required(</=6C, not frozen).	True	
Cooler Temperature is recorded.	True	
WV:Container Temp acceptable,where thermal pres is required (</=6C, not frozen).	N/A	
WV: Container Temperature is recorded.	N/A	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the containers received and the COC.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
There is sufficient vol. for all requested analyses.	True	
Is the Field Sampler's name present on COC?	False	Received project as a subcontract.
Sample custody seals are intact.	N/A	Not present.
VOA sample vials do not have headspace >6mm in diameter (none, if from WV)?	N/A	

Login Sample Receipt Checklist

Client: Heidelberg Materials Northeast LLC

Job Number: 460-304810-1

Login Number: 304810
List Number: 4
Creator: Munro, Caroline

List Source: Eurofins Savannah
List Creation: 06/01/24 11:14 AM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Lab Results

June 12, 2024

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Katie Murray
Heidelberg Materials Northeast LLC
7660 Imperial Way
Allentown, Pennsylvania 18195

Generated 6/27/2024 4:39:22 PM

JOB DESCRIPTION

Rock Hill Anti-Degradation

JOB NUMBER

460-305725-1

Eurofins Edison
777 New Durham Road
Edison NJ 08817

See page two for job notes and contact information.

my EOL

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing Northeast, LLC Project Manager.

Authorization

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Qualifiers

HPLC/IC

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Metals

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

General Chemistry

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
H	Sample was prepped or analyzed beyond the specified holding time. This does not meet regulatory requirements.
H3	Sample was received and analyzed past holding time. This does not meet regulatory requirements.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job Narrative
460-305725-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

- Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

The method detection limit (MDL) is the lowest value detectable by the laboratory for a given analyte as determined by the MDL procedure detailed in EPA 40 CFR 136. Reported MDL values are adjusted for any dilutions and percent moisture (as applicable). The lab is unable to report values below the MDL.

Receipt
The samples were received on 6/12/2024 7:00 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 3 coolers at receipt time were 2.3°C, 2.4°C and 3.4°C.

Note: All samples which require thermal preservation are considered acceptable if the arrival temperature is within 2C of the required temperature or method specified range. For samples with a specified temperature of 4C, samples with a temperature ranging from just above freezing temperature of water to 6C shall be acceptable. Samples that are hand delivered immediately following collection may not meet these criteria, however they will be deemed acceptable according to NELAC standards, if there is evidence that the chilling process has begun, such as arrival on ice, etc.

Subcontract Work
Method Osomotic Pressure: This method was subcontracted to Microbac Laboratories, Inc. The subcontract laboratory certification is different from that of the facility issuing the final report. The subcontract report is appended in its entirety.

Method 300.0 - Anions, Ion Chromatography
Samples NPDES 001 (460-305725-1), Basin 1 (460-305725-2), Upstream (460-305725-4) and Clarifying Pond (460-305725-5) were analyzed for Anions, Ion Chromatography. The samples were analyzed on 6/14/2024.

Method 300.0 - Anions, Ion Chromatography
Samples NPDES 001 (460-305725-1), Basin 1 (460-305725-2), Upstream (460-305725-4) and Clarifying Pond (460-305725-5) were analyzed for Anions, Ion Chromatography. The samples were analyzed on 6/14/2024.

Method 245.1 - Mercury (CVAA)
Samples NPDES 001 (460-305725-1), Basin 1 (460-305725-2), Upstream (460-305725-4) and Clarifying Pond (460-305725-5) were analyzed for Mercury (CVAA). The samples were prepared and analyzed on 6/19/2024.

Method 6020B - Metals (ICP/MS)
Samples NPDES 001 (460-305725-1), Basin 1 (460-305725-2), Upstream (460-305725-4) and Clarifying Pond (460-305725-5) were analyzed for Metals (ICP/MS). The samples were prepared on 6/19/2024 and analyzed on 6/20/2024.

Method 6020B - Metals (ICP/MS) - Dissolved
Samples NPDES 001 (460-305725-1), Basin 1 (460-305725-2), Upstream (460-305725-4) and Clarifying Pond (460-305725-5) were analyzed for Metals (ICP/MS) - Dissolved. The samples were prepared on 6/14/2024, 6/17/2024 and 6/18/2024 and analyzed on 6/14/2024, 6/18/2024 and 6/20/2024.

The following samples were not filtered within 15 minutes of sample collection as required by the method: NPDES 001 (460-305725-1), Basin 1 (460-305725-2), Upstream (460-305725-4) and Clarifying Pond (460-305725-5). The sample(s) was filtered prior to analysis at the laboratory, and the results have been reported. This does not meet regulatory requirements.

The following samples were not filtered and preserved within 15 minutes of sample collection in accordance with 40 CFR Part 136 Table II, Footnote 7, method 6020B. The samples were filtered prior to analysis at the laboratory.

NPDES 001 (460-305725-1), Basin 1 (460-305725-2), Upstream (460-305725-4), Clarifying Pond (460-305725-5), (460-305725-D-1 DU) and (460-305725-D-1 MS)

The following samples were not filtered within 15 minutes of sample collection as required by the method: NPDES 001 (460-305725-1), Basin 1 (460-305725-2), Upstream (460-305725-4) and Clarifying Pond (460-305725-5). The sample(s) was filtered prior to analysis at the laboratory, and the results have been reported. This does not meet regulatory requirements.

Method 6020B - Metals (ICP/MS) - Total Recoverable
Samples NPDES 001 (460-305725-1), Basin 1 (460-305725-2), Upstream (460-305725-4) and Clarifying Pond (460-305725-5) were analyzed for Metals (ICP/MS) - Total Recoverable. The samples were prepared on 6/17/2024 and 6/18/2024 and analyzed on 6/17/2024, 6/18/2024, 6/19/2024 and 6/21/2024.

Method 120.1 - Conductivity, Specific Conductance
Samples NPDES 001 (460-305725-1), Basin 1 (460-305725-2), Upstream (460-305725-4) and Clarifying Pond (460-305725-5) were analyzed for Conductivity, Specific Conductance. The samples were analyzed on 6/20/2024.

Method 2320B-2011 - Alkalinity, Total
Samples NPDES 001 (460-305725-1), Basin 1 (460-305725-2), Upstream (460-305725-4) and Clarifying Pond (460-305725-5) were analyzed for Alkalinity, Total. The samples were analyzed on 6/22/2024.

Method 2540C-2015 - Total Dissolved Solids (Dried at 180 °C)
Samples NPDES 001 (460-305725-1), Basin 1 (460-305725-2), Upstream (460-305725-4) and Clarifying Pond (460-305725-5) were analyzed for Total Dissolved Solids (Dried at 180 °C). The samples were analyzed on 6/17/2024.

Method 2540D-2015 - Total Suspended Solids (Dried at 103-105°C)
Samples NPDES 001 (460-305725-1), Basin 1 (460-305725-2), Upstream (460-305725-4) and Clarifying Pond (460-305725-5) were analyzed for Total Suspended Solids (Dried at 103-105°C). The samples were analyzed on 6/19/2024.

Method 350.1 - Nitrogen, Ammonia
Samples NPDES 001 (460-305725-1), Basin 1 (460-305725-2), Upstream (460-305725-4) and Clarifying Pond (460-305725-5) were analyzed for Nitrogen, Ammonia. The samples were analyzed on 6/20/2024.

Method 350.1 - Nitrogen, Ammonia - Dissolved
Samples NPDES 001 (460-305725-1), Basin 1 (460-305725-2), Upstream (460-305725-4) and Clarifying Pond (460-305725-5) were analyzed for Nitrogen, Ammonia - Dissolved. The samples were analyzed on 6/20/2024 and 6/22/2024.

Method 351.2 - Nitrogen, Total Kjeldahl
Samples NPDES 001 (460-305725-1), Basin 1 (460-305725-2), Upstream (460-305725-4) and Clarifying Pond (460-305725-5) were analyzed for Nitrogen, Total Kjeldahl. The samples were prepared on 6/18/2024, 6/20/2024 and 6/21/2024 and analyzed on 6/18/2024, 6/21/2024 and 6/24/2024.

Method 410.4 - COD
Samples NPDES 001 (460-305725-1), Basin 1 (460-305725-2), Upstream (460-305725-4) and Clarifying Pond (460-305725-5) were analyzed for COD. The samples were analyzed on 6/20/2024.

Method 4500 O C-2016 - Oxygen, Dissolved
Samples NPDES 001 (460-305725-1), Basin 1 (460-305725-2), Upstream (460-305725-4) and Clarifying Pond (460-305725-5) were analyzed for Oxygen, Dissolved. The samples were analyzed on 6/14/2024.

This analysis is normally performed in the field and has a method-defined holding time of 15 minutes. The following samples has been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe: NPDES 001 (460-305725-1), Basin 1 (460-305725-2), Upstream (460-305725-4) and Clarifying Pond (460-305725-5).

Method SM4500 P E-2011 - Phosphorus
Samples NPDES 001 (460-305725-1), Basin 1 (460-305725-2), Upstream (460-305725-4) and Clarifying Pond (460-305725-5) were analyzed for Phosphorus. The samples were prepared and analyzed on 6/25/2024.

Job ID: 460-305725-1 (Continued) Eurofins Edison

Method SM4500 P E-2011 - Phosphorus - Dissolved
Samples NPDES 001 (460-305725-1), Basin 1 (460-305725-2), Upstream (460-305725-4) and Clarifying Pond (460-305725-5) were analyzed for Phosphorus - Dissolved. The samples were prepared and analyzed on 6/27/2024.

Method 4500 P E-2011 - Orthophosphate
Samples NPDES 001 (460-305725-1), Basin 1 (460-305725-2), Upstream (460-305725-4) and Clarifying Pond (460-305725-5) were analyzed for Orthophosphate. The samples were analyzed on 6/13/2024.

Method 4500 P E-2011 - Orthophosphate - Dissolved
Samples NPDES 001 (460-305725-1), Basin 1 (460-305725-2), Upstream (460-305725-4) and Clarifying Pond (460-305725-5) were analyzed for Orthophosphate - Dissolved. The samples were analyzed on 6/13/2024.

Method 9060A - Organic Carbon, Total (TOC)
Samples NPDES 001 (460-305725-1), Basin 1 (460-305725-2), Upstream (460-305725-4) and Clarifying Pond (460-305725-5) were analyzed for Organic Carbon, Total (TOC). The samples were analyzed on 6/18/2024.

Method Total Nitrogen - Nitrogen, Total
Samples NPDES 001 (460-305725-1), Basin 1 (460-305725-2), Upstream (460-305725-4) and Clarifying Pond (460-305725-5) were analyzed for Nitrogen, Total. The samples were analyzed on 6/22/2024 and 6/25/2024.

Method 2310B-2011 - Acidity
Samples NPDES 001 (460-305725-1), Basin 1 (460-305725-2), Upstream (460-305725-4) and Clarifying Pond (460-305725-5) were analyzed for Acidity. The samples were analyzed on 6/19/2024.

Method 5210 B-2016 - BOD, 5-Day
Samples NPDES 001 (460-305725-1), Basin 1 (460-305725-2), Upstream (460-305725-4) and Clarifying Pond (460-305725-5) were analyzed for BOD, 5-Day. The samples were analyzed on 6/13/2024.

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill Anti-Degradation

Job ID: 460-305725-1

Client Sample ID: NPDES 001

Date Collected: 06/12/24 08:30
Date Received: 06/12/24 19:00

Lab Sample ID: 460-305725-1

Matrix: Water

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide	0.054	U	0.32	0.054	mg/L			06/14/24 08:16	1
Nitrate as N	**0.073**	**J**	0.16	0.070	mg/L			06/14/24 08:16	1
Chloride	**2.89**		0.32	0.039	mg/L			06/14/24 08:16	1
Nitrate Nitrite as N	**0.073**	**J**	0.16	0.070	mg/L			06/14/24 08:16	1
Nitrite as N	0.047	U	0.16	0.047	mg/L			06/14/24 08:16	1
Sulfate	**5.89**		0.48	0.095	mg/L			06/14/24 08:16	1

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000042	U	0.00020	0.000042	mg/L		06/19/24 10:00	06/19/24 16:44	1

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**8.3**		4.0	0.91	ug/L		06/19/24 08:06	06/20/24 19:02	1
Boron	**66.6**	**J**	80.0	30.4	ug/L		06/19/24 08:06	06/20/24 19:02	1
Calcium	**25400**		500	53.6	ug/L		06/19/24 08:06	06/20/24 19:02	1
Copper	**3.9**	**J**	4.0	2.5	ug/L		06/19/24 08:06	06/20/24 19:02	1
Lead	**1.2**		1.2	0.84	ug/L		06/19/24 08:06	06/20/24 19:02	1
Magnesium	**11100**		200	46.9	ug/L		06/19/24 08:06	06/20/24 19:02	1
Manganese	**167**		8.0	1.5	ug/L		06/19/24 08:06	06/20/24 19:02	1
Nickel	**1.4**	**J**	4.0	0.91	ug/L		06/19/24 08:06	06/20/24 19:02	1
Potassium	**871**		200	112	ug/L		06/19/24 08:06	06/20/24 19:02	1
Selenium	0.59	U	2.5	0.59	ug/L		06/19/24 08:06	06/20/24 19:02	1
Sodium	**4830**		500	219	ug/L		06/19/24 08:06	06/20/24 19:02	1
Strontium	**72.5**		4.0	0.50	ug/L		06/19/24 08:06	06/20/24 19:02	1
Zinc	**12.2**	**J**	16.0	6.5	ug/L		06/19/24 08:06	06/20/24 19:02	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**230**		100	35.0	ug/L		06/17/24 06:41	06/18/24 02:00	1
Iron	**158**		50.0	20.0	ug/L		06/18/24 21:00	06/19/24 10:46	1
Lithium	1.7	U	8.0	1.7	ug/L		06/18/24 14:00	06/19/24 18:29	1

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	19.5	U	40.0	19.5	ug/L		06/14/24 22:17	06/14/24 23:31	1
Cadmium	0.15	U	0.50	0.15	ug/L		06/18/24 07:50	06/18/24 14:59	1
Lithium	1.7	U	8.0	1.7	ug/L		06/17/24 14:00	06/20/24 13:32	1
Arsenic	0.89	U	2.0	0.89	ug/L		06/14/24 22:17	06/14/24 23:31	1
Iron	**55.7**		50.0	20.0	ug/L		06/18/24 07:50	06/18/24 14:59	1
Calcium	**24800**		500	53.6	ug/L		06/14/24 22:17	06/14/24 23:31	1
Zinc	4.0	U	10.0	4.0	ug/L		06/18/24 07:50	06/18/24 14:59	1
Copper	2.5	U	4.0	2.5	ug/L		06/14/24 22:17	06/14/24 23:31	1
Iron	58.2	U	120	58.2	ug/L		06/14/24 22:17	06/14/24 23:31	1
Lead	0.84	U F1	1.2	0.84	ug/L		06/14/24 22:17	06/14/24 23:31	1
Magnesium	**10500**		200	46.9	ug/L		06/14/24 22:17	06/14/24 23:31	1
Manganese	**1.8**	**J**	8.0	1.5	ug/L		06/14/24 22:17	06/14/24 23:31	1
Nickel	0.91	U	4.0	0.91	ug/L		06/14/24 22:17	06/14/24 23:31	1

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill Anti-Degradation

Job ID: 460-305725-1

Client Sample ID: NPDES 001

Date Collected: 06/12/24 08:30
Date Received: 06/12/24 19:00

Lab Sample ID: 460-305725-1

Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Resistivity (EPA 120.1)	**0.00466**		0.000100	0.000100	Mohm-cm			06/20/24 17:00	1
Specific Conductance (EPA 120.1)	**215**		1.00	1.00	umhos/cm			06/20/24 17:00	1
Acidity (SM 2310B-2011)	20.0	U	20.0	20.0	mg/L			06/19/24 15:26	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-2011)	**99.5**		5.0	5.0	mg/L			06/22/24 10:11	1
Carbonate Alkalinity as CaCO3 (SM 2320B-2011)	5.0	U	5.0	5.0	mg/L			06/22/24 10:11	1
Alkalinity as CaCO3 to pH 4.5 (SM 2320B-2011)	**99.5**		5.0	5.0	mg/L			06/22/24 10:11	1
Total Dissolved Solids (SM 2540C-2015)	**130**		2.5	2.5	mg/L			06/17/24 11:07	1
Total Suspended Solids (SM 2540D-2015)	**6.3**		2.5	2.5	mg/L			06/19/24 07:40	1
Ammonia (EPA 350.1)	0.050	U	0.10	0.050	mg/L			06/20/24 09:39	1
Total Kjeldahl Nitrogen (EPA 351.2)	0.50	U	1.0	0.50	mg/L		06/20/24 15:35	06/21/24 12:31	1
Chemical Oxygen Demand (EPA 410.4)	**7.7**	**J**	10.0	3.3	mg/L			06/20/24 19:01	1
Oxygen, Dissolved (SM 4500 O C-2016)	**6.1**	**H H3**	1.0	1.0	mg/L			06/14/24 11:50	1
Orthophosphate as P (SM 4500 P E-2011)	0.0050	U	0.030	0.0050	mg/L			06/13/24 13:15	1
Carbonaceous Biochemical Oxygen Demand 5 (SM 5210 B-2016)	1.0	U	1.0	1.0	mg/L			06/13/24 16:45	1
Total Organic Carbon (SW846 9060A)	**2.0**		1.0	0.53	mg/L			06/18/24 14:38	1
Phosphorus as PO4 (SM4500 P E-2011)	**0.073**	**J F1**	0.090	0.071	mg/L		06/25/24 09:30	06/25/24 14:30	1
Phosphorus as P (SM4500 P E-2011)	**0.024**	**J**	0.030	0.023	mg/L		06/25/24 09:30	06/25/24 14:30	1
Nitrogen, Total (EPA Total Nitrogen)	0.50	U	0.50	0.50	mg/L			06/25/24 06:26	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (EPA 350.1)	0.050	U	0.10	0.050	mg/L			06/20/24 09:46	1
Orthophosphate as P (SM 4500 P E-2011)	0.0050	U	0.030	0.0050	mg/L			06/13/24 13:35	1
Phosphorus as PO4 (SM4500 P E-2011)	**0.22**		0.090	0.071	mg/L		06/27/24 11:52	06/27/24 15:08	1
Phosphorus as P (SM4500 P E-2011)	**0.071**		0.030	0.023	mg/L		06/27/24 11:52	06/27/24 15:08	1

Client Sample ID: Basin 1

Date Collected: 06/12/24 11:00
Date Received: 06/12/24 19:00

Lab Sample ID: 460-305725-2

Matrix: Water

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide	0.054	U	0.32	0.054	mg/L			06/14/24 08:31	1
Nitrate as N	0.070	U	0.16	0.070	mg/L			06/14/24 08:31	1
Chloride	**3.91**		0.32	0.039	mg/L			06/14/24 08:31	1
Nitrate Nitrite as N	0.070	U	0.16	0.070	mg/L			06/14/24 08:31	1
Nitrite as N	0.047	U	0.16	0.047	mg/L			06/14/24 08:31	1
Sulfate	**3.63**		0.48	0.095	mg/L			06/14/24 08:31	1

Client Sample ID: Basin 1

Date Collected: 06/12/24 11:00
Date Received: 06/12/24 19:00

Lab Sample ID: 460-305725-2

Matrix: Water

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000042	U	0.00020	0.000042	mg/L		06/19/24 10:00	06/19/24 16:45	1

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**5.0**		4.0	0.91	ug/L		06/19/24 08:06	06/20/24 19:05	1
Boron	**83.9**		80.0	30.4	ug/L		06/19/24 08:06	06/20/24 19:05	1
Calcium	**26100**		500	53.6	ug/L		06/19/24 08:06	06/20/24 19:05	1
Copper	2.5	U	4.0	2.5	ug/L		06/19/24 08:06	06/20/24 19:05	1
Lead	0.84	U	1.2	0.84	ug/L		06/19/24 08:06	06/20/24 19:05	1
Magnesium	**12300**		200	46.9	ug/L		06/19/24 08:06	06/20/24 19:05	1
Manganese	**211**		8.0	1.5	ug/L		06/19/24 08:06	06/20/24 19:05	1
Nickel	0.91	U	4.0	0.91	ug/L		06/19/24 08:06	06/20/24 19:05	1
Potassium	**924**		200	112	ug/L		06/19/24 08:06	06/20/24 19:05	1
Selenium	0.59	U	2.5	0.59	ug/L		06/19/24 08:06	06/20/24 19:05	1
Sodium	**5740**		500	219	ug/L		06/19/24 08:06	06/20/24 19:05	1
Strontium	**71.7**		4.0	0.50	ug/L		06/19/24 08:06	06/20/24 19:05	1
Zinc	**31.7**		16.0	6.5	ug/L		06/19/24 08:06	06/20/24 19:05	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	35.0	U	100	35.0	ug/L		06/17/24 06:41	06/18/24 01:58	1
Iron	**681**		50.0	20.0	ug/L		06/18/24 21:00	06/19/24 10:49	1
Lithium	1.7	U	8.0	1.7	ug/L		06/18/24 14:00	06/19/24 18:37	1

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	19.5	U	40.0	19.5	ug/L		06/14/24 22:17	06/14/24 23:36	1
Cadmium	0.15	U	0.50	0.15	ug/L		06/18/24 07:50	06/18/24 15:17	1
Lithium	1.7	U	8.0	1.7	ug/L		06/17/24 14:00	06/20/24 13:34	1
Arsenic	0.89	U	2.0	0.89	ug/L		06/14/24 22:17	06/14/24 23:36	1
Iron	**76.3**		50.0	20.0	ug/L		06/18/24 07:50	06/18/24 15:17	1
Calcium	**25900**		500	53.6	ug/L		06/14/24 22:17	06/14/24 23:36	1
Zinc	**14.2**		10.0	4.0	ug/L		06/18/24 07:50	06/18/24 15:17	1
Copper	2.5	U	4.0	2.5	ug/L		06/14/24 22:17	06/14/24 23:36	1
Iron	**70.2**	**J**	120	58.2	ug/L		06/14/24 22:17	06/14/24 23:36	1
Lead	0.84	U	1.2	0.84	ug/L		06/14/24 22:17	06/14/24 23:36	1
Magnesium	**11600**		200	46.9	ug/L		06/14/24 22:17	06/14/24 23:36	1
Manganese	**85.5**		8.0	1.5	ug/L		06/14/24 22:17	06/14/24 23:36	1
Nickel	0.91	U	4.0	0.91	ug/L		06/14/24 22:17	06/14/24 23:36	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Resistivity (EPA 120.1)	**0.00429**		0.000100	0.000100	Mohm-cm			06/20/24 17:00	1
Specific Conductance (EPA 120.1)	**233**		1.00	1.00	umhos/cm			06/20/24 17:00	1
Acidity (SM 2310B-2011)	20.0	U	20.0	20.0	mg/L			06/19/24 15:26	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-2011)	**109**		5.0	5.0	mg/L			06/22/24 10:23	1
Carbonate Alkalinity as CaCO3 (SM 2320B-2011)	5.0	U	5.0	5.0	mg/L			06/22/24 10:23	1
Alkalinity as CaCO3 to pH 4.5 (SM 2320B-2011)	**109**		5.0	5.0	mg/L			06/22/24 10:23	1

Client Sample ID: Basin 1

Date Collected: 06/12/24 11:00
Date Received: 06/12/24 19:00

Lab Sample ID: 460-305725-2
Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C-2015)	**138**		2.5	2.5	mg/L			06/17/24 11:07	1
Total Suspended Solids (SM 2540D-2015)	**3.7**		2.5	2.5	mg/L			06/19/24 07:40	1
Ammonia (EPA 350.1)	0.050	U	0.10	0.050	mg/L			06/20/24 09:40	1
Total Kjeldahl Nitrogen (EPA 351.2)	0.50	U	1.0	0.50	mg/L		06/20/24 15:35	06/21/24 12:33	1
Chemical Oxygen Demand (EPA 410.4)	3.3	U	10.0	3.3	mg/L			06/20/24 19:01	1
Oxygen, Dissolved (SM 4500 O C-2016)	**6.5**	**H**	1.0	1.0	mg/L			06/14/24 12:05	1
Orthophosphate as P (SM 4500 P E-2011)	0.0050	U	0.030	0.0050	mg/L			06/13/24 13:15	1
Carbonaceous Biochemical Oxygen Demand 5 (SM 5210 B-2016)	1.0	U	1.0	1.0	mg/L			06/13/24 17:00	1
Total Organic Carbon (SW846 9060A)	**2.6**		1.0	0.53	mg/L			06/18/24 13:21	1
Phosphorus as PO4 (SM4500 P E-2011)	0.071	U	0.090	0.071	mg/L		06/25/24 09:30	06/25/24 14:30	1
Phosphorus as P (SM4500 P E-2011)	0.023	U	0.030	0.023	mg/L		06/25/24 09:30	06/25/24 14:30	1
Nitrogen, Total (EPA Total Nitrogen)	0.50	U	0.50	0.50	mg/L			06/25/24 06:26	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (EPA 350.1)	0.050	U	0.10	0.050	mg/L			06/20/24 10:10	1
Orthophosphate as P (SM 4500 P E-2011)	0.0050	U	0.030	0.0050	mg/L			06/13/24 13:35	1
Phosphorus as PO4 (SM4500 P E-2011)	**0.59**		0.090	0.071	mg/L		06/27/24 11:52	06/27/24 15:08	1
Phosphorus as P (SM4500 P E-2011)	**0.19**		0.030	0.023	mg/L		06/27/24 11:52	06/27/24 15:08	1

Client Sample ID: Upstream

Date Collected: 06/12/24 10:00
Date Received: 06/12/24 19:00

Lab Sample ID: 460-305725-4
Matrix: Water

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide	0.054	U	0.32	0.054	mg/L			06/14/24 08:46	1
Nitrate as N	0.070	U	0.16	0.070	mg/L			06/14/24 08:46	1
Chloride	**4.15**		0.32	0.039	mg/L			06/14/24 08:46	1
Nitrate Nitrite as N	0.070	U	0.16	0.070	mg/L			06/14/24 08:46	1
Nitrite as N	0.047	U	0.16	0.047	mg/L			06/14/24 08:46	1
Sulfate	**8.68**		0.48	0.095	mg/L			06/14/24 08:46	1

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000042	U	0.00020	0.000042	mg/L		06/19/24 10:00	06/19/24 16:47	1

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**18.2**		4.0	0.91	ug/L		06/19/24 08:06	06/20/24 19:07	1
Boron	**62.4**	**J**	80.0	30.4	ug/L		06/19/24 08:06	06/20/24 19:07	1
Calcium	**36500**		500	53.6	ug/L		06/19/24 08:06	06/20/24 19:07	1

Client Sample ID: Upstream

Date Collected: 06/12/24 10:00
Date Received: 06/12/24 19:00

Lab Sample ID: 460-305725-4

Matrix: Water

Method: SW846 6020B - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Copper	3.6	J	4.0	2.5	ug/L		06/19/24 08:06	06/20/24 19:07	1
Lead	1.2		1.2	0.84	ug/L		06/19/24 08:06	06/20/24 19:07	1
Magnesium	12900		200	46.9	ug/L		06/19/24 08:06	06/20/24 19:07	1
Manganese	1050		8.0	1.5	ug/L		06/19/24 08:06	06/20/24 19:07	1
Nickel	3.3	J	4.0	0.91	ug/L		06/19/24 08:06	06/20/24 19:07	1
Potassium	1280		200	112	ug/L		06/19/24 08:06	06/20/24 19:07	1
Selenium	0.59	U	2.5	0.59	ug/L		06/19/24 08:06	06/20/24 19:07	1
Sodium	4400		500	219	ug/L		06/19/24 08:06	06/20/24 19:07	1
Strontium	148		4.0	0.50	ug/L		06/19/24 08:06	06/20/24 19:07	1
Zinc	7.0	J	16.0	6.5	ug/L		06/19/24 08:06	06/20/24 19:07	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	67.7	J	100	35.0	ug/L		06/17/24 06:41	06/17/24 16:09	1
Iron	1610		50.0	20.0	ug/L		06/18/24 21:00	06/19/24 10:41	1
Lithium	2.7	J	8.0	1.7	ug/L		06/18/24 14:00	06/19/24 18:39	1

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	19.5	U	40.0	19.5	ug/L		06/14/24 22:17	06/14/24 23:38	1
Cadmium	0.15	U	0.50	0.15	ug/L		06/18/24 07:50	06/18/24 15:19	1
Lithium	3.0	J	8.0	1.7	ug/L		06/17/24 14:00	06/20/24 13:51	1
Arsenic	0.89	U	2.0	0.89	ug/L		06/14/24 22:17	06/14/24 23:38	1
Iron	106		50.0	20.0	ug/L		06/18/24 07:50	06/18/24 15:19	1
Calcium	38000		500	53.6	ug/L		06/14/24 22:17	06/14/24 23:38	1
Zinc	4.1	J	10.0	4.0	ug/L		06/18/24 07:50	06/18/24 15:19	1
Copper	2.5	U	4.0	2.5	ug/L		06/14/24 22:17	06/14/24 23:38	1
Iron	110	J	120	58.2	ug/L		06/14/24 22:17	06/14/24 23:38	1
Lead	0.84	U	1.2	0.84	ug/L		06/14/24 22:17	06/14/24 23:38	1
Magnesium	12900		200	46.9	ug/L		06/14/24 22:17	06/14/24 23:38	1
Manganese	925		8.0	1.5	ug/L		06/14/24 22:17	06/14/24 23:38	1
Nickel	2.9	J	4.0	0.91	ug/L		06/14/24 22:17	06/14/24 23:38	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Resistivity (EPA 120.1)	0.00327		0.000100	0.000100	Mohm-cm			06/20/24 17:00	1
Specific Conductance (EPA 120.1)	306		1.00	1.00	umhos/cm			06/20/24 17:00	1
Acidity (SM 2310B-2011)	20.0	U	20.0	20.0	mg/L			06/19/24 15:26	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-2011)	137		5.0	5.0	mg/L			06/22/24 10:29	1
Carbonate Alkalinity as CaCO3 (SM 2320B-2011)	5.0	U	5.0	5.0	mg/L			06/22/24 10:29	1
Alkalinity as CaCO3 to pH 4.5 (SM 2320B-2011)	137		5.0	5.0	mg/L			06/22/24 10:29	1
Total Dissolved Solids (SM 2540C-2015)	191		2.5	2.5	mg/L			06/17/24 11:07	1
Total Suspended Solids (SM 2540D-2015)	4.4		2.5	2.5	mg/L			06/19/24 07:40	1
Ammonia (EPA 350.1)	0.050	U	0.10	0.050	mg/L			06/20/24 09:42	1
Total Kjeldahl Nitrogen (EPA 351.2	0.52	J	1.0	0.50	mg/L		06/21/24 15:28	06/24/24 11:00	1
Chemical Oxygen Demand (EPA 410.4)	6.1	J	10.0	3.3	mg/L			06/20/24 19:01	1

Client Sample ID: Upstream
Lab Sample ID: 460-305725-4
Date Collected: 06/12/24 10:00
Matrix: Water
Date Received: 06/12/24 19:00

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oxygen, Dissolved (SM 4500 O C-2016)	**4.9**	**H H3**	1.0	1.0	mg/L			06/14/24 11:55	1
Orthophosphate as P (SM 4500 P E-2011)	0.0050	U	0.030	0.0050	mg/L			06/13/24 13:15	1
Carbonaceous Biochemical Oxygen Demand 5 (SM 5210 B-2016)	1.0	U	1.0	1.0	mg/L			06/13/24 16:50	1
Total Organic Carbon (SW846 9060A)	**4.5**		1.0	0.53	mg/L			06/18/24 17:05	1
Phosphorus as PO4 (SM4500 P E-2011)	0.071	U	0.090	0.071	mg/L		06/25/24 09:30	06/25/24 14:30	1
Phosphorus as P (SM4500 P E-2011)	0.023	U	0.030	0.023	mg/L		06/25/24 09:30	06/25/24 14:30	1
Nitrogen, Total (EPA Total Nitrogen)	**0.52**		0.50	0.50	mg/L			06/25/24 06:26	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (EPA 350.1)	0.050	U	0.10	0.050	mg/L			06/20/24 10:00	1
Orthophosphate as P (SM 4500 P E-2011)	0.0050	U	0.030	0.0050	mg/L			06/13/24 13:35	1
Phosphorus as PO4 (SM4500 P E-2011)	**0.13**	**F1**	0.090	0.071	mg/L		06/27/24 11:52	06/27/24 15:08	1
Phosphorus as P (SM4500 P E-2011)	**0.042**		0.030	0.023	mg/L		06/27/24 11:52	06/27/24 15:08	1

Client Sample ID: Clarifying Pond
Lab Sample ID: 460-305725-5
Date Collected: 06/12/24 10:30
Matrix: Water
Date Received: 06/12/24 19:00

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide	0.054	U	0.32	0.054	mg/L			06/14/24 09:01	1
Nitrate as N	**0.091**	**J**	0.16	0.070	mg/L			06/14/24 09:01	1
Chloride	**0.90**		0.32	0.039	mg/L			06/14/24 09:01	1
Nitrate Nitrite as N	**0.091**	**J**	0.16	0.070	mg/L			06/14/24 09:01	1
Nitrite as N	0.047	U	0.16	0.047	mg/L			06/14/24 09:01	1
Sulfate	**5.44**		0.48	0.095	mg/L			06/14/24 09:01	1

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000042	U	0.00020	0.000042	mg/L		06/19/24 10:00	06/19/24 16:48	1

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**5.7**		4.0	0.91	ug/L		06/19/24 08:06	06/20/24 19:10	1
Boron	**59.3**	**J**	80.0	30.4	ug/L		06/19/24 08:06	06/20/24 19:10	1
Calcium	**16500**		500	53.6	ug/L		06/19/24 08:06	06/20/24 19:10	1
Copper	**4.8**		4.0	2.5	ug/L		06/19/24 08:06	06/20/24 19:10	1
Lead	**1.4**		1.2	0.84	ug/L		06/19/24 08:06	06/20/24 19:10	1
Magnesium	**6180**		200	46.9	ug/L		06/19/24 08:06	06/20/24 19:10	1
Manganese	**156**		8.0	1.5	ug/L		06/19/24 08:06	06/20/24 19:10	1
Nickel	**1.8**	**J**	4.0	0.91	ug/L		06/19/24 08:06	06/20/24 19:10	1
Potassium	**998**		200	112	ug/L		06/19/24 08:06	06/20/24 19:10	1
Selenium	0.59	U	2.5	0.59	ug/L		06/19/24 08:06	06/20/24 19:10	1

Client Sample ID: Clarifying Pond

Date Collected: 06/12/24 10:30
Date Received: 06/12/24 19:00

Lab Sample ID: 460-305725-5
Matrix: Water

Method: SW846 6020B - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sodium	**3270**		500	219	ug/L		06/19/24 08:06	06/20/24 19:10	1
Strontium	**34.4**		4.0	0.50	ug/L		06/19/24 08:06	06/20/24 19:10	1
Zinc	6.5	U	16.0	6.5	ug/L		06/19/24 08:06	06/20/24 19:10	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**545**		100	35.0	ug/L		06/17/24 06:41	06/18/24 02:03	1
Iron	**2030**		50.0	20.0	ug/L		06/18/24 21:00	06/21/24 15:55	1
Lithium	1.7	U	8.0	1.7	ug/L		06/18/24 14:00	06/19/24 18:42	1

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	19.5	U	40.0	19.5	ug/L		06/14/24 22:17	06/14/24 23:43	1
Cadmium	0.15	U	0.50	0.15	ug/L		06/18/24 07:50	06/18/24 15:21	1
Lithium	1.7	U	8.0	1.7	ug/L		06/17/24 14:00	06/20/24 13:48	1
Arsenic	0.89	U	2.0	0.89	ug/L		06/14/24 22:17	06/14/24 23:43	1
Iron	**62.8**		50.0	20.0	ug/L		06/18/24 07:50	06/18/24 15:21	1
Calcium	**18000**		500	53.6	ug/L		06/14/24 22:17	06/14/24 23:43	1
Zinc	4.0	U	10.0	4.0	ug/L		06/18/24 07:50	06/18/24 15:21	1
Copper	2.5	U	4.0	2.5	ug/L		06/14/24 22:17	06/14/24 23:43	1
Iron	**66.4**	**J**	120	58.2	ug/L		06/14/24 22:17	06/14/24 23:43	1
Lead	0.84	U	1.2	0.84	ug/L		06/14/24 22:17	06/14/24 23:43	1
Magnesium	**6290**		200	46.9	ug/L		06/14/24 22:17	06/14/24 23:43	1
Manganese	**82.5**		8.0	1.5	ug/L		06/14/24 22:17	06/14/24 23:43	1
Nickel	0.91	U	4.0	0.91	ug/L		06/14/24 22:17	06/14/24 23:43	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Resistivity (EPA 120.1)	**0.00692**		0.000100	0.000100	Mohm-cm			06/20/24 17:00	1
Specific Conductance (EPA 120.1)	**145**		1.00	1.00	umhos/cm			06/20/24 17:00	1
Acidity (SM 2310B-2011)	20.0	U	20.0	20.0	mg/L			06/19/24 15:26	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-2011)	**61.5**		5.0	5.0	mg/L			06/22/24 10:36	1
Carbonate Alkalinity as CaCO3 (SM 2320B-2011)	5.0	U	5.0	5.0	mg/L			06/22/24 10:36	1
Alkalinity as CaCO3 to pH 4.5 (SM 2320B-2011)	**61.5**		5.0	5.0	mg/L			06/22/24 10:36	1
Total Dissolved Solids (SM 2540C-2015)	**76.0**		2.5	2.5	mg/L			06/17/24 11:07	1
Total Suspended Solids (SM 2540D-2015)	**46.5**		2.5	2.5	mg/L			06/19/24 07:40	1
Ammonia (EPA 350.1)	0.050	U	0.10	0.050	mg/L			06/20/24 09:43	1
Total Kjeldahl Nitrogen (EPA 351.2)	0.50	U	1.0	0.50	mg/L		06/21/24 15:28	06/24/24 11:02	1
Chemical Oxygen Demand (EPA 410.4)	3.3	U	10.0	3.3	mg/L			06/20/24 19:01	1
Oxygen, Dissolved (SM 4500 O C-2016)	**5.1**	**H H3**	1.0	1.0	mg/L			06/14/24 12:00	1
Orthophosphate as P (SM 4500 P E-2011)	0.0050	U	0.030	0.0050	mg/L			06/13/24 13:15	1
Carbonaceous Biochemical Oxygen Demand 5 (SM 5210 B-2016)	1.0	U	1.0	1.0	mg/L			06/13/24 16:55	1
Total Organic Carbon (SW846 9060A)	**1.5**		1.0	0.53	mg/L			06/18/24 17:30	1

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill Anti-Degradation

Job ID: 460-305725-1

Client Sample ID: Clarifying Pond

Date Collected: 06/12/24 10:30
Date Received: 06/12/24 19:00

Lab Sample ID: 460-305725-5

Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phosphorus as PO4 (SM4500 P E-2011)	**0.17**		0.090	0.071	mg/L		06/25/24 09:30	06/25/24 14:30	1
Phosphorus as P (SM4500 P E-2011)	**0.054**		0.030	0.023	mg/L		06/25/24 09:30	06/25/24 14:30	1
Nitrogen, Total (EPA Total Nitrogen)	0.50	U	0.50	0.50	mg/L			06/25/24 06:26	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (EPA 350.1)	0.050	U	0.10	0.050	mg/L			06/20/24 10:02	1
Orthophosphate as P (SM 4500 P E-2011)	0.0050	U	0.030	0.0050	mg/L			06/13/24 13:35	1
Phosphorus as PO4 (SM4500 P E-2011)	**0.17**		0.090	0.071	mg/L		06/27/24 11:52	06/27/24 15:08	1
Phosphorus as P (SM4500 P E-2011)	**0.056**		0.030	0.023	mg/L		06/27/24 11:52	06/27/24 15:08	1

Lab Chronicle

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill Anti-Degradation

Job ID: 460-305725-1

Client Sample ID: NPDES 001

Date Collected: 06/12/24 08:30
Date Received: 06/12/24 19:00

Lab Sample ID: 460-305725-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		1	980146	OXG	EET EDI	06/14/24 08:16
Total/NA	Analysis	300.0		1	980148	OXG	EET EDI	06/14/24 08:16
Total/NA	Prep	245.1			716037	ESB	EET BUF	06/19/24 10:00
Total/NA	Analysis	245.1		1	716197	ESB	EET BUF	06/19/24 16:44
Dissolved	Filtration	Filtration			517933	UDL9	ELLE	06/17/24 08:05
Dissolved	Prep	3005A			518111	X3ZX	ELLE	06/18/24 07:50
Dissolved	Analysis	6020B		1	518742	UCIG	ELLE	06/18/24 14:59
Dissolved	Filtration	FILTRATION			616780	GK	EET CLE	06/17/24 13:00
Dissolved	Prep	3005A			616782	GK	EET CLE	06/17/24 14:00
Dissolved	Analysis	6020B		1	617280	AJC	EET CLE	06/20/24 13:32
Dissolved	Filtration	FILTRATION			980311	VAD	EET EDI	06/14/24 22:13
Dissolved	Prep	3010A			980314	VAD	EET EDI	06/14/24 22:17
Dissolved	Analysis	6020B		1	980232	JKF	EET EDI	06/14/24 23:31
Total Recoverable	Prep	3005A			518765	UAMX	ELLE	06/18/24 21:00
Total Recoverable	Analysis	6020B		1	519035	F7JF	ELLE	06/19/24 10:46
Total Recoverable	Prep	3005A			616800	GK	EET CLE	06/18/24 14:00
Total Recoverable	Analysis	6020B		1	617163	AJC	EET CLE	06/19/24 18:29
Total Recoverable	Prep	3005A			842672	RR	EET SAV	06/17/24 06:41
Total Recoverable	Analysis	6020B		1	842918	BJB	EET SAV	06/18/24 02:00
Total/NA	Prep	3010A			980960	KXN	EET EDI	06/19/24 08:06
Total/NA	Analysis	6020B		1	981326	JKF	EET EDI	06/20/24 19:02
Total/NA	Analysis	120.1		1	981349	HTV	EET EDI	06/20/24 17:00
Total/NA	Analysis	2310B-2011		1	981060	RAK	EET EDI	06/19/24 15:26
Total/NA	Analysis	2320B-2011		1	981656	RXA	EET EDI	06/22/24 10:11
Total/NA	Analysis	2540C-2015		1	980603	PLS	EET EDI	06/17/24 11:07
Total/NA	Analysis	2540D-2015		1	980950	PLS	EET EDI	06/19/24 07:40
Dissolved	Filtration	FILTRATION			981253	AXP	EET EDI	06/20/24 09:22
Dissolved	Analysis	350.1		1	981277	AXP	EET EDI	06/20/24 09:46
Total/NA	Analysis	350.1		1	981277	AXP	EET EDI	06/20/24 09:39
Total/NA	Prep	351.2			519725	NLE3	ELLE	06/20/24 15:35 - 06/20/24 18:35 [1]
Total/NA	Analysis	351.2		1	520118	JCG7	ELLE	06/21/24 12:31
Total/NA	Analysis	410.4		1	981367	HTV	EET EDI	06/20/24 19:01
Total/NA	Analysis	4500 O C-2016		1	980242	RXA	EET EDI	06/14/24 11:50
Dissolved	Filtration	FILTRATION			979961	AXP	EET EDI	06/13/24 13:01
Dissolved	Analysis	4500 P E-2011		1	979960	AXP	EET EDI	06/13/24 13:35
Total/NA	Analysis	4500 P E-2011		1	979960	AXP	EET EDI	06/13/24 13:15
Total/NA	Analysis	5210 B-2016		1	980008	RXA	EET EDI	06/13/24 16:45
Total/NA	Analysis	9060A		1	980973	MMC	EET EDI	06/18/24 14:38
Dissolved	Filtration	FILTRATION			982513	RAK	EET EDI	06/27/24 10:00
Dissolved	Prep	SM 4500 P B			982511	RAK	EET EDI	06/27/24 11:52
Dissolved	Analysis	SM4500 P E-2011		1	982538	RAK	EET EDI	06/27/24 15:08
Total/NA	Prep	SM 4500 P B			982124	HTV	EET EDI	06/25/24 09:30
Total/NA	Analysis	SM4500 P E-2011		1	982130	HTV	EET EDI	06/25/24 14:30

Eurofins Edison

Lab Chronicle

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill Anti-Degradation

Job ID: 460-305725-1

Client Sample ID: NPDES 001

Lab Sample ID: 460-305725-1

Date Collected: 06/12/24 08:30

Matrix: Water

Date Received: 06/12/24 19:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Total Nitrogen		1	982030	TJW	EET EDI	06/25/24 06:26

Client Sample ID: Basin 1

Lab Sample ID: 460-305725-2

Date Collected: 06/12/24 11:00

Matrix: Water

Date Received: 06/12/24 19:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		1	980146	OXG	EET EDI	06/14/24 08:31
Total/NA	Analysis	300.0		1	980148	OXG	EET EDI	06/14/24 08:31
Total/NA	Prep	245.1			716037	ESB	EET BUF	06/19/24 10:00
Total/NA	Analysis	245.1		1	716197	ESB	EET BUF	06/19/24 16:45
Dissolved	Filtration	Filtration			517933	UDL9	ELLE	06/17/24 08:05
Dissolved	Prep	3005A			518111	X3ZX	ELLE	06/18/24 07:50
Dissolved	Analysis	6020B		1	518742	UCIG	ELLE	06/18/24 15:17
Dissolved	Filtration	FILTRATION			616780	GK	EET CLE	06/17/24 13:00
Dissolved	Prep	3005A			616782	GK	EET CLE	06/17/24 14:00
Dissolved	Analysis	6020B		1	617280	AJC	EET CLE	06/20/24 13:34
Dissolved	Filtration	FILTRATION			980311	VAD	EET EDI	06/14/24 22:13
Dissolved	Prep	3010A			980314	VAD	EET EDI	06/14/24 22:17
Dissolved	Analysis	6020B		1	980232	JKF	EET EDI	06/14/24 23:36
Total Recoverable	Prep	3005A			518765	UAMX	ELLE	06/18/24 21:00
Total Recoverable	Analysis	6020B		1	519035	F7JF	ELLE	06/19/24 10:49
Total Recoverable	Prep	3005A			616800	GK	EET CLE	06/18/24 14:00
Total Recoverable	Analysis	6020B		1	617163	AJC	EET CLE	06/19/24 18:37
Total Recoverable	Prep	3005A			842672	RR	EET SAV	06/17/24 06:41
Total Recoverable	Analysis	6020B		1	842918	BJB	EET SAV	06/18/24 01:58
Total/NA	Prep	3010A			980960	KXN	EET EDI	06/19/24 08:06
Total/NA	Analysis	6020B		1	981326	JKF	EET EDI	06/20/24 19:05
Total/NA	Analysis	120.1		1	981349	HTV	EET EDI	06/20/24 17:00
Total/NA	Analysis	2310B-2011		1	981060	RAK	EET EDI	06/19/24 15:26
Total/NA	Analysis	2320B-2011		1	981656	RXA	EET EDI	06/22/24 10:23
Total/NA	Analysis	2540C-2015		1	980603	PLS	EET EDI	06/17/24 11:07
Total/NA	Analysis	2540D-2015		1	980950	PLS	EET EDI	06/19/24 07:40
Dissolved	Filtration	FILTRATION			981253	AXP	EET EDI	06/20/24 09:22
Dissolved	Analysis	350.1		1	981277	AXP	EET EDI	06/20/24 10:10
Total/NA	Analysis	350.1		1	981277	AXP	EET EDI	06/20/24 09:40
Total/NA	Prep	351.2			519725	NLE3	ELLE	06/20/24 15:35 - 06/20/24 18:35 [1]
Total/NA	Analysis	351.2		1	520118	JCG7	ELLE	06/21/24 12:33
Total/NA	Analysis	410.4		1	981367	HTV	EET EDI	06/20/24 19:01
Total/NA	Analysis	4500 O C-2016		1	980242	RXA	EET EDI	06/14/24 12:05
Dissolved	Filtration	FILTRATION			979961	AXP	EET EDI	06/13/24 13:01
Dissolved	Analysis	4500 P E-2011		1	979960	AXP	EET EDI	06/13/24 13:35
Total/NA	Analysis	4500 P E-2011		1	979960	AXP	EET EDI	06/13/24 13:15

Lab Chronicle

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill Anti-Degradation

Job ID: 460-305725-1

Client Sample ID: Basin 1

Lab Sample ID: 460-305725-2

Date Collected: 06/12/24 11:00

Matrix: Water

Date Received: 06/12/24 19:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	5210 B-2016		1	980008	RXA	EET EDI	06/13/24 17:00
Total/NA	Analysis	9060A		1	980973	MMC	EET EDI	06/18/24 13:21
Dissolved	Filtration	FILTRATION			982513	RAK	EET EDI	06/27/24 10:00
Dissolved	Prep	SM 4500 P B			982511	RAK	EET EDI	06/27/24 11:52
Dissolved	Analysis	SM4500 P E-2011		1	982538	RAK	EET EDI	06/27/24 15:08
Total/NA	Prep	SM 4500 P B			982124	HTV	EET EDI	06/25/24 09:30
Total/NA	Analysis	SM4500 P E-2011		1	982130	HTV	EET EDI	06/25/24 14:30
Total/NA	Analysis	Total Nitrogen		1	982030	TJW	EET EDI	06/25/24 06:26

Client Sample ID: Upstream

Lab Sample ID: 460-305725-4

Date Collected: 06/12/24 10:00

Matrix: Water

Date Received: 06/12/24 19:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		1	980146	OXG	EET EDI	06/14/24 08:46
Total/NA	Analysis	300.0		1	980148	OXG	EET EDI	06/14/24 08:46
Total/NA	Prep	245.1			716037	ESB	EET BUF	06/19/24 10:00
Total/NA	Analysis	245.1		1	716197	ESB	EET BUF	06/19/24 16:47
Dissolved	Filtration	Filtration			517933	UDL9	ELLE	06/17/24 08:05
Dissolved	Prep	3005A			518111	X3ZX	ELLE	06/18/24 07:50
Dissolved	Analysis	6020B		1	518742	UCIG	ELLE	06/18/24 15:19
Dissolved	Filtration	FILTRATION			616780	GK	EET CLE	06/17/24 13:00
Dissolved	Prep	3005A			616782	GK	EET CLE	06/17/24 14:00
Dissolved	Analysis	6020B		1	617280	AJC	EET CLE	06/20/24 13:51
Dissolved	Filtration	FILTRATION			980311	VAD	EET EDI	06/14/24 22:13
Dissolved	Prep	3010A			980314	VAD	EET EDI	06/14/24 22:17
Dissolved	Analysis	6020B		1	980232	JKF	EET EDI	06/14/24 23:38
Total Recoverable	Prep	3005A			518765	UAMX	ELLE	06/18/24 21:00
Total Recoverable	Analysis	6020B		1	519035	F7JF	ELLE	06/19/24 10:41
Total Recoverable	Prep	3005A			616800	GK	EET CLE	06/18/24 14:00
Total Recoverable	Analysis	6020B		1	617163	AJC	EET CLE	06/19/24 18:39
Total Recoverable	Prep	3005A			842673	RR	EET SAV	06/17/24 06:41
Total Recoverable	Analysis	6020B		1	842918	BJB	EET SAV	06/17/24 16:09
Total/NA	Prep	3010A			980960	KXN	EET EDI	06/19/24 08:06
Total/NA	Analysis	6020B		1	981326	JKF	EET EDI	06/20/24 19:07
Total/NA	Analysis	120.1		1	981349	HTV	EET EDI	06/20/24 17:00
Total/NA	Analysis	2310B-2011		1	981060	RAK	EET EDI	06/19/24 15:26
Total/NA	Analysis	2320B-2011		1	981656	RXA	EET EDI	06/22/24 10:29
Total/NA	Analysis	2540C-2015		1	980603	PLS	EET EDI	06/17/24 11:07
Total/NA	Analysis	2540D-2015		1	980950	PLS	EET EDI	06/19/24 07:40
Dissolved	Filtration	FILTRATION			981253	AXP	EET EDI	06/20/24 09:22
Dissolved	Analysis	350.1		1	981277	AXP	EET EDI	06/20/24 10:00
Total/NA	Analysis	350.1		1	981277	AXP	EET EDI	06/20/24 09:42

Client Sample ID: Upstream

Lab Sample ID: 460-305725-4

Date Collected: 06/12/24 10:00

Matrix: Water

Date Received: 06/12/24 19:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	351.2			520160	NLE3	ELLE	06/21/24 15:28 - 06/21/24 18:28 [1]
Total/NA	Analysis	351.2		1	520809	JCG7	ELLE	06/24/24 11:00
Total/NA	Analysis	410.4		1	981367	HTV	EET EDI	06/20/24 19:01
Total/NA	Analysis	4500 O C-2016		1	980242	RXA	EET EDI	06/14/24 11:55
Dissolved	Filtration	FILTRATION			979961	AXP	EET EDI	06/13/24 13:01
Dissolved	Analysis	4500 P E-2011		1	979960	AXP	EET EDI	06/13/24 13:35
Total/NA	Analysis	4500 P E-2011		1	979960	AXP	EET EDI	06/13/24 13:15
Total/NA	Analysis	5210 B-2016		1	980008	RXA	EET EDI	06/13/24 16:50
Total/NA	Analysis	9060A		1	980973	MMC	EET EDI	06/18/24 17:05
Dissolved	Filtration	FILTRATION			982513	RAK	EET EDI	06/27/24 10:00
Dissolved	Prep	SM 4500 P B			982511	RAK	EET EDI	06/27/24 11:52
Dissolved	Analysis	SM4500 P E-2011		1	982538	RAK	EET EDI	06/27/24 15:08
Total/NA	Prep	SM 4500 P B			982124	HTV	EET EDI	06/25/24 09:30
Total/NA	Analysis	SM4500 P E-2011		1	982130	HTV	EET EDI	06/25/24 14:30
Total/NA	Analysis	Total Nitrogen		1	982030	TJW	EET EDI	06/25/24 06:26

Client Sample ID: Clarifying Pond

Lab Sample ID: 460-305725-5

Date Collected: 06/12/24 10:30

Matrix: Water

Date Received: 06/12/24 19:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		1	980146	OXG	EET EDI	06/14/24 09:01
Total/NA	Analysis	300.0		1	980148	OXG	EET EDI	06/14/24 09:01
Total/NA	Prep	245.1			716037	ESB	EET BUF	06/19/24 10:00
Total/NA	Analysis	245.1		1	716197	ESB	EET BUF	06/19/24 16:48
Dissolved	Filtration	Filtration			517933	UDL9	ELLE	06/17/24 08:05
Dissolved	Prep	3005A			518111	X3ZX	ELLE	06/18/24 07:50
Dissolved	Analysis	6020B		1	518742	UCIG	ELLE	06/18/24 15:21
Dissolved	Filtration	FILTRATION			616780	GK	EET CLE	06/17/24 13:00
Dissolved	Prep	3005A			616782	GK	EET CLE	06/17/24 14:00
Dissolved	Analysis	6020B		1	617280	AJC	EET CLE	06/20/24 13:48
Dissolved	Filtration	FILTRATION			980311	VAD	EET EDI	06/14/24 22:13
Dissolved	Prep	3010A			980314	VAD	EET EDI	06/14/24 22:17
Dissolved	Analysis	6020B		1	980232	JKF	EET EDI	06/14/24 23:43
Total Recoverable	Prep	3005A			518764	UAMX	ELLE	06/18/24 21:00
Total Recoverable	Analysis	6020B		1	520194	S4PD	ELLE	06/21/24 15:55
Total Recoverable	Prep	3005A			616800	GK	EET CLE	06/18/24 14:00
Total Recoverable	Analysis	6020B		1	617163	AJC	EET CLE	06/19/24 18:42
Total Recoverable	Prep	3005A			842672	RR	EET SAV	06/17/24 06:41
Total Recoverable	Analysis	6020B		1	842918	BJB	EET SAV	06/18/24 02:03
Total/NA	Prep	3010A			980960	KXN	EET EDI	06/19/24 08:06
Total/NA	Analysis	6020B		1	981326	JKF	EET EDI	06/20/24 19:10
Total/NA	Analysis	120.1		1	981349	HTV	EET EDI	06/20/24 17:00
Total/NA	Analysis	2310B-2011		1	981060	RAK	EET EDI	06/19/24 15:26

Lab Chronicle

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill Anti-Degradation

Job ID: 460-305725-1

Client Sample ID: Clarifying Pond

Date Collected: 06/12/24 10:30
Date Received: 06/12/24 19:00

Lab Sample ID: 460-305725-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	2320B-2011		1	981656	RXA	EET EDI	06/22/24 10:36
Total/NA	Analysis	2540C-2015		1	980603	PLS	EET EDI	06/17/24 11:07
Total/NA	Analysis	2540D-2015		1	980950	PLS	EET EDI	06/19/24 07:40
Dissolved	Filtration	FILTRATION			981253	AXP	EET EDI	06/20/24 09:23
Dissolved	Analysis	350.1		1	981277	AXP	EET EDI	06/20/24 10:02
Total/NA	Analysis	350.1		1	981277	AXP	EET EDI	06/20/24 09:43
Total/NA	Prep	351.2			520160	NLE3	ELLE	06/21/24 15:28 - 06/21/24 18:28 [1]
Total/NA	Analysis	351.2		1	520809	JCG7	ELLE	06/24/24 11:02
Total/NA	Analysis	410.4		1	981367	HTV	EET EDI	06/20/24 19:01
Total/NA	Analysis	4500 O C-2016		1	980242	RXA	EET EDI	06/14/24 12:00
Dissolved	Filtration	FILTRATION			979961	AXP	EET EDI	06/13/24 13:01
Dissolved	Analysis	4500 P E-2011		1	979960	AXP	EET EDI	06/13/24 13:35
Total/NA	Analysis	4500 P E-2011		1	979960	AXP	EET EDI	06/13/24 13:15
Total/NA	Analysis	5210 B-2016		1	980008	RXA	EET EDI	06/13/24 16:55
Total/NA	Analysis	9060A		1	980973	MMC	EET EDI	06/18/24 17:30
Dissolved	Filtration	FILTRATION			982513	RAK	EET EDI	06/27/24 10:00
Dissolved	Prep	SM 4500 P B			982511	RAK	EET EDI	06/27/24 11:52
Dissolved	Analysis	SM4500 P E-2011		1	982538	RAK	EET EDI	06/27/24 15:08
Total/NA	Prep	SM 4500 P B			982124	HTV	EET EDI	06/25/24 09:30
Total/NA	Analysis	SM4500 P E-2011		1	982130	HTV	EET EDI	06/25/24 14:30
Total/NA	Analysis	Total Nitrogen		1	982030	TJW	EET EDI	06/25/24 06:26

[1] This procedure uses a method stipulated length of time for the process. Both start and end times are displayed.

Laboratory References:

EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600
EET CLE = Eurofins Cleveland, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396
EET EDI = Eurofins Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900
EET SAV = Eurofins Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858
ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300
Microbac = Marietta, OH, 158 Starlite Drive, Marietta, OH 45750

Accreditation/Certification Summary

Client: Heidelberg Materials Northeast LLC
Job ID: 460-305725-1
Project/Site: Rock Hill Anti-Degradation

Laboratory: Eurofins Edison

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Connecticut	State	PH-0818	09-30-24
DE Haz. Subst. Cleanup Act (HSCA)	State	N/A	01-02-25
Georgia	State	12028 (NJ)	06-30-24
Massachusetts	State	M-NJ312	06-30-24
New Jersey	NELAP	12028	06-30-24
New York	NELAP	11452	04-01-25
Pennsylvania	NELAP	68-00522	02-28-25
Rhode Island	State	LAO00376	12-31-24
USDA	US Federal Programs	525-24-149-77606	05-21-27

Laboratory: Eurofins Buffalo

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Arkansas DEQ	State	88-0686	07-06-24
Connecticut	State	PH-0807	03-31-25
Florida	NELAP	E87672	06-30-23 *
Georgia	State	10026 (NY)	03-31-25
Georgia	State Program	N/A	03-31-09 *
Illinois	NELAP	200003	09-30-24
Iowa	State	374	03-01-25
Iowa	State Program	374	03-01-09 *
Kansas	NELAP	E-10187	02-01-25
Kentucky (UST)	State	108092	04-01-24 *
Kentucky (WW)	State	KY90029	12-31-24
Louisiana	NELAP	02031	06-30-23 *
Louisiana (All)	NELAP	02031	06-30-23 *
Maine	State	NY00044	12-04-24
Maryland	State	294	06-30-24
Massachusetts	State	M-NY044	07-01-24
Michigan	State	9937	03-31-25
Michigan	State Program	9937	04-01-09 *
New Hampshire	NELAP	2973	09-11-19 *
New Hampshire	NELAP	2337	11-17-24
New Jersey	NELAP	NY455	06-30-24
New York	NELAP	10026	03-31-25
Pennsylvania	NELAP	68-00281	08-31-24
Rhode Island	State	LAO00378	12-30-24
Texas	NELAP	T104704412-18-10	07-31-23 *
Virginia	NELAP	460185	09-14-24
Washington	State	C784	02-10-25
Wisconsin	State	998310390	08-31-24

Laboratory: Eurofins Cleveland

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
California	State	2927	02-28-25
Georgia	State	4062	02-27-25
Illinois	NELAP	200004	07-31-24
Iowa	State	421	06-01-25

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Accreditation/Certification Summary

Client: Heidelberg Materials Northeast LLC
Job ID: 460-305725-1
Project/Site: Rock Hill Anti-Degradation

Laboratory: Eurofins Cleveland (Continued)

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Kentucky (UST)	State	112225	02-27-25
Kentucky (WW)	State	KY98016	12-30-24
Minnesota	NELAP	039-999-348	12-31-24
New Jersey	NELAP	OH001	06-30-24
New York	NELAP	10975	04-02-25
Ohio VAP	State	ORELAP 4062	02-27-25
Oregon	NELAP	4062	02-28-25
Pennsylvania	NELAP	68-00340	08-31-24
Texas	NELAP	T104704517-22-19	08-31-24
USDA	US Federal Programs	P330-18-00281	01-05-27
Virginia	NELAP	460175	09-14-24
West Virginia DEP	State	210	12-31-24

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
A2LA	Dept. of Defense ELAP	0001.01	11-30-24
A2LA	ISO/IEC 17025	0001.01	11-30-24
Alabama	State	43200	01-31-25
Alaska	State	PA00009	06-30-24
Alaska (UST)	State	17-027	02-28-25
Arizona	State	AZ0780	03-12-25
Arkansas DEQ	State	88-00660	08-09-24
California	State	2792	11-30-24
Colorado	State	PA00009	06-30-25
Connecticut	State	PH-0746	06-30-25
DE Haz. Subst. Cleanup Act (HSCA)	State	019-006 (PA cert)	01-31-25
Delaware (DW)	State	N/A	01-31-25
Florida	NELAP	E87997	06-30-24
Georgia (DW)	State	C048	01-31-25
Hawaii	State	N/A	01-31-25
Illinois	NELAP	200027	01-31-25
Iowa	State	361	03-01-24 *
Kansas	NELAP	E-10151	10-31-24
Kentucky (DW)	State	KY90088	12-31-24
Kentucky (UST)	State	0001.01	11-30-24
Kentucky (WW)	State	KY90088	12-31-24
Louisiana (All)	NELAP	02055	06-30-24
Maine	State	2019012	03-12-25
Maryland	State	100	06-30-25
Massachusetts	State	M-PA009	06-30-25
Michigan	State	9930	01-31-25
Minnesota	NELAP	042-999-487	12-31-24
Mississippi	State	023	01-31-25
Missouri	State	450	01-31-25
Montana (DW)	State	0098	01-01-25
Nebraska	State	NE-OS-32-17	01-31-25
New Hampshire	NELAP	2730	01-10-25
New Jersey	NELAP	PA011	06-30-24

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC (Continued)

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
New York	NELAP	10670	04-01-25
North Carolina (DW)	State	42705	07-31-24
North Carolina (WW/SW)	State	521	12-31-24
North Dakota	State	R-205	01-31-24 *
Oklahoma	NELAP	9804	08-31-24
Oregon	NELAP	PA200001	09-11-24
Pennsylvania	NELAP	36-00037	01-31-25
Quebec Ministry of Environment and Fight against Climate Change	PALA	507	09-16-24
Rhode Island	State	LAO00338	12-30-24
South Carolina	State	89002	01-31-25
Tennessee	State	02838	01-31-25
Texas	NELAP	T104704194-23-46	08-31-24
USDA	US Federal Programs	525-22-298-19481	10-25-25
Vermont	State	VT - 36037	10-28-24
Virginia	NELAP	460182	06-14-25
Washington	State	C457	04-11-24 *
West Virginia (DW)	State	9906 C	01-31-25
West Virginia DEP	State	055	07-31-24
Wyoming	State	8TMS-L	01-31-25
Wyoming (UST)	A2LA	0001.01	11-30-24

Laboratory: Eurofins Savannah

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
	AFCEE	SAVLAB	
Alabama	State	41450	06-30-24
ANAB	Dept. of Defense ELAP	L2463	09-22-24
Arkansas (DW)	State	GA00006	06-30-24
California	State	2939	06-30-24
Florida	NELAP	E87052	06-30-24
Georgia	State	E87052	06-30-24
Georgia (DW)	State	803	06-30-24
Hawaii	State	<cert No.>	06-30-24
Illinois	NELAP	200022	11-30-24
Indiana	State	C-GA-02	06-30-24
Iowa	State	353	07-01-25
Kentucky (UST)	State	NA	06-30-24
Louisiana	NELAP	30690	06-30-24
Louisiana (All)	NELAP	30690	06-30-24
Louisiana (DW)	State	LA009	12-31-24
Maine	State	GA00006	09-25-24
Maryland	State	250	12-31-24
Massachusetts	State	M-GA006	06-30-24
Michigan	State	9925	06-30-24
Mississippi	State	<cert No.>	06-30-24
Nebraska	State	NE-OS-7-04	06-30-24
New Jersey	NELAP	GA769	06-30-24
New Mexico	State	GA00006	06-30-24
North Carolina (DW)	State	13701	07-31-24

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Accreditation/Certification Summary

Client: Heidelberg Materials Northeast LLC
Job ID: 460-305725-1
Project/Site: Rock Hill Anti-Degradation

Laboratory: Eurofins Savannah (Continued)

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
North Carolina (WW/SW)	State	269	12-31-24
Pennsylvania	NELAP	68-00474	06-30-24
Puerto Rico	State	GA00006	01-01-25
South Carolina	State	98001	06-30-24
Tennessee	State	TN02961	06-30-24
Texas	NELAP	T1047004185	11-30-24
Texas	TCEQ Water Supply	T104704185	06-30-24
USDA	US Federal Programs	P330-18-00313	04-04-27
Virginia	NELAP	460161	06-14-25
Wyoming	State	8TMS-L	06-30-24

Method Summary

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill Anti-Degradation

Job ID: 460-305725-1

Method	Method Description	Protocol	Laboratory
300.0	Anions, Ion Chromatography	EPA	EET EDI
245.1	Mercury (CVAA)	EPA	EET BUF
6020B	Metals (ICP/MS)	SW846	EET CLE
6020B	Metals (ICP/MS)	SW846	EET EDI
6020B	Metals (ICP/MS)	SW846	EET SAV
6020B	Metals (ICP/MS)	SW846	ELLE
120.1	Conductivity, Specific Conductance	EPA	EET EDI
2310B-2011	Acidity	SM	EET EDI
2320B-2011	Alkalinity, Total	SM	EET EDI
2540C-2015	Total Dissolved Solids (Dried at 180 °C)	SM	EET EDI
2540D-2015	Total Suspended Solids (Dried at 103-105°C)	SM	EET EDI
350.1	Nitrogen, Ammonia	EPA	EET EDI
351.2	Nitrogen, Total Kjeldahl	EPA	ELLE
410.4	COD	EPA	EET EDI
4500 O C-2016	Oxygen, Dissolved	SM	EET EDI
4500 P E-2011	Orthophosphate	SM	EET EDI
5210 B-2016	BOD, 5-Day	SM	EET EDI
9060A	Organic Carbon, Total (TOC)	SW846	EET EDI
SM4500 P E-2011	Phosphorus	SM	EET EDI
Total Nitrogen	Nitrogen, Total	EPA	EET EDI
Subcontract	Osomotic Pressure	None	Microbac
245.1	Preparation, Mercury	EPA	EET BUF
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	EET CLE
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	EET SAV
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	ELLE
3010A	Preparation, Total Metals	SW846	EET EDI
351.2	Nitrogen, Total Kjeldahl	EPA	ELLE
FILTRATION	Sample Filtration	None	EET CLE
FILTRATION	Sample Filtration	None	EET EDI
Filtration	Sample Filtration	None	ELLE
SM 4500 P B	Phosphorous, Total and Ortho	SM	EET EDI

Protocol References:

EPA = US Environmental Protection Agency
None = None
SM = "Standard Methods For The Examination Of Water And Wastewater"
SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600
EET CLE = Eurofins Cleveland, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396
EET EDI = Eurofins Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900
EET SAV = Eurofins Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858
ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300
Microbac = Marietta, OH, 158 Starlite Drive, Marietta, OH 45750

Sample Summary

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill Anti-Degradation

Job ID: 460-305725-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
460-305725-1	NPDES 001	Water	06/12/24 08:30	06/12/24 19:00
460-305725-2	Basin 1	Water	06/12/24 11:00	06/12/24 19:00
460-305725-4	Upstream	Water	06/12/24 10:00	06/12/24 19:00
460-305725-5	Clarifying Pond	Water	06/12/24 10:30	06/12/24 19:00

Microbac Laboratories Inc., - Marietta, OH

Client Project ID:

Test America

For:

Julie Gilmore

Eurofins Environment Testing Northeast, LLC

777 New Durham RD

Edison, NJ 08817

Project State of Origin: Pennsylvania

Project Requested Certification:

Microbac Laboratories Inc., - Marietta, OH 68-01670 PA Department of Environmental Protection

All test results meet the requirements of the QAPP and other applicable contract terms and conditions. Any exceptions are attached to this cover page or addressed in the method narratives presented in the report. All results for soil samples are reported on a 'dry-weight' basis unless specified otherwise. Analytical results for water and wastes are reported on a 'as received' basis unless specified otherwise. A statement of uncertainty for each analysis is available upon request. The reported results are related only to the samples analyzed as received. This laboratory report may be released as a hardcopy and in computer-readable form submitted electronically or on diskette. This laboratory report shall not be reproduced, except in full, without the written approval of Microbac Laboratories, Inc.

Laboratory Project Manager:

Michelle Taylor

Project Manager

Michelle.Taylor@microbac.com

Authorized By:

Jacqueline Parsons

Customer Relationship Coordinator

Issued: 06/20/2024

MICROBAC®

Laboratory Report Number: M4F1219

Client Project ID: Test America

Cooler Receipt Log

Cooler ID: Default Cooler Temp: 4.8°C

Cooler Inspection Checklist

Ice Present or not required?	Yes
Shipping containers sealed or not required?	Yes
Custody seals intact or not required?	Yes
Chain of Custody (COC) Present?	Yes
COC includes customer information?	Yes
Relinquished and received signature on COC?	Yes
Sample collector identified on COC?	Yes
Sample type identified on COC?	Yes
Correct type of Containers Received	No
Correct number of containers listed on COC?	Yes
Containers Intact?	Yes
COC includes requested analyses?	Yes
Enough sample volume for indicated tests received?	Yes
Sample labels match COC (Name, Date & Time?)	Yes
Samples arrived within hold time?	Yes
Correct preservatives on COC or not required?	Yes
Chemical preservations checked or not required?	Yes
Preservation checks meet method requirements?	Yes
VOA vials have zero headspace, or not recd.?	Yes

Laboratory Report Number: M4F1219

Client Project ID: Test America

Sample Notes

PADEP 391-2000-008

A4 **Sample was received with head space.**

Osmotic Pressure

M4F1219-01	NPDES 001 (460-305725-1)	M4F1219-02	Basin 1 (460-305725-2)
M4F1219-03	Upstream (460-305725-4)	M4F1219-04	Clarifying Pond (460-305725-5)

MICROBAC®

Laboratory Report Number: M4F1219

Client Project ID: Test America

Microbac Laboratories Inc., - Marietta, OH

CERTIFICATE OF ANALYSIS

Client ID:	NPDES 001 (460-305725-1)			**Collection Date:**	06/12/2024 08:30
Laboratory ID:	M4F1219-01			**Prep Date:**	06/19/2024 15:50
Matrix:	Aqueous			**Analyzed:**	06/19/2024 16:48
Batch / Sequence:	B4F1050 /	**Analytical Method:**	PADEP 391-2000-008	**Calibration:**	NA
Instrument:	OSMOMETER 5004	**Units:**	mOsm/kg	**File ID:**	OsmoticPressure_B4F1050_240619035250.xls
Analyst:	TTB	**Dilution:**	1		

Analyte	CAS Number	Result	MDL	RL	Flag	Qualifier
Osmotic Pressure		7.00	6.00	10.0		A4

MICROBAC®

Laboratory Report Number: M4F1219

Client Project ID: Test America

Microbac Laboratories Inc., - Marietta, OH

CERTIFICATE OF ANALYSIS

Client ID:	Basin 1 (460-305725-2)			**Collection Date:**	06/12/2024 11:00
Laboratory ID:	M4F1219-02			**Prep Date:**	06/19/2024 15:50
Matrix:	Aqueous			**Analyzed:**	06/19/2024 16:48
Batch / Sequence:	B4F1050 /	**Analytical Method:**	PADEP 391-2000-008	**Calibration:**	NA
Instrument:	OSMOMETER 5004	**Units:**	mOsm/kg	**File ID:**	OsmoticPressure_B4F1050_240619035250.xls
Analyst:	TTB	**Dilution:**	1		

Analyte	CAS Number	Result	MDL	RL	Flag	Qualifier
Osmotic Pressure		7.00	6.00	10.0		A4

MICROBAC®

Laboratory Report Number: M4F1219

Client Project ID: Test America

Microbac Laboratories Inc., - Marietta, OH

CERTIFICATE OF ANALYSIS

Client ID:	Upstream (460-305725-4)			**Collection Date:**	06/12/2024 10:00
Laboratory ID:	M4F1219-03			**Prep Date:**	06/19/2024 15:50
Matrix:	Aqueous			**Analyzed:**	06/19/2024 16:48
Batch / Sequence:	B4F1050 /	**Analytical Method:**	PADEP 391-2000-008	**Calibration:**	NA
Instrument:	OSMOMETER 5004	**Units:**	mOsm/kg	**File ID:**	OsmoticPressure_B4F1050_240619035250.xls
Analyst:	TTB	**Dilution:**	1		

Analyte	CAS Number	Result	MDL	RL	Flag	Qualifier
Osmotic Pressure		**10.0**	6.00	10.0		A4

MICROBAC®

Laboratory Report Number: M4F1219

Client Project ID: Test America

Microbac Laboratories Inc., - Marietta, OH

CERTIFICATE OF ANALYSIS

Client ID:	Clarifying Pond (460-305725-5)			**Collection Date:**	06/12/2024 10:30
Laboratory ID:	M4F1219-04			**Prep Date:**	06/19/2024 15:50
Matrix:	Aqueous			**Analyzed:**	06/19/2024 16:48
Batch / Sequence:	B4F1050 /	**Analytical Method:**	PADEP 391-2000-008	**Calibration:**	NA
Instrument:	OSMOMETER 5004	**Units:**	mOsm/kg	**File ID:**	OsmoticPressure_B4F1050_240619035250.xls
Analyst:	TTB	**Dilution:**	1		

Analyte	CAS Number	Result	MDL	RL	Flag	Qualifier
Osmotic Pressure		ND	6.00	10.0		A4

Laboratory Report Number: M4F1219

Client Project ID: Test America

Notes and Definitions

A4: Sample was received with head space.
MDL: Method Detection Limit
RL: Reporting Limit

Laboratory Report Number: M4F1219

Client Project ID: Test America

METHOD BLANKS

Sample ID:	B4F1050-BLK1	**Prep Date:**	06/19/24 15:50	**Matrix:**	Aqueous
Instrument:	OSMOMETER 5004	**Analyzed:**	06/19/24 16:48	**Method:**	PADEP 391-2000-008
File ID:	OsmoticPressure_B4F1	**Sequence:**		**Analyst:**	TTB
Batch:	B4F1050	**Units:**	mOsm/kg	**Calibration:**	

Analyte	Result	MDL	RL	Dilution	Flag	Q
Osmotic Pressure	6.00	6.00	10.0	1	U	

* - Detected in the associated method Blank at a concentration >= RL

MICROBAC®

Laboratory Report Number: M4F1219

Client Project ID: Test America

BLANK SPIKE / DUPLICATE (BS/BSD)

Method:	PADEP 391-2000-008		**Blank Spike**	**Duplicate**
Batch:	B4F1050	**Spike ID:**	B4F1050-BS1	B4F1050-BSD1
Analyst:	TTB	**Prepared:**	06/19/24 15:50	06/19/24 15:50
Matrix:	Aqueous	**Analyzed:**	06/19/24 16:48	06/19/24 16:48
Units:	mOsm/kg	**File ID:**	OsmoticPressure_B4F1050_2406	OsmoticPressure_B4F1050_2406
Instrument:	OSMOMETER 5004	**Initial/Final:**	1mL/1mL	1mL/1mL
Calibration:				

Analyte	BS Spiked	BS Found	BS %Rec	BSD Spiked	BSD Found	BSD %Rec	%RPD	%Rec Limts	RPD Limit	Q
Osmotic Pressure	290	296	102	290	297	102	0.337	90 - 110	20	

* - Does not meet %Rec acceptance criteria.
- Does not meet RPD acceptance criteria.

Laboratory Report Number: M4F1219

Client Project ID: Test America

DUPLICATE

Parent ID:	M4F1219-04	**Calibration:**				**Method:**	PADEP 391-2000-008
Instrument:	OSMOMETER 500	**File ID:**	OsmoticPressure_B	**Dil:**	1	**Matrix:**	Aqueous
Sample ID:	B4F1050-DUP1	**Batch:**	B4F1050			**Units:**	mOsm/kg

Analyte	Parent	Duplicate	RPD	RPD Limit	Q
Osmotic Pressure	ND	ND		20	

Laboratory Report Number: M4F1219

Client Project ID: Test America

* - Exceeds RPD Limit
- Based on the low concentration of this analyte, Relative Percent Difference is not an appropriate evaluator of precision. The precision of the duplicate analysis is considered acceptable

Eurofins Edison
777 New Durham Road
Edison, NJ 08817
Phone: 732-549-3900 Fax: 732-549-3679

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Gilmore, Julie L	Carrier Tracking No(s):	COC No: 460-71497.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Julie.Gilmore@et.eurofinsus.com	State of Origin: Pennsylvania	Page: Page 1 of 1
Company: Microbac Laboratories, Inc.		Accreditations Required (See note): NELAP - Pennsylvania		Job #: 460-305725-1
Address: 158 Starlite Drive, ,	Due Date Requested: 6/24/2024			
City: Marietta	TAT Requested (days):			
State, Zip: OH, 45750				
Phone: 800-373-4071(Tel)	PO #:			
Email:	WO #:			
Project Name: Rock Hill Anti-Degradation	Project #: 46011424			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:
-
Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	SUB (Osmotic Pressure)/ Osmotic Pressure	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
NPDES 001 (460-305725-1)	6/12/24	08:30 Eastern		Water			X	1	
Basin 1 (460-305725-2)	6/12/24	11:00 Eastern		Water			X	1	
Upstream (460-305725-4)	6/12/24	10:00 Eastern		Water			X	1	
Clarifying Pond (460-305725-5)	6/12/24	10:30 Eastern		Water			X	1	

M 4 F 1 2 1 9
Eurofins Environment Testing Northeast, LLC
Rec'd: 06/18/2024 10:25
By: Stephanie Murphy Temp. 4.8 (Signature)

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Northeast, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Northeast, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Northeast, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Northeast, LLC.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 1	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
		6/17/24 1900	[illegible]			
	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	Relinquished by:	Date/Time:	Company	Received by: [signature]	Date/Time: 6/18/24 1025	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks: 4.8/N

MICROBAC®

Work Order # M4L1219

COOLER TEMP >6° C LOG

SAMPLE ID	Bottle 1 °C	Bottle 2 °C	Bottle 3 °C	Bottle 4 °C	Bottle 5 °C	Bottle 6 °C

6/18/2024 SM

pH Lot # HC 334874

pH Exceptions

SAMPLE ID	Bottle 1	Bottle 2	Bottle 3	Bottle 4	Bottle 5	Bottle 6

6/18/2024 SM

PRESERVATIVE EXCEPTIONS

✓ NONE

AS NOTED

6/18/2024 SM

Document Control # 1957
Last 04-10-2019

Issued to: Document Master File

Eurofins Edison
777 New Durham Road
Edison NJ 08817
Phone: 732-549-3900 Fax: 732-549-3679

Chain of Custody Record

eurofins

Client Information	Sampler	Lab PM: Gilmore, Julie L	Carrier Tracking No(s):	COC No: 460-182833-115848.1
Client Contact: Andrew Gutshall	Phone:	E-Mail: Julie.Gilmore@et.eurofinsus.com	State of Origin:	Page: Page 1 of 2
Company: Heidelberg Materials Northeast LLC	PWSID:			Job #: 305725
Address: 7660 Imperial Way	Due Date Requested:			
City: Allentown	TAT Requested (days):			
State, Zip: PA, 18195	Compliance Project: Δ Yes Δ No			
Phone:	PO #: Purchase Order not required			
Email: andrew.gutshall@heidelbergmaterials.com	WO #:			
Project Name: Rock Hill Anti-Degradation	Project #: 46011424			
Site:	SSOW#:			

Analysis Requested

Preservation Codes: N None; D HNO3; S H…

SHORT HOLD

Other

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020B (MOD) Single Element 6020B Metals List	6020B (MOD) Single Element 6020B Metals List	351.2 Local Method	6020B Dissolved Cd/Fe/Zn	6020B (MOD) Total Fe	350.1 410.4, 4500_P_E	120.1 9040C, SM2310B	350.1, 4500_P_E, 6020B	2320B (MOD) Alkalinity	6020B (MOD) Total Custom Metals	9060A TOC	2540D, SM5210B_Calc	2540C_TDS	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	D	S	N	D	S	N	N	N	D	S	N	N		
NPDES 001	6/12/24	830	G	Water			X	X	X	X	X	X	X	X	X	X	X	X	X		1
Basin 1	6/12/24	1100	G	Water			X	X	X	X	X	X	X	X	X	X	X	X	X		2
Basin 2 NO FLOW; NO SAMPLE				Water																	
Upstream	6/12/24	1000	G	Water			X	X	X	X	X	X	X	X	X	X	X	X	X		4
Clarifying Pond	6/12/24	1030	G	Water			X	X	X	X	X	X	X	X	X	X	X	X	X		5

460-305725 Chain of Custody

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed
☐ Return To Client ☐ Disposal

Deliverable Requested: I II III IV Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Meth…

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	Christopher Spelman	6/12/24	EARTHRES		6/12/24 1247	EETN-KOP
2		EETN-KOP 1630	6-12-24		6/12	ETA
3		6/12 1900	ETA		6/12 1900	ETA

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.

Cooler Temperature(s) °C and Other Remarks:

Ver: 04/02/2024

Eurofins Edison
777 New Durham Road
Edison, NJ 08817
Phone: 732-549-3900 Fax: 732-549-3679

Chain of Custody Record

eurofins 305725

Client Information	Sampler	Lab PM: Gilmore, Julie L	Carrier Tracking No(s):	COC No: 460-182833-115848.2
Client Contact: Andrew Gutshall	Phone:	E-Mail: Julie.Gilmore@et.eurofinsus.com	State of Origin:	Page: Page 2 of 2
Company: Heidelberg Materials Northeast LLC	PWSID:			Job #:
Address: 7660 Imperial Way	Due Date Requested:			
City: Allentown	TAT Requested (days):			
State, Zip: PA, 18195	Compliance Project: Δ Yes Δ No			
Phone:	PO #: Purchase Order not required			
Email: andrew.gutshall@heidelbergmaterials.com	WO #:			
Project Name: Rock Hill Anti-Degradation	Project #: 46011424			
Site:	SSOW#:			

Analysis Requested

Preservation Codes: N None; D HNO3

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	300_ORGFM_28D, 300_ORGFMS	245.1 Local Method	6020B Total Aluminum	4-500_O_C - DISSOLVED OXYGEN	Total Number of containers	Special Instructions/Note:
Preservation Code:							N	D	D			
NPDES 001	6/12/24	830	G	Water			X	X	X	X		1
Basin 1	6/12/24	1100	G	Water			X	X	X	X		2
Basin 2 NO FLOW ; NO SAMPLE				Water								
Upstream	6/12/24	1000	G	Water			X	X	X	X		4
Clarifying Pond	6/12/24	1030	G	Water			X	X	X	X		5

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I II III IV Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		6/12/24	FARTHES		6/12/24 1247	EETN-KOP
2	Relinquished by:	Date/Time: 6-12-24 1630	Company EETN-KOP	Received by:	Date/Time: 6/12	Company ETA
3	Relinquished by: HS	Date/Time: 6/12 1900	Company ETA	Received by:	Date/Time: ETA 6/12	Company 1900

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks:

Ver: 04/02/2024

TestAmerica Edison
Receipt Temperature and pH Log

Job Number: 35725

Number of Coolers: 3 IR Gun # 2

Cooler Temperatures

	RAW	CORRECTED		RAW	CORRECTED		RAW	CORRECTED
Cooler #1:	3.4 °C	3.4 °C	Cooler #4:	°C	°C	Cooler #7:	°C	°C
Cooler #2:	2.3 °C	2.3 °C	Cooler #5:	°C	°C	Cooler #8:	°C	°C
Cooler #3:	2.4 °C	2.4 °C	Cooler #6:	°C	°C	Cooler #9:	°C	°C

TALS Sample Number	Ammonia (pH<2)	COD (pH<2)	Nitrate Nitrite (pH<2)	Metals* (pH<2)	Hardness (pH<2)	Pest (pH 5-9)	EPH or QAM (pH<2)	Phenols (pH<2)	Sulfide (pH>9)	TKN (pH<2)	TOC (pH<2)	Total Cyanide (pH>12)	Total Phos (pH<2)	Other	Other
1	<2	<2		<2							<2		<2		
2	<2	<2		<2							<2		<2		
4	<2	<2		<2							<2		<2		
5	<2	<2		<2							<2		<2		

If pH adjustments are required record the information below.

Sample No(s). adjusted _____

Preservative Name/Conc. _____ Volume of Preservative used (ml): _____

Lot # of Preservative(s): _____ Expiration Date: _____

The appropriate Project Manager and Department Manager should be notified about the samples which were pH adjusted.

** Samples for Metal analysis which are out of compliance must be acidified at least 24 hours prior to analysis.*

Initials: _____ Date 6/12

Eurofins Edison
777 New Durham Road
Edison, NJ 08817
Phone: 732-549-3900 Fax: 732-549-3679

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Gilmore, Julie L	Carrier Tracking No(s):	COC No: 460-71475.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Julie.Gilmore@et.eurofinsus.com	State of Origin: Pennsylvania	Page: Page 1 of 1
Company: Eurofins Lancaster Laboratories Environm		Accreditations Required (See note): NELAP - Pennsylvania		Job #: 460-305725-1
Address: 2425 New Holland Pike, ,	Due Date Requested: 6/26/2024			
City: Lancaster	TAT Requested (days):			
State, Zip: PA, 17601				
Phone: 717-656-2300(Tel)	PO #:			
Email:	WO #:			
Project Name: Rock Hill Anti-Degradation	Project #: 46011424			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:
-
Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020B/3005A (MOD) Total Fe	6020B/Filtration_ME Dissolved Cd/Fe/Zn	351.2/351.2_Prep	Total Number of containers	Special Instructions/Note:
Preservation Code:					X	X					
NPDES 001 (460-305725-1)	6/12/24	08:30 Eastern		Water			X	X	X	3	
Basin 1 (460-305725-2)	6/12/24	11:00 Eastern		Water			X	X	X	3	
Upstream (460-305725-4)	6/12/24	10:00 Eastern		Water			X	X	X	3	
Clarifying Pond (460-305725-5)	6/12/24	10:30 Eastern		Water			X	X	X	3	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Northeast, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Northeast, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Northeast, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Northeast, LLC.

Possible Hazard Identification	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 1	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		6/14/24 1615	ETL		6/14/24 1615	ETL
2		6/14/24 1940	ETL			
3					6/14/24 19:40	ETL

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: r: 1.4 c: 1.4

777 New Durham Road
Edison, NJ 08817
Phone: 732-549-3900 Fax: 732-549-3679

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Gilmore, Julie L	Carrier Tracking No(s):	COC No: 460-71496.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Julie.Gilmore@et.eurofinsus.com	State of Origin: Pennsylvania	Page: Page 1 of 1
Company: Eurofins Environment Testing Northeast,		Accreditations Required (See note): NELAP - Pennsylvania		Job #: 460-305725-1
Address: 10 Hazelwood Drive, ,	Due Date Requested: 6/21/2024			Preservation Codes: -
City: Amherst	TAT Requested (days):			
State, Zip: NY, 14228-2298				
Phone: 716-691-2600(Tel) 716-691-7991(Fax)	PO #:			
Email:	WO #:			
Project Name: Rock Hill Anti-Degradation	Project #: 46011424			
Site:	SSOW#:			Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	Analysis Requested: 245.1/245.1_Prep	Number of Containers	Special Instructions/Note:
NPDES 001 (460-305725-1)	6/12/24	08:30 Eastern		Water			X	1	
Basin 1 (460-305725-2)	6/12/24	11:00 Eastern		Water			X	1	
Upstream (460-305725-4)	6/12/24	10:00 Eastern		Water			X	1	
Clarifying Pond (460-305725-5)	6/12/24	10:30 Eastern		Water			X	1	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Northeast, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Northeast, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Northeast, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Northeast, LLC.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 1	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:			
Relinquished by:	Date/Time: 6/17/24 1900	Company: EETGL	Received by:	Date/Time: 6/18/24 1000	Company: EA	
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company	
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company	
Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks: 4.8# 1 of 1			

Login Sample Receipt Checklist

Client: Heidelberg Materials Northeast LLC

Job Number: 460-305725-1

Login Number: 305725
List Number: 1
Creator: Meyers, Gary

List Source: Eurofins Edison

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Heidelberg Materials Northeast LLC

Job Number: 460-305725-1

Login Number: 305725
List Number: 5
Creator: Kolb, Chris M

List Source: Eurofins Buffalo
List Creation: 06/19/24 12:32 PM

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	4.8 ir gun #1 ice
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	True	

Login Sample Receipt Checklist

Client: Heidelberg Materials Northeast LLC

Job Number: 460-305725-1

Login Number: 305725
List Number: 2
Creator: Metzger, Katherine A

List Source: Eurofins Lancaster Laboratories Environment Testing, LLC
List Creation: 06/14/24 09:47 PM

Question	Answer	Comment
The cooler's custody seal is intact.	N/A	Not present
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature acceptable,where thermal pres is required(</=6C, not frozen).	True	
Cooler Temperature is recorded.	True	
WV:Container Temp acceptable,where thermal pres is required (</=6C, not frozen).	N/A	
WV: Container Temperature is recorded.	N/A	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the containers received and the COC.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
There is sufficient vol. for all requested analyses.	True	
Is the Field Sampler's name present on COC?	False	Received project as a subcontract.
Sample custody seals are intact.	N/A	Not present.
VOA sample vials do not have headspace >6mm in diameter (none, if from WV)?	N/A	

Login Sample Receipt Checklist

Client: Heidelberg Materials Northeast LLC

Job Number: 460-305725-1

Login Number: 305725
List Number: 3
Creator: Munro, Caroline

List Source: Eurofins Savannah
List Creation: 06/15/24 11:26 AM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Lab Results

July 30, 2024

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Katie Murray
Heidelberg Materials Northeast LLC
7660 Imperial Way
Allentown, Pennsylvania 18195

Generated 8/20/2024 2:38:33 PM

JOB DESCRIPTION

Rock Hill - Anti-Degradation

JOB NUMBER

460-308556-1

Eurofins Edison
777 New Durham Road
Edison NJ 08817

See page two for job notes and contact information.

my EOL

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing Northeast, LLC Project Manager.

Authorization



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8/20/2024 2:38:33 PM

Authorized for release by
Julie Gilmore, Project Manager I
Julie.Gilmore@et.eurofinsus.com
(484)685-0865

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Qualifiers

HPLC/IC

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Metals

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

General Chemistry

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
H	Sample was prepped or analyzed beyond the specified holding time. This does not meet regulatory requirements.
H3	Sample was received and analyzed past holding time. This does not meet regulatory requirements.
HF	Parameter with a holding time of 15 minutes. Test performed by laboratory at client's request. Sample was analyzed outside of hold time.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 460-308556-1 Eurofins Edison

Job Narrative
460-308556-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

The method detection limit (MDL) is the lowest value detectable by the laboratory for a given analyte as determined by the MDL procedure detailed in EPA 40 CFR 136. Reported MDL values are adjusted for any dilutions and percent moisture (as applicable). The lab is unable to report values below the MDL.

Receipt
The samples were received on 7/30/2024 7:00 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 3 coolers at receipt time were 2.8°C, 3.4°C and 4.2°C.

Receipt Exceptions
The following samples were logged in out of hold for Orthophos due to sample receiving not initially logging it in when received.

Subcontract Work
Method Osomotic Pressure: This method was subcontracted to Microbac Laboratories, Inc. The subcontract laboratory certification is different from that of the facility issuing the final report. The subcontract report is appended in its entirety.

Method 300.0 - Anions, Ion Chromatography
Samples NPDES 001 (460-308556-1), BASIN 2 (460-308556-2), BASIN 1 (460-308556-3), UPSTREAM (460-308556-4) and CLARIFYING POND (460-308556-5) were analyzed for Anions, Ion Chromatography. The samples were analyzed on 7/31/2024.

Method 300.0 - Anions, Ion Chromatography
Samples NPDES 001 (460-308556-1), BASIN 2 (460-308556-2), BASIN 1 (460-308556-3), UPSTREAM (460-308556-4) and CLARIFYING POND (460-308556-5) were analyzed for Anions, Ion Chromatography. The samples were analyzed on 7/31/2024.

Method 245.1 - Mercury (CVAA)
Samples NPDES 001 (460-308556-1), BASIN 2 (460-308556-2), BASIN 1 (460-308556-3), UPSTREAM (460-308556-4) and CLARIFYING POND (460-308556-5) were analyzed for Mercury (CVAA). The samples were prepared and analyzed on 8/6/2024.

Method 6020B - Metals (ICP/MS)
Samples NPDES 001 (460-308556-1), BASIN 2 (460-308556-2), BASIN 1 (460-308556-3), UPSTREAM (460-308556-4) and CLARIFYING POND (460-308556-5) were analyzed for Metals (ICP/MS). The samples were prepared on 8/6/2024 and analyzed on 8/6/2024 and 8/7/2024.

Method 6020B - Metals (ICP/MS) - Dissolved
Samples NPDES 001 (460-308556-1), BASIN 2 (460-308556-2), BASIN 1 (460-308556-3), UPSTREAM (460-308556-4) and CLARIFYING POND (460-308556-5) were analyzed for Metals (ICP/MS) - Dissolved. The samples were prepared on 8/2/2024 and 8/8/2024 and analyzed on 8/7/2024 and 8/20/2024.

The following samples were not filtered within 15 minutes of sample collection as required by the method: NPDES 001 (460-308556-1), BASIN 2 (460-308556-2), BASIN 1 (460-308556-3), UPSTREAM (460-308556-4) and CLARIFYING POND (460-308556-5). The sample(s) was filtered prior to analysis at the laboratory, and the results have been reported. This does not meet regulatory requirements.

The following samples were not filtered within 15 minutes of sample collection as required by the method: NPDES 001 (460-308556-1), BASIN 2 (460-308556-2), BASIN 1 (460-308556-3), UPSTREAM (460-308556-4) and CLARIFYING POND (460-308556-5). The sample(s) was filtered prior to analysis at the laboratory, and the results have been reported. This does not

meet regulatory requirements.

Method 6020B - Metals (ICP/MS) - Total Recoverable
Samples NPDES 001 (460-308556-1), BASIN 2 (460-308556-2), BASIN 1 (460-308556-3), UPSTREAM (460-308556-4) and CLARIFYING POND (460-308556-5) were analyzed for Metals (ICP/MS) - Total Recoverable. The samples were prepared on 8/2/2024 and 8/5/2024 and analyzed on 8/5/2024, 8/7/2024, 8/8/2024, 8/14/2024 and 8/20/2024.

Method 2340B-2011 - Total Hardness (as CaCO3) by calculation - SM Online, 2011
Samples NPDES 001 (460-308556-1), BASIN 2 (460-308556-2), BASIN 1 (460-308556-3), UPSTREAM (460-308556-4) and CLARIFYING POND (460-308556-5) were analyzed for Total Hardness (as CaCO3) by calculation - SM Online, 2011. The samples were analyzed on 8/7/2024.

Method 120.1 - Conductivity, Specific Conductance
Samples NPDES 001 (460-308556-1), BASIN 2 (460-308556-2), BASIN 1 (460-308556-3), UPSTREAM (460-308556-4) and CLARIFYING POND (460-308556-5) were analyzed for Conductivity, Specific Conductance. The samples were analyzed on 8/8/2024.

Method 2320B-2011 - Alkalinity, Total
Samples NPDES 001 (460-308556-1), BASIN 2 (460-308556-2), BASIN 1 (460-308556-3), UPSTREAM (460-308556-4) and CLARIFYING POND (460-308556-5) were analyzed for Alkalinity, Total. The samples were analyzed on 8/9/2024.

Method 2540C-2015 - Total Dissolved Solids (Dried at 180 °C)
Samples NPDES 001 (460-308556-1), BASIN 2 (460-308556-2), BASIN 1 (460-308556-3), UPSTREAM (460-308556-4) and CLARIFYING POND (460-308556-5) were analyzed for Total Dissolved Solids (Dried at 180 °C). The samples were analyzed on 8/6/2024.

Method 2540D-2015 - Total Suspended Solids (Dried at 103-105°C)
Samples NPDES 001 (460-308556-1), BASIN 2 (460-308556-2), BASIN 1 (460-308556-3), UPSTREAM (460-308556-4) and CLARIFYING POND (460-308556-5) were analyzed for Total Suspended Solids (Dried at 103-105°C). The samples were analyzed on 8/2/2024.

Method 350.1 - Nitrogen, Ammonia
Samples NPDES 001 (460-308556-1), BASIN 2 (460-308556-2), BASIN 1 (460-308556-3), UPSTREAM (460-308556-4) and CLARIFYING POND (460-308556-5) were analyzed for Nitrogen, Ammonia. The samples were analyzed on 8/8/2024.

Method 350.1 - Nitrogen, Ammonia - Dissolved
Samples NPDES 001 (460-308556-1), BASIN 2 (460-308556-2), BASIN 1 (460-308556-3), UPSTREAM (460-308556-4) and CLARIFYING POND (460-308556-5) were analyzed for Nitrogen, Ammonia - Dissolved. The samples were analyzed on 8/8/2024.

Method 351.2 - Nitrogen, Total Kjeldahl
Samples NPDES 001 (460-308556-1), BASIN 2 (460-308556-2), BASIN 1 (460-308556-3), UPSTREAM (460-308556-4) and CLARIFYING POND (460-308556-5) were analyzed for Nitrogen, Total Kjeldahl. The samples were prepared on 8/5/2024 and analyzed on 8/6/2024.

Method 410.4 - COD
Samples NPDES 001 (460-308556-1), BASIN 2 (460-308556-2), BASIN 1 (460-308556-3), UPSTREAM (460-308556-4) and CLARIFYING POND (460-308556-5) were analyzed for COD. The samples were analyzed on 8/8/2024.

Method 4500 O C-2016 - Oxygen, Dissolved
Samples NPDES 001 (460-308556-1), BASIN 2 (460-308556-2), BASIN 1 (460-308556-3), UPSTREAM (460-308556-4) and CLARIFYING POND (460-308556-5) were analyzed for Oxygen, Dissolved. The samples were analyzed on 8/1/2024.

This analysis is normally performed in the field and has a method-defined holding time of 15 minutes. The following samples has been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe: NPDES 001 (460-308556-1), BASIN 2 (460-308556-2), BASIN 1 (460-308556-3), UPSTREAM (460-308556-4) and CLARIFYING POND (460-308556-5).

Method SM4500 P E-2011 - Phosphorus
Samples NPDES 001 (460-308556-1), BASIN 2 (460-308556-2), BASIN 1 (460-308556-3), UPSTREAM (460-308556-4) and CLARIFYING POND (460-308556-5) were analyzed for Phosphorus. The samples were prepared and analyzed on 8/12/2024.

Job ID: 460-308556-1 (Continued) Eurofins Edison

Method SM4500 P E-2011 - Phosphorus - Dissolved
Samples NPDES 001 (460-308556-1), BASIN 2 (460-308556-2), BASIN 1 (460-308556-3), UPSTREAM (460-308556-4) and CLARIFYING POND (460-308556-5) were analyzed for Phosphorus - Dissolved. The samples were prepared and analyzed on 8/12/2024.

Method 4500 P E-2011 - Orthophosphate
Samples NPDES 001 (460-308556-1), BASIN 2 (460-308556-2), BASIN 1 (460-308556-3), UPSTREAM (460-308556-4) and CLARIFYING POND (460-308556-5) were analyzed for Orthophosphate. The samples were analyzed on 8/3/2024.

Method 4500 P E-2011 - Orthophosphate - Dissolved
Samples NPDES 001 (460-308556-1), BASIN 2 (460-308556-2), BASIN 1 (460-308556-3), UPSTREAM (460-308556-4) and CLARIFYING POND (460-308556-5) were analyzed for Orthophosphate - Dissolved. The samples were analyzed on 8/3/2024.

Method 9040C - pH
Samples NPDES 001 (460-308556-1), BASIN 2 (460-308556-2), BASIN 1 (460-308556-3), UPSTREAM (460-308556-4) and CLARIFYING POND (460-308556-5) were analyzed for pH. The samples were analyzed on 8/9/2024.

This analysis is normally performed in the field and has a method-defined holding time of 15 minutes. The following samples has been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe: NPDES 001 (460-308556-1), BASIN 2 (460-308556-2), BASIN 1 (460-308556-3), UPSTREAM (460-308556-4), CLARIFYING POND (460-308556-5), (460-308525-A-1) and (460-308525-A-1 DU).

Method 9060A - Organic Carbon, Total (TOC)
Samples NPDES 001 (460-308556-1), BASIN 2 (460-308556-2), BASIN 1 (460-308556-3), UPSTREAM (460-308556-4) and CLARIFYING POND (460-308556-5) were analyzed for Organic Carbon, Total (TOC). The samples were analyzed on 8/3/2024.

Method 2310B-2011 - Acidity
Samples NPDES 001 (460-308556-1), BASIN 2 (460-308556-2), BASIN 1 (460-308556-3), UPSTREAM (460-308556-4) and CLARIFYING POND (460-308556-5) were analyzed for Acidity. The samples were analyzed on 8/8/2024.

Method 5210 B-2016 - BOD, 5-Day
Samples NPDES 001 (460-308556-1), BASIN 2 (460-308556-2), BASIN 1 (460-308556-3), UPSTREAM (460-308556-4) and CLARIFYING POND (460-308556-5) were analyzed for BOD, 5-Day. The samples were analyzed on 7/31/2024.

Client Sample ID: NPDES 001

Date Collected: 07/30/24 09:30
Date Received: 07/30/24 19:00

Lab Sample ID: 460-308556-1

Matrix: Water

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide	0.056	J	0.32	0.054	mg/L			07/31/24 21:10	1
Nitrate as N	0.088	J	0.16	0.070	mg/L			07/31/24 21:10	1
Chloride	2.96		0.32	0.039	mg/L			07/31/24 21:10	1
Nitrate Nitrite as N	0.15	J	0.16	0.070	mg/L			07/31/24 21:10	1
Nitrite as N	0.065	J	0.16	0.047	mg/L			07/31/24 21:10	1
Sulfate	5.03		0.48	0.095	mg/L			07/31/24 21:10	1

Method: SM-Online 2340B-2011 - Total Hardness (as CaCO3) by calculation - SM Online, 2011

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	97.2		33.1	33.1	mg/L			08/07/24 12:07	1

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000042	U	0.00020	0.000042	mg/L		08/06/24 12:02	08/06/24 15:10	1

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	5.4		4.0	0.91	ug/L		08/06/24 15:25	08/06/24 23:25	1
Boron	76.1	J	80.0	30.4	ug/L		08/06/24 15:25	08/06/24 23:25	1
Calcium	22700	B	500	53.6	ug/L		08/06/24 15:25	08/06/24 23:25	1
Copper	2.5	U	4.0	2.5	ug/L		08/06/24 15:25	08/06/24 23:25	1
Lead	0.84	U	1.2	0.84	ug/L		08/06/24 15:25	08/06/24 23:25	1
Magnesium	9810		200	46.9	ug/L		08/06/24 15:25	08/06/24 23:25	1
Manganese	71.4		8.0	1.5	ug/L		08/06/24 15:25	08/06/24 23:25	1
Nickel	0.91	U	4.0	0.91	ug/L		08/06/24 15:25	08/06/24 23:25	1
Potassium	519		200	112	ug/L		08/06/24 15:25	08/06/24 23:25	1
Selenium	0.59	U	2.5	0.59	ug/L		08/06/24 15:25	08/06/24 23:25	1
Sodium	4660		500	219	ug/L		08/06/24 15:25	08/06/24 23:25	1
Strontium	57.0		4.0	0.50	ug/L		08/06/24 15:25	08/06/24 23:25	1
Zinc	6.5	U	16.0	6.5	ug/L		08/06/24 15:25	08/07/24 01:49	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	67.3	J	100	35.0	ug/L		08/05/24 06:40	08/05/24 19:21	1
Iron	485		50.0	20.0	ug/L		08/05/24 07:55	08/20/24 01:35	1
Lithium	1.7	U	8.0	1.7	ug/L		08/02/24 14:00	08/08/24 13:56	1

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.15	U	0.50	0.15	ug/L		08/08/24 22:00	08/20/24 02:22	1
Lithium	1.7	U	8.0	1.7	ug/L		08/02/24 14:00	08/07/24 18:07	1
Iron	42.8	J	50.0	20.0	ug/L		08/08/24 22:00	08/20/24 02:22	1
Zinc	4.0	U	10.0	4.0	ug/L		08/08/24 22:00	08/20/24 02:22	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Resistivity (EPA 120.1)	0.00480		0.000100	0.000100	Mohm-cm			08/08/24 14:50	1
Specific Conductance (EPA 120.1)	208		1.00	1.00	umhos/cm			08/08/24 14:50	1
Acidity (SM 2310B-2011)	20.0	U	20.0	20.0	mg/L			08/08/24 14:51	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-2011)	92.3		5.0	5.0	mg/L			08/09/24 10:13	1

Client Sample ID: NPDES 001

Lab Sample ID: 460-308556-1

Date Collected: 07/30/24 09:30

Matrix: Water

Date Received: 07/30/24 19:00

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbonate Alkalinity as CaCO3 (SM 2320B-2011)	5.0	U	5.0	5.0	mg/L			08/09/24 10:13	1
Alkalinity as CaCO3 to pH 4.5 (SM 2320B-2011)	**92.3**		5.0	5.0	mg/L			08/09/24 10:13	1
Total Dissolved Solids (SM 2540C-2015)	**119**		2.5	2.5	mg/L			08/06/24 07:30	1
Total Suspended Solids (SM 2540D-2015)	**12.4**		4.5	4.5	mg/L			08/02/24 08:53	1
Ammonia (EPA 350.1)	0.050	U	0.10	0.050	mg/L			08/08/24 14:01	1
Total Kjeldahl Nitrogen (EPA 351.2)	0.50	U	1.0	0.50	mg/L		08/05/24 15:17	08/06/24 11:40	1
Chemical Oxygen Demand (EPA 410.4)	3.3	U	10.0	3.3	mg/L			08/08/24 17:37	1
Oxygen, Dissolved (SM 4500 O C-2016)	**5.7**	**H H3**	1.0	1.0	mg/L			08/01/24 10:10	1
Orthophosphate as P (SM 4500 P E-2011)	0.0050	U H	0.030	0.0050	mg/L			08/03/24 01:57	1
Carbonaceous Biochemical Oxygen Demand 5 (SM 5210 B-2016)	1.0	U	1.0	1.0	mg/L			07/31/24 17:30	1
pH (SW846 9040C)	**7.8**	**HF**	0.1	0.1	SU			08/09/24 10:13	1
pH (SW846 9040C)	**7.8**	**HF**	0.1	0.1	SU			08/09/24 10:13	1
Temperature (SW846 9040C)	**24.1**	**HF**	0.1	0.1	Degrees C			08/09/24 10:13	1
Temperature (SW846 9040C)	**24.1**	**HF**	0.1	0.1	Degrees C			08/09/24 10:13	1
Total Organic Carbon (SW846 9060A)	**0.86**	**J**	1.0	0.71	mg/L			08/03/24 02:26	1
Phosphorus as PO4 (SM4500 P E-2011)	**0.51**		0.090	0.071	mg/L		08/12/24 08:31	08/12/24 14:27	1
Phosphorus as P (SM4500 P E-2011)	**0.17**		0.030	0.023	mg/L		08/12/24 08:31	08/12/24 14:27	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (EPA 350.1)	0.050	U	0.10	0.050	mg/L			08/08/24 14:10	1
Orthophosphate as P (SM 4500 P E-2011)	0.0050	U H	0.030	0.0050	mg/L			08/03/24 01:57	1
Phosphorus as PO4 (SM4500 P E-2011)	**0.22**		0.090	0.071	mg/L		08/12/24 08:31	08/12/24 14:27	1
Phosphorus as P (SM4500 P E-2011)	**0.070**		0.030	0.023	mg/L		08/12/24 08:31	08/12/24 14:27	1

Client Sample ID: BASIN 2

Lab Sample ID: 460-308556-2

Date Collected: 07/30/24 10:30

Matrix: Water

Date Received: 07/30/24 19:00

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide	**0.11**	**J**	0.32	0.054	mg/L			07/31/24 18:10	1
Nitrate as N	0.070	U	0.16	0.070	mg/L			07/31/24 18:10	1
Chloride	**4.15**		0.32	0.039	mg/L			07/31/24 18:10	1
Nitrate Nitrite as N	**0.11**	**J**	0.16	0.070	mg/L			07/31/24 18:10	1
Nitrite as N	**0.053**	**J**	0.16	0.047	mg/L			07/31/24 18:10	1
Sulfate	**9.11**		0.48	0.095	mg/L			07/31/24 18:10	1

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill - Anti-Degradation

Job ID: 460-308556-1

Client Sample ID: BASIN 2
Date Collected: 07/30/24 10:30
Date Received: 07/30/24 19:00

Lab Sample ID: 460-308556-2
Matrix: Water

Method: SM-Online 2340B-2011 - Total Hardness (as CaCO3) by calculation - SM Online, 2011

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**141**		33.1	33.1	mg/L			08/07/24 12:07	1

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000042	U	0.00020	0.000042	mg/L		08/06/24 12:02	08/06/24 15:15	1

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**8.1**		4.0	0.91	ug/L		08/06/24 15:25	08/06/24 23:27	1
Boron	**73.5**	**J**	80.0	30.4	ug/L		08/06/24 15:25	08/06/24 23:27	1
Calcium	**28600**	**B**	500	53.6	ug/L		08/06/24 15:25	08/06/24 23:27	1
Copper	2.5	U	4.0	2.5	ug/L		08/06/24 15:25	08/06/24 23:27	1
Lead	0.84	U	1.2	0.84	ug/L		08/06/24 15:25	08/06/24 23:27	1
Magnesium	**17000**		200	46.9	ug/L		08/06/24 15:25	08/06/24 23:27	1
Manganese	**75.7**		8.0	1.5	ug/L		08/06/24 15:25	08/06/24 23:27	1
Nickel	0.91	U	4.0	0.91	ug/L		08/06/24 15:25	08/06/24 23:27	1
Potassium	**553**		200	112	ug/L		08/06/24 15:25	08/06/24 23:27	1
Selenium	0.59	U	2.5	0.59	ug/L		08/06/24 15:25	08/06/24 23:27	1
Sodium	**5760**		500	219	ug/L		08/06/24 15:25	08/06/24 23:27	1
Strontium	**71.2**		4.0	0.50	ug/L		08/06/24 15:25	08/06/24 23:27	1
Zinc	6.5	U	16.0	6.5	ug/L		08/06/24 15:25	08/07/24 01:52	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**53.5**	**J**	100	35.0	ug/L		08/05/24 06:40	08/05/24 19:00	1
Iron	**434**		50.0	20.0	ug/L		08/05/24 07:30	08/14/24 18:05	1
Lithium	1.7	U	8.0	1.7	ug/L		08/02/24 14:00	08/07/24 17:52	1

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.15	U	0.50	0.15	ug/L		08/08/24 22:00	08/20/24 02:20	1
Lithium	1.7	U	8.0	1.7	ug/L		08/02/24 14:00	08/07/24 18:09	1
Iron	**75.9**		50.0	20.0	ug/L		08/08/24 22:00	08/20/24 02:20	1
Zinc	4.0	U	10.0	4.0	ug/L		08/08/24 22:00	08/20/24 02:20	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Resistivity (EPA 120.1)	**0.00351**		0.000100	0.000100	Mohm-cm			08/08/24 14:50	1
Specific Conductance (EPA 120.1)	**285**		1.00	1.00	umhos/cm			08/08/24 14:50	1
Acidity (SM 2310B-2011)	20.0	U	20.0	20.0	mg/L			08/08/24 14:51	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-2011)	**130**		5.0	5.0	mg/L			08/09/24 10:21	1
Carbonate Alkalinity as CaCO3 (SM 2320B-2011)	5.0	U	5.0	5.0	mg/L			08/09/24 10:21	1
Alkalinity as CaCO3 to pH 4.5 (SM 2320B-2011)	**130**		5.0	5.0	mg/L			08/09/24 10:21	1
Total Dissolved Solids (SM 2540C-2015)	**173**		2.5	2.5	mg/L			08/06/24 07:30	1
Total Suspended Solids (SM 2540D-2015)	**8.8**		3.2	3.2	mg/L			08/02/24 08:53	1
Ammonia (EPA 350.1)	0.050	U	0.10	0.050	mg/L			08/08/24 14:02	1
Total Kjeldahl Nitrogen (EPA 351.2)	1.3	U	2.5	1.3	mg/L		08/05/24 15:53	08/06/24 13:03	1

Client Sample ID: BASIN 2

Lab Sample ID: 460-308556-2

Date Collected: 07/30/24 10:30

Matrix: Water

Date Received: 07/30/24 19:00

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand (EPA 410.4)	11.0		10.0	3.3	mg/L			08/08/24 17:37	1
Oxygen, Dissolved (SM 4500 O C-2016)	8.2	H H3	1.0	1.0	mg/L			08/01/24 10:10	1
Orthophosphate as P (SM 4500 P E-2011)	0.0050	U H	0.030	0.0050	mg/L			08/03/24 01:57	1
Carbonaceous Biochemical Oxygen Demand 5 (SM 5210 B-2016)	1.0	U	1.0	1.0	mg/L			07/31/24 18:00	1
pH (SW846 9040C)	8.1	HF	0.1	0.1	SU			08/09/24 10:21	1
pH (SW846 9040C)	8.1	HF	0.1	0.1	SU			08/09/24 10:21	1
Temperature (SW846 9040C)	24.2	HF	0.1	0.1	Degrees C			08/09/24 10:21	1
Temperature (SW846 9040C)	24.2	HF	0.1	0.1	Degrees C			08/09/24 10:21	1
Total Organic Carbon (SW846 9060A)	2.8		1.0	0.71	mg/L			08/03/24 02:51	1
Phosphorus as PO4 (SM4500 P E-2011)	0.31		0.090	0.071	mg/L		08/12/24 08:31	08/12/24 14:27	1
Phosphorus as P (SM4500 P E-2011)	0.10		0.030	0.023	mg/L		08/12/24 08:31	08/12/24 14:27	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (EPA 350.1)	0.050	U	0.10	0.050	mg/L			08/08/24 14:22	1
Orthophosphate as P (SM 4500 P E-2011)	0.0050	U H	0.030	0.0050	mg/L			08/03/24 01:57	1
Phosphorus as PO4 (SM4500 P E-2011)	0.074	J	0.090	0.071	mg/L		08/12/24 08:31	08/12/24 14:27	1
Phosphorus as P (SM4500 P E-2011)	0.024	J	0.030	0.023	mg/L		08/12/24 08:31	08/12/24 14:27	1

Client Sample ID: BASIN 1

Lab Sample ID: 460-308556-3

Date Collected: 07/30/24 11:15

Matrix: Water

Date Received: 07/30/24 19:00

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide	0.066	J	0.32	0.054	mg/L			07/31/24 18:25	1
Nitrate as N	0.070	U	0.16	0.070	mg/L			07/31/24 18:25	1
Chloride	5.89		0.32	0.039	mg/L			07/31/24 18:25	1
Nitrate Nitrite as N	0.14	J	0.16	0.070	mg/L			07/31/24 18:25	1
Nitrite as N	0.066	J	0.16	0.047	mg/L			07/31/24 18:25	1
Sulfate	2.94		0.48	0.095	mg/L			07/31/24 18:25	1

Method: SM-Online 2340B-2011 - Total Hardness (as CaCO3) by calculation - SM Online, 2011

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	155		33.1	33.1	mg/L			08/07/24 12:07	1

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000042	U	0.00020	0.000042	mg/L		08/06/24 12:02	08/06/24 15:17	1

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	7.6		4.0	0.91	ug/L		08/06/24 15:25	08/06/24 23:30	1

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill - Anti-Degradation

Job ID: 460-308556-1

Client Sample ID: BASIN 1
Date Collected: 07/30/24 11:15
Date Received: 07/30/24 19:00

Lab Sample ID: 460-308556-3
Matrix: Water

Method: SW846 6020B - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	109		80.0	30.4	ug/L		08/06/24 15:25	08/06/24 23:30	1
Calcium	34300	B	500	53.6	ug/L		08/06/24 15:25	08/06/24 23:30	1
Copper	2.5	U	4.0	2.5	ug/L		08/06/24 15:25	08/06/24 23:30	1
Lead	0.84	U	1.2	0.84	ug/L		08/06/24 15:25	08/06/24 23:30	1
Magnesium	16800		200	46.9	ug/L		08/06/24 15:25	08/06/24 23:30	1
Manganese	95.0		8.0	1.5	ug/L		08/06/24 15:25	08/06/24 23:30	1
Nickel	0.91	U	4.0	0.91	ug/L		08/06/24 15:25	08/06/24 23:30	1
Potassium	683		200	112	ug/L		08/06/24 15:25	08/06/24 23:30	1
Selenium	0.59	U	2.5	0.59	ug/L		08/06/24 15:25	08/06/24 23:30	1
Sodium	8000		500	219	ug/L		08/06/24 15:25	08/06/24 23:30	1
Strontium	91.1		4.0	0.50	ug/L		08/06/24 15:25	08/06/24 23:30	1
Zinc	29.5		16.0	6.5	ug/L		08/06/24 15:25	08/07/24 01:54	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	35.0	U	100	35.0	ug/L		08/05/24 06:40	08/05/24 18:56	1
Iron	3240		50.0	20.0	ug/L		08/05/24 07:30	08/14/24 18:07	1
Lithium	1.7	U	8.0	1.7	ug/L		08/02/24 14:00	08/07/24 17:54	1

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.15	U	0.50	0.15	ug/L		08/08/24 22:00	08/20/24 02:24	1
Lithium	1.7	U	8.0	1.7	ug/L		08/02/24 14:00	08/07/24 18:12	1
Iron	61.2		50.0	20.0	ug/L		08/08/24 22:00	08/20/24 02:24	1
Zinc	17.8		10.0	4.0	ug/L		08/08/24 22:00	08/20/24 02:24	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Resistivity (EPA 120.1)	0.00368		0.000100	0.000100	Mohm-cm			08/08/24 14:50	1
Specific Conductance (EPA 120.1)	272		1.00	1.00	umhos/cm			08/08/24 14:50	1
Acidity (SM 2310B-2011)	20.0	U	20.0	20.0	mg/L			08/08/24 14:51	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-2011)	134		5.0	5.0	mg/L			08/09/24 10:30	1
Carbonate Alkalinity as CaCO3 (SM 2320B-2011)	5.0	U	5.0	5.0	mg/L			08/09/24 10:30	1
Alkalinity as CaCO3 to pH 4.5 (SM 2320B-2011)	134		5.0	5.0	mg/L			08/09/24 10:30	1
Total Dissolved Solids (SM 2540C-2015)	182		2.5	2.5	mg/L			08/06/24 07:30	1
Total Suspended Solids (SM 2540D-2015)	10.0		3.1	3.1	mg/L			08/02/24 08:53	1
Ammonia (EPA 350.1)	0.050	U	0.10	0.050	mg/L			08/08/24 14:04	1
Total Kjeldahl Nitrogen (EPA 351.2)	1.3	U	2.5	1.3	mg/L		08/05/24 15:53	08/06/24 13:05	1
Chemical Oxygen Demand (EPA 410.4)	7.7	J	10.0	3.3	mg/L			08/08/24 17:37	1
Oxygen, Dissolved (SM 4500 O C-2016)	6.4	H	1.0	1.0	mg/L			08/01/24 10:10	1
Orthophosphate as P (SM 4500 P E-2011)	0.0050	U H	0.030	0.0050	mg/L			08/03/24 01:57	1
Carbonaceous Biochemical Oxygen Demand 5 (SM 5210 B-2016)	1.0	U	1.0	1.0	mg/L			07/31/24 18:15	1
pH (SW846 9040C)	8.0	HF	0.1	0.1	SU			08/09/24 10:30	1

Client Sample ID: BASIN 1

Lab Sample ID: 460-308556-3

Date Collected: 07/30/24 11:15

Matrix: Water

Date Received: 07/30/24 19:00

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH (SW846 9040C)	8.0	HF	0.1	0.1	SU			08/09/24 10:30	1
Temperature (SW846 9040C)	24.3	HF	0.1	0.1	Degrees C			08/09/24 10:30	1
Temperature (SW846 9040C)	24.3	HF	0.1	0.1	Degrees C			08/09/24 10:30	1
Total Organic Carbon (SW846 9060A)	1.9		1.0	0.71	mg/L			08/03/24 03:16	1
Phosphorus as PO4 (SM4500 P E-2011)	0.66		0.090	0.071	mg/L		08/12/24 08:31	08/12/24 14:27	1
Phosphorus as P (SM4500 P E-2011)	0.21		0.030	0.023	mg/L		08/12/24 08:31	08/12/24 14:27	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (EPA 350.1)	0.050	U	0.10	0.050	mg/L			08/08/24 14:24	1
Orthophosphate as P (SM 4500 P E-2011)	0.0050	U H	0.030	0.0050	mg/L			08/03/24 01:57	1
Phosphorus as PO4 (SM4500 P E-2011)	0.11	F1	0.090	0.071	mg/L		08/12/24 08:31	08/12/24 14:27	1
Phosphorus as P (SM4500 P E-2011)	0.037		0.030	0.023	mg/L		08/12/24 08:31	08/12/24 14:27	1

Client Sample ID: UPSTREAM

Lab Sample ID: 460-308556-4

Date Collected: 07/30/24 11:30

Matrix: Water

Date Received: 07/30/24 19:00

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide	0.054	U	0.32	0.054	mg/L			07/31/24 18:40	1
Nitrate as N	0.11	J	0.16	0.070	mg/L			07/31/24 18:40	1
Chloride	1.75		0.32	0.039	mg/L			07/31/24 18:40	1
Nitrate Nitrite as N	0.16		0.16	0.070	mg/L			07/31/24 18:40	1
Nitrite as N	0.056	J	0.16	0.047	mg/L			07/31/24 18:40	1
Sulfate	28.4		0.48	0.095	mg/L			07/31/24 18:40	1

Method: SM-Online 2340B-2011 - Total Hardness (as CaCO3) by calculation - SM Online, 2011

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	65.7		33.1	33.1	mg/L			08/07/24 12:07	1

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000042	U	0.00020	0.000042	mg/L		08/06/24 12:02	08/06/24 15:18	1

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	3.3	J	4.0	0.91	ug/L		08/06/24 15:25	08/06/24 23:32	1
Boron	69.7	J	80.0	30.4	ug/L		08/06/24 15:25	08/06/24 23:32	1
Calcium	17200	B	500	53.6	ug/L		08/06/24 15:25	08/06/24 23:32	1
Copper	2.5	U	4.0	2.5	ug/L		08/06/24 15:25	08/06/24 23:32	1
Lead	0.84	U	1.2	0.84	ug/L		08/06/24 15:25	08/06/24 23:32	1
Magnesium	5540		200	46.9	ug/L		08/06/24 15:25	08/06/24 23:32	1
Manganese	49.0		8.0	1.5	ug/L		08/06/24 15:25	08/06/24 23:32	1
Nickel	0.91	U	4.0	0.91	ug/L		08/06/24 15:25	08/06/24 23:32	1
Potassium	994		200	112	ug/L		08/06/24 15:25	08/06/24 23:32	1

Client Sample ID: UPSTREAM

Date Collected: 07/30/24 11:30
Date Received: 07/30/24 19:00

Lab Sample ID: 460-308556-4

Matrix: Water

Method: SW846 6020B - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Selenium	0.59	U	2.5	0.59	ug/L		08/06/24 15:25	08/06/24 23:32	1
Sodium	**3360**		500	219	ug/L		08/06/24 15:25	08/06/24 23:32	1
Strontium	**29.2**		4.0	0.50	ug/L		08/06/24 15:25	08/06/24 23:32	1
Zinc	6.5	U	16.0	6.5	ug/L		08/06/24 15:25	08/07/24 01:57	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**110**		100	35.0	ug/L		08/05/24 06:40	08/05/24 19:17	1
Iron	**2080**		50.0	20.0	ug/L		08/05/24 07:30	08/14/24 18:25	1
Lithium	**3.3**	**J**	8.0	1.7	ug/L		08/02/24 14:00	08/07/24 17:57	1

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.15	U	0.50	0.15	ug/L		08/08/24 22:00	08/20/24 02:28	1
Lithium	**7.4**	**J**	8.0	1.7	ug/L		08/02/24 14:00	08/07/24 18:14	1
Iron	20.0	U	50.0	20.0	ug/L		08/08/24 22:00	08/20/24 02:28	1
Zinc	4.0	U	10.0	4.0	ug/L		08/08/24 22:00	08/20/24 02:28	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Resistivity (EPA 120.1)	**0.00258**		0.000100	0.000100	Mohm-cm			08/08/24 14:50	1
Specific Conductance (EPA 120.1)	**388**		1.00	1.00	umhos/cm			08/08/24 14:50	1
Acidity (SM 2310B-2011)	20.0	U	20.0	20.0	mg/L			08/08/24 14:51	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-2011)	**170**		5.0	5.0	mg/L			08/09/24 10:39	1
Carbonate Alkalinity as CaCO3 (SM 2320B-2011)	5.0	U	5.0	5.0	mg/L			08/09/24 10:39	1
Alkalinity as CaCO3 to pH 4.5 (SM 2320B-2011)	**170**		5.0	5.0	mg/L			08/09/24 10:39	1
Total Dissolved Solids (SM 2540C-2015)	**241**		2.5	2.5	mg/L			08/06/24 07:30	1
Total Suspended Solids (SM 2540D-2015)	**45.2**		2.9	2.9	mg/L			08/02/24 08:53	1
Ammonia (EPA 350.1)	0.050	U	0.10	0.050	mg/L			08/08/24 14:05	1
Total Kjeldahl Nitrogen (EPA 351.2)	0.50	U	1.0	0.50	mg/L		08/05/24 15:53	08/06/24 13:12	1
Chemical Oxygen Demand (EPA 410.4)	**8.7**	**J**	10.0	3.3	mg/L			08/08/24 17:37	1
Oxygen, Dissolved (SM 4500 O C-2016)	**7.0**	**H**	1.0	1.0	mg/L			08/01/24 10:10	1
Orthophosphate as P (SM 4500 P E-2011)	0.0050	U H	0.030	0.0050	mg/L			08/03/24 01:57	1
Carbonaceous Biochemical Oxygen Demand 5 (SM 5210 B-2016)	1.0	U	1.0	1.0	mg/L			07/31/24 18:30	1
pH (SW846 9040C)	**8.1**	**HF**	0.1	0.1	SU			08/09/24 10:39	1
pH (SW846 9040C)	**8.1**	**HF**	0.1	0.1	SU			08/09/24 10:39	1
Temperature (SW846 9040C)	**24.3**	**HF**	0.1	0.1	Degrees C			08/09/24 10:39	1
Temperature (SW846 9040C)	**24.3**	**HF**	0.1	0.1	Degrees C			08/09/24 10:39	1
Total Organic Carbon (SW846 9060A)	0.71	U	1.0	0.71	mg/L			08/03/24 03:44	1
Phosphorus as PO4 (SM4500 P E-2011)	**0.29**		0.090	0.071	mg/L		08/12/24 08:31	08/12/24 14:27	1
Phosphorus as P (SM4500 P E-2011)	**0.096**		0.030	0.023	mg/L		08/12/24 08:31	08/12/24 14:27	1

Client Sample ID: UPSTREAM

Lab Sample ID: 460-308556-4

Date Collected: 07/30/24 11:30

Matrix: Water

Date Received: 07/30/24 19:00

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (EPA 350.1)	0.050	U	0.10	0.050	mg/L			08/08/24 14:25	1
Orthophosphate as P (SM 4500 P E-2011)	0.0050	U H	0.030	0.0050	mg/L			08/03/24 01:57	1
Phosphorus as PO4 (SM4500 P E-2011)	**0.27**		0.090	0.071	mg/L		08/12/24 08:31	08/12/24 14:27	1
Phosphorus as P (SM4500 P E-2011)	**0.087**		0.030	0.023	mg/L		08/12/24 08:31	08/12/24 14:27	1

Client Sample ID: CLARIFYING POND

Lab Sample ID: 460-308556-5

Date Collected: 07/30/24 12:15

Matrix: Water

Date Received: 07/30/24 19:00

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide	0.054	U	0.32	0.054	mg/L			07/31/24 18:55	1
Nitrate as N	**0.10**	**J**	0.16	0.070	mg/L			07/31/24 18:55	1
Chloride	**1.11**		0.32	0.039	mg/L			07/31/24 18:55	1
Nitrate Nitrite as N	**0.16**		0.16	0.070	mg/L			07/31/24 18:55	1
Nitrite as N	**0.052**	**J**	0.16	0.047	mg/L			07/31/24 18:55	1
Sulfate	**6.37**		0.48	0.095	mg/L			07/31/24 18:55	1

Method: SM-Online 2340B-2011 - Total Hardness (as CaCO3) by calculation - SM Online, 2011

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	**199**		33.1	33.1	mg/L			08/07/24 12:07	1

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000042	U	0.00020	0.000042	mg/L		08/06/24 12:02	08/06/24 15:19	1

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**17.2**		4.0	0.91	ug/L		08/06/24 15:25	08/06/24 23:34	1
Boron	**109**		80.0	30.4	ug/L		08/06/24 15:25	08/06/24 23:34	1
Calcium	**49100**	**B**	500	53.6	ug/L		08/06/24 15:25	08/06/24 23:34	1
Copper	**6.2**		4.0	2.5	ug/L		08/06/24 15:25	08/06/24 23:34	1
Lead	**3.7**		1.2	0.84	ug/L		08/06/24 15:25	08/06/24 23:34	1
Magnesium	**18600**		200	46.9	ug/L		08/06/24 15:25	08/06/24 23:34	1
Manganese	**508**		8.0	1.5	ug/L		08/06/24 15:25	08/06/24 23:34	1
Nickel	**2.7**	**J**	4.0	0.91	ug/L		08/06/24 15:25	08/06/24 23:34	1
Potassium	**2190**		200	112	ug/L		08/06/24 15:25	08/06/24 23:34	1
Selenium	0.59	U	2.5	0.59	ug/L		08/06/24 15:25	08/06/24 23:34	1
Sodium	**6050**		500	219	ug/L		08/06/24 15:25	08/06/24 23:34	1
Strontium	**187**		4.0	0.50	ug/L		08/06/24 15:25	08/06/24 23:34	1
Zinc	6.5	U	16.0	6.5	ug/L		08/06/24 15:25	08/07/24 01:59	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**150**		100	35.0	ug/L		08/05/24 06:40	08/05/24 19:13	1
Iron	**2610**		50.0	20.0	ug/L		08/05/24 07:30	08/14/24 18:03	1
Lithium	**3.0**	**J**	8.0	1.7	ug/L		08/02/24 14:00	08/07/24 17:59	1

Client Sample ID: CLARIFYING POND

Lab Sample ID: 460-308556-5

Date Collected: 07/30/24 12:15

Matrix: Water

Date Received: 07/30/24 19:00

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.15	U	0.50	0.15	ug/L		08/08/24 22:00	08/20/24 02:26	1
Lithium	1.7	U	8.0	1.7	ug/L		08/02/24 14:00	08/07/24 18:16	1
Iron	**41.8**	**J**	50.0	20.0	ug/L		08/08/24 22:00	08/20/24 02:26	1
Zinc	4.0	U	10.0	4.0	ug/L		08/08/24 22:00	08/20/24 02:26	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Resistivity (EPA 120.1)	**0.00691**		0.000100	0.000100	Mohm-cm			08/08/24 14:50	1
Specific Conductance (EPA 120.1)	**145**		1.00	1.00	umhos/cm			08/08/24 14:50	1
Acidity (SM 2310B-2011)	20.0	U	20.0	20.0	mg/L			08/08/24 14:51	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-2011)	**61.0**		5.0	5.0	mg/L			08/09/24 10:48	1
Carbonate Alkalinity as CaCO3 (SM 2320B-2011)	5.0	U	5.0	5.0	mg/L			08/09/24 10:48	1
Alkalinity as CaCO3 to pH 4.5 (SM 2320B-2011)	**61.0**		5.0	5.0	mg/L			08/09/24 10:48	1
Total Dissolved Solids (SM 2540C-2015)	**49.0**		2.5	2.5	mg/L			08/06/24 07:30	1
Total Suspended Solids (SM 2540D-2015)	**19.2**		3.8	3.8	mg/L			08/02/24 08:53	1
Ammonia (EPA 350.1)	0.050	U	0.10	0.050	mg/L			08/08/24 14:07	1
Total Kjeldahl Nitrogen (EPA 351.2)	12.5	U	25.0	12.5	mg/L		08/05/24 15:53	08/06/24 13:14	1
Chemical Oxygen Demand (EPA 410.4)	3.3	U	10.0	3.3	mg/L			08/08/24 17:37	1
Oxygen, Dissolved (SM 4500 O C-2016)	1.0	U H	1.0	1.0	mg/L			08/01/24 10:10	1
Orthophosphate as P (SM 4500 P E-2011)	0.0050	U H	0.030	0.0050	mg/L			08/03/24 01:57	1
Carbonaceous Biochemical Oxygen Demand 5 (SM 5210 B-2016)	1.0	U	1.0	1.0	mg/L			07/31/24 18:45	1
pH (SW846 9040C)	**7.6**	**HF**	0.1	0.1	SU			08/09/24 10:48	1
pH (SW846 9040C)	**7.6**	**HF**	0.1	0.1	SU			08/09/24 10:48	1
Temperature (SW846 9040C)	**24.2**	**HF**	0.1	0.1	Degrees C			08/09/24 10:48	1
Temperature (SW846 9040C)	**24.2**	**HF**	0.1	0.1	Degrees C			08/09/24 10:48	1
Total Organic Carbon (SW846 9060A)	**2.9**		1.0	0.71	mg/L			08/03/24 04:09	1
Phosphorus as PO4 (SM4500 P E-2011)	**0.17**		0.090	0.071	mg/L		08/12/24 08:31	08/12/24 14:27	1
Phosphorus as P (SM4500 P E-2011)	**0.056**		0.030	0.023	mg/L		08/12/24 08:31	08/12/24 14:27	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (EPA 350.1)	0.050	U	0.10	0.050	mg/L			08/08/24 14:27	1
Orthophosphate as P (SM 4500 P E-2011)	0.0050	U H	0.030	0.0050	mg/L			08/03/24 01:57	1
Phosphorus as PO4 (SM4500 P E-2011)	**0.23**		0.090	0.071	mg/L		08/12/24 08:31	08/12/24 14:27	1
Phosphorus as P (SM4500 P E-2011)	**0.076**		0.030	0.023	mg/L		08/12/24 08:31	08/12/24 14:27	1

Lab Chronicle

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill - Anti-Degradation

Job ID: 460-308556-1

Client Sample ID: NPDES 001

Date Collected: 07/30/24 09:30
Date Received: 07/30/24 19:00

Lab Sample ID: 460-308556-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		1	988190	SZK	EET EDI	07/31/24 21:10
Total/NA	Analysis	300.0		1	988192	SZK	EET EDI	07/31/24 21:10
Total/NA	Analysis	2340B-2011		1	989313	LBD	EET EDI	08/07/24 12:07
Total/NA	Prep	245.1			720752	ESB	EET BUF	08/06/24 12:02
Total/NA	Analysis	245.1		1	720837	ESB	EET BUF	08/06/24 15:10
Dissolved	Filtration	Filtration			536156	UDL9	ELLE	08/05/24 07:34
Dissolved	Prep	3005A			538074	UAMX	ELLE	08/08/24 22:00
Dissolved	Analysis	6020B		1	542345	F7JF	ELLE	08/20/24 02:22
Dissolved	Filtration	FILTRATION			622119	GK	EET CLE	08/02/24 10:30
Dissolved	Prep	3005A			622120	GK	EET CLE	08/02/24 14:00
Dissolved	Analysis	6020B		1	622690	AJC	EET CLE	08/07/24 18:07
Total Recoverable	Prep	3005A			536154	UJL8	ELLE	08/05/24 07:55
Total Recoverable	Analysis	6020B		1	542345	F7JF	ELLE	08/20/24 01:35
Total Recoverable	Prep	3005A			622120	GK	EET CLE	08/02/24 14:00
Total Recoverable	Analysis	6020B		1	622854	AJC	EET CLE	08/08/24 13:56
Total Recoverable	Prep	3005A			849804	RR	EET SAV	08/05/24 06:40
Total Recoverable	Analysis	6020B		1	849998	BWR	EET SAV	08/05/24 19:21
Total/NA	Prep	3010A			989131	NNW	EET EDI	08/06/24 15:25
Total/NA	Analysis	6020B		1	989184	VAD	EET EDI	08/06/24 23:25
Total/NA	Prep	3010A			989131	NNW	EET EDI	08/06/24 15:25
Total/NA	Analysis	6020B		1	989152	JKF	EET EDI	08/07/24 01:49
Total/NA	Analysis	120.1		1	989558	MMC	EET EDI	08/08/24 14:50
Total/NA	Analysis	2310B-2011		1	989557	RAK	EET EDI	08/08/24 14:51
Total/NA	Analysis	2320B-2011		1	989774	AXP	EET EDI	08/09/24 10:13
Total/NA	Analysis	2540C-2015		1	989048	PLS	EET EDI	08/06/24 07:30
Total/NA	Analysis	2540D-2015		1	988527	PLS	EET EDI	08/02/24 08:53
Dissolved	Filtration	FILTRATION			989548	AXP	EET EDI	08/08/24 13:34
Dissolved	Analysis	350.1		1	989563	AXP	EET EDI	08/08/24 14:10
Total/NA	Analysis	350.1		1	989563	AXP	EET EDI	08/08/24 14:01
Total/NA	Prep	351.2			536454	NLE3	ELLE	08/05/24 15:17 - 08/05/24 18:17 [1]
Total/NA	Analysis	351.2		1	537047	JCG7	ELLE	08/06/24 11:40
Total/NA	Analysis	410.4		1	989583	HTV	EET EDI	08/08/24 17:37
Total/NA	Analysis	4500 O C-2016		1	988335	PLS	EET EDI	08/01/24 10:10
Dissolved	Filtration	FILTRATION			988663	VBG	EET EDI	08/03/24 00:20
Dissolved	Analysis	4500 P E-2011		1	988664	VBG	EET EDI	08/03/24 01:57
Total/NA	Analysis	4500 P E-2011		1	988664	VBG	EET EDI	08/03/24 01:57
Total/NA	Analysis	5210 B-2016		1	988145	PXP	EET EDI	07/31/24 17:30
Total/NA	Analysis	9040C		1	989775	AXP	EET EDI	08/09/24 10:13
Total/NA	Analysis	9060A		1	988873	MMC	EET EDI	08/03/24 02:26
Dissolved	Prep	SM 4500 P B			990043	RAK	EET EDI	08/12/24 08:31
Dissolved	Filtration	FILTRATION			990046	RAK	EET EDI	08/12/24 08:36
Dissolved	Analysis	SM4500 P E-2011		1	990086	RAK	EET EDI	08/12/24 14:27

Eurofins Edison

Lab Chronicle

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill - Anti-Degradation

Job ID: 460-308556-1

Client Sample ID: NPDES 001

Lab Sample ID: 460-308556-1

Date Collected: 07/30/24 09:30

Matrix: Water

Date Received: 07/30/24 19:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	SM 4500 P B			990043	RAK	EET EDI	08/12/24 08:31
Total/NA	Analysis	SM4500 P E-2011		1	990086	RAK	EET EDI	08/12/24 14:27

Client Sample ID: BASIN 2

Lab Sample ID: 460-308556-2

Date Collected: 07/30/24 10:30

Matrix: Water

Date Received: 07/30/24 19:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		1	988190	SZK	EET EDI	07/31/24 18:10
Total/NA	Analysis	300.0		1	988192	SZK	EET EDI	07/31/24 18:10
Total/NA	Analysis	2340B-2011		1	989313	LBD	EET EDI	08/07/24 12:07
Total/NA	Prep	245.1			720752	ESB	EET BUF	08/06/24 12:02
Total/NA	Analysis	245.1		1	720837	ESB	EET BUF	08/06/24 15:15
Dissolved	Filtration	Filtration			536156	UDL9	ELLE	08/05/24 07:34
Dissolved	Prep	3005A			538074	UAMX	ELLE	08/08/24 22:00
Dissolved	Analysis	6020B		1	542345	F7JF	ELLE	08/20/24 02:20
Dissolved	Filtration	FILTRATION			622119	GK	EET CLE	08/02/24 10:30
Dissolved	Prep	3005A			622120	GK	EET CLE	08/02/24 14:00
Dissolved	Analysis	6020B		1	622690	AJC	EET CLE	08/07/24 18:09
Total Recoverable	Prep	3005A			536049	UJL8	ELLE	08/05/24 07:30
Total Recoverable	Analysis	6020B		1	540524	T8CQ	ELLE	08/14/24 18:05
Total Recoverable	Prep	3005A			622120	GK	EET CLE	08/02/24 14:00
Total Recoverable	Analysis	6020B		1	622690	AJC	EET CLE	08/07/24 17:52
Total Recoverable	Prep	3005A			849804	RR	EET SAV	08/05/24 06:40
Total Recoverable	Analysis	6020B		1	849998	BWR	EET SAV	08/05/24 19:00
Total/NA	Prep	3010A			989131	NNW	EET EDI	08/06/24 15:25
Total/NA	Analysis	6020B		1	989184	VAD	EET EDI	08/06/24 23:27
Total/NA	Prep	3010A			989131	NNW	EET EDI	08/06/24 15:25
Total/NA	Analysis	6020B		1	989152	JKF	EET EDI	08/07/24 01:52
Total/NA	Analysis	120.1		1	989558	MMC	EET EDI	08/08/24 14:50
Total/NA	Analysis	2310B-2011		1	989557	RAK	EET EDI	08/08/24 14:51
Total/NA	Analysis	2320B-2011		1	989774	AXP	EET EDI	08/09/24 10:21
Total/NA	Analysis	2540C-2015		1	989048	PLS	EET EDI	08/06/24 07:30
Total/NA	Analysis	2540D-2015		1	988527	PLS	EET EDI	08/02/24 08:53
Dissolved	Filtration	FILTRATION			989548	AXP	EET EDI	08/08/24 13:34
Dissolved	Analysis	350.1		1	989563	AXP	EET EDI	08/08/24 14:22
Total/NA	Analysis	350.1		1	989563	AXP	EET EDI	08/08/24 14:02
Total/NA	Prep	351.2			536477	NLE3	ELLE	08/05/24 15:53 - 08/05/24 18:53 [1]
Total/NA	Analysis	351.2		1	537047	JCG7	ELLE	08/06/24 13:03
Total/NA	Analysis	410.4		1	989583	HTV	EET EDI	08/08/24 17:37
Total/NA	Analysis	4500 O C-2016		1	988335	PLS	EET EDI	08/01/24 10:10
Dissolved	Filtration	FILTRATION			988663	VBG	EET EDI	08/03/24 00:20
Dissolved	Analysis	4500 P E-2011		1	988664	VBG	EET EDI	08/03/24 01:57

Lab Chronicle

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill - Anti-Degradation

Job ID: 460-308556-1

Client Sample ID: BASIN 2

Lab Sample ID: 460-308556-2

Date Collected: 07/30/24 10:30

Matrix: Water

Date Received: 07/30/24 19:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	4500 P E-2011		1	988664	VBG	EET EDI	08/03/24 01:57
Total/NA	Analysis	5210 B-2016		1	988145	PXP	EET EDI	07/31/24 18:00
Total/NA	Analysis	9040C		1	989775	AXP	EET EDI	08/09/24 10:21
Total/NA	Analysis	9060A		1	988873	MMC	EET EDI	08/03/24 02:51
Dissolved	Prep	SM 4500 P B			990043	RAK	EET EDI	08/12/24 08:31
Dissolved	Filtration	FILTRATION			990046	RAK	EET EDI	08/12/24 08:36
Dissolved	Analysis	SM4500 P E-2011		1	990086	RAK	EET EDI	08/12/24 14:27
Total/NA	Prep	SM 4500 P B			990043	RAK	EET EDI	08/12/24 08:31
Total/NA	Analysis	SM4500 P E-2011		1	990086	RAK	EET EDI	08/12/24 14:27

Client Sample ID: BASIN 1

Lab Sample ID: 460-308556-3

Date Collected: 07/30/24 11:15

Matrix: Water

Date Received: 07/30/24 19:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		1	988190	SZK	EET EDI	07/31/24 18:25
Total/NA	Analysis	300.0		1	988192	SZK	EET EDI	07/31/24 18:25
Total/NA	Analysis	2340B-2011		1	989313	LBD	EET EDI	08/07/24 12:07
Total/NA	Prep	245.1			720752	ESB	EET BUF	08/06/24 12:02
Total/NA	Analysis	245.1		1	720837	ESB	EET BUF	08/06/24 15:17
Dissolved	Filtration	Filtration			536156	UDL9	ELLE	08/05/24 07:34
Dissolved	Prep	3005A			538074	UAMX	ELLE	08/08/24 22:00
Dissolved	Analysis	6020B		1	542345	F7JF	ELLE	08/20/24 02:24
Dissolved	Filtration	FILTRATION			622119	GK	EET CLE	08/02/24 10:30
Dissolved	Prep	3005A			622120	GK	EET CLE	08/02/24 14:00
Dissolved	Analysis	6020B		1	622690	AJC	EET CLE	08/07/24 18:12
Total Recoverable	Prep	3005A			536049	UJL8	ELLE	08/05/24 07:30
Total Recoverable	Analysis	6020B		1	540524	T8CQ	ELLE	08/14/24 18:07
Total Recoverable	Prep	3005A			622120	GK	EET CLE	08/02/24 14:00
Total Recoverable	Analysis	6020B		1	622690	AJC	EET CLE	08/07/24 17:54
Total Recoverable	Prep	3005A			849804	RR	EET SAV	08/05/24 06:40
Total Recoverable	Analysis	6020B		1	849998	BWR	EET SAV	08/05/24 18:56
Total/NA	Prep	3010A			989131	NNW	EET EDI	08/06/24 15:25
Total/NA	Analysis	6020B		1	989184	VAD	EET EDI	08/06/24 23:30
Total/NA	Prep	3010A			989131	NNW	EET EDI	08/06/24 15:25
Total/NA	Analysis	6020B		1	989152	JKF	EET EDI	08/07/24 01:54
Total/NA	Analysis	120.1		1	989558	MMC	EET EDI	08/08/24 14:50
Total/NA	Analysis	2310B-2011		1	989557	RAK	EET EDI	08/08/24 14:51
Total/NA	Analysis	2320B-2011		1	989774	AXP	EET EDI	08/09/24 10:30
Total/NA	Analysis	2540C-2015		1	989048	PLS	EET EDI	08/06/24 07:30
Total/NA	Analysis	2540D-2015		1	988527	PLS	EET EDI	08/02/24 08:53
Dissolved	Filtration	FILTRATION			989548	AXP	EET EDI	08/08/24 13:34
Dissolved	Analysis	350.1		1	989563	AXP	EET EDI	08/08/24 14:24

Client Sample ID: BASIN 1

Lab Sample ID: 460-308556-3

Date Collected: 07/30/24 11:15

Matrix: Water

Date Received: 07/30/24 19:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	350.1		1	989563	AXP	EET EDI	08/08/24 14:04
Total/NA	Prep	351.2			536477	NLE3	ELLE	08/05/24 15:53 - 08/05/24 18:53 [1]
Total/NA	Analysis	351.2		1	537047	JCG7	ELLE	08/06/24 13:05
Total/NA	Analysis	410.4		1	989583	HTV	EET EDI	08/08/24 17:37
Total/NA	Analysis	4500 O C-2016		1	988335	PLS	EET EDI	08/01/24 10:10
Dissolved	Filtration	FILTRATION			988663	VBG	EET EDI	08/03/24 00:20
Dissolved	Analysis	4500 P E-2011		1	988664	VBG	EET EDI	08/03/24 01:57
Total/NA	Analysis	4500 P E-2011		1	988664	VBG	EET EDI	08/03/24 01:57
Total/NA	Analysis	5210 B-2016		1	988145	PXP	EET EDI	07/31/24 18:15
Total/NA	Analysis	9040C		1	989775	AXP	EET EDI	08/09/24 10:30
Total/NA	Analysis	9060A		1	988873	MMC	EET EDI	08/03/24 03:16
Dissolved	Prep	SM 4500 P B			990043	RAK	EET EDI	08/12/24 08:31
Dissolved	Filtration	FILTRATION			990046	RAK	EET EDI	08/12/24 08:36
Dissolved	Analysis	SM4500 P E-2011		1	990086	RAK	EET EDI	08/12/24 14:27
Total/NA	Prep	SM 4500 P B			990043	RAK	EET EDI	08/12/24 08:31
Total/NA	Analysis	SM4500 P E-2011		1	990086	RAK	EET EDI	08/12/24 14:27

Client Sample ID: UPSTREAM

Lab Sample ID: 460-308556-4

Date Collected: 07/30/24 11:30

Matrix: Water

Date Received: 07/30/24 19:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		1	988190	SZK	EET EDI	07/31/24 18:40
Total/NA	Analysis	300.0		1	988192	SZK	EET EDI	07/31/24 18:40
Total/NA	Analysis	2340B-2011		1	989313	LBD	EET EDI	08/07/24 12:07
Total/NA	Prep	245.1			720752	ESB	EET BUF	08/06/24 12:02
Total/NA	Analysis	245.1		1	720837	ESB	EET BUF	08/06/24 15:18
Dissolved	Filtration	Filtration			536156	UDL9	ELLE	08/05/24 07:34
Dissolved	Prep	3005A			538074	UAMX	ELLE	08/08/24 22:00
Dissolved	Analysis	6020B		1	542345	F7JF	ELLE	08/20/24 02:28
Dissolved	Filtration	FILTRATION			622119	GK	EET CLE	08/02/24 10:30
Dissolved	Prep	3005A			622120	GK	EET CLE	08/02/24 14:00
Dissolved	Analysis	6020B		1	622690	AJC	EET CLE	08/07/24 18:14
Total Recoverable	Prep	3005A			536049	UJL8	ELLE	08/05/24 07:30
Total Recoverable	Analysis	6020B		1	540524	T8CQ	ELLE	08/14/24 18:25
Total Recoverable	Prep	3005A			622120	GK	EET CLE	08/02/24 14:00
Total Recoverable	Analysis	6020B		1	622690	AJC	EET CLE	08/07/24 17:57
Total Recoverable	Prep	3005A			849804	RR	EET SAV	08/05/24 06:40
Total Recoverable	Analysis	6020B		1	849998	BWR	EET SAV	08/05/24 19:17
Total/NA	Prep	3010A			989131	NNW	EET EDI	08/06/24 15:25
Total/NA	Analysis	6020B		1	989184	VAD	EET EDI	08/06/24 23:32
Total/NA	Prep	3010A			989131	NNW	EET EDI	08/06/24 15:25
Total/NA	Analysis	6020B		1	989152	JKF	EET EDI	08/07/24 01:57
Total/NA	Analysis	120.1		1	989558	MMC	EET EDI	08/08/24 14:50

Lab Chronicle

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill - Anti-Degradation

Job ID: 460-308556-1

Client Sample ID: UPSTREAM

Lab Sample ID: 460-308556-4

Date Collected: 07/30/24 11:30

Matrix: Water

Date Received: 07/30/24 19:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	2310B-2011		1	989557	RAK	EET EDI	08/08/24 14:51
Total/NA	Analysis	2320B-2011		1	989774	AXP	EET EDI	08/09/24 10:39
Total/NA	Analysis	2540C-2015		1	989048	PLS	EET EDI	08/06/24 07:30
Total/NA	Analysis	2540D-2015		1	988527	PLS	EET EDI	08/02/24 08:53
Dissolved	Filtration	FILTRATION			989548	AXP	EET EDI	08/08/24 13:34
Dissolved	Analysis	350.1		1	989563	AXP	EET EDI	08/08/24 14:25
Total/NA	Analysis	350.1		1	989563	AXP	EET EDI	08/08/24 14:05
Total/NA	Prep	351.2			536477	NLE3	ELLE	08/05/24 15:53 - 08/05/24 18:53 [1]
Total/NA	Analysis	351.2		1	537047	JCG7	ELLE	08/06/24 13:12
Total/NA	Analysis	410.4		1	989583	HTV	EET EDI	08/08/24 17:37
Total/NA	Analysis	4500 O C-2016		1	988335	PLS	EET EDI	08/01/24 10:10
Dissolved	Filtration	FILTRATION			988663	VBG	EET EDI	08/03/24 00:20
Dissolved	Analysis	4500 P E-2011		1	988664	VBG	EET EDI	08/03/24 01:57
Total/NA	Analysis	4500 P E-2011		1	988664	VBG	EET EDI	08/03/24 01:57
Total/NA	Analysis	5210 B-2016		1	988145	PXP	EET EDI	07/31/24 18:30
Total/NA	Analysis	9040C		1	989775	AXP	EET EDI	08/09/24 10:39
Total/NA	Analysis	9060A		1	988873	MMC	EET EDI	08/03/24 03:44
Dissolved	Prep	SM 4500 P B			990043	RAK	EET EDI	08/12/24 08:31
Dissolved	Filtration	FILTRATION			990046	RAK	EET EDI	08/12/24 08:36
Dissolved	Analysis	SM4500 P E-2011		1	990086	RAK	EET EDI	08/12/24 14:27
Total/NA	Prep	SM 4500 P B			990043	RAK	EET EDI	08/12/24 08:31
Total/NA	Analysis	SM4500 P E-2011		1	990086	RAK	EET EDI	08/12/24 14:27

Client Sample ID: CLARIFYING POND

Lab Sample ID: 460-308556-5

Date Collected: 07/30/24 12:15

Matrix: Water

Date Received: 07/30/24 19:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		1	988190	SZK	EET EDI	07/31/24 18:55
Total/NA	Analysis	300.0		1	988192	SZK	EET EDI	07/31/24 18:55
Total/NA	Analysis	2340B-2011		1	989313	LBD	EET EDI	08/07/24 12:07
Total/NA	Prep	245.1			720752	ESB	EET BUF	08/06/24 12:02
Total/NA	Analysis	245.1		1	720837	ESB	EET BUF	08/06/24 15:19
Dissolved	Filtration	Filtration			536156	UDL9	ELLE	08/05/24 07:34
Dissolved	Prep	3005A			538074	UAMX	ELLE	08/08/24 22:00
Dissolved	Analysis	6020B		1	542345	F7JF	ELLE	08/20/24 02:26
Dissolved	Filtration	FILTRATION			622119	GK	EET CLE	08/02/24 10:30
Dissolved	Prep	3005A			622120	GK	EET CLE	08/02/24 14:00
Dissolved	Analysis	6020B		1	622690	AJC	EET CLE	08/07/24 18:16
Total Recoverable	Prep	3005A			536049	UJL8	ELLE	08/05/24 07:30
Total Recoverable	Analysis	6020B		1	540524	T8CQ	ELLE	08/14/24 18:03
Total Recoverable	Prep	3005A			622120	GK	EET CLE	08/02/24 14:00
Total Recoverable	Analysis	6020B		1	622690	AJC	EET CLE	08/07/24 17:59

Lab Chronicle

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill - Anti-Degradation

Job ID: 460-308556-1

Client Sample ID: CLARIFYING POND

Date Collected: 07/30/24 12:15
Date Received: 07/30/24 19:00

Lab Sample ID: 460-308556-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			849804	RR	EET SAV	08/05/24 06:40
Total Recoverable	Analysis	6020B		1	849998	BWR	EET SAV	08/05/24 19:13
Total/NA	Prep	3010A			989131	NNW	EET EDI	08/06/24 15:25
Total/NA	Analysis	6020B		1	989184	VAD	EET EDI	08/06/24 23:34
Total/NA	Prep	3010A			989131	NNW	EET EDI	08/06/24 15:25
Total/NA	Analysis	6020B		1	989152	JKF	EET EDI	08/07/24 01:59
Total/NA	Analysis	120.1		1	989558	MMC	EET EDI	08/08/24 14:50
Total/NA	Analysis	2310B-2011		1	989557	RAK	EET EDI	08/08/24 14:51
Total/NA	Analysis	2320B-2011		1	989774	AXP	EET EDI	08/09/24 10:48
Total/NA	Analysis	2540C-2015		1	989048	PLS	EET EDI	08/06/24 07:30
Total/NA	Analysis	2540D-2015		1	988527	PLS	EET EDI	08/02/24 08:53
Dissolved	Filtration	FILTRATION			989548	AXP	EET EDI	08/08/24 13:34
Dissolved	Analysis	350.1		1	989563	AXP	EET EDI	08/08/24 14:27
Total/NA	Analysis	350.1		1	989563	AXP	EET EDI	08/08/24 14:07
Total/NA	Prep	351.2			536477	NLE3	ELLE	08/05/24 15:53 - 08/05/24 18:53 [1]
Total/NA	Analysis	351.2		1	537047	JCG7	ELLE	08/06/24 13:14
Total/NA	Analysis	410.4		1	989583	HTV	EET EDI	08/08/24 17:37
Total/NA	Analysis	4500 O C-2016		1	988335	PLS	EET EDI	08/01/24 10:10
Dissolved	Filtration	FILTRATION			988663	VBG	EET EDI	08/03/24 00:20
Dissolved	Analysis	4500 P E-2011		1	988664	VBG	EET EDI	08/03/24 01:57
Total/NA	Analysis	4500 P E-2011		1	988664	VBG	EET EDI	08/03/24 01:57
Total/NA	Analysis	5210 B-2016		1	988145	PXP	EET EDI	07/31/24 18:45
Total/NA	Analysis	9040C		1	989775	AXP	EET EDI	08/09/24 10:48
Total/NA	Analysis	9060A		1	988873	MMC	EET EDI	08/03/24 04:09
Dissolved	Prep	SM 4500 P B			990043	RAK	EET EDI	08/12/24 08:31
Dissolved	Filtration	FILTRATION			990046	RAK	EET EDI	08/12/24 08:36
Dissolved	Analysis	SM4500 P E-2011		1	990086	RAK	EET EDI	08/12/24 14:27
Total/NA	Prep	SM 4500 P B			990043	RAK	EET EDI	08/12/24 08:31
Total/NA	Analysis	SM4500 P E-2011		1	990086	RAK	EET EDI	08/12/24 14:27

[1] This procedure uses a method stipulated length of time for the process. Both start and end times are displayed.

Laboratory References:

EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

EET CLE = Eurofins Cleveland, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

EET EDI = Eurofins Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

EET SAV = Eurofins Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Microbac = Marietta, OH, 158 Starlite Drive, Marietta, OH 45750

Accreditation/Certification Summary

Client: Heidelberg Materials Northeast LLC
Job ID: 460-308556-1
Project/Site: Rock Hill - Anti-Degradation

Laboratory: Eurofins Edison

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Connecticut	State	PH-0818	09-30-24
DE Haz. Subst. Cleanup Act (HSCA)	State	N/A	01-02-25
Georgia	State	12028 (NJ)	07-01-25
Massachusetts	State	M-NJ312	07-01-25
New Jersey	NELAP	12028	06-30-25
New York	NELAP	11452	04-01-25
Pennsylvania	NELAP	68-00522	02-28-25
Rhode Island	State	LAO00376	12-31-24
USDA	US Federal Programs	525-24-149-77606	05-21-27

Laboratory: Eurofins Buffalo

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Connecticut	State	PH-0807	03-31-25
Georgia	State	10026 (NY)	03-31-25
Georgia	State Program	N/A	03-31-09 *
Illinois	NELAP	200003	09-30-24
Iowa	State	374	03-01-25
Iowa	State Program	374	03-01-09 *
Kansas	NELAP	E-10187	02-01-25
Kentucky (UST)	State	108092	04-01-25
Kentucky (WW)	State	KY90029	12-31-24
Maine	State	NY00044	12-04-24
Maryland	State	294	06-30-25
Massachusetts	State	M-NY044	07-01-25
Michigan	State	9937	03-31-25
Michigan	State Program	9937	04-01-09 *
New Hampshire	NELAP	2973	09-11-19 *
New Hampshire	NELAP	2337	11-17-24
New Jersey	NELAP	NY455	07-02-25
New York	NELAP	10026	03-31-25
Pennsylvania	NELAP	68-00281	08-31-24
Rhode Island	State	LAO00378	12-30-24
Virginia	NELAP	460185	09-14-24
Washington	State	C784	02-10-25
Wisconsin	State	998310390	08-31-24

Laboratory: Eurofins Cleveland

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
California	State	2927	02-28-25
Georgia	State	4062	02-27-25
Illinois	NELAP	200004	08-31-25
Iowa	State	421	06-01-25
Kentucky (UST)	State	112225	02-27-25
Kentucky (WW)	State	KY98016	12-30-24
Minnesota	NELAP	039-999-348	12-31-24
New Jersey	NELAP	OH001	07-03-25
New York	NELAP	10975	04-02-25

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Accreditation/Certification Summary

Client: Heidelberg Materials Northeast LLC
Job ID: 460-308556-1
Project/Site: Rock Hill - Anti-Degradation

Laboratory: Eurofins Cleveland (Continued)

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Ohio VAP	State	ORELAP 4062	02-27-25
Oregon	NELAP	4062	08-08-24
Pennsylvania	NELAP	68-00340	08-31-25
Texas	NELAP	T104704517-22-19	08-31-24
USDA	US Federal Programs	P330-18-00281	01-05-27
Virginia	NELAP	460175	09-14-24
West Virginia DEP	State	210	12-31-24

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
A2LA	Dept. of Defense ELAP	0001.01	11-30-24
A2LA	ISO/IEC 17025	0001.01	11-30-24
Alabama	State	43200	01-31-25
Alaska	State	PA00009	06-30-25
Alaska (UST)	State	17-027	02-28-25
Arizona	State	AZ0780	03-12-25
California	State	2792	11-30-24
Colorado	State	PA00009	06-30-25
Connecticut	State	PH-0746	06-30-25
DE Haz. Subst. Cleanup Act (HSCA)	State	019-006 (PA cert)	01-31-25
Delaware (DW)	State	N/A	01-31-25
Florida	NELAP	E87997	06-30-25
Georgia (DW)	State	C048	01-31-25
Hawaii	State	N/A	01-31-25
Illinois	NELAP	200027	01-31-25
Iowa	State	361	03-01-26
Kansas	NELAP	E-10151	10-31-24
Kentucky (DW)	State	KY90088	12-31-24
Kentucky (UST)	State	0001.01	11-30-24
Kentucky (WW)	State	KY90088	12-31-24
Louisiana (All)	NELAP	02055	06-30-25
Maine	State	2019012	03-12-25
Maryland	State	100	06-30-25
Massachusetts	State	M-PA009	06-30-25
Michigan	State	9930	01-31-25
Minnesota	NELAP	042-999-487	12-31-24
Mississippi	State	023	01-31-25
Missouri	State	450	01-31-25
Montana (DW)	State	0098	01-01-25
Nebraska	State	NE-OS-32-17	01-31-25
New Hampshire	NELAP	2730	01-10-25
New Jersey	NELAP	PA011	06-30-25
New York	NELAP	10670	04-01-25
North Carolina (DW)	State	42705	07-31-25
North Carolina (WW/SW)	State	521	12-31-25
North Dakota	State	R-205	01-31-24 *
Oklahoma	NELAP	9804	08-31-24
Oregon	NELAP	PA200001	09-11-24

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Accreditation/Certification Summary

Client: Heidelberg Materials Northeast LLC
Job ID: 460-308556-1
Project/Site: Rock Hill - Anti-Degradation

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC (Continued)

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Pennsylvania	NELAP	36-00037	01-31-25
Quebec Ministry of Environment and Fight against Climate Change	PALA	507	09-16-24
Rhode Island	State	LAO00338	12-30-24
South Carolina	State	89002	01-31-25
Tennessee	State	02838	01-31-25
Texas	NELAP	T104704194-23-46	08-31-24
USDA	US Federal Programs	525-22-298-19481	10-25-25
Vermont	State	VT - 36037	10-28-24
Virginia	NELAP	460182	06-14-25
Washington	State	C457	04-11-25
West Virginia (DW)	State	9906 C	01-31-25
West Virginia DEP	State	055	07-31-25
Wyoming	State	8TMS-L	01-31-25
Wyoming (UST)	A2LA	0001.01	11-30-24

Laboratory: Eurofins Savannah

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
	AFCEE	SAVLAB	
Alabama	State	41450	06-30-25
ANAB	Dept. of Defense ELAP	L2463	09-22-24
Arkansas (DW)	State	GA00006	06-30-24 *
Arkansas DEQ	State	88-00692	02-01-25
Florida	NELAP	E87052	06-30-25
Georgia	State	E87052	06-30-25
Georgia (DW)	State	803	06-30-24 *
Guam	State	24-05R	04-17-25
Hawaii	State	<cert No.>	06-30-25
Illinois	NELAP	200022	11-30-24
Iowa	State	353	07-01-25
Kentucky (UST)	State	NA	06-30-24 *
Louisiana (All)	NELAP	30690	06-30-25
Louisiana (DW)	State	LA009	12-31-24
Maine	State	GA00006	09-25-24
Maryland	State	250	12-31-24
Massachusetts	State	M-GA006	06-30-24 *
Michigan	State	9925	06-30-24 *
Mississippi	State	<cert No.>	06-30-24 *
Nebraska	State	NE-OS-7-04	06-30-24 *
New Mexico	State	GA00006	06-30-24 *
North Carolina (DW)	State	13701	07-31-25
North Carolina (WW/SW)	State	269	12-31-24
Puerto Rico	State	GA00006	01-01-25
South Carolina	State	98001	06-30-24 *
Tennessee	State	TN02961	06-30-25
Texas	NELAP	T1047004185	11-30-24
Texas	TCEQ Water Supply	T104704185	06-30-24 *
USDA	US Federal Programs	P330-18-00313	04-04-27
Virginia	NELAP	460161	06-14-25

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Method Summary

Client: Heidelberg Materials Northeast LLC
Project/Site: Rock Hill - Anti-Degradation

Job ID: 460-308556-1

Method	Method Description	Protocol	Laboratory
300.0	Anions, Ion Chromatography	EPA	EET EDI
2340B-2011	Total Hardness (as CaCO3) by calculation - SM Online, 2011	SM-Online	EET EDI
245.1	Mercury (CVAA)	EPA	EET BUF
6020B	Metals (ICP/MS)	SW846	EET CLE
6020B	Metals (ICP/MS)	SW846	EET EDI
6020B	Metals (ICP/MS)	SW846	EET SAV
6020B	Metals (ICP/MS)	SW846	ELLE
120.1	Conductivity, Specific Conductance	EPA	EET EDI
2310B-2011	Acidity	SM	EET EDI
2320B-2011	Alkalinity, Total	SM	EET EDI
2540C-2015	Total Dissolved Solids (Dried at 180 °C)	SM	EET EDI
2540D-2015	Total Suspended Solids (Dried at 103-105°C)	SM	EET EDI
350.1	Nitrogen, Ammonia	EPA	EET EDI
351.2	Nitrogen, Total Kjeldahl	EPA	ELLE
410.4	COD	EPA	EET EDI
4500 O C-2016	Oxygen, Dissolved	SM	EET EDI
4500 P E-2011	Orthophosphate	SM	EET EDI
5210 B-2016	BOD, 5-Day	SM	EET EDI
9040C	pH	SW846	EET EDI
9060A	Organic Carbon, Total (TOC)	SW846	EET EDI
SM4500 P E-2011	Phosphorus	SM	EET EDI
Subcontract	Osomotic Pressure	None	Microbac
245.1	Preparation, Mercury	EPA	EET BUF
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	EET CLE
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	EET SAV
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	ELLE
3010A	Preparation, Total Metals	SW846	EET EDI
351.2	Nitrogen, Total Kjeldahl	EPA	ELLE
FILTRATION	Sample Filtration	None	EET CLE
FILTRATION	Sample Filtration	None	EET EDI
Filtration	Sample Filtration	None	ELLE
SM 4500 P B	Phosphorous, Total and Ortho	SM	EET EDI

Protocol References:

EPA = US Environmental Protection Agency

None = None

SM = "Standard Methods For The Examination Of Water And Wastewater"

SM-Online = Standard Methods Online

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

EET CLE = Eurofins Cleveland, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

EET EDI = Eurofins Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

EET SAV = Eurofins Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Microbac = Marietta, OH, 158 Starlite Drive, Marietta, OH 45750

Sample Summary

Client: Heidelberg Materials Northeast LLC
Job ID: 460-308556-1
Project/Site: Rock Hill - Anti-Degradation

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
460-308556-1	NPDES 001	Water	07/30/24 09:30	07/30/24 19:00
460-308556-2	BASIN 2	Water	07/30/24 10:30	07/30/24 19:00
460-308556-3	BASIN 1	Water	07/30/24 11:15	07/30/24 19:00
460-308556-4	UPSTREAM	Water	07/30/24 11:30	07/30/24 19:00
460-308556-5	CLARIFYING POND	Water	07/30/24 12:15	07/30/24 19:00

Microbac Laboratories Inc., - Marietta, OH

Client Project ID:

46011424

For:

Julie Gilmore

Eurofins Environment Testing Northeast, LLC

777 New Durham RD

Edison, NJ 08817

Project State of Origin: Pennsylvania

Project Requested Certification:

Microbac Laboratories Inc., - Marietta, OH	68-01670	PA Department of Environmental Protection

All test results meet the requirements of the QAPP and other applicable contract terms and conditions. Any exceptions are attached to this cover page or addressed in the method narratives presented in the report. All results for soil samples are reported on a 'dry-weight' basis unless specified otherwise. Analytical results for water and wastes are reported on a 'as received' basis unless specified otherwise. A statement of uncertainty for each analysis is available upon request. The reported results are related only to the samples analyzed as received. This laboratory report may be released as a hardcopy and in computer-readable form submitted electronically or on diskette. This laboratory report shall not be reproduced, except in full, without the written approval of Microbac Laboratories, Inc.

Laboratory Project Manager:

Michelle Taylor

Project Manager

Michelle.Taylor@microbac.com

Authorized By:

Michelle Taylor

Project Manager

Issued: 08/07/2024

MICROBAC®

Laboratory Report Number: M4H0148

Client Project ID: 46011424

Cooler Receipt Log

Cooler ID: Default Cooler Temp: 1.8°C

Cooler Inspection Checklist

Ice Present or not required?	Yes
Shipping containers sealed or not required?	Yes
Custody seals intact or not required?	Yes
Chain of Custody (COC) Present?	Yes
COC includes customer information?	Yes
Relinquished and received signature on COC?	Yes
Sample collector identified on COC?	Yes
Sample type identified on COC?	Yes
Correct type of Containers Received	No
Correct number of containers listed on COC?	Yes
Containers Intact?	Yes
COC includes requested analyses?	Yes
Enough sample volume for indicated tests received?	Yes
Sample labels match COC (Name, Date & Time?)	Yes
Samples arrived within hold time?	Yes
Correct preservatives on COC or not required?	Yes
Chemical preservations checked or not required?	Yes
Preservation checks meet method requirements?	Yes
VOA vials have zero headspace, or not recd.?	Yes

MICROBAC®

Laboratory Report Number: M4H0148

Client Project ID: 46011424

Microbac Laboratories Inc., - Marietta, OH

CERTIFICATE OF ANALYSIS

Client ID:	NPDES 001 (460-308556-1)			**Collection Date:**	07/30/2024 09:30
Laboratory ID:	M4H0148-01			**Prep Date:**	08/06/2024 15:36
Matrix:	Aqueous			**Analyzed:**	08/06/2024 17:43
Batch / Sequence:	B4H0223 /	**Analytical Method:**	PADEP 391-2000-008	**Calibration:**	NA
Instrument:	OSMOMETER 5004	**Units:**	mOsm/kg	**File ID:**	OsmoticPressure_B4H0223_240806033803.xls
Analyst:	APH	**Dilution:**	1		

Analyte	CAS Number	Result	MDL	RL	Flag	Qualifier
Osmotic Pressure		8.00	6.00	10.0		

MICROBAC®

Laboratory Report Number: M4H0148

Client Project ID: 46011424

Microbac Laboratories Inc., - Marietta, OH

CERTIFICATE OF ANALYSIS

Client ID:	BASIN 2 (460-308556-2)			**Collection Date:**	07/30/2024 10:30
Laboratory ID:	M4H0148-02			**Prep Date:**	08/06/2024 15:36
Matrix:	Aqueous			**Analyzed:**	08/06/2024 17:43
Batch / Sequence:	B4H0223 /	**Analytical Method:**	PADEP 391-2000-008	**Calibration:**	NA
Instrument:	OSMOMETER 5004	**Units:**	mOsm/kg	**File ID:**	OsmoticPressure_B4H0223_240806033803.xls
Analyst:	APH	**Dilution:**	1		

Analyte	CAS Number	Result	MDL	RL	Flag	Qualifier
Osmotic Pressure		**13.0**	6.00	10.0		

MICROBAC®

Laboratory Report Number: M4H0148

Client Project ID: 46011424

Microbac Laboratories Inc., - Marietta, OH

CERTIFICATE OF ANALYSIS

Client ID:	BASIN 1 (460-308556-3)			**Collection Date:**	07/30/2024 11:15
Laboratory ID:	M4H0148-03			**Prep Date:**	08/06/2024 15:36
Matrix:	Aqueous			**Analyzed:**	08/06/2024 17:43
Batch / Sequence:	B4H0223 /	**Analytical Method:**	PADEP 391-2000-008	**Calibration:**	NA
Instrument:	OSMOMETER 5004	**Units:**	mOsm/kg	**File ID:**	OsmoticPressure_B4H0223_240806033803.xls
Analyst:	APH	**Dilution:**	1		

Analyte	CAS Number	Result	MDL	RL	Flag	Qualifier
Osmotic Pressure		8.00	6.00	10.0		

MICROBAC®

Laboratory Report Number: M4H0148

Client Project ID: 46011424

Microbac Laboratories Inc., - Marietta, OH

CERTIFICATE OF ANALYSIS

Client ID:	UPSTREAM (460-308556-4)			**Collection Date:**	07/30/2024 11:30
Laboratory ID:	M4H0148-04			**Prep Date:**	08/06/2024 15:36
Matrix:	Aqueous			**Analyzed:**	08/06/2024 17:43
Batch / Sequence:	B4H0223 /	**Analytical Method:**	PADEP 391-2000-008	**Calibration:**	NA
Instrument:	OSMOMETER 5004	**Units:**	mOsm/kg	**File ID:**	OsmoticPressure_B4H0223_240806033803.xls
Analyst:	APH	**Dilution:**	1		

Analyte	CAS Number	Result	MDL	RL	Flag	Qualifier
Osmotic Pressure		**10.0**	6.00	10.0		

MICROBAC®

Laboratory Report Number: M4H0148

Client Project ID: 46011424

Microbac Laboratories Inc., - Marietta, OH

CERTIFICATE OF ANALYSIS

Client ID:	CLARIFYING POND (460-308556-5)			**Collection Date:**	07/30/2024 12:15
Laboratory ID:	M4H0148-05			**Prep Date:**	08/06/2024 15:36
Matrix:	Aqueous			**Analyzed:**	08/06/2024 17:43
Batch / Sequence:	B4H0223 /	**Analytical Method:**	PADEP 391-2000-008	**Calibration:**	NA
Instrument:	OSMOMETER 5004	**Units:**	mOsm/kg	**File ID:**	OsmoticPressure_B4H0223_240806033803.xls
Analyst:	APH	**Dilution:**	1		

Analyte	CAS Number	Result	MDL	RL	Flag	Qualifier
Osmotic Pressure		7.00	6.00	10.0		

Laboratory Report Number: M4H0148

Client Project ID: 46011424

Notes and Definitions

:
DL: Detection Limit
LOD: Limit of Detection
LOQ: Limit of Quantitation
MDL: Method Detection Limit
RL: Reporting Limit

MICROBAC®

Laboratory Report Number: M4H0148

Client Project ID: 46011424

METHOD BLANKS

Sample ID:	B4H0223-BLK1	**Prep Date:**	08/06/24 15:36	**Matrix:**	Aqueous
Instrument:	OSMOMETER 5004	**Analyzed:**	08/06/24 17:43	**Method:**	PADEP 391-2000-008
File ID:	OsmoticPressure_B4H(	**Sequence:**		**Analyst:**	APH
Batch:	B4H0223	**Units:**	mOsm/kg	**Calibration:**	

Analyte	Result	MDL	RL	Dilution	Flag	Q
Osmotic Pressure	6.00	6.00	10.0	1	U	

* - Detected in the associated method Blank at a concentration >= RL

MICROBAC®

Laboratory Report Number: M4H0148

Client Project ID: 46011424

BLANK SPIKE / DUPLICATE (BS/BSD)

Method:	PADEP 391-2000-008		**Blank Spike**	**Duplicate**
Batch:	B4H0223	**Spike ID:**	B4H0223-BS1	B4H0223-BSD1
Analyst:	APH	**Prepared:**	08/06/24 15:36	08/06/24 15:36
Matrix:	Aqueous	**Analyzed:**	08/06/24 17:43	08/06/24 17:43
Units:	mOsm/kg	**File ID:**	OsmoticPressure_B4H0223_240	OsmoticPressure_B4H0223_240
Instrument:	OSMOMETER 5004	**Initial/Final:**	1mL/1mL	1mL/1mL
Calibration:				

Analyte	BS Spiked	BS Found	BS %Rec	BSD Spiked	BSD Found	BSD %Rec	%RPD	%Rec Limts	RPD Limit	Q
Osmotic Pressure	290	292	101	290	292	101	0.00	90 - 110	20	

* - Does not meet %Rec acceptance criteria.
- Does not meet RPD acceptance criteria.

Eurofins Edison
777 New Durham Road
Edison, NJ 08817
Phone: 732-549-3900 Fax: 732-549-3679

Chain of Custody Record

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8/20/2024

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Gilmore, Julie L	Carrier Tracking No(s):	COC No: 460-71830.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Julie.Gilmore@et.eurofinsus.com	State of Origin: Pennsylvania	Page: Page 1 of 1
Company: Microbac Laboratories, Inc.		Accreditations Required (See note): NELAP - Pennsylvania		Job #: 460-308556-1
Address: 158 Starlite Drive, ,	Due Date Requested: 8/9/2024			
City: Marietta	TAT Requested (days):			
State, Zip: OH, 45750				
Phone: 800-373-4071(Tel)	PO #:			
Email:	WO #:			
Project Name: Rock Hill - Anti-Degradation	Project #: 46011424			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:
-

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	SUB (Osmotic Pressure)/ Osmotic Pressure	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
NPDES 001 (460-308556-1)	7/30/24	09:30 Eastern		Water			X	1	
BASIN 2 (460-308556-2)	7/30/24	10:30 Eastern		Water			X	1	
BASIN 1 (460-308556-3)	7/30/24	11:15 Eastern		Water			X	1	
UPSTREAM (460-308556-4)	7/30/24	11:30 Eastern		Water			X	1	
CLARIFYING POND (460-308556-5)	7/30/24	12:15 Eastern		Water			X	1	

M 4 H 0 1 4 8
Eurofins Environment Testing Northeast, LLC
Rec'd: 08/02/2024 13:30
By: Stephanie Murphy Temp: 1.8 (Signature)

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Northeast, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Northeast, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Northeast, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Northeast, LLC.

Possible Hazard Identification	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 1	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
		8/1/24 1400	FEDEX		8/2/24 1330	
	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

MICROBAC®

Work Order # M4H0148

COOLER TEMP >6° C LOG

SAMPLE ID	Bottle 1 °C	Bottle 2 °C	Bottle 3 °C	Bottle 4 °C	Bottle 5 °C	Bottle 6 °C

8/2/2024 SM

pH Lot # HC442471

pH Exceptions

SAMPLE ID	Bottle 1	Bottle 2	Bottle 3	Bottle 4	Bottle 5	Bottle 6

8/2/2024 SM

PRESERVATIVE EXCEPTIONS

__NONE

__AS NOTED

8/2/2024 SM

Document Control # 1957
Last 04-10-2019

Issued to: Document Master File

Eurofins Edison
777 New Durham Road
Edison NJ 08817
Phone: 732-549-3900 Fax: 732-549-3679

450 OP

Chain of Custody Record

42 28 34 KOP 2

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Client Information	Sampler	Lab PM: Gilmore, Julie L	Carrier Tracking No(s):	COC No: 460-184267 115848.1
Client Contact: Andrew Gutshall	Phone:	E-Mail: Julie.Gilmore@et.eurofinsus.com	State of Origin:	Page: Page 1 of 2
Company: Heidelberg Materials Northeast LLC	PWSID:			Job #: 308556
Address: 7660 Imperial Way	Due Date Requested:			
City: Allentown	TAT Requested (days):			
State, Zip: PA, 18195	Compliance Project: Δ Yes Δ No			
Phone:	PO #: Purchase Order not required			
Email: andrew.gutshall@heidelbergmaterials.com	WO #:			
Project Name: Rock Hill Anti-Degradation	Project #: 46011424			
Site:	SSOW#:			

460-308556 Chain of Custody

Analysis Requested

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water S=solid, O=waste/oi BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020B (MOD) Single Element 6020B Metals List	6020B (MOD) Single Element 6020B Metals List	351.2 Local Method	6020B Dissolved Cd/Fe/Zn	6020B (MOD) Total Fe	350.1 410.4, 4500_P_E	120.1 9040C, SM2310B	350.1 4500_P_E, 6020B	2320B (MOD) Alkalinity	6020B (MOD) Total Custom Metals	9060A TOC	2540D, SM5210B_Calc	2540C TDS	Total Number of containers	Other	Special Instructions/Note:
			Preservation Code:				N	D	S	N	D	S	N	N	N	D	S	N	N			
NPDES 001	7/30/24	930	G	Water	N	N	X	X	X	X	X	X	X	X	X	X	X	X	X	20		See note on 1
BASIN 2	7/30/24	1030	G	Water	N	N	X	X	X	X	X	X	X	X	X	X	X	X	X	20		second page, 2
BASIN 1	7/30/24	1115	G	Water	N	N	X	X	X	X	X	X	X	X	X	X	X	X	X	20		please. 3
UPSTREAM	7/30/24	1130	G	Water	N	N	X	X	X	X	X	X	X	X	X	X	X	X	X	20		4
CLARIFYING POND	7/30/24	1215	G	Water	N	N	X	X	X	X	X	X	X	X	X	X	X	X	X	20		5

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested I II III IV Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	7/30/24 1410			7/30/24 1341	EETN-KOP
	7-30-24 1733	EETN-KOP		7/30	EEA
HS	7/30 1900	EEA		7/30 1900	FETA

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.	Cooler Temperature(s) °C and Other Remarks:

Ver: 04/02/2024

Eurofins Edison
777 New Durham Road
Edison, NJ 08817
Phone: 732-549-3900 Fax: 732-549-3679

450 OP

Chain of Custody Record

42 28 34 Job 2 of 2

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Client Information	Sampler	Lab PM: Gilmore, Julie L	Carrier Tracking No(s):	COC No: 460-184267 115848.2
Client Contact: Andrew Gutshall	Phone:	E-Mail: Julie.Gilmore@et.eurofinsus.com	State of Origin:	Page: Page 2 of 2
Company: Heidelberg Materials Northeast LLC	PWSID:			Job #: 306556
Address: 7660 Imperial Way	Due Date Requested:			
City: Allentown	TAT Requested (days):			
State, Zip: PA, 18195	Compliance Project: Δ Yes Δ No			
Phone:	PO #: Purchase Order not required			
Email: andrew.gutshall@heidelbergmaterials.com	WO #:			
Project Name: Rock Hill Anti-Degradation	Project #: 46011424			
Site:	SSOW#:			

Analysis Requested

Preservation Codes: N None; D HNO3

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water S=solid, O=waste/oil BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	300_ORGFM_28D, 300_ORGFMS	245.1 Local Method	6020B Total Aluminum	DISSOLVED OXYGEN	HARDNESS AS CALCIUM CARBONATE	PH	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	D	D					
NPDES 001	7/30/24	930	G	Water	N	N	X	X	X	X	X	X	20	If possible, please
BASIN 2	7/30/24	1030	G	Water	N	N	X	X	X	X	X	X	20	analyze for
BASIN 1	7/30/24	1115	G	Water	N	N	X	X	X	X	X	X	20	"Hardness as calcium
UPSTREAM	7/30/24	1130	G	Water	N	N	X	X	X	X	X	X	20	carbonate" Thank
CLARIFYING POND	7/30/24	1215	G	Water	N	N	X	X	X	X	X	X	20	you!

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II III IV Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	[signature]	7/30/24 1:41P		[signature]	7/30/24 1341	ETN-KOP
2	[signature]	7-30-24 1733	GETNKOP	[signature]	7/30	ETA
3	[signature]	7/30 1900	ETA	[signature]	7/30 1900	ETA

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks:

Ver: 04/02/2024

TestAmerica Edison
Receipt Temperature and pH Log

Job Number: 308556

Number of Coolers: 3 IR Gun # 2

Cooler Temperatures

	RAW	CORRECTED		RAW	CORRECTED		RAW	CORRECTED
Cooler #1:	4.2 °C	4.2 °C	Cooler #4:	°C	°C	Cooler #7:	°C	°C
Cooler #2:	2.8 °C	2.8 °C	Cooler #5:	°C	°C	Cooler #8:	°C	°C
Cooler #3:	3.4 °C	3.4 °C	Cooler #6:	°C	°C	Cooler #9:	°C	°C

TALS Sample Number	Ammonia (pH<2)	COD (pH<2)	Nitrate Nitrite (pH<2)	Metals* (pH<2)	Hardness (pH<2)	Pest (pH 5-9)	EPH or QAM (pH<2)	Phenols (pH<2)	Sulfide (pH>9)	TKN (pH<2)	TOC (pH<2)	Total Cyanide (pH>12)	Total Phos (pH<2)	Other	Other
1	<2	<2		<2	<2					<2	<2		<2		
2	<2	<2		<2	<2					<2	<2		<2		
3	<2	<2		<2	<2					<2	<2		<2		
4	<2	<2		<2	<2					<2	<2		<2		
5	<2	<2		<2	<2					<2			<2		

If pH adjustments are required record the information below.

Sample No(s) adjusted _____

Preservative Name/Conc _____ Volume of Preservative used (ml): _____

Lot # of Preservative(s): _____ Expiration Date: _____

The appropriate Project Manager and Departmen Manager should be notified about the samples which were pH adjusted

Samples for Metal analysis which are out of compliance must be acidified at least 24 hours prior to analysis.

Initials _____ Date 7/30

Eurofins Edison
777 New Durham Road
Edison, NJ 08817
Phone: 732-549-3900 Fax: 732-549-3679

Chain of Custody Record

4.6
4.5

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Client Information (Sub Contract Lab)	Sampler	Lab PM: Gilmore, Julie L	Carrier Tracking No(s):	COC No: 460-71818.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Julie.Gilmore@et.eurofinsus.com	State of Origin: Pennsylvania	Page: Page 1 of 1
Company: Eurofins Environment Testing North Centr		Accreditations Required (See note): NELAP Pennsylvania		Job #: 460-308556-1
Address: 180 S. Van Buren Avenue,	Due Date Requested: 8/12/2024			Preservation Codes:
City: Barberton	TAT Requested (days):			
State, Zip: OH, 44203				
Phone: 330-497-9396(Tel) 330-497-0772(Fax)	PO #:			
Email:	WO #:			
Project Name: Rock Hill Anti-Degradation	Project #: 46011424			
Site:	SSOW#:			Other

Sample Identification Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020B/3005A (MOD) Total Lithium	6020B/FILTRATION Dissolved Lithium	Total Number of containers	Special Instructions/Note:
			Preservation Code:							
NPDES 001 (460-308556-1)	7/30/24	09:30 Eastern		Water			X	X	2	
BASIN 2 (460-308556-2)	7/30/24	10:30 Eastern		Water			X	X	2	
BASIN 1 (460-308556-3)	7/30/24	11 15 Eastern		Water			X	X	2	
UPSTREAM (460-308556-4)	7/30/24	11:30 Eastern		Water			X	X	2	
CLARIFYING POND (460-308556-5)	7/30/24	12:15 Eastern		Water			X	X	2	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Northeast, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Northeast, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Northeast, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Northeast, LLC.

Possible Hazard Identification	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* ____ *Months*
Deliverable Requested: I, II, III, IV Other (specify) Primary Deliverable Rank: 1	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		7/31/24 1900	EET EK	KM	8/1/24 900	EUL
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.	Cooler Temperature(s) °C and Other Remarks:

8/20/2024

Eurofins – Cleveland Sample Receipt Form/Narrative **Login # :** _____
Barberton Facility

Client Eurofins Site Name _____ Cooler unpacked by: KM

Cooler Received on 8/1/24 Opened on 8/1/24

FedEx. 1st Grd (Exp) UPS FAS Waypoint Client Drop Off Eurofins Courier Other _____

Receipt After-hours Drop-off Date/Time _____ Storage Location _____

Eurofins Cooler # EC Foam Box Client Cooler Box Other _____

Packing material used Bubble Wrap Foam ~~Plastic Bag~~ None Other _____

COOLANT (Wet Ice) Blue Ice Dry Ice Water None

1 Cooler temperature upon receipt ☐ See Multiple Cooler Form

IR GUN # 22 (CF -0.1 °C) Observed Cooler Temp. 4.6 °C Corrected Cooler Temp 4.5 °C

2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 2	(Yes)	No
-Were the seals on the outside of the cooler(s) signed & dated?	Yes	(No) NA
-Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)?	Yes	(No)
-Were tamper/custody seals intact and uncompromised?	(Yes)	No NA
3 Shippers' packing slip attached to the cooler(s)?	KM (Yes)	(No)
4. Did custody papers accompany the sample(s)?	(Yes)	No
5 Were the custody papers relinquished & signed in the appropriate place?	(Yes)	No
6. Was/were the person(s) who collected the samples clearly identified on the COC?	Yes	(No)
7 Did all bottles arrive in good condition (Unbroken)?	(Yes)	No
8 Could all bottle labels (ID/Date/Time) be reconciled with the COC?	(Yes)	No
9 For each sample, does the COC specify preservatives (Y/N), # of containers (Y/N), and sample type of grab/comp(Y/N)?		
10 Were correct bottle(s) used for the test(s) indicated?	(Yes)	No
11 Sufficient quantity received to perform indicated analyses?	(Yes)	No
12 Are these work share samples and all listed on the COC?	(Yes)	No
If yes, Questions 13-17 have been checked at the originating laboratory		
13 Were all preserved sample(s) at the correct pH upon receipt?	Yes	No NA pH Strip Lot# HC442471
14 Were VOAs on the COC?	Yes	No
15 Were air bubbles >6 mm in any VOA vials? ● ⬅ Larger than this.	Yes	No NA
16 Was a VOA trip blank present in the cooler(s)? Trip Blank Lot #_____	Yes	No
17 Was a LL Hg or Me Hg trip blank present? _____	Yes	No

Tests that are not checked for pH by Receiving:

VOAs
Oil and Grease
TOC

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other

Concerning _____

18. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES ☐ additional next page

Samples processed by:

_____

_____

_____

_____

19. SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.

Sample(s) _____ were received in a broken container

Sample(s) _____ were received with bubble >6 mm in diameter (Notify PM)

20. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory

Time preserved. _____ Preservative(s) added/Lot number(s): _____

VOA Sample Preservation - Date/Time VOAs Frozen _____

Eurofins Edison
777 New Durham Road
Edison, NJ 08817
Phone: 732-549-3900 Fax: 732-549-3679

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Gilmore, Julie L	Carrier Tracking No(s):	COC No: 460-71812.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Julie.Gilmore@et.eurofinsus.com	State of Origin: Pennsylvania	Page: Page 1 of 1
Company: Eurofins Lancaster Laboratories Environm		Accreditations Required (See note): NELAP - Pennsylvania		Job #: 460-308556-1
Address: 2425 New Holland Pike, ,	Due Date Requested: 8/13/2024	Analysis Requested		Preservation Codes: -
City: Lancaster	TAT Requested (days):			
State, Zip: PA, 17601				
Phone: 717-656-2300(Tel)	PO #:			
Email:	WO #:			
Project Name: Rock Hill - Anti-Degradation	Project #: 46011424			Other:
Site:	SSOW#:			

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020B/Filtration_ME Dissolved Cd/Fe/Zn	351.2/351.2_Prep	6020B/3005A (MOD) Total Fe	Total Number of containers	Special Instructions/Note:
NPDES 001 (460-308556-1)	7/30/24	09:30 Eastern		Water			X	X	X		
BASIN 2 (460-308556-2)	7/30/24	10:30 Eastern		Water			X	X	X		
BASIN 1 (460-308556-3)	7/30/24	11:15 Eastern		Water			X	X	X		
UPSTREAM (460-308556-4)	7/30/24	11:30 Eastern		Water			X	X	X		
CLARIFYING POND (460-308556-5)	7/30/24	12:15 Eastern		Water			X	X	X		

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Northeast, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Northeast, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Northeast, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Northeast, LLC.

Possible Hazard Identification	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 1	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		7/31/24 1615	ETEL		7/31/24 1615	
2		7/31/24 2013	ETEL			
3					7/31/24 2013	ETEL

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: raw: 0.8 corr: 0.7

777 New Durham Road
Edison, NJ 08817
Phone: 732-549-3900 Fax: 732-549-3679

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Gilmore, Julie L	Carrier Tracking No(s):	COC No: 460-71817.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Julie.Gilmore@et.eurofinsus.com	State of Origin: Pennsylvania	Page: Page 1 of 1
Company: Eurofins Environment Testing Northeast L		Accreditations Required (See note): NELAP - Pennsylvania		Job #: 460-308556-1
Address: 10 Hazelwood Drive, ,	Due Date Requested: 8/8/2024			
City: Amherst	TAT Requested (days):			
State, Zip: NY, 14228-2298				
Phone: 716-691-2600(Tel) 716-691-7991(Fax)	PO #:			
Email:	WO #:			
Project Name: Rock Hill - Anti-Degradation	Project #: 46011424			
Site:	SSOW#:			

Analysis Requested

Preservation Codes: -

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	245.1/245.1_Prep	Total Number of containers	Special Instructions/Note:
	Preservation Code:								
NPDES 001 (460-308556-1)	7/30/24	09:30 Eastern		Water			X		
BASIN 2 (460-308556-2)	7/30/24	10:30 Eastern		Water			X		
BASIN 1 (460-308556-3)	7/30/24	11:15 Eastern		Water			X		
UPSTREAM (460-308556-4)	7/30/24	11:30 Eastern		Water			X		
CLARIFYING POND (460-308556-5)	7/30/24	12:15 Eastern		Water			X		

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Northeast, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Northeast, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Northeast, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Northeast, LLC.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 1	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:
Relinquished by:	Date/Time: 7/31/24 1900	Company: FETL	Received by: KG
Relinquished by:	Date/Time:	Company	Received by:
Relinquished by:	Date/Time:	Company	Received by:

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:
		13.5 #1 Ice

Date/Time: 8/2/24 915 (Company)

Date/Time: (Company)

Date/Time: (Company)

8/20/2024

Eurofins Edison
777 New Durham Road
Edison, NJ 08817
Phone: 732-549-3900 Fax: 732-549-3679

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Gilmore, Julie L	Carrier Tracking No(s):	COC No: 460-71819.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Julie.Gilmore@et.eurofinsus.com	State of Origin: Pennsylvania	Page: Page 1 of 1
Company: Eurofins Environment Testing Southeast L		Accreditations Required (See note): NELAP - Pennsylvania		Job #: 460-308556-1
Address: 5102 LaRoche Avenue, ,	Due Date Requested: 8/9/2024	Analysis Requested		Preservation Codes: -
City: Savannah	TAT Requested (days):			
State, Zip: GA, 31404				
Phone: 912-354-7858(Tel) 912-352-0165(Fax)	PO #:			
Email:	WO #:			
Project Name: Rock Hill - Anti-Degradation	Project #: 46011424			Other:
Site:	SSOW#:			

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=wastoil, BT=Tissue, A=Air)	6020B/3005A Total Aluminum	Total Number of containers	Special Instructions/Note:
			Preservation Code:				
NPDES 001 (460-308556-1)	7/30/24	09:30 Eastern		Water	X	1	
BASIN 2 (460-308556-2)	7/30/24	10:30 Eastern		Water	X	1	
BASIN 1 (460-308556-3)	7/30/24	11:15 Eastern		Water	X	1	
UPSTREAM (460-308556-4)	7/30/24	11:30 Eastern		Water	X	1	
CLARIFYING POND (460-308556-5)	7/30/24	12:15 Eastern		Water	X	1	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Northeast, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Northeast, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Northeast, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Northeast, LLC.

Possible Hazard Identification	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 1	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	7/31/24 1900	EET EL		8/2/24 1018	
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: ∆ Yes ∆ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 17.6 / 17.6

Login Sample Receipt Checklist

Client: Heidelberg Materials Northeast LLC

Job Number: 460-308556-1

Login Number: 308556

List Source: Eurofins Edison

List Number: 1

Creator: Thundathorn, Sukanan 1

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Heidelberg Materials Northeast LLC

Job Number: 460-308556-1

Login Number: 308556
List Number: 4
Creator: Stapleton, Kaitlyn

List Source: Eurofins Buffalo
List Creation: 08/02/24 09:55 AM

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	13.5 #1 ice
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	N/A	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	N/A	

Login Sample Receipt Checklist

Client: Heidelberg Materials Northeast LLC

Job Number: 460-308556-1

Login Number: 308556
List Number: 2
Creator: Metzger, Katherine A

List Source: Eurofins Lancaster Laboratories Environment Testing, LLC
List Creation: 07/31/24 09:08 PM

Question	Answer	Comment
The cooler's custody seal is intact.	N/A	Not present
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature acceptable,where thermal pres is required(</=6C, not frozen).	True	
Cooler Temperature is recorded.	True	
WV:Container Temp acceptable,where thermal pres is required (</=6C, not frozen).	N/A	
WV: Container Temperature is recorded.	N/A	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the containers received and the COC.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
There is sufficient vol. for all requested analyses.	True	
Is the Field Sampler's name present on COC?	False	Received project as a subcontract.
Sample custody seals are intact.	N/A	Not present.
VOA sample vials do not have headspace >6mm in diameter (none, if from WV)?	N/A	

Login Sample Receipt Checklist

Client: Heidelberg Materials Northeast LLC

Job Number: 460-308556-1

Login Number: 308556
List Number: 5
Creator: Faught, Timothy

List Source: Eurofins Savannah
List Creation: 08/02/24 02:26 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

APPLICATION FOR INDIVIDUAL NPDES PERMMIT ASSOCIATED WITH MINING ACTIVITIES

5600-PM-BMP0032 Rev. 5/2020
Application

pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF MINING PROGRAMS

OFFICIAL USE ONLY
ID # _____
Date Received _____

APPLICATION FOR INDIVIDUAL NPDES PERMIT ASSOCIATED WITH MINING ACTIVITIES

Please answer all questions completely. Refer to the instructions that come with this form.

SECTION A. GENERAL APPLICANT INFORMATION

1. Application Type ☐ New ☒ Renewal ☒ Modification ☐ Transfer
☒ Fee included: See https://www.dep.pa.gov/Business/Land/Mining/BureauofDistrictMining/Pages/Fees.aspx

2. Applicant: Heidelberg Materials Northeast LLC

3. Associated Mining Permit No. or ID: 7974SM1
Except for "new", list existing NPDES Permit No: PA0594121

4. Operation Name: Rock Hill Quarry

5. License No: 24143

6. Applicant Email: andrew.gutshall@heidelbergmaterials.com

7. Permit/Project Type: (check applicable)
☐ Coal ☒ Noncoal
☒ Mining permit (surface or underground)
☐ Exploration
☐ GP-105 (Bluestone)
☐ Other _____

8. Public notice. (See instructions to determine if public notice is required.) Public notice has been submitted for publication. A draft notice is attached. ☒ Yes ☐ No

9. Production qualifications (Small business exemption)
COAL: Will coal production be at least 100,000 tons per year? ☐ Yes ☐ No
NONCOAL: Will production be at least $100,000 (1980 dollars) per year? ☒ Yes ☐ No

10. Total Affected Area (Acres): 109.8
Include all associated haul roads. Note: This acreage may be greater than the acres for the associated mining permit.

11. Estimated Timeframe: Start (or permit issuance) 7/19/2023 End (or permit expiration) 7/19/2028

12. Physical Address of Permit Location (911 compliant):
2055 N Rockhill Road, Sellersville, PA

County	Municipality	City	Boro	Twp
Bucks	East Rockhill	☐	☐	☒
		☐	☐	☐
		☐	☐	☐

13. Map View of Area
☒ Attach a map with outline of the affected area associated with the mining activity and label all outfalls.
☐ Map is included as part of mining permit documents marked as Exhibit No. _____ Date: _____

14. Receiving Stream/Watershed Name: Unnamed Tributary to Tohickon Creek/Upper Tohickon Creek Watershed
Is this stream subject to a TMDL? ☐ Yes ☒ No

15. Chapter 93 Receiving Water Designated Use: TSF, MF

16. Existing Stream Use (if different from designated use): EV Has this stream been petitioned for redesignation? ☒ Yes ☐ No

NOTE: If designated use is 'HQ' or 'EV', complete anti-degradation supplement form 5600-PM-BMP0007.

17. During mining, drainage will result in:
☒ **Point source discharge(s) (complete Section C: Outfall Information)**
☒ Surface Stream
☐ Municipal or Private Storm Sewer -- Provide name of Storm Sewer Operator:

☒ **Non-discharge**
☒ Groundwater – infiltration
☐ Containment without discharge (reuse)

☐ **Other** (Including off-site discharges) – Describe and attach documentation to support a legal right to discharge.

SECTION B. EROSION AND SEDIMENTATION (E & S) PLAN

18. E & S Plan

An E & S plan must be included as part of the associated mining permit information or attached to this application. The plan must provide a brief narrative describing the use of proposed BMPs and their performance to manage E & S for the project. If E & S BMPs to be implemented do not follow the guidelines referenced in the PA Erosion and Sediment Pollution Control Program Manual (TGD # 363-2134-008) or the Engineering Manual for Mining Operations (TGD # 563-0300-101), provide documentation to demonstrate performance equivalent to, or better than, the BMPs in the Manuals.

Check one:

☒ E & S plan meeting the above criteria is contained within the information associated with the mining permit/project listed in item #3 of this application.

☐ E & S information including a complete description of the implementation of BMPs is included with this NPDES application.

19. Best Management Practices (BMPs) Summary.

Check here if all BMPs are described as part of appropriate Modules of the mining permit/project (coal or noncoal) identified in Item No. 3. ☒

Complete the following if specific E & S Modules have not been submitted with an associated mining permit.

Check all that will be used at this mining site.

	BMP		BMP
☐	Sediment basins/traps with discharge outlet	☐	Bio-infiltration areas
☐	Constructed wetlands	☐	Vegetated swales / Stabilized channels
☐	Retention/containment basins	☐	Constructed filters/ filter bags
☐	Detention basin/pit sump	☐	Stabilized site entrances
☐	Non-discharging sedimentation traps	☐	Wheel washes
☐	Sediment fore bay	☐	Limiting disturbed area with concurrent reclamation
☐	Infiltration measures	☐	Oil/grit separators
☐	Protect Sensitive & Special Value Features	☐	Street sweeping
☐	Protect/Conserve/ Enhance Riparian areas	☐	Runoff capture/Reuse
☐	Restoration: Buffers/ Landscape/ Floodplain	☐	Temporary sediment controls (silt fence/silt-sok)
☐	Top of slope berms	☐	Top of slope diversions
☐	Rock inlets for basins	☐	Other _____
☐	Erosion control blankets/textiles	☐	Other _____

20. Reclamation and BMPs

Check here if any of the above checked BMPs will be left after final bond release. ☐

If checked, supply details, signed documentation of permission by the landowner and justification in the reclamation plan with the mining permit application. If this information is contained in the mining permit documents, please explain:

SECTION C. OUTFALL INFORMATION

This Section is to be completed when discrete outfalls are proposed. Attach additional pages for more than 4 points.

21. Identify each point in the tables below. Each discharge point must be shown and labeled as such on a map submitted with this application or as part of the mining permit/authorization. The labeling of discharge points must correspond with the labels used on the exhibit maps submitted in support of the mining permit/authorization. Non-discharging sedimentation traps and groundwater infiltration points are not outfalls and should not be included as outfalls but should be listed at the end of this section. Emergency Spillway(s) for ponds associated with non-discharge alternative must be permitted.

Describe the location and source of each point.

Discharge Point (e.g. SP 001, SP 002 etc.)	Latitude	Longitude	Receiving Stream	Source of Discharge (e.g., sedimentation pond, groundwater sump, etc.)
001	40° 24' 10.86“	-75° 18' 10.82“	Unnamed Tributary to Tohickon Creek	Stormwater
002	40° 24' 17.67“	-75° 18' 15.77“	Unnamed Tributary to Tohickon Creek	Sedimentation/Stormwater Pond #1
003	40° 24' 14.49“	-75° 18' 14.22“	Unnamed Tributary to Tohickon Creek	Sedimentation/Stormwater Pond #2
004	40° 24' 10.86“	-75° 18' 10.82“	Unnamed Tributary to Tohickon Creek	Clarification Pond and Pit Sump

For the same points as above, describe the flow and treatment for each point.

	Flow			
Discharge Point (e.g. SP 01, SP 02 etc.)	Average rate (mgd)	Design rate (mgd)	Frequency (Intermittent (I), Precipitation Dependent (P), Continuous (C)	Treatment
001	N/A - Precipitation	N/A – Precipitation	Precipitation	Settlement of Suspended Solids by Detention
002	0.052	39.5	Precipitation	Settlement of Suspended Solids by Detention
003	0.049	74.6	Precipitation	Settlement of Suspended Solids by Detention
004	0.238	0.238	Intermittent	Settlement of Suspended Solids by Detention

Design rate is the discharge flow at the Q 7-10 stream flow for post-mining discharges, the maximum hydraulic capacity for other treatment facilities or the routed storm flow for sedimentation ponds.

Latitude/Longitude Collection Method: ☐ EMAP ☐ GPS ☐ Printed Map ☒ Other **Google Earth**

Check the horizontal reference datum (or projection datum) employed in the collection method.

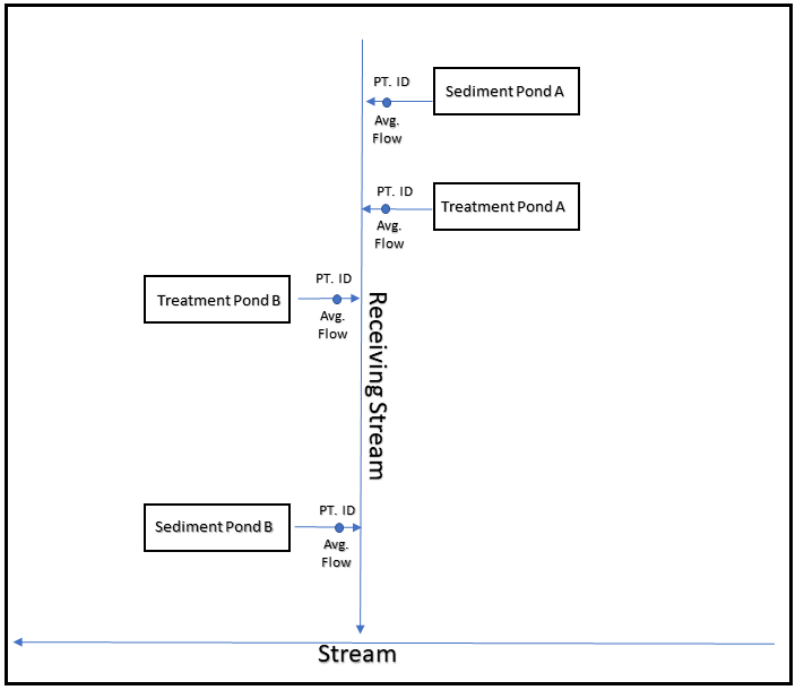
☐ NAD27 (topo maps) ☐ NAD83 (Emap) ☒ WGS84 (GEO84) (most GPS units)

For non-discharging sedimentation traps and groundwater infiltration points, provide the description and location:

Discharge/Sampling Point:	Latitude:	Longitude:	Source of Discharge (e.g., sedimentation pond, groundwater sump, etc.):
N/A	41° 13' 59.30“	-75° 16' 09.34“	Non-discharging Sediment Trap 1
N/A	41° 14' 18.67“	-75° 16' 28.18“	Non-discharging Sediment Trap 2
N/A	41° 14' 01.97“	-75° 16' 10.36“	Non-discharging Sediment Trap 3

Depict the structures and corresponding discharge points, average flow rate, and receiving stream(s) in a flow diagram. Include line drawing below or attachment. [40 C.F.R. § 122.21(g)(2)] **Please see Attachment C-21.4: Flow Diagram**

Example:



22. Evaluation of Thermal Impacts. Describe how thermal impacts were evaluated and, if necessary, how they will be mitigated, in accordance with 25 Pa. Code Chapter 93.

Thermal impacts to the Unnamed Tributary to Tohickon Creek are not anticipated. The water discharged at NPDES discharge points are runoff from precipitation at the Site along with any groundwater discharge that may occur as a result of pumping from the mine pit.

23. Solid or liquid wastes not discharged. Will there be sludge or sediment produced from the treatment described above? ☒ Yes ☐ No

Will there be liquid produced from the treatment described above (not discharged via the outfall)? ☐ Yes ☒ No

Describe the material and its ultimate disposal: **Pond fines will be used with site overburden for final reclamation.**

SECTION D. EFFLUENT CHARACTERIZATION

Complete the following subsections for each discharge outfall listed in Item #21.

Discharge Point No(s).: **001**

24. **Common parameters/pollutants.** Complete the table for each constituent. Indicate 'E' if estimate, 'D' if based on actual data. If needed, attach a separate sheet labeled "Item #24 Common parameters/pollutants". Please include the units of measurement. If you are providing data from one discharge for two or more substantially identical effluents, indicate which outfalls the data represents. [40 CFR 122.21(k)(5)(i) and 40 CFR 122.21(g)(7)(iii)]

Constituent	Daily Max	Daily Average	Source of Information
pH	**8.1**	**7.8**	**D – Water Quality Assessment Report**
Total Suspended Solids (TSS)	**70.0 mg/l**	**35.0 mg/l**	**D – See Analytical Results Attachment D-1 (Existing Permit)**
Conductivity	**113 umhos/cm**	**113 umhos/cm**	**D – See Analytical Results Attachment D-1**
Chemical Oxygen Demand (COD)[1]	**10.5 mg/l**	**10.5 mg/l**	**D – See Analytical Results Attachment D-1**
Biochemical Oxygen Demand (BOD)[1]	< **1.0 mg/l**	< **1.0 mg/l**	**D – See Analytical Results Attachment D-1**
Ammonia (NH3)[1]	< **0.050 mg/l**	< **0.050 mg/l**	**D – See Analytical Results Attachment D-1**
Total Organic Carbon (TOC)[1]	**1.6 mg/l**	**1.6 mg/l**	**D – See Analytical Results Attachment D-1**
Flow	**N/A**	**N/A**	**N/A - Stormwater**
Temperature (high)	**Varies**	**Varies**	**Temperature of the discharge water varies with season**
Temperature (low)	**Varies**	**Varies**	

[1] Waiver option [40 CFR 122.21(k)(5)(i)]: A waiver is requested for the following constituents that are not anticipated to be present in the discharge:

☒ COD ☒ BOD ☒ NH3 ☒ TOC

Provide a justification for this waiver request.

25. Dioxins. As the applicant, do you have reason to believe that at any time dioxins were made, used, stored or buried on or directly upgradient from the site designated for mining and/or support area? [TCDD, 2,4,5-T, 2,4,5-TP, Erbon, Ronnel, TCP or HCP under 40 CFR 122.21 (g)(7)(viii) and 40 CFR 122.21 (k)(5)(iv)]

☐ Yes ☒ No

If yes, provide information and data characterizing the potential discharge on a separate sheet labeled "Item #25 Dioxins"

26. Organic Toxic Pollutants (EPA Table II) Provide waiver justification or data regarding organic toxic pollutants for the mine site.

Waiver: This section is not applicable because this operation fulfills one of the following criteria:

☐ For coal, this operation produces less than 100,000 tons per year.

☐ For noncoal, this operation has gross sales of less than $100,000 per year (1980 dollars).

If a waiver is not applicable, refer to Appendix B: Table II - Organic Toxic Pollutants. List any constituents from that table that are expected to be present in the discharge.

See Attachment D-1: Effluent Characterization Summary.

For all constituents listed above, provide a table of the estimated daily maximum concentration, the estimated daily average concentration and the source of this information on a separate attachment labeled "Item #26 Organic Toxic Pollutants".

27. Other toxic pollutants. For new mining permits, for each of the following constituents, provide an estimate of the concentration that could reasonably expected to be present in the discharges(s) and the source of this information [40 CFR 122.21 (k)(5)(iii)(A)] (EPA Table III).

For all Coal mining renewals, provide the actual data for concentrations. [40 CFR 122.21 (g)(7)(v)(B)]

For Noncoal renewals, provide data for those you expect to be present. Insert "X" for those not expected to be present [40 CFR 122.21 (g)(7)(vi)(B)]

Please include units of measurement for all concentrations reported.

Constituent	Concentration		Constituent	Concentration
Antimony, Total	< **0.76 ug/L**		Nickel, Total	< **0.91 ug/L**
Arsenic, Total	< **0.89 ug/L**		Selenium, Total	< **0.59 ug/L**
Beryllium, Total	<**0.13 ug/l**		Silver, Total	**X**
Cadmium, Total	< **0.071 ug/L**		Thallium, Total	<**0.21 ug/L**
Chromium, Total	<**2.5 ug/L**		Zinc, Total	< **6.5 ug/L**
Copper, Total	< **2.5 ug/L**		Cyanide, Total	**X**
Lead, Total	< **0.84 ug/L**		Phenols, Total	<**0.29 ug/L**
Mercury, Total	< **0.043 ug/L**			

28. Conventional and Nonconventional Pollutants. For each of the following constituents, check the boxes for those that you expect to be present in the discharge. (EPA Table IV)

☐ Bromide	☐ Nitrogen, Total Organic	☐ Sulfite	☒ Iron, Total
☐ Chlorine, Total Residual	☒ Oil and Grease	☐ Surfactants	☒ Magnesium, Total
☒ Color	☒ Phosphorus, Total	☒ Aluminum, Total	☐ Molybdenum, Total
☐ Fecal Coliform	☐ Radioactivity	☒ Barium, Total	☒ Manganese, Total
☒ Fluoride	☒ Sulfate	☒ Boron, Total	☐ Tin, Total
☒ Nitrate-Nitrite	☐ Sulfide	☐ Cobalt, Total	☒ Titanium, Total

For new outfalls, for each constituent checked above (those that you expect to be present) provide the estimated daily maximum concentration, daily average concentration and the source of the information on an attachment. For existing outfalls, report the daily maximum and daily average based on data collected within the previous five years.

See Attachment D-1: Effluent Characterization Summary.

29. Toxic Pollutants and Hazardous Substances (EPA Table V) Refer to Appendix B: Toxic Pollutants and Hazardous Substances. List any constituents from that table that are expected to be present in the discharge.

See Attachment D-1: Effluent Characterization Summary.

For all constituents listed above, provide data for each pollutant expected in the discharge or justification of why any are believed to be not present and the source of this information on a separate attachment labeled "Item #29 Toxic and Hazardous Pollutants".

SECTION D. EFFLUENT CHARACTERIZATION

Complete the following subsections for each discharge outfall listed in Item #21.

Discharge Point No(s).: **002**

24. **Common parameters/pollutants.** Complete the table for each constituent. Indicate 'E' if estimate, 'D' if based on actual data. If needed, attach a separate sheet labeled "Item #24 Common parameters/pollutants". Please include the units of measurement. If you are providing data from one discharge for two or more substantially identical effluents, indicate which outfalls the data represents. [40 CFR 122.21(k)(5)(i) and 40 CFR 122.21(g)(7)(iii)]

Constituent	Daily Max	Daily Average	Source of Information
pH	**8.2**	**7.7**	**D – Water Quality Assessment Report**
Total Suspended Solids (TSS)	**70.0 mg/l**	**35.0 mg/l**	**D – See Analytical Results Attachment D-1 (Existing Permit)**
Conductivity	**245 umhos/cm**	**245 umhos/cm**	**D – See Analytical Results Attachment D-1**
Chemical Oxygen Demand (COD)[1]	**15.3 mg/l**	**15.3 mg/l**	**D – See Analytical Results Attachment D-1**
Biochemical Oxygen Demand (BOD)[1]	**< 1.0 mg/l**	**< 1.0 mg/l**	**D – See Analytical Results Attachment D-1**
Ammonia (NH3)[1]	**< 0.050 mg/l**	**< 0.050 mg/l**	**D – See Analytical Results Attachment D-1**
Total Organic Carbon (TOC)[1]	**2.9 mg/l**	**2.9 mg/l**	**D – See Analytical Results Attachment D-1**
Flow	**39.5 MGD**	**0.052 MGD**	**Daily Max flow is based on primary spillway design storm (10-year) as required in E&S TGD 363-2134-008. Daily Average flow is based on dry weather storm event of one (1) inch in 24 hours.**
Temperature (high)	**Varies**	**Varies**	**Temperature of the discharge water varies with season**
Temperature (low)	**Varies**	**Varies**	

[1] Waiver option [40 CFR 122.21(k)(5)(i)]: A waiver is requested for the following constituents that are not anticipated to be present in the discharge:

☒ COD ☒ BOD ☒ NH3 ☒ TOC

Provide a justification for this waiver request.

25. Dioxins. As the applicant, do you have reason to believe that at any time dioxins were made, used, stored or buried on or directly upgradient from the site designated for mining and/or support area? [TCDD, 2,4,5-T, 2,4,5-TP, Erbon, Ronnel, TCP or HCP under 40 CFR 122.21 (g)(7)(viii) and 40 CFR 122.21 (k)(5)(iv)]

☐ Yes ☒ No

If yes, provide information and data characterizing the potential discharge on a separate sheet labeled "Item #25 Dioxins"

26. Organic Toxic Pollutants (EPA Table II) Provide waiver justification or data regarding organic toxic pollutants for the mine site.

Waiver: This section is not applicable because this operation fulfills one of the following criteria:

☐ For coal, this operation produces less than 100,000 tons per year.

☐ For noncoal, this operation has gross sales of less than $100,000 per year (1980 dollars).

If a waiver is not applicable, refer to Appendix B: Table II - Organic Toxic Pollutants. List any constituents from that table that are expected to be present in the discharge.

See Attachment D-1: Effluent Characterization Summary.

For all constituents listed above, provide a table of the estimated daily maximum concentration, the estimated daily average concentration and the source of this information on a separate attachment labeled "Item #26 Organic Toxic Pollutants".

27. Other toxic pollutants. For new mining permits, for each of the following constituents, provide an estimate of the concentration that could reasonably expected to be present in the discharges(s) and the source of this information [40 CFR 122.21 (k)(5)(iii)(A)] (EPA Table III).

For all Coal mining renewals, provide the actual data for concentrations. [40 CFR 122.21 (g)(7)(v)(B)]

For Noncoal renewals, provide data for those you expect to be present. Insert "X" for those not expected to be present [40 CFR 122.21 (g)(7)(vi)(B)]

Please include units of measurement for all concentrations reported.

Constituent	Concentration		Constituent	Concentration
Antimony, Total	< **0.76 ug/L**		Nickel, Total	< **0.91 ug/L**
Arsenic, Total	< **0.89 ug/L**		Selenium, Total	< **0.59 ug/L**
Beryllium, Total	< **0.13 ug/L**		Silver, Total	**X**
Cadmium, Total	< **0.071 ug/L**		Thallium, Total	< **0.21 ug/L**
Chromium, Total	< **2.5 ug/L**		Zinc, Total	**13.0 ug/L**
Copper, Total	< **2.5 ug/L**		Cyanide, Total	**X**
Lead, Total	< **0.84 ug/L**		Phenols, Total	< **0.29 ug/L**
Mercury, Total	< **0.043 ug/L**			

28. Conventional and Nonconventional Pollutants. For each of the following constituents, check the boxes for those that you expect to be present in the discharge. (EPA Table IV)

☐ Bromide	☐ Nitrogen, Total Organic	☐ Sulfite	☒ Iron, Total
☐ Chlorine, Total Residual	☒ Oil and Grease	☐ Surfactants	☒ Magnesium, Total
☒ Color	☒ Phosphorus, Total	☒ Aluminum, Total	☐ Molybdenum, Total
☐ Fecal Coliform	☐ Radioactivity	☒ Barium, Total	☒ Manganese, Total
☒ Fluoride	☒ Sulfate	☒ Boron, Total	☐ Tin, Total
☒ Nitrate-Nitrite	☐ Sulfide	☐ Cobalt, Total	☒ Titanium, Total

For new outfalls, for each constituent checked above (those that you expect to be present) provide the estimated daily maximum concentration, daily average concentration and the source of the information on an attachment. For existing outfalls, report the daily maximum and daily average based on data collected within the previous five years.

See Attachment D-1: Effluent Characterization Summary.

29. Toxic Pollutants and Hazardous Substances (EPA Table V) Refer to Appendix B: Toxic Pollutants and Hazardous Substances. List any constituents from that table that are expected to be present in the discharge.

See Attachment D-1: Effluent Characterization Summary.

For all constituents listed above, provide data for each pollutant expected in the discharge or justification of why any are believed to be not present and the source of this information on a separate attachment labeled "Item #29 Toxic and Hazardous Pollutants".

SECTION D. EFFLUENT CHARACTERIZATION

Complete the following subsections for each discharge outfall listed in Item #21.

Discharge Point No(s).: **003**

24. **Common parameters/pollutants.** Complete the table for each constituent. Indicate 'E' if estimate, 'D' if based on actual data. If needed, attach a separate sheet labeled "Item #24 Common parameters/pollutants". Please include the units of measurement. If you are providing data from one discharge for two or more substantially identical effluents, indicate which outfalls the data represents. [40 CFR 122.21(k)(5)(i) and 40 CFR 122.21(g)(7)(iii)]

Constituent	Daily Max	Daily Average	Source of Information
pH	**8.2**	**8.02**	**D – Water Quality Assessment Report**
Total Suspended Solids (TSS)	**70.0 mg/l**	**35.0 mg/l**	**D – See Analytical Results Attachment D-1 (Existing Permit)**
Conductivity	**172 umhos/cm**	**172 umhos/cm**	**D – See Analytical Results Attachment D-1**
Chemical Oxygen Demand (COD)[1]	**19.1 mg/l**	**19.1 mg/l**	**D – See Analytical Results Attachment D-1**
Biochemical Oxygen Demand (BOD)[1]	**< 1.0 mg/l**	**< 1.0 mg/l**	**D – See Analytical Results Attachment D-1**
Ammonia (NH3)[1]	**< 0.050 mg/l**	**< 0.050 mg/l**	**D – See Analytical Results Attachment D-1**
Total Organic Carbon (TOC)[1]	**3.6 mg/l**	**3.6 mg/l**	**D – See Analytical Results Attachment D-1**
Flow	**74.6 MGD**	**0.049 MGD**	**Daily Max flow is based on primary spillway design storm (10-year) as required in E&S TGD 363-2134-008. Daily Average flow is based on dry weather storm event of one (1) inch in 24 hours.**
Temperature (high)	**Varies**	**Varies**	**Temperature of the discharge water varies with season**
Temperature (low)	**Varies**	**Varies**	

[1] Waiver option [40 CFR 122.21(k)(5)(i)]: A waiver is requested for the following constituents that are not anticipated to be present in the discharge:

☒ COD ☒ BOD ☒ NH3 ☒ TOC

Provide a justification for this waiver request.

25. Dioxins. As the applicant, do you have reason to believe that at any time dioxins were made, used, stored or buried on or directly upgradient from the site designated for mining and/or support area? [TCDD, 2,4,5-T, 2,4,5-TP, Erbon, Ronnel, TCP or HCP under 40 CFR 122.21 (g)(7)(viii) and 40 CFR 122.21 (k)(5)(iv)]

☐ Yes ☒ No

If yes, provide information and data characterizing the potential discharge on a separate sheet labeled "Item #25 Dioxins"

26. Organic Toxic Pollutants (EPA Table II) Provide waiver justification or data regarding organic toxic pollutants for the mine site.

Waiver: This section is not applicable because this operation fulfills one of the following criteria:

☐ For coal, this operation produces less than 100,000 tons per year.

☐ For noncoal, this operation has gross sales of less than $100,000 per year (1980 dollars).

If a waiver is not applicable, refer to Appendix B: Table II - Organic Toxic Pollutants. List any constituents from that table that are expected to be present in the discharge.

See Attachment D-1: Effluent Characterization Summary.

For all constituents listed above, provide a table of the estimated daily maximum concentration, the estimated daily average concentration and the source of this information on a separate attachment labeled "Item #26 Organic Toxic Pollutants".

27. Other toxic pollutants. For new mining permits, for each of the following constituents, provide an estimate of the concentration that could reasonably expected to be present in the discharges(s) and the source of this information [40 CFR 122.21 (k)(5)(iii)(A)] (EPA Table III).

For all Coal mining renewals, provide the actual data for concentrations. [40 CFR 122.21 (g)(7)(v)(B)]

For Noncoal renewals, provide data for those you expect to be present. Insert "X" for those not expected to be present [40 CFR 122.21 (g)(7)(vi)(B)]

Please include units of measurement for all concentrations reported.

Constituent	Concentration		Constituent	Concentration
Antimony, Total	< **0.76 ug/L**		Nickel, Total	**1.5 ug/L**
Arsenic, Total	< **0.89 ug/L**		Selenium, Total	< **0.59 ug/L**
Beryllium, Total	< **0.13 ug/L**		Silver, Total	**X**
Cadmium, Total	< **0.071 ug/L**		Thallium, Total	< **0.21 ug/L**
Chromium, Total	**3.5 ug/L**		Zinc, Total	< **6.5 ug/L**
Copper, Total	**3.7 ug/L**		Cyanide, Total	**X**
Lead, Total	< **0.84 ug/L**		Phenols, Total	< **0.29 ug/L**
Mercury, Total	< **0.043 ug/L**			

28. Conventional and Nonconventional Pollutants. For each of the following constituents, check the boxes for those that you expect to be present in the discharge. (EPA Table IV)

☐ Bromide	☐ Nitrogen, Total Organic	☐ Sulfite	☒ Iron, Total
☐ Chlorine, Total Residual	☒ Oil and Grease	☐ Surfactants	☒ Magnesium, Total
☒ Color	☒ Phosphorus, Total	☒ Aluminum, Total	☐ Molybdenum, Total
☐ Fecal Coliform	☐ Radioactivity	☒ Barium, Total	☒ Manganese, Total
☒ Fluoride	☒ Sulfate	☒ Boron, Total	☐ Tin, Total
☒ Nitrate-Nitrite	☐ Sulfide	☐ Cobalt, Total	☒ Titanium, Total

For new outfalls, for each constituent checked above (those that you expect to be present) provide the estimated daily maximum concentration, daily average concentration and the source of the information on an attachment. For existing outfalls, report the daily maximum and daily average based on data collected within the previous five years.

See Attachment D-1: Effluent Characterization Summary.

29. Toxic Pollutants and Hazardous Substances (EPA Table V) Refer to Appendix B: Toxic Pollutants and Hazardous Substances. List any constituents from that table that are expected to be present in the discharge.

See Attachment D-1: Effluent Characterization Summary.

For all constituents listed above, provide data for each pollutant expected in the discharge or justification of why any are believed to be not present and the source of this information on a separate attachment labeled "Item #29 Toxic and Hazardous Pollutants".

SECTION D. EFFLUENT CHARACTERIZATION

Complete the following subsections for each discharge outfall listed in Item #21.

Discharge Point No(s).: **004**

24. **Common parameters/pollutants.** Complete the table for each constituent. Indicate 'E' if estimate, 'D' if based on actual data. If needed, attach a separate sheet labeled "Item #24 Common parameters/pollutants". Please include the units of measurement. If you are providing data from one discharge for two or more substantially identical effluents, indicate which outfalls the data represents. [40 CFR 122.21(k)(5)(i) and 40 CFR 122.21(g)(7)(iii)]

Constituent	Daily Max	Daily Average	Source of Information
pH	**8.1**	**7.9**	**D – Water Quality Assessment Report**
Total Suspended Solids (TSS)	**70.0 mg/l**	**35.0 mg/l**	**D – See Analytical Results Attachment D-1 (Existing Permit)**
Conductivity	**113 umhos/cm**	**113 umhos/cm**	**D – See Analytical Results Attachment D-1**
Chemical Oxygen Demand (COD)[1]	**10.5 mg/l**	**10.5 mg/l**	**D – See Analytical Results Attachment D-1**
Biochemical Oxygen Demand (BOD)[1]	< **1.0 mg/l**	< **1.0 mg/l**	**D – See Analytical Results Attachment D-1**
Ammonia (NH3)[1]	< **0.050 mg/l**	< **0.050 mg/l**	**D – See Analytical Results Attachment D-1**
Total Organic Carbon (TOC)[1]	**1.6 mg/l**	**1.6 mg/l**	**D – See Analytical Results Attachment D-1**
Flow	**0.238 MGD**	**0.238 MGD**	**See attached NDPES Discharge Modification Report**
Temperature (high)	**Varies**	**Varies**	**Temperature of the discharge water varies with season**
Temperature (low)	**Varies**	**Varies**	

[1] Waiver option [40 CFR 122.21(k)(5)(i)]: A waiver is requested for the following constituents that are not anticipated to be present in the discharge:

☒ COD ☒ BOD ☒ NH3 ☒ TOC

Provide a justification for this waiver request.

25. Dioxins. As the applicant, do you have reason to believe that at any time dioxins were made, used, stored or buried on or directly upgradient from the site designated for mining and/or support area? [TCDD, 2,4,5-T, 2,4,5-TP, Erbon, Ronnel, TCP or HCP under 40 CFR 122.21 (g)(7)(viii) and 40 CFR 122.21 (k)(5)(iv)]

☐ Yes ☒ No

If yes, provide information and data characterizing the potential discharge on a separate sheet labeled "Item #25 Dioxins"

26. Organic Toxic Pollutants (EPA Table II) Provide waiver justification or data regarding organic toxic pollutants for the mine site.

Waiver: This section is not applicable because this operation fulfills one of the following criteria:

☐ For coal, this operation produces less than 100,000 tons per year.

☐ For noncoal, this operation has gross sales of less than $100,000 per year (1980 dollars).

If a waiver is not applicable, refer to Appendix B: Table II - Organic Toxic Pollutants. List any constituents from that table that are expected to be present in the discharge.

See Attachment D-1: Effluent Characterization Summary.

For all constituents listed above, provide a table of the estimated daily maximum concentration, the estimated daily average concentration and the source of this information on a separate attachment labeled "Item #26 Organic Toxic Pollutants".

27. Other toxic pollutants. For new mining permits, for each of the following constituents, provide an estimate of the concentration that could reasonably expected to be present in the discharges(s) and the source of this information [40 CFR 122.21 (k)(5)(iii)(A)] (EPA Table III).

For all Coal mining renewals, provide the actual data for concentrations. [40 CFR 122.21 (g)(7)(v)(B)]

For Noncoal renewals, provide data for those you expect to be present. Insert "X" for those not expected to be present [40 CFR 122.21 (g)(7)(vi)(B)]

Please include units of measurement for all concentrations reported.

Constituent	Concentration		Constituent	Concentration
Antimony, Total	< **0.76 ug/L**		Nickel, Total	< **0.91 ug/L**
Arsenic, Total	< **0.89 ug/L**		Selenium, Total	< **0.59 ug/L**
Beryllium, Total	<**0.13 ug/l**		Silver, Total	**X**
Cadmium, Total	< **0.071 ug/L**		Thallium, Total	<**0.21 ug/L**
Chromium, Total	<**2.5 ug/L**		Zinc, Total	< **6.5 ug/L**
Copper, Total	< **2.5 ug/L**		Cyanide, Total	**X**
Lead, Total	< **0.84 ug/L**		Phenols, Total	<**0.29 ug/L**
Mercury, Total	< **0.043 ug/L**			

28. Conventional and Nonconventional Pollutants. For each of the following constituents, check the boxes for those that you expect to be present in the discharge. (EPA Table IV)

☐ Bromide	☐ Nitrogen, Total Organic	☐ Sulfite	☒ Iron, Total
☐ Chlorine, Total Residual	☒ Oil and Grease	☐ Surfactants	☒ Magnesium, Total
☒ Color	☒ Phosphorus, Total	☒ Aluminum, Total	☐ Molybdenum, Total
☐ Fecal Coliform	☐ Radioactivity	☒ Barium, Total	☒ Manganese, Total
☒ Fluoride	☒ Sulfate	☒ Boron, Total	☐ Tin, Total
☒ Nitrate-Nitrite	☐ Sulfide	☐ Cobalt, Total	☒ Titanium, Total

For new outfalls, for each constituent checked above (those that you expect to be present) provide the estimated daily maximum concentration, daily average concentration and the source of the information on an attachment. For existing outfalls, report the daily maximum and daily average based on data collected within the previous five years.

See Attachment D-1: Effluent Characterization Summary.

29. Toxic Pollutants and Hazardous Substances (EPA Table V) Refer to Appendix B: Toxic Pollutants and Hazardous Substances. List any constituents from that table that are expected to be present in the discharge.

See Attachment D-1: Effluent Characterization Summary.

For all constituents listed above, provide data for each pollutant expected in the discharge or justification of why any are believed to be not present and the source of this information on a separate attachment labeled "Item #29 Toxic and Hazardous Pollutants".

SECTION E. CERTIFICATIONS

The information on the NPDES form must be certified as correct by one of the following, as applicable.

a) In the case of corporations, by principal executive officer of at least the level of vice president, or his duly authorized representative, if such representative is responsible for the overall operation of the facility from which the discharge described in the NPDES form originates.
b) In the case of a partnership, by a general partner.
c) In the case of a sole proprietorship, by the proprietor.
d) In the case of a municipal, state or other public facility, by either a principal executive officer, ranking elected official or other duly authorized employee.

30. Applicant Affidavit

I certify under penalty of law that this application and all related attachments were prepared by me or under my direction or supervision. Based on my own knowledge and on inquiry of the person or persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I verify that the activity is eligible to participate in the NPDES permit, and that the BMPs, E&S Plan, and other plans and controls described are being or will be, implemented to ensure that water quality standards and effluent limits are attained. Furthermore, I agree to accept all conditions and limitations imposed by the associated permit. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment or both for knowing violations pursuant to Section 309(c)(4) of the Clean Water Act and, 18 Pa. C.S. §§4903-4904.

Sworn and Subscribed to Before Me This 18th day of January (month) 2023 (year)

Signature of Applicant or Responsible Official

Denise L. Welser

Signature of Notary Public

Mark E. Kendrick

Name (Typed) of Applicant or Responsible Official

Notary Seal

Commonwealth of Pennsylvania - Notary Seal
DENISE L WELSER - Notary Public
Lehigh County
My Commission Expires January 24, 2026
Commission Number 1324306

7660 Imperial Way

Address of Applicant

Allentown, PA 18195

Address of Applicant

Vice President

Applicant Title and Corporate Seal

31. Preparation of this report (to be completed by the person who prepared this application)

I do hereby certify to the best of my knowledge, information and belief that the submitted information is true and correct, represents actual field conditions and are in accordance with the appropriate Chapters of the Department's rules and regulations. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Signature

Joseph Jung Taek Kim

Printed Name and Title

1/19/2023

Date Signed

Earthres Group, Inc.

Company

6912 Old Easton Road

Address

Pipersville, PA 18947

City, State, Zip

(215) 766-1211

Phone

Email Address: jkim@earthres.com

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
JUNG TAEK KIM
ENGINEER
PE088887
Professional Seal
1/19/2023

NPDES No. _____
Permit No. _____

SECTION F. PREPAREDNESS, PREVENTION AND CONTINGENCY (PPC) PLAN

This completed form constitutes the PPC plan. Along with an approved erosion and sedimentation control plan and reclamation plan as well as additional information supplied in the mining activity request, this PPC plan comprises the Stormwater Pollution Prevention Plan.

☐ Option: If the permittee has a separate, comprehensive PPC plan located on the site, check this box and sign below to confirm that this document is available upon request.

Signature: _____ Print Name: _____ Date: _____

F1. Facility Contact

This person is the designated contact for the mining facility:

Name: **Andrew J. Gutshall** Title: **Environmental Manager**

Address: _____

Phone: (24-hr emergency) **(215) 388-8835** Email: **andrew.gutshall@heidelbergmaterials.com**

F2. PPC Team

List PPC team members (names and title) who will undertake and oversee the control measures in this plan and make necessary corrective actions:

1. **Andrew J. Gutshall – Environmental Manager** 2. **Micheal T. Sullivan – Vice President**
3. _____ 4. _____

Potential Pollutant Sources and Control

F3. Inventory

List **all chemicals**, petroleum products, solvents, paint, acids, water treatment products, fertilizer, antifreeze, ice melt/salt, etc. that are to be used and stored on site. If more space is needed, please submit table on a separate page labeled "F3: Inventory"

NA – An updated/proposed PPC plan, including the inventory, will be provided once the site is operational. No potential pollutants are currently stored onsite.

Chemical and trade name	Location	Quantity	Storage Management (letter key) *	Coal sites only AST Inventoried?
N/A				☐
				☐
				☐
				☐
				☐
				☐
				☐

* Key to Storage Management: A. Closed, sturdy containers B. Open-sided covered C. Secured Tarps D. Sheds/buildings/trailers E. Other

F4. History of site

a. Within 3 years prior to this being a mine site, was this site used for any industrial activity? ☐ Yes ☒ No
If yes, what products (such as those listed above) were used, stored and/or disposed of at this site?

b. Have leaks or spills occurred at this site in the past 3 years? ☐ Yes ☒ No
If yes, provide details of the event.

c. An authorized individual must evaluate the site for nonauthorized discharges such as leaking pipelines, drains, hoses and any other non-stormwater discharges.
Date of evaluation: **12/14/2022** Person who did evaluation: **Andrew J. Gutshall, P.G.**

F5. Potential Pollution Locations

Identify locations that have potential for spills or leaks at this site:

- ☒ Excavation area
- ☒ Stockpile area
- ☒ Product storage area
- ☒ Haul roads
- ☐ Other(s) (list): _____
- ☒ Vehicle refueling, maintenance or washing area
- ☒ Equipment storage and maintenance area
- ☐ Chemical preparation area
- ☐ Treatment system setup

F6. Pollution Control

The operator or designated representative agrees to the following (check each):

- ☒ 1. Maintain regular pickup and disposal of waste materials
- ☒ 2. Undertake daily inspection of site for leaks and spills.
- ☒ 3. Ensure that chemical containers and supplies are properly and promptly stored after use.
- ☒ 4. Maintain equipment so that spills/leaks are avoided.
- ☒ 5. Undertake practices to keep control measures operational.
- ☒ 6. Take corrective actions to prevent and/or contain leaks and spills.
- ☒ 7. Ensure products are stored in appropriate containers that are clearly labeled.
- ☒ 8. Locate materials storage areas away from vehicle high-traffic areas.
- ☒ 9. Control garbage onsite to prevent dispersion by water or wind.

The above items are included as part of this PPC.

F7. Emergency Procedures and Training

The operator or designated representative confirms the following (check each):

- ☒ 1. The operator has in place a procedure for stopping, containing and cleaning up spills, leaks or other releases.
- ☒ 2. The operator agrees to train all on-site working personnel in the procedures listed in this PPC.
- ☒ 3. The operator has a procedure for notifying appropriate facility personnel, emergency response and regulatory agencies (including the District Mining Office) in the event of a spill, leak or release. *

* Attach this notification list to this document. List is attached. ☐

The above items are included as part of this PPC.

Inspections

F8. Inactivity

a. Will this site be seasonally inactive? ☒ Yes ☐ No

If yes, provide time period of inactivity: **Inactivity period may vary with market demand for aggregate product.**

If yes, complete item b.

b. Please confirm the following by checking the *appropriate* box(es):

- ☒ Sites will be secured, and access limited to prevent dumping and vandalism during shutdown.
- ☒ Chemicals will be removed from the site during shutdown.
- ☒ Chemicals will be secured in locked structures during shutdown.

F9. Self-inspection and plan updates

The operator agrees to the following (check the box):

- ☒ 1. Undertake yearly, documented, self-inspections to ensure the PPC is up to date and all BMPs are working.
- ☒ 2. Retain the written self-inspection report for at least one year.
- ☒ 3. Update this PPC as necessary and upon renewal of the NPDES permit.

The above items are included as part of this PPC.

Affidavit	
I certify under penalty of law that this PPC document and any attachments related to it were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. The information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.	
Name: Mark E. Kendrick **Title:** Vice President	
Signature:	**Date:** 1/10/23

EFFLUENT CHARACTERIZATION SUMMARY

Attachment D-1
Effluent Characterization Summary

Sampling Program

Effluent characterization samples were obtained from the Clarifying Pond (proposed NPDES 001); Sediment Basin No. 1 (proposed NPDES 002), and Sediment Basin No. 02 (proposed NPDES 003) on April 1, 2022. In addition, per discussion with PA DEP, additional background samples were obtained from the Quarry pit sump, as well as at upgradient and downgradient points along the unnamed tributary. The upgradient point is located west of the Clarifying Pond prior to the confluence with the Clarifying Pond discharge. The downgradient point is located at the downgradient property boundary where the existing NPDES point is located.

Analyses to be included in effluent characterization were determined from the National Pollutant Discharge Elimination System (NPDES) Application For Individual Permit To Discharge Industrial Wastewater Instruction (3800-PM-BCW0008a – 11/2016). The effluent characterization samples were analyzed for the following parameters listed in Appendix D of 40 CFR 122:

Item #24 - Common Parameters/Pollutants

pH
Total Suspended Solids (TSS)

Item #27 - Other Toxic Pollutants

Arsenic, total
Cadmium, total
Copper, total
Lead, total
Chromium, total
Mercury, total
Nickel, total
Selenium, total
Zinc, total

Item #28 - Conventional and Nonconventional Pollutants

Aluminum, total
Barium, total
Boron, total
Titanium, Total
Color
Fluoride
Iron, Total & Dissolved
Manganese, total
Sulfate

Item #29 - Toxic Pollutants and Hazardous Substances

Asbestos (Naturally Occuring)
Vanadium
Strontium

Additional Parameters

Alkalinity/Acidity
Hardness
Chloride
Total Dissolved Solids (TDS)
Total Kjeldahl Nitrogen (TKN)

List of Exemptions

The constituents detailed below are not anticipated to be present in any potential discharges from the Rock Hill Quarry. This list of exclusions was prepared giving consideration to the detailed geochemical data[1] available for the diabase geology of the Rock Hill Quarry Yorkhaven type. This data were reviewed to assess the potential for trace elements to be present in the discharge. Any trace element present in the rock at a concentration of less than 10 parts per million, (0.001 %) by weight was negated from the characterization sampling. In addition other trace elements were negated due to their common association with parameters that have already been sampled at the Site and found to be not present.

Item #24 - Common Parameters/Pollutants

A waiver is requested per 40 CFR 122.21(K)(5)(i) for sampling the following constituents: chemical oxygen demand (COD), biochemical oxygen demand (BOD), ammonia (NH3), total organic carbon (TOC) and Conductivity. COD is commonly used to indirectly measure the amount of organic compounds in water. Organic compounds are not expected in the discharge from the permitted outfalls at the Site. BOD is an indication of the organic quality of water and can be used to gauge the effectiveness of wastewater treatment plants. The organic quality of the water is not expected to be compromised from the mining of non-coal materials. Ammonia is produced for commercial fertilizers and other industrial applications, including metal finishing and treating applications as well as in the production of pharmaceuticals and dyes. Ammonia is used in mining applications for the extraction of metals. However, the mining activities at the Rock Hill Quarry do not extract metals from ore. TOC can be used as a rapid and accurate alternative to analyses for COD and BOD. As the need for COD and BOD is not expected, neither is analysis for TOC. Conductivity is commonly used to determine the ionic content within water. The existing monitoring plan includes Total Dissolved Solids (TDS), which is a direct measurement of ionic content in water. Therefore, the need to test for Conductivity is not expected.

Item #25 - Dioxins

There is no evidence that, at any time, dioxins, TCDD, 2,4,5-TP, Erbon, TCH or HCP were made, used, stored or buried on or directly upgradient from the surface mine permit area.

Item #26 - Organic Toxic Pollutants

The Organic Toxic Pollutants listed in EPA Table II (Appendix D of 40 CFR 122) are not expected to be present on the Site. Pesticides, herbicides, soil conditioners, and fertilizers are not applied within the SMP boundary.

Item #27 - Other Toxic Pollutants

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[1] Smith R C., et al., Geology and Geochemistry of Triassic Diabase in PA, Geological Society of America Bulletin, v. 86, p. 943-955, July 1975.
Woodruff, L.G., et al., Evolution of tholeiitic diabase sheet systems in the eastern United States: examples from the Culpeper Basin, Virginia-Maryland and the Gettysburg Basin, Pennsylvania, Journal of Volcanology and Geothermal Research 64 (1995)

The following Other Toxic Pollutants identified in EPA Table III (Appendix D of 40 CFR 122) are not expected to be present at the Site based upon the following:

Antimony: Antimony is a transition metal typically found as a sulfide mineral in igneous deposits. It is used as an alloying agent, flame retardant coating, as a catalyst in polymer production, and in the semiconductor industry. Antimony is reported at less than 0.1 ppm by weight in the diabase and is therefore not expected to be present in discharges from the Site. Antimony is not used or produced at this Site.

Beryllium: Beryllium is extremely uncommon in occurrence as a mineral. It may be present as a trace element in minerals of alkaline or granitic composition. Beryllium is present at 0.6 ppm by weight in the diabase geology and is therefore not expected to be present in the discharges from the Site. Beryllium is not used or produced at this Site.

Silver: Silver is a precious metal found associated with copper, lead and zinc sulfide minerals in igneous rocks. Silver is not reported to be present at any level in the diabase geology of the Site. Silver is not used or produced at this Site.

Thallium: Thallium is a transition metal associated with heavy metal sulfide minerals and potassium rich clay and granite minerals. Thallium was reported to be present at a trace level of 2.2 ppm in the diabase geology and is not expected in discharges from the Site. Thallium is not used or produced at this Site.

Cyanide: Cyanide comes from chemical manufacturing as an intermediate of a number of chemicals, electroplating and metal treatment. Cyanide can be generated from the incomplete combustion of organic nitrogen compounds and found in car exhaust. Cyanide is not expected at a non-coal mining site. Cyanide is not used or produced at this Site.

Phenols: Phenols are used in the production of phenolic resins and medicinal products. Phenols also form from the incomplete combustion of fossil fuels. Phenols are not expected at a non-coal mining site. Phenols are not used or produced at this Site.

Item #28 - Conventional and Nonconventional Pollutants

The following Conventional and Nonconventional Pollutants listed in EPA Table IV (Appendix D of 40 CFR 122) are not attributable to Site operations and/or are not expected to be present in effluent from the Site based upon the following:

Total Residual Chlorine: Total Residual Chlorine is the chlorine or chlorine type compounds used to disinfect potable water, industrial water and municipal wastewater. Water at the Site is not treated with chlorine; therefore, Total Residual Chlorine is not expected to be present in effluent from the Site.

Total Organic Nitrogen: Total organic nitrogen is a measure of nitrogen found in surface water and possibly groundwater associated with agriculture and municipal organic wastewaters. No agricultural land use occurs within the SMP boundary.

Radioactivity: Radioactivity measures the presence of radioactive isotopes in water. The presence of radioactive isotopes would be due to mining of uranium or extraction of fossil fuels, including coal, petroleum and natural gas. These activities are not present at the Site.

Sulfide: Sulfide is the reduced form of sulfur produced under anaerobic decomposition of organic sulfur compounds and is typically a concern with wastewater treatment. These activities are not present at the Site.

Sulfite: Sulfite is a sulfur oxide anion present in boiler waters dissolved oxygen control, industrial wastewater, and wastewaters where sulfur dioxide is used for dechlorination. These activities are not present at the Site.

Surfactants: Surfactants are present in industrial and municipal wastewaters from the use of detergents, soaps and other cleansing agents. These activities are not present at the Site.

Bromide: Bromide is a naturally occurring anion halide found at low concentrations in freshwater. Bromide is not used or produced at the Site.

Cobalt, total: Cobalt is a metal found in copper and nickel sulfide igneous minerals mined in Canada, South America, South Africa, and Australia. Cobalt is present in the diabase geology at trace levels similar to copper and nickel. The absence of detectable copper (< 4 ug/L) and nickel (< 4 ug/L) in previous effluent samples from the Site indicates cobalt is not present in discharge from the Site.

Magnesium, total: Magnesium is a common alkaline earth metal found in a variety of minerals including sulfide, silicate and carbonate minerals. Although commonly found in ground and surface waters, Magnesium is not used or produced at the site.

Molybdenum, total: Molybdenum is found in copper sulfide igneous minerals mined in the U.S., Canada, China, and South America. Copper sulfide igneous minerals are not expected to be present at the Site. Molybdenum is not reported in the list of trace elements included with the geology of the Site.

Fecal Coliform: Fecal Coliform is an indicator of animal feces contamination or inadequate treatment of animal waste in wastewater treatment and not associated with Site operations. Animal waste is not present at the Site.

Item #29 - Toxic Pollutants and Hazardous Substances

The constituents listed in EPA Table V (Appendix D of 40 CFR 122) are not known to be present, nor are they expected to be present in discharge from the Site.

Asbestos, "Naturally Occurring": PA DEP does not have applicable water quality criteria for asbestos. However, based on an extensive evaluation of the presence of asbestos at the Site, it is not anticipated that asbestos is present in groundwater or surface water at levels that present any risk. Even taking into consideration EPA's National

Recommended Water Quality Criteria for asbestos of 7 million fibers per liter (MFL) (which has not been adopted into PA DEP regulations), asbestos at the site does not present a risk to human health. Samples were collected and demonstrate non-dectable levels of asbestos in the effluent.

ANTI-DEGRADATION SUPPLEMENT

pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF MINING PROGRAMS

APPLICATION SUPPLEMENT - ANTI-DEGRADATION

General Instructions: This supplement is to be completed if the operation is proposed within areas of Special Protection Waters where a new, additional or increased discharge is proposed. In Special Protection waters, Section 1 is required. Every effort must be made to achieve total non-discharge or partial non-discharge. For more info on the Anti-degradation analysis, refer to Technical Guidance Document No. 391-0300-002.

For all coal and large noncoal surface and underground permits: Because of the interaction necessary between the department and the applicant, Section 1 must be completed prior to a formal submission of the mining permit application. It may take two or more exchanges of information between the parties to adequately complete this module. Pre-application discussions are required. Submission of a mining permit without adequate pre-application information will result in the permit application being returned to you as incomplete.

After submitting Section 1 including the Non-Discharge Alternatives Analysis, the applicant will receive communication from the department regarding the information presented in Section 1. If applicable, the applicant then completes Section 2 or the Social or Economic Justification (SEJ) (5600-PM-BMP0028). All plans described in this supplement must correlate directly with Erosion and Sedimentation Control, Operation and Reclamation plans in the permit application. All parts and supporting data, including those sections previously submitted to the department, must be included with the permit application upon formal submittal which must also include an application for an individual NPDES permit even if there is no point source discharge proposed.

For small noncoal, bluestone, General Permits and exploration activities: Complete Section 1 in conjunction with an appropriate NPDES individual permit application. Submit with the permit application package. The Department encourages pre-application discussions for any mining activity in a Special Protection watershed but it is not required for sites 5 acres or less. Section 2 will need to be completed only by Department request.

Section 1

A. General Information

This supplement is submitted in support of the following facility:

Applicant: Heidelberg Materials Northeast LLC Mining License No. 24143

Permit or Authorization No.: SMP 7974SM1 *Insert "pending" if no number has been assigned.*

Operation Name: Rock Hill Quarry

B. Receiving Streams Watershed is: ☐ HQ (high quality) or ☒ EV (exceptional value)

Provide the name(s) and existing water use(s) as identified in 25 Pa Code Section 93.9 for each of the proposed receiving streams:

Unnamed Tributary to Tohickon Creek/Upper Tohickon Creek Watershed - Current Designated Use is TSF/MF;

Existing Use is EV; Stream petitioned for upgrade

C. Non-Discharge Alternatives Evaluation (*Attach extra sheets labeled "Non-Discharge Alternatives Evaluation")*

Consider and evaluate non-discharge alternatives for the proposed storm water and/or encountered groundwater discharge(s) as required by 25 Pa Code Section 93.4c.(b)(1)(i)(A). Indicate which alternatives will be used at this site. Describe in an attachment(s) each specific alternative that will be used. If **no** specific options are feasible, provide feasibility analysis and cost data as justification.

To Be Used	
☐	1. Alternative project siting (in whole or in part)
☐	2. Alternative discharge locations/discharging to another (non-special protection) watershed
☐	3. Infiltration – galleries or land application
☒	4. Limiting disturbed area (vertically or horizontally), extent and/or duration of mining
☒	5. Recycling/reuse of water onsite
☐	6. Constructed treatment wetlands
☐	7. Holding facilities and/or wastewater hauling
☐	8. Injection (☐ pretreated) (☐ no treatment)
☐	9. Vegetated riparian buffers
☐	10. Specific pollution prevention processes
☐	11. Other(s) List:

D. Use of Non-Discharge Alternatives

In consideration of the options proposed for use in Section C. and in reference to supporting information that must be supplied for Section C., characterize the fate of stormwater runoff and/or encountered groundwater at this site. Choose #1 or #2.

☐ 1. Non-discharge alternatives will be used to address the entire discharge. No point source discharge is proposed. (Describe the implementation of the non-discharge alternative(s) you are proposing as part of the Erosion and Sedimentation plan and your NPDES permit application.)

OR

☒ 2. Non-discharge alternatives use will not account for the entire discharge. A point source discharge is anticipated. (Provide justification in Section 1.C. and chose a. or b. below.)

a. ☒ A demonstration will be made that the resulting discharge will maintain and protect the existing quality of receiving surface waters. (Section 2)

b. ☐ A demonstration will be made that the resulting discharge to the High Quality (HQ) water(s) will support the applicable existing and designated water uses (other than HQ uses) and an SEJ (Module 24) will be submitted.

STOP: Section 1 must be reviewed by the department before proceeding.

Department use only

Section 2

A. Demonstration for Maintaining and Protecting Existing Water Quality – Test for non-degradation of water quality

If no environmentally sound and cost-effective non-discharge alternative exists to address the entire discharge, provide a demonstration that a non-degrading discharge is feasible and will maintain and protect the existing water quality of the receiving stream(s). Using existing monitoring data, calculate the non-degrading effluent limits for this discharge (mass balance). Describe the technology and details of the practices that will be used to achieve these effluent limits and assess the costs. Attach separate sheets as necessary labeled "Non-degrading ABACT".

See Module 12, Module 10 and Water Quality Assessment for descriptions of the below BMPs

B. Anti-degradation Best Available Combination of Technologies (ABACT)

Identify the combination of Best Management Practices (BMPs) to be used during the mining operations to achieve a non-degrading discharge.

Best Management Practices (BMPs)	
☐ 1. Oversized sediment basin (8600 ft3/ac or greater)	☒ 11. Sediment traps with infiltration trench
☒ 2. Sediment basin ratio of 4:1 or greater (flow length:basin width)	☒ 12. Diversions
☒ 3. Sediment basin with 4-7 day detention	☐ 13. Constructed wetlands
☐ 4. Alternate/additional sediment controls during basin construction	☐ 14. Vegetated swales
☐ 5. Flocculants	☐ 15. Manufactured devices
☒ 6. Manual dewatering device	☐ 16. Bio-retention
☐ 7. Vegetated Riparian buffers	☐ 17. Mulch immediately after topsoiling
☐ 8. Street sweeping	☐ 18. Land Preservation or non-use
☒ 9. Channels, collectors and diversions lined with permanent vegetation, rock, geotextile or other non-erosive materials	☐ 19. Other _____
☒ 10. Water reuse	☐ 20. Other _____ _____

Are the ABACT BMPs selected sufficient to protect the existing surface water quality? ☒ Yes ☐ No

If no, and the project is located in a HQ water, complete Module 24, Social or Economic Justification (SEJ), in the permit application.

STOP: Section 2 must be reviewed by the department before proceeding.

Department use only

ATTACHMENT SECTION 1-C

Anti-Degradation Supplement

Non-Discharge Alternatives Evaluation

As part of planned future mining operations, Heidelberg Materials is proposing to dewater the currently filled Rock Hill Quarry Pit impoundment. Heidelberg Materials is proposing to reclassify the existing NPDES Discharge Point 001 at Rock Hill Quarry to a stormwater outfall and add three (3) individual discharge points 002, 003, and 004. With these modifications, outfall 004 will be permitted with a discharge rate of 0.238 MGD consistent with the rate included in the existing permit. This rate is sufficient to support mining operations to be conducted above the water table that will not require dewatering of the existing water-filled quarry pit. Future mining below the water table will require dewatering of the water-filled quarry pit. The NPDES Discharge Modification report determined that future dewatering of the pit can be facilitated by discharging at a rate of 4.46 cubic feet per second (cfs). No modifications and/or upgrades to existing Site and downstream features are proposed with the modification as the proposed dewatering discharge rate was determined based on the calculated limits of the existing conveyance system. In addition, no degradation in the watershed ecology will occur during the dewatering timeframe. Following dewatering, flows will return to approximate pre-dewatering rates. No water quality changes will occur during or following dewatering.

Currently there are two (2) sediment basins, a clarifying pond and three (3) non-discharging sediment traps to receive runoff from bonded support areas. A permit correction was issued on June 8, 2018, to authorize the implementation of the Erosion and Sediment Pollution Control Plan, including the above-mentioned impoundments. Per the June 28, 2018 approval letter, all impoundments were certified and approved by the Department and currently meet the requirements for EV watershed.

All efforts to route water around the project have been completed. The existing quarry pit receives precipitation that falls directly over the mining area and groundwater inflow. The water retained in the quarry pit discharges in two (2) ways: a gravity drainpipe to the clarifying pond, ultimately discharging through existing NPDES 004 and evapotranspiration. It is estimated that the quarry pit is currently holding approximately 1,584 acre-feet or 516 million gallons of water and would require approximately 173 days of uninterrupted pumping to dewater to the permitted operating level of 464 msl, assuming no contributions from precipitation and groundwater. After depletion of the existing storage, the pumping rate needed to keep the Pit dry will decrease significantly to approximately pre-dewatering discharge rates.

Anti-Degradation Implementation Guidance (391-0300-002) (Guidance) was referenced as part of the following evaluation. The following describes specific non-discharge alternatives that will be used at the quarry and those that are infeasible.

Alternative Project Siting

The proposed project is an NPDES permit modification to allow dewatering of the currently filled Rock Hill quarry pit impoundment. The Guidance states that the following factors must be considered in siting a project: infrastructure, utilities, transportation, raw materials, and work

force. The guidance questions whether this watershed or specific stream segment is the only location that offers these requirements. When considering the existing quarry, all of the above are present in the existing location. The project is already at this site and cannot be relocated.

Alternate Discharge Location/Discharging to another (non-special protection) watershed

According to the Guidance, alternative discharge locations involve transporting the effluent, typically via pipeline, to a different watershed, generally a non-HQ/EV watershed. This alternative is most feasible when the project is located on a small HQ or EV waterway, tributary to some larger non-HQ/EV waterbody. This alternative may not be an environmentally sound option in cases where the project will generate a reliable HQ effluent and where low-flow augmentation would be beneficial to the HQ or EV water. In this setting, groundwater pumped from the quarry will provide low-flow augmentation to the tributary headwater. Further, installation of a pipeline to a neighboring non-EQ/EV watershed is infeasible.

As shown in the Water Quality Assessment (included as an attachment to the Anti-Degradation Supplement), the project will generate an effluent that will maintain the quality of Bog Run, consistent with HQ and EV designations.

Infiltration – Galleries or Land Application

Infiltration was evaluated as a non-discharge alternative. The area proposed for mining is situated atop a diabase formation. This area is known to have shallow bedrock overlain by soils that are unsuitable for infiltration.

Limiting Disturbed Areas

The area proposed for mining has already been disturbed, and the duration of disturbance cannot be shortened. Mining operations generally last for decades, and the active life is determined by growth in the area and the corresponding need for aggregate and associated products. Heidelberg Materials intends to conduct concurrent reclamation, to the extent possible, along highwalls where mining is complete. This reclamation will restore areas in accordance with the reclamation plan and create additional vegetated areas. These vegetated areas will promote evapotranspiration, thereby reducing discharge rates. There will be no negative impacts to the water quality as a result of this reclamation activity. Additionally, no new areas will be disturbed, therefore disturbed areas are limited to the degree possible.

Recycling/Reuse of Water Onsite

A portion of water collected in the quarry sump will be used to supply a water truck for dust suppression of roads throughout the Permit Area. In addition, the water will be utilized for stockpile dust suppression. If a processing plant is constructed in the future, the quarry sump water could be used in the plant. These activities would reduce the need for potable water through recycling/reuse and increase evapotranspiration and infiltration, thereby reducing the discharge to the highest degree practicable.

Constructed Treatment Wetlands

According to the PA DEP Stormwater BMP Manual, Constructed Treatment Wetlands are not typically considered a volume-reducing BMP. Constructed wetlands can achieve some volume reduction through evapotranspiration, especially during small storms. The primary function of constructed wetlands is water quality improvement. Constructed wetlands improve the quality of runoff through settling, filtration, uptake, chemical and biological decomposition, volatilization, and adsorption.

It is anticipated that the future discharge will maintain the existing water quality of Bog Run. Since the primary purpose of constructed wetlands is water quality improvement and not volume retention, constructed treatment wetlands are not a feasible discharge alternative for the Rock Hill Quarry.

Holding Facilities/Wastewater Hauling

Wastewater hauling would entail trucking of pit water, which is comprised of uncontaminated groundwater and surface water, to a publicly owned wastewater treatment facility (POTW). Considering the significant volumes of discharge necessary to maintain quarry dewatering operations and the distance to the closest wastewater treatment plant, this option would be economically unfeasible as a non-discharge alternative.

Injection Wells

A hydrogeologic investigation was conducted in support of the NPDES Permit Modification. Wells were monitored throughout the SMP Boundary and slug tests were conducted to determine aquifer parameters. Based on the outcomes of the investigation, the transmissivity of the formations within the SMP boundary and the well yields observed during monitoring well slug tests, the site would not be conducive for injection wells.

Vegetated Riparian Buffers

Utilization of a vegetated riparian buffer along the discharge location would not be feasible as non-discharge alternatives. There is an insufficient vegetated riparian buffer presently around these three discharge locations to maintain.

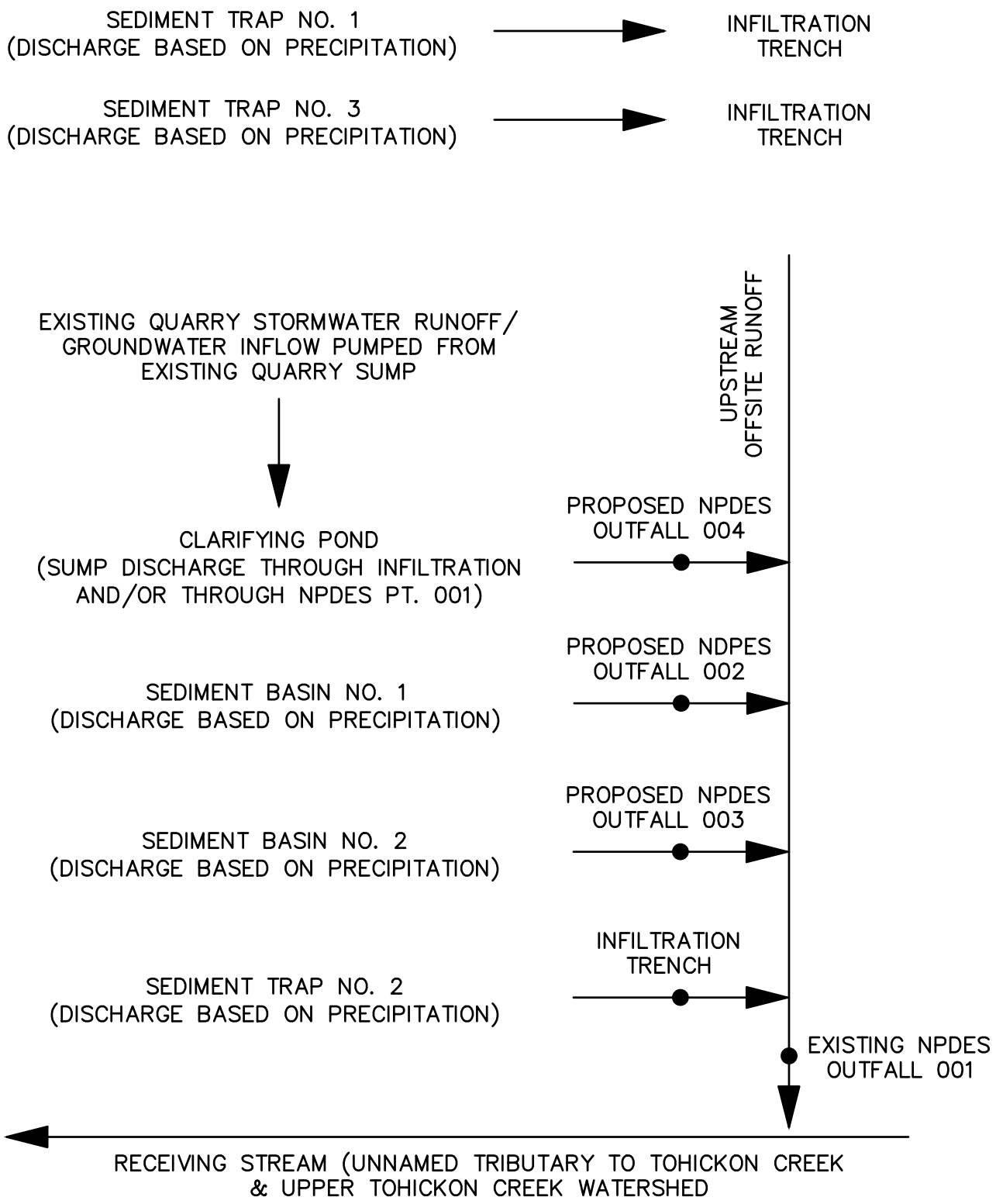
Specific Pollution Prevention Processes

There is no manner in which the process by which water is generated in surface mining can be changed. Groundwater and precipitation that enter the pit must be removed for mining to occur.

Heidelberg will employ feasible practices such as re-use and recycling of pit water and maintenance of riparian buffers as alternatives to discharging to prevent degradation of Bog Run. The discharge from the sump (NPDES 004) is controlled, and only discharges when the pipe valves open or a pump is utilized. Heidelberg will conduct monitoring of water quality prior to discharging the water to the Unnamed Tributary.

ATTACHMENT C-21.3

FLOW DIAGRAM



EARTHRES
a Division of RESPEC
www.earthres.com

HEADQUARTERS
PHILADELPHIA REGION
P.O. Box 468
6912 Old Easton Road
Pipersville, PA 18947

APPALACHIAN
REGIONAL OFFICE
P.O. Box 794
3000 Coombs Farm Drive
Morgantown, WV 26505

DRAWN BY:	CHECKED BY:
JTK	MSW
DATE:	PROJECT NO:
4/30/25	061003.052
DRAWING SCALE:	
NOT TO SCALE	

ATTACHMENT C21.4
FLOW DIAGRAM

HEIDELBERG MATERIALS NORTHEAST LLC
SMP NO. 7974SM1
EAST ROCK HILL TOWNSHIP, BUCKS COUNTY
PENNSYLVANIA

ATTACHMENT C-21.5

SITE PLAN / MAP VIEW OF AREA



NORTH

LEGEND

SMP BOUNDARY

001 NPDES DISCHARGE POINT

NOTES:

1. AERIAL IMAGE REFERENCED FROM GOOGLE EARTH PRO, DATED SEPTEMBER 21, 2020.

GRAPHIC SCALE

200 0 100 200 400 800

(IN FEET)
1 inch = 200 ft.

NO.	DATE	BY	REVISIONS
1	4/29/25	JTK	REVISED PER DEP COMMENTS

COMMONWEALTH OF PENNSYLVANIA — REGISTERED PROFESSIONAL — TERRY W. SCHMIDT — No. PE048535 — ENGINEER

TERRY W. SCHMIDT, P.E.
LICENSE NO. PE048535

PREPARED FOR:

Heidelberg Materials

PREPARED BY:

EARTHRES
a Division of RESPEC
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Morgantown, WV 26505

ATTACHMENT C-21.5
SITE PLAN/MAP VIEW OF AREA

HEIDELBERG MATERIALS NORTHEAST LLC
ROCK HILL QUARRY OPERATION

DRAWN BY: JTK	CHECKED BY: MSW		
DATE: 9/11/2023	PROJECT NO: 061003.052		
DRAWING NUMBER: D-001			SHEET 1 OF 1

F:\PROJECTS\Hanson\061003.052 Rock Hill Permit Update\CAD\Drawings\Rev 12 (NPDES Permit Modification RTC 2025)\Site Location Map.dwg Layout: D SIZE User: jungtaek.kim 05/08/2025 15:43

NPDES DISCHARGE MODIFICATION REPORT

NPDES Discharge Point Modification Report

Heidelberg Materials Northeast LLC – Rock Hill Quarry Operation

Heidelberg Materials Northeast LLC (Heidelberg) currently has an existing NPDES Discharge Point 001 (NPDES Permit No. PA0594121) and operates under Surface Mining Permit No. 7974SM1 at Rock Hill Quarry. Heidelberg is proposing to reclassify 001 as a stormwater outfall to better characterize this discharge and add three (3) additional NPDES discharge points, 002, 003, and 004. Discharge Points 002 and 003 will convey stormwater runoff from quarry support areas via Sediment Ponds No. 1 and No. 2, and Discharge Point 004 will manage quarry pit water discharged through the Clarifying Pond. With these modifications, outfall 004 will be permitted with a discharge rate of 0.238 MGD consistent with the rate included in the existing permit. This rate is sufficient to support mining operations to be conducted above the water table that will not require dewatering of the existing water-filled quarry pit. The modifications are proposed to isolate the quarry pit discharge through the Clarifying Pond, the stormwater runoff discharge through the Sediment Ponds and the upstream offsite runoff. The isolation of the discharges is proposed to improve monitoring and control of the proposed future increased pumped quarry pit discharge and alleviate impacts on downstream conveyance structures.

Future mining below the water table will require dewatering of the water-filled quarry pit. Pending future DEP authorization, dewatering of the quarry pit is proposed to be conducted at a temporary increased rate at 004 to efficiently remove the water accumulated during years of non pumping. In support of the proposed future rate increase, the receiving tributary and downstream culverts (Site Culverts & Rich Hill Crossing) were evaluated to assess the resulting impact of the pumped quarry pit discharge in regards to hydraulic capacity and determine the temporary discharge rate. The assessment included a field study and survey of the culvert crossings, conditions and measurement of the mean annual flow passing through the culvert. In addition, the analysis includes an assessment of maximum allowable flow through the existing culvert crossing to determine the proposed NPDES Point 004 discharge rate to facilitate pit dewatering. The following sections outline the results of that analysis and propose a plan for implementation of the proposed individual discharges.

Site Description

Heidelberg is proposing to reclassify the existing NPDES discharge point 001 at Rock Hill Quarry to a stormwater outfall and add three (3) upstream discharge points 002, 003 and 004 (see Attachment C-21.5 Site Plan). The plan does not require any additional construction of erosion and sedimentation controls. All proposed discharge points are existing impoundment discharge points with sufficient downstream controls (Pond Construction As-built Approval received, dated June 28, 2018).

As discussed above, the three (3) proposed discharge points converge prior to passing through the existing NPDES discharge point 001 location. The receiving stream at the discharge points are the Unnamed Tributary to Tohickon Creek/Upper Tohickon Watershed, Chapter 93

designation Trout Stocking, Migratory Fishes (MF). As the stream is designated as an Exceptional Value (EV) and MF on PA DEP's existing use table, the basin and trap design were evaluated and found to be property sized to meet the conditions for an EV watershed. Given the capacity of the receiving tributary and conditions downstream, it is anticipated that the Rich Hill culvert crossing will be the limiting downstream conveyance structure for the future discharge rate increase. In support of this assumption, field study and survey were conducted to confirm existing culvert conditions and capacity.

Receiving Stream Analysis

EARTHRES completed a field study inclusive of the survey and measurement of the five (5) culvert crossings (see Attachment C-21.5 Site Plan) downstream of the proposed NPDES discharge point 001 to identify any flow limiting factors which may be at increased risk for flooding as a result of the pumped quarry pit discharge.

The field study indicates that in the immediate vicinity of the proposed discharge points the receiving channel has a stable lining consisting of R-3 and R-4 size riprap. There are four (4) constrictions along the channel prior to the confluence with a large off-site wetland area that is capable of passing larger flood flows. See attached Attachment C-21.5 Site Plan and Table 1 below for a summary of the field study results.

Table 1 Downstream Constrictions

Structure	Span (in)*	Length (ft)*
Culvert 1	24" RCP	56.7
Culvert 6	24" Steel	24.7
Culvert 8	24" RCP	39.4
Culvert 5	24" Steel	40.8
Rich Hill Crossing Culvert	24" CMP (modeled as 11.5" CMP based on the culvert's approximate available flow area in existing conditions)	24.7

*Measurements are based on survey information.

Hydraulic Capacity Assessment

The above measurements and conditions were utilized to assess the hydraulic capacity of the channel for flooding events under existing conditions as well as with the addition of the proposed discharge. See attached Attachment C-21.3.1 for the Hydraflow Hydrograph Outputs for the basin discharge information.

Offsite flood flow data and mean annual flow data were obtained from the USGS web-based program Streamstats to evaluate flow conditions and resultant impact through the downstream constrictions listed above. The Streamstats flow from three (3) watersheds (Upstream Clarifying Pond, Downstream, and Downstream 2) were considered when determining the anticipated flows for each culvert. Site specific data and calculations were used to determine discharges from the site basins. Although Sediment Basins 1 and 2 have been designed to discharge intermittently in

response to precipitation, for this assessment, a conservative average flow for each basin was determined by evaluating the peak flow during a 1" 24-hour storm assuming a wet pond condition. The 1" 24-hour storm was found to be the lowest intensity storm to cause a measurable discharge.

Listed below are the combinations of Streamstats and Hydraflow Hydrograph flows that were utilized to calculate the anticipated flood and mean annual flows:

Flood Conditions

Culvert 1 = Streamstats Upstream
Culvert 6 = Streamstats Upstream + Sed. Basin 1 Discharge
Culvert 8 = Streamstats Upstream + Sediment Basin 1 and 2 Discharge
Culvert 5 = Streamstats Upstream + Sediment Basin 1 and 2 Discharge
Rich Hill Crossing = Streamstats Upstream + Streamstats Downstream + Streamstats Downstream 2 + Sediment Basin 1 and 2 Discharge

Streamstats and Hydraflow Hydrograph data are summarized below and can be found in Attachment C-21.3.1 and C-21.3.2.

Table 2 Stormwater Sediment Basin Flood Flows

	1" Storm *	2yr	5yr	10yr	50yr	100yr
Sed. Basin 1 (CFS)	0.08	0.147	0.221	1.214	13.18	39.41
Sed. Basin 2 (CFS)	0.075	0.220	1.498	4.186	40.20	71.91

* Hydraflow Hydrograph basin routing was completed with existing wet pond conditions (basin water elevation immediately prior to discharge through first row of perforations on existing riser barrel discharge structures) for a conservative average flow for each basin.

Table 3 Streamstats Flood Flows

	2yr	5yr	10yr	50yr	100yr
Streamstats Upstream	30.4	58.4	83.3	154.0	190.0
Streamstats Downstream	26.5	51.1	73.1	135.0	167.0
Streamstats Downstream 2	37.1	70.7	100.0	184.0	227.0

Table 4 Streamstats & Stormwater Sediment Basin Flood Flows

	2yr	5yr	10yr	50yr	100yr
Culvert 1 Flows (CFS)	30.4	58.4	83.3	154.0	190.0
Culvert 6 Flows (CFS)	30.5	58.6	84.5	167.2	229.4
Culvert 8 Flows (CFS)	30.8	60.1	88.7	207.4	301.3
Culvert 5 Flows (CFS)	30.8	60.1	88.7	207.4	301.3
Rich Hill Crossing Culvert Flows (CFS)	94.4	181.9	261.8	526.4	695.3

Mean Annual Flow:

Culvert 1 = Streamstats Upstream
Culvert 6 = Streamstats Upstream + Sed. Basin 1 Average Discharge

Culvert 8 = Streamstats Upstream + Sed. Basin 1 & 2 Average Discharge
Culvert 5 = Streamstats Upstream + Sed. Basin 1 & 2 Average Discharge
Rich Hill Crossing = Streamstats Upstream + Streamstats Downstream + Streamstats Downstream 2 + Sed. Basin 1 & 2 Average Discharge

Table 5 Streamstats and Sediment Basin Mean Annual Flows

	Streamstats Mean Annual Flow	Contributing Average Basin Discharge*	Total Anticipated Mean Annual Flow
Site Culvert 1 Flows (CFS)	0.0885	0.08	0.17
Site Culvert 6 Flows (CFS)	0.0885	0.155	0.24
Site Culvert 8 Flows (CFS)	0.0885	0.155	0.24
Site Culvert 5 Flows (CFS)	0.0885	0.155	0.24
Rich Hill Crossing Culvert flows (CFS)	0.2773	0.155	0.43

* Contributing Average Basin Flows are referenced from Table 2, 1" Storm Event flows.

The flow and field survey data were used to complete hydraulic calculations for the constrictions downstream of the proposed discharge. Hydraflow Express software was utilized to calculate the maximum allowable flow capacity of the existing culverts. A summary of the calculation output is found below and Hydraflow output is provided in Attachment C-21.2.

Table 6 Hydraflow Output

	Maximum Capacity Flow (cfs)
Culvert 1 Flows	31.7
Culvert 6 Flows	47.7
Culvert 8 Flows	41.8
Culvert 5 Flows	54.5
Rich Hill Crossing Culvert Flows	4.89

The results summarized in Table 6 indicate that the downstream constrictions at the Rich Hill Crossing, with a maximum allowable flow of 4.89 cfs, will be the limiting factor in the existing conveyance system. Based on the analysis, it is anticipated that the system is currently overloaded during any significant storm event. In order to minimize impacts of the proposed increase while also maximizing pumping for dewatering of the Pit, Heidelberg proposes to discharge intermittently based on precipitation. Heidelberg is proposing to suspend dewatering discharge during any storm event exceeding 1.0 inches over a 24-hour period.

A site weather station rain gauge will be connected to an automated alarm system to notify Heidelberg personnel to suspend the pumping from the quarry pit. Heidelberg will have personnel available to respond to the alarm and suspend pumping typically within 1 hour of the notification. Heidelberg will initiate pumping once visible capacity is available in the Rich Hill Crossing Culvert. This precaution will minimize impacts to the existing conveyance system to convey flow, by minimizing potential to contribute to additional flooding or channel bottom

instability. The proposed pumping practice will continue until the quarry pit has been dewatered to a condition where a quarry pit sump has been established to control runoff.

Considering the above mentioned mean annual flow, including the 1" 24-hour storm basin discharges, and assuming no additional stormwater flow through the system during the pumped quarry pit discharge, the proposed temporary discharge increase for pit dewatering is calculated (Proposed Discharge Rate = Rich Hill Crossing Maximum Capacity – Total Mean Annual Flow) to be 4.46 cfs (2.88 MGD). The following Table 5 shows the de minimis impact the proposed pumped quarry discharge will have in comparison to the existing stormwater flows.

Table 7 Proposed Discharge vs Flood Flows Comparison

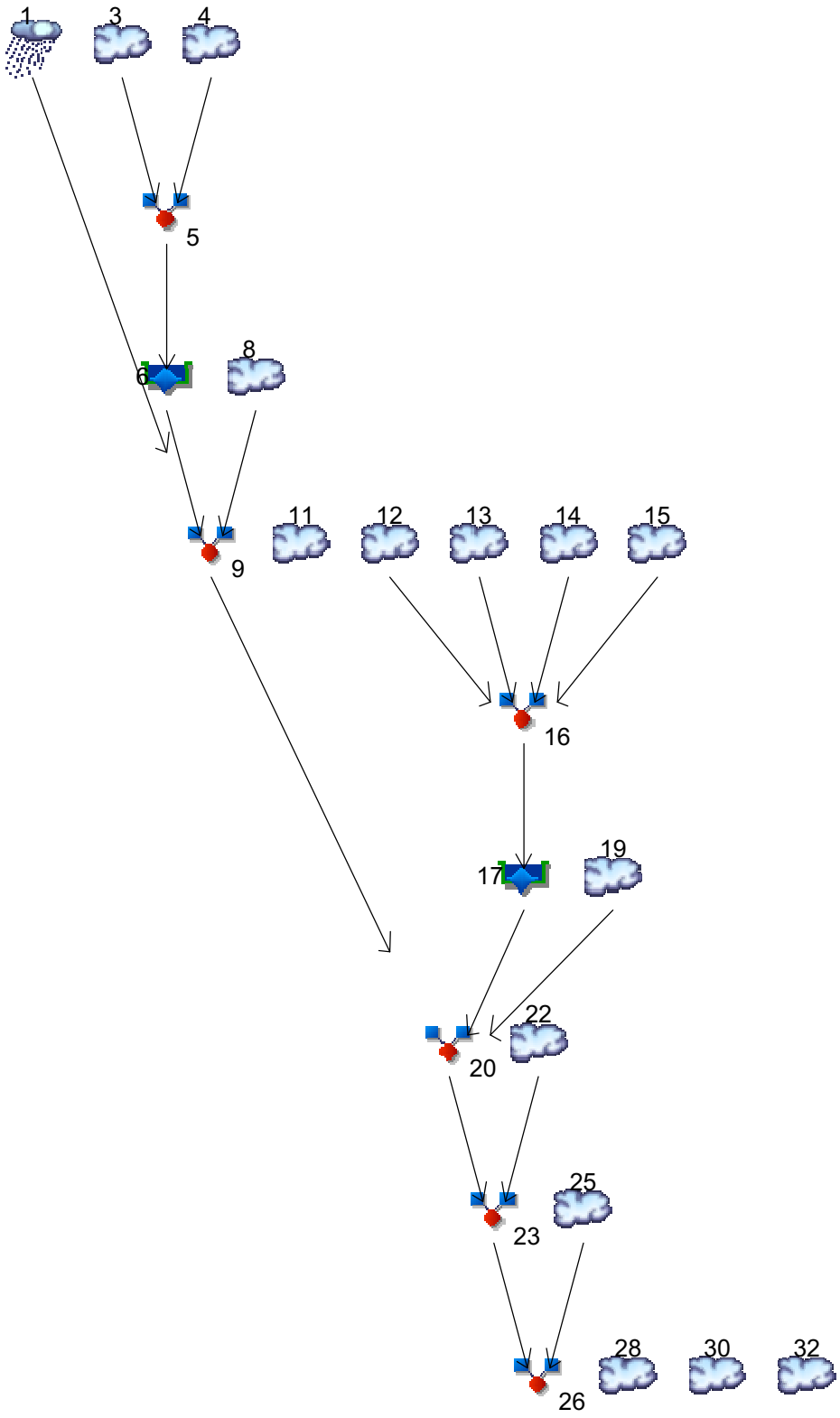
	2yr*	**5yr***	**10yr***	**50yr***	**100yr***
Culvert 1 Flows (%)	14.7%	7.6%	5.4%	2.9%	2.3%
Culvert 6 Flows (%)	14.6%	7.6%	5.3%	2.7%	1.9%
Culvert 8 Flows (%)	14.4%	7.4%	5.0%	2.2%	1.5%
Culvert 5 Flows (%)	14.4%	7.4%	5.0%	2.2%	1.5%
Rich Hill Crossing Culvert Flows (%)	4.7%	2.4%	1.7%	0.85%	0.64%

Based upon the above, EARTHRES concludes the proposed temporary discharge increase of 4.46 cfs or 2.88 MGD for future pit dewatering will not adversely affect the existing conveyance.

After dewatering of the surface water storage contained in the pit, the discharge rate required to keep the pit dry will reduce to the steady state average of 0.074 MGD (see Groundwater Pumping Evaluation Addendum) subject to seasonal and climatic variation and will be sufficiently covered by the existing 0.238 MGD discharge rate.

HYDRAFLOW HYDROGRAPH OUTPUT REPORT

Watershed Model Schematic



Hydrograph Summary Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024

Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	Manual	0.370	2	2	44	------	------	------	Clarifying Pond Discharge
3	SCS Runoff	32.28	2	722	91,286	------	------	------	Culvert 2 & Berm 1 DA
4	SCS Runoff	7.932	2	716	16,364	------	------	------	Basin 1 DA
5	Combine	37.16	2	720	107,649	3, 4	------	------	Basin 1 Inflow
6	Reservoir	1.204	2	914	79,888	5	533.76	151,166	Basin 1 Routing
8	SCS Runoff	1.879	2	716	3,876	------	------	------	Channel 1 DA
9	Combine	2.012	2	716	83,808	1, 6, 8	------	------	Channel 1 & Culvert 6 Inflow
11	SCS Runoff	3.444	2	716	7,105	------	------	------	Channel 5 & Culvert 7 DA
12	SCS Runoff	7.932	2	716	16,364	------	------	------	Culvert 3 DA
13	SCS Runoff	12.87	2	716	26,555	------	------	------	Culvert 4 DA
14	SCS Runoff	16.07	2	716	33,158	------	------	------	Basin 2 DA
15	SCS Runoff	33.89	2	716	69,904	------	------	------	Upslope Pad Area
16	Combine	70.77	2	716	145,980	12, 13, 14, 15	------	------	Basin 2 Inflow
17	Reservoir	1.293	2	962	90,053	16	529.83	160,934	Basin 2 Routing
19	SCS Runoff	3.618	2	716	7,464	------	------	------	Channel 2 Section 1 DA
20	Combine	5.784	2	716	181,324	9, 17, 19	------	------	Channel 2 Section 1 & Culvert 8 Inflo
22	SCS Runoff	2.832	2	716	5,842	------	------	------	Channel 2 Section 2 DA
23	Combine	8.616	2	716	187,167	20, 22	------	------	Channel 2 Section 2 & Culvert 5 Inflo
25	SCS Runoff	6.680	2	716	13,780	------	------	------	Channel 3 DA
26	Combine	15.30	2	716	200,946	23, 25	------	------	Channel 3 Inflow
28	SCS Runoff	17.08	2	716	35,239	------	------	------	Berms 2 and 3 DA
30	SCS Runoff	21.94	2	718	43,868	------	------	------	Channel 4 DA
32	SCS Runoff	4.940	2	716	10,191	------	------	------	Berm 4 & Berm 5 DA

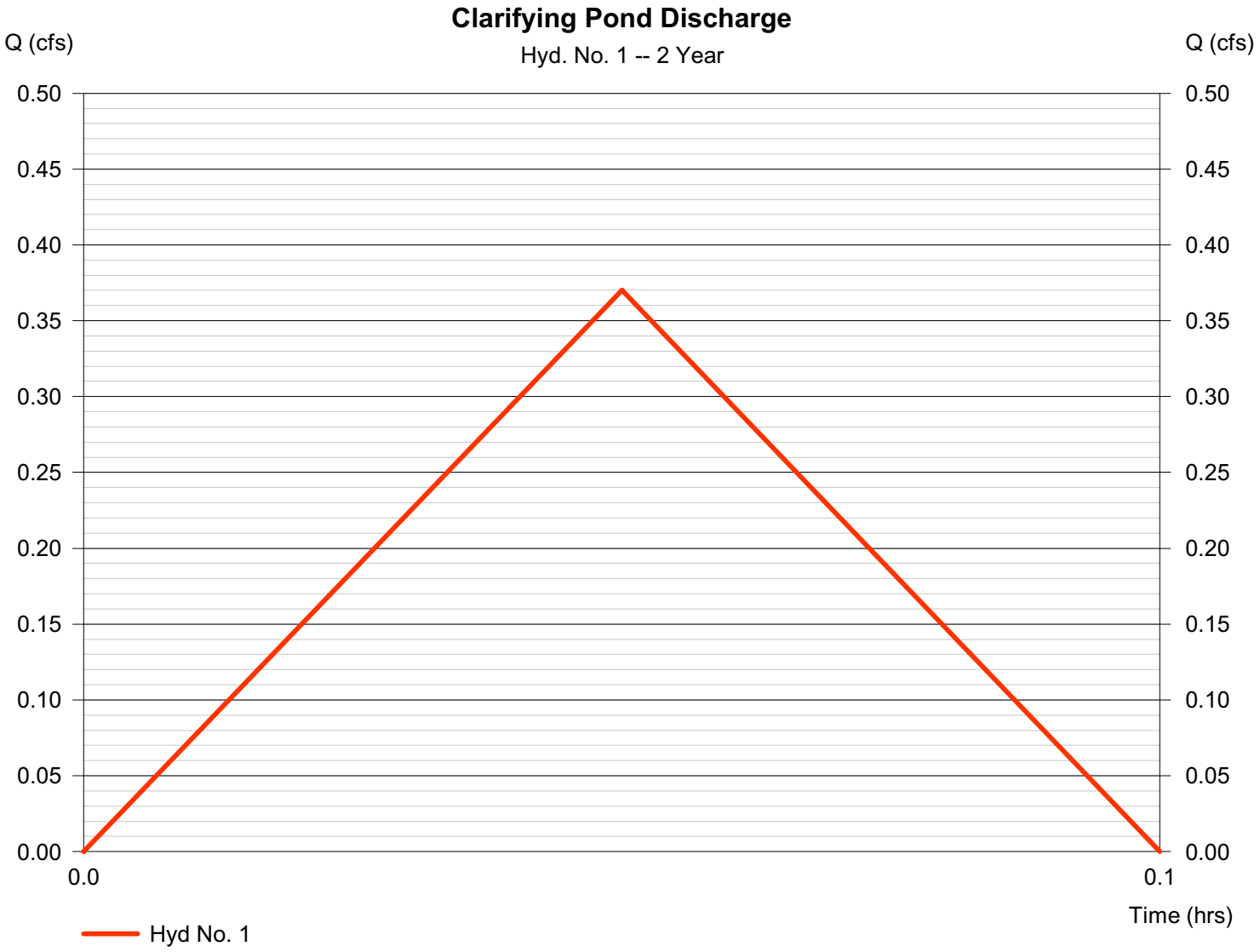
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024 Friday, 04 / 18 / 2025

Hyd. No. 1

Clarifying Pond Discharge

Hydrograph type	= Manual	Peak discharge	= 0.370 cfs
Storm frequency	= 2 yrs	Time to peak	= 0.03 hrs
Time interval	= 2 min	Hyd. volume	= 44 cuft



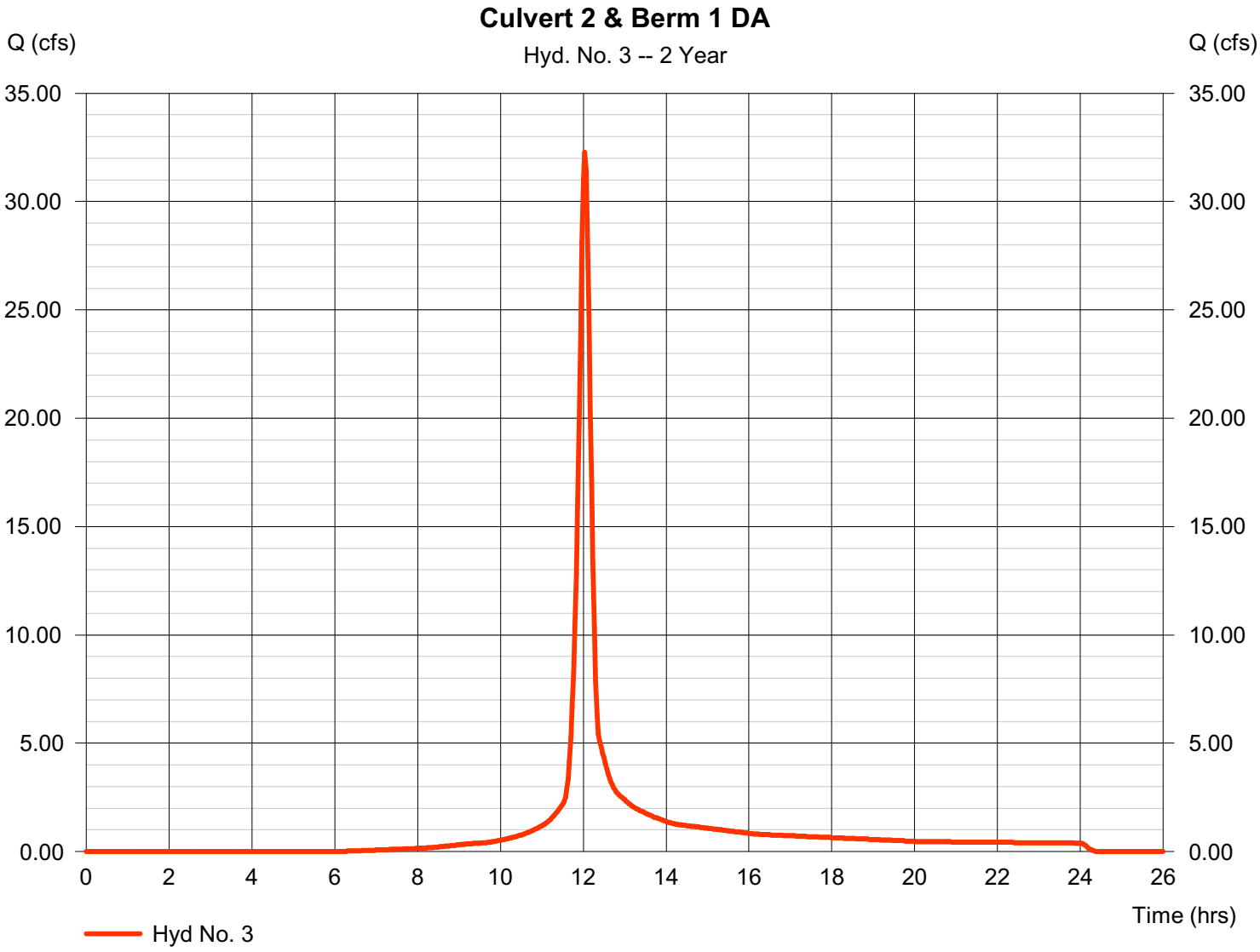
Hydrograph Report

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Hyd. No. 3

Culvert 2 & Berm 1 DA

Hydrograph type	= SCS Runoff	Peak discharge	= 32.28 cfs
Storm frequency	= 2 yrs	Time to peak	= 12.03 hrs
Time interval	= 2 min	Hyd. volume	= 91,286 cuft
Drainage area	= 12.230 ac	Curve number	= 89
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 15.00 min
Total precip.	= 3.23 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484



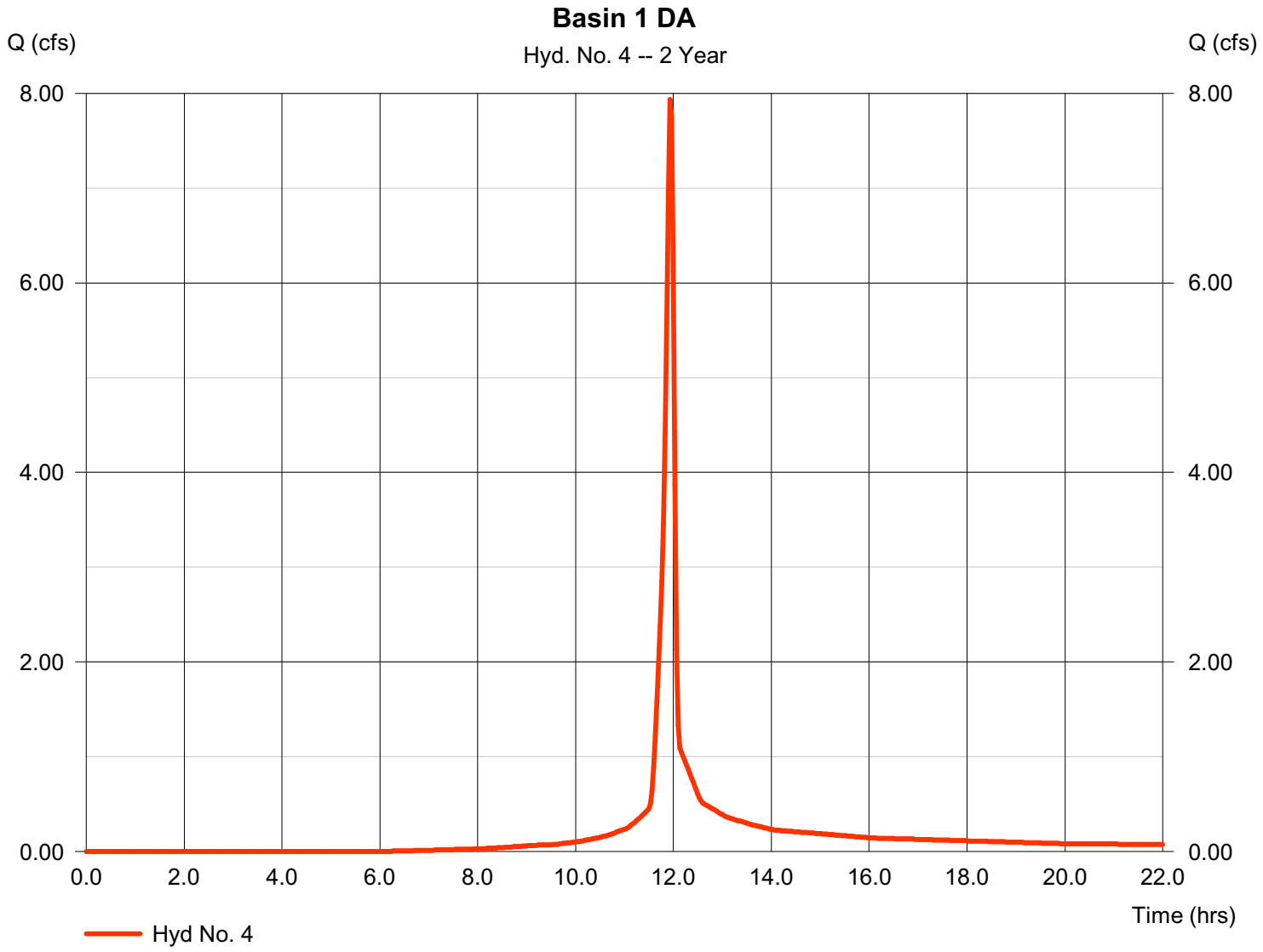
Hydrograph Report

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Hyd. No. 4

Basin 1 DA

Hydrograph type	= SCS Runoff	Peak discharge	= 7.932 cfs
Storm frequency	= 2 yrs	Time to peak	= 11.93 hrs
Time interval	= 2 min	Hyd. volume	= 16,364 cuft
Drainage area	= 2.280 ac	Curve number	= 89
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 5.00 min
Total precip.	= 3.23 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484



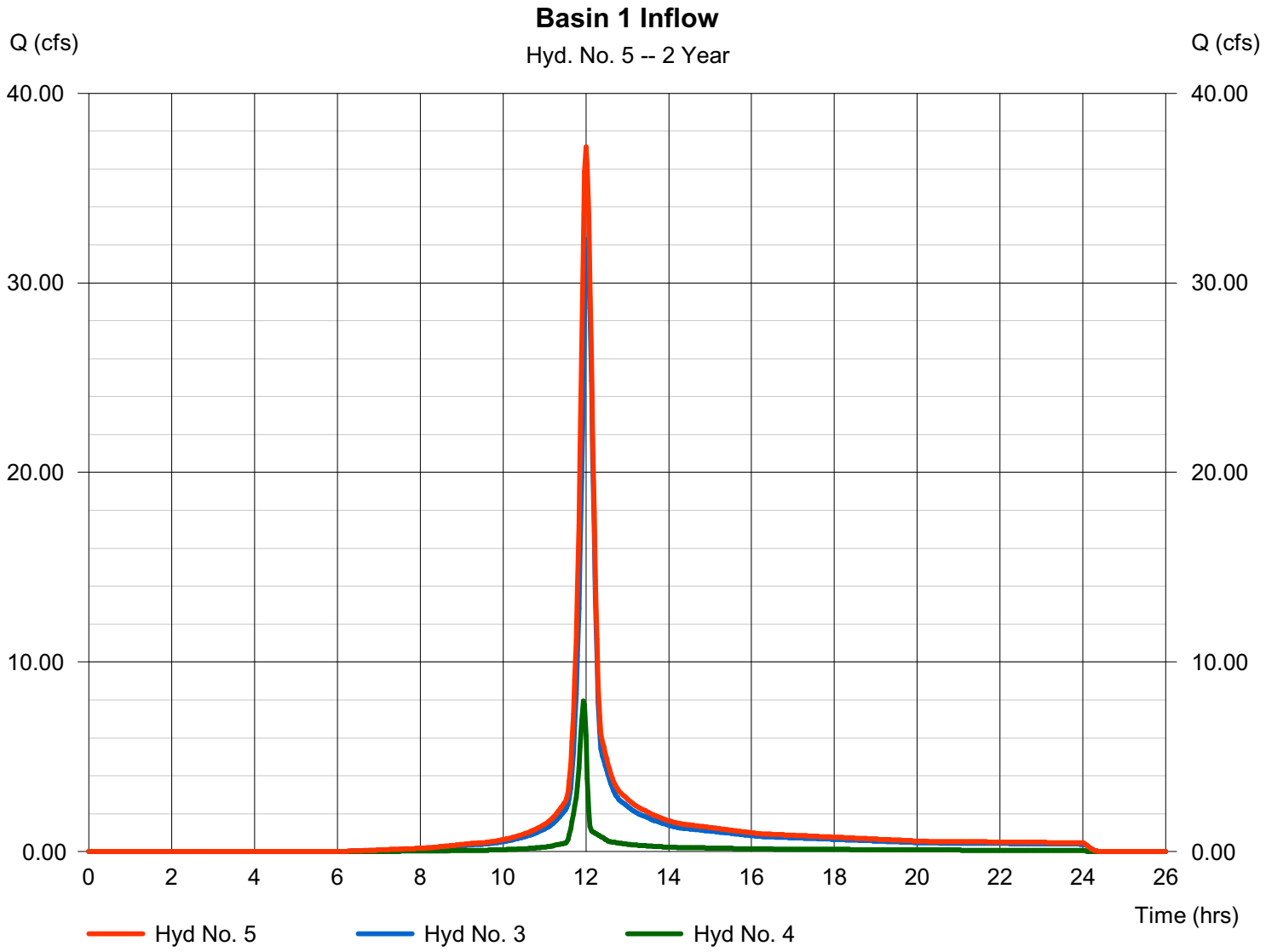
Hydrograph Report

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Hyd. No. 5

Basin 1 Inflow

Hydrograph type	= Combine	Peak discharge	= 37.16 cfs
Storm frequency	= 2 yrs	Time to peak	= 12.00 hrs
Time interval	= 2 min	Hyd. volume	= 107,649 cuft
Inflow hyds.	= 3, 4	Contrib. drain. area	= 14.510 ac



Hydrograph Report

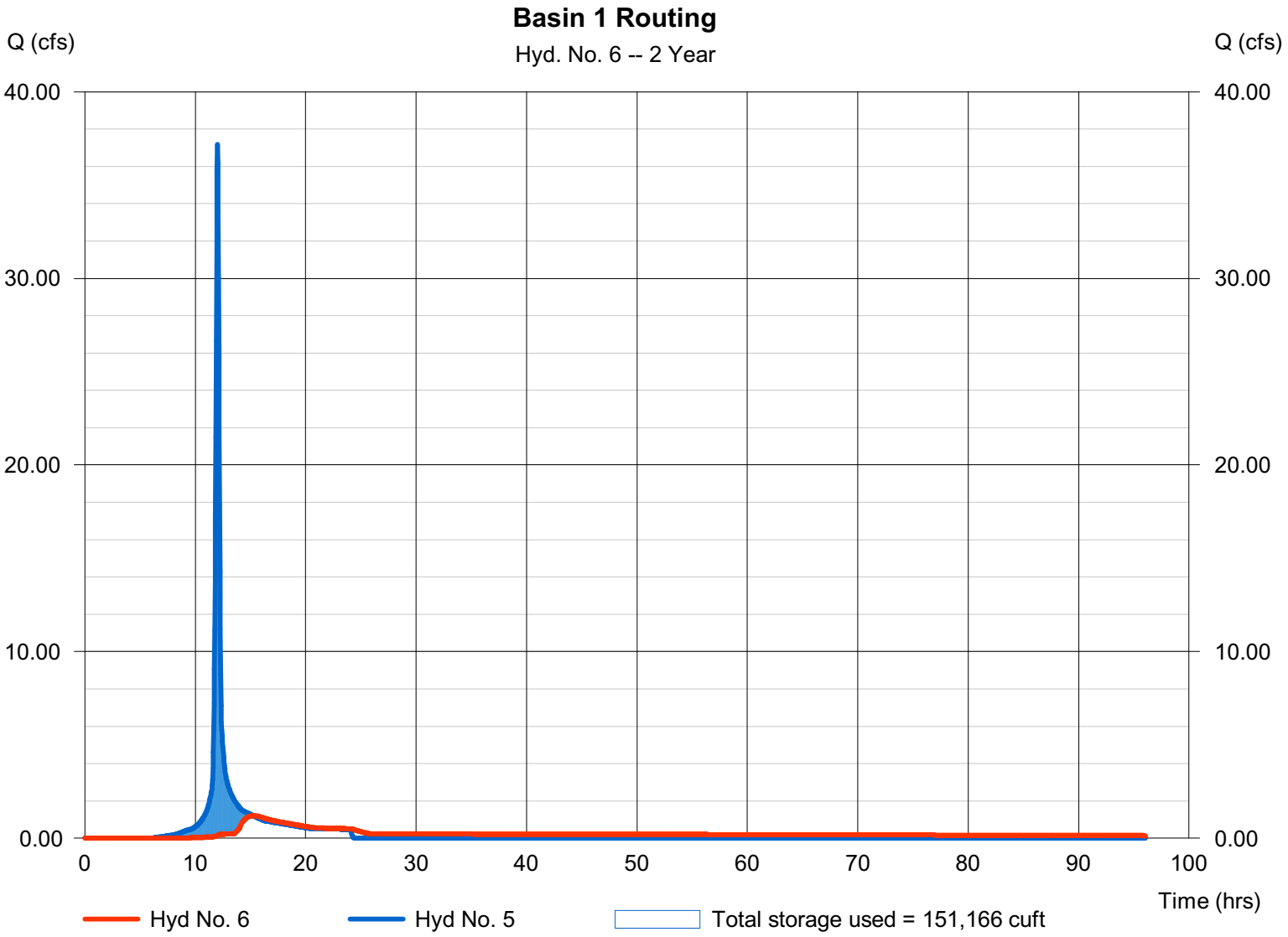
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Hyd. No. 6

Basin 1 Routing

Hydrograph type	=	Reservoir	Peak discharge	=	1.204 cfs
Storm frequency	=	2 yrs	Time to peak	=	15.23 hrs
Time interval	=	2 min	Hyd. volume	=	79,888 cuft
Inflow hyd. No.	=	5 - Basin 1 Inflow	Max. Elevation	=	533.76 ft
Reservoir name	=	Sediment Basin 1	Max. Storage	=	151,166 cuft

Storage Indication method used. Wet pond routing start elevation = 530.30 ft.



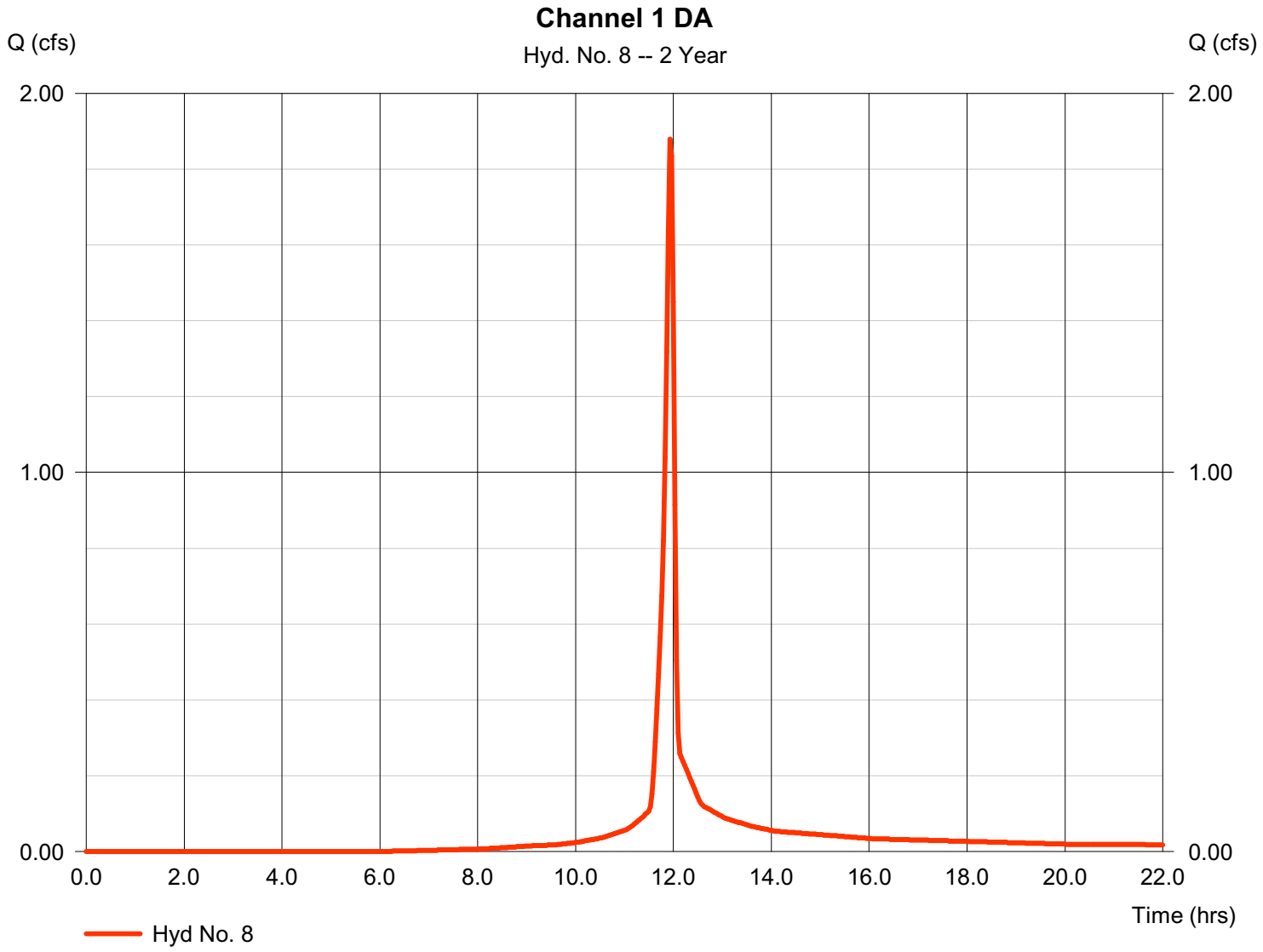
Hydrograph Report

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Hyd. No. 8

Channel 1 DA

Hydrograph type	=	SCS Runoff	Peak discharge	=	1.879 cfs
Storm frequency	=	2 yrs	Time to peak	=	11.93 hrs
Time interval	=	2 min	Hyd. volume	=	3,876 cuft
Drainage area	=	0.540 ac	Curve number	=	89
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	5.00 min
Total precip.	=	3.23 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484



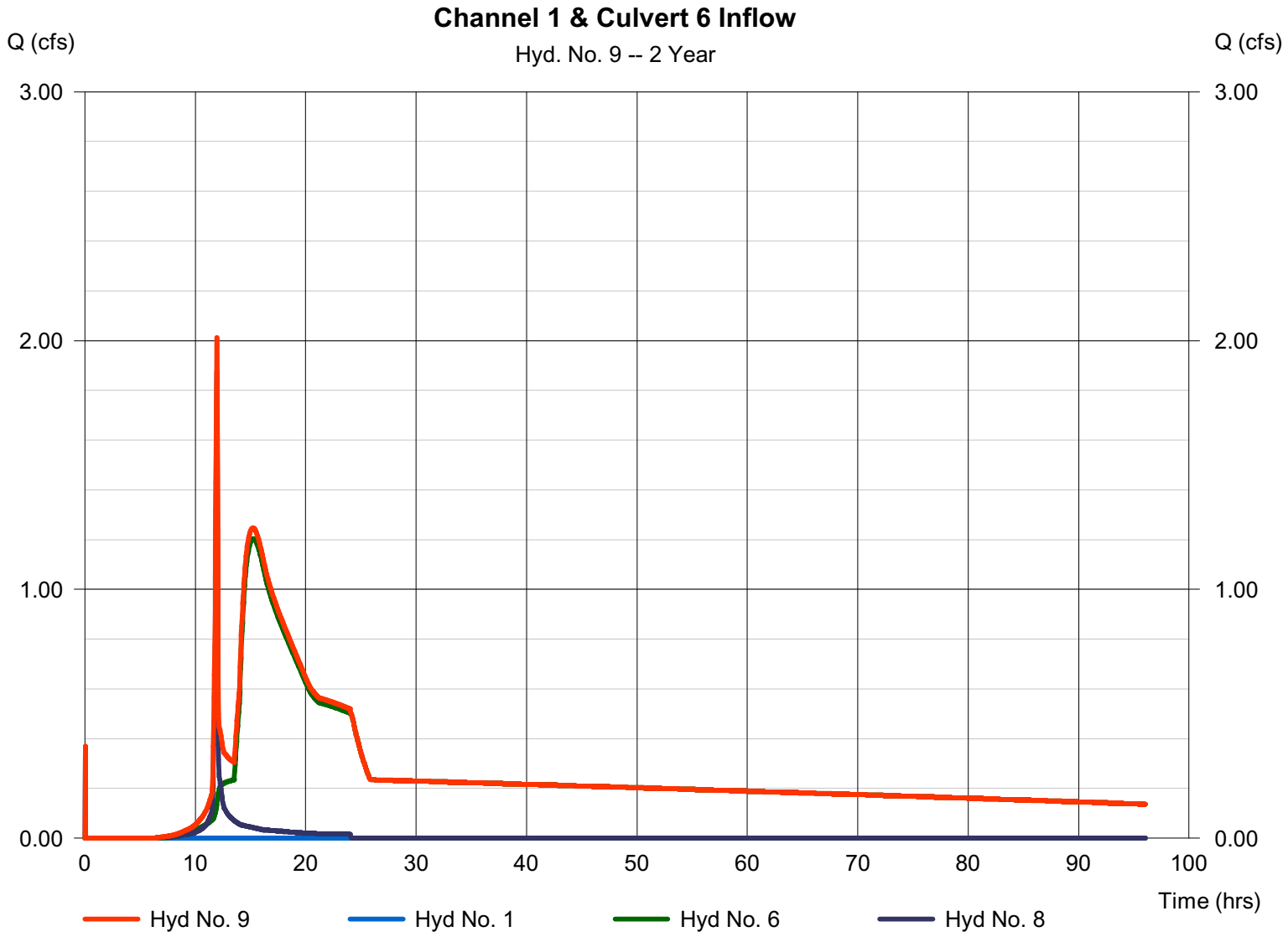
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Hyd. No. 9

Channel 1 & Culvert 6 Inflow

Hydrograph type	= Combine	Peak discharge	= 2.012 cfs
Storm frequency	= 2 yrs	Time to peak	= 11.93 hrs
Time interval	= 2 min	Hyd. volume	= 83,808 cuft
Inflow hyds.	= 1, 6, 8	Contrib. drain. area	= 0.540 ac



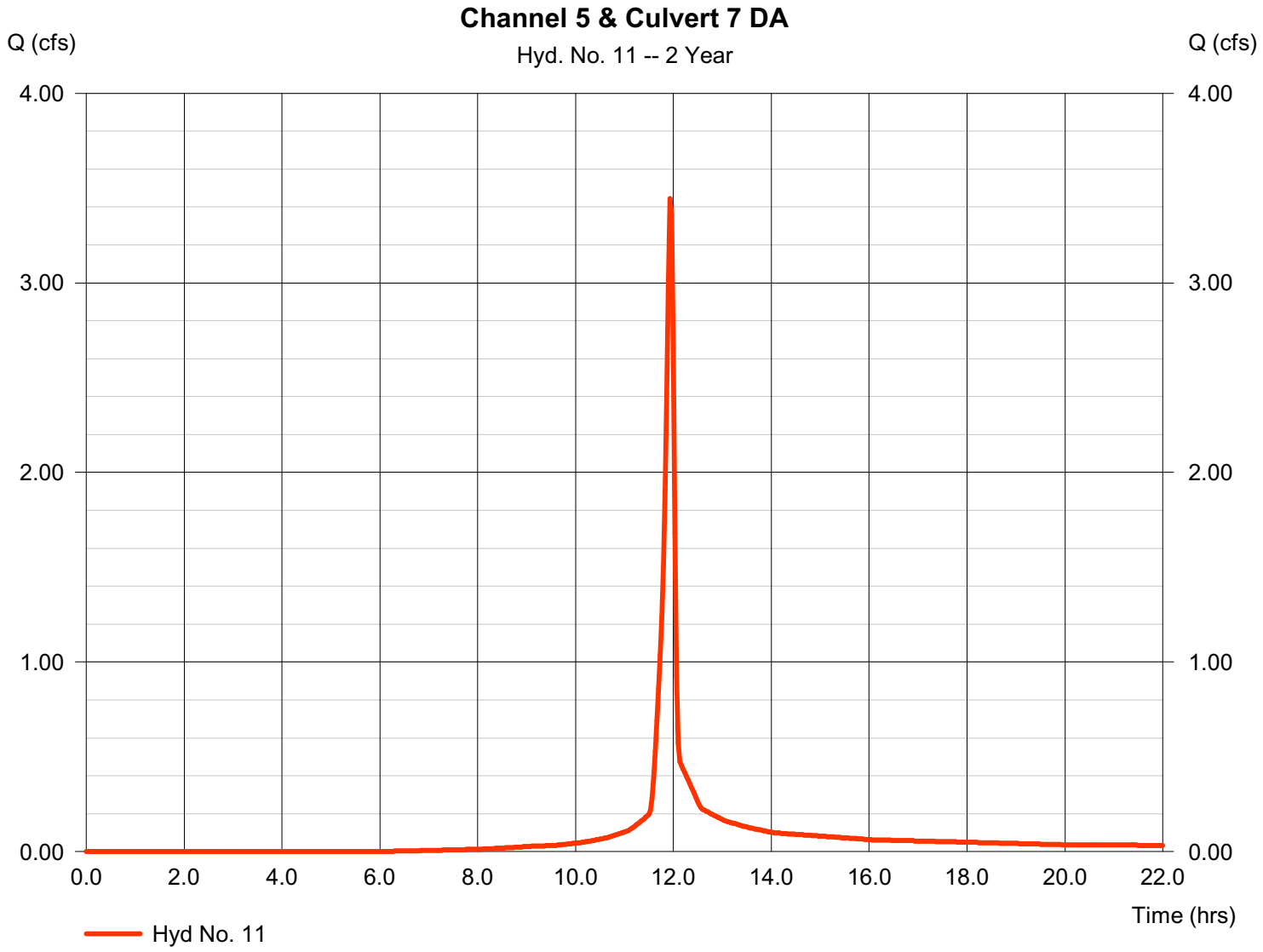
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Hyd. No. 11

Channel 5 & Culvert 7 DA

Hydrograph type	= SCS Runoff	Peak discharge	= 3.444 cfs
Storm frequency	= 2 yrs	Time to peak	= 11.93 hrs
Time interval	= 2 min	Hyd. volume	= 7,105 cuft
Drainage area	= 0.990 ac	Curve number	= 89
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 5.00 min
Total precip.	= 3.23 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484



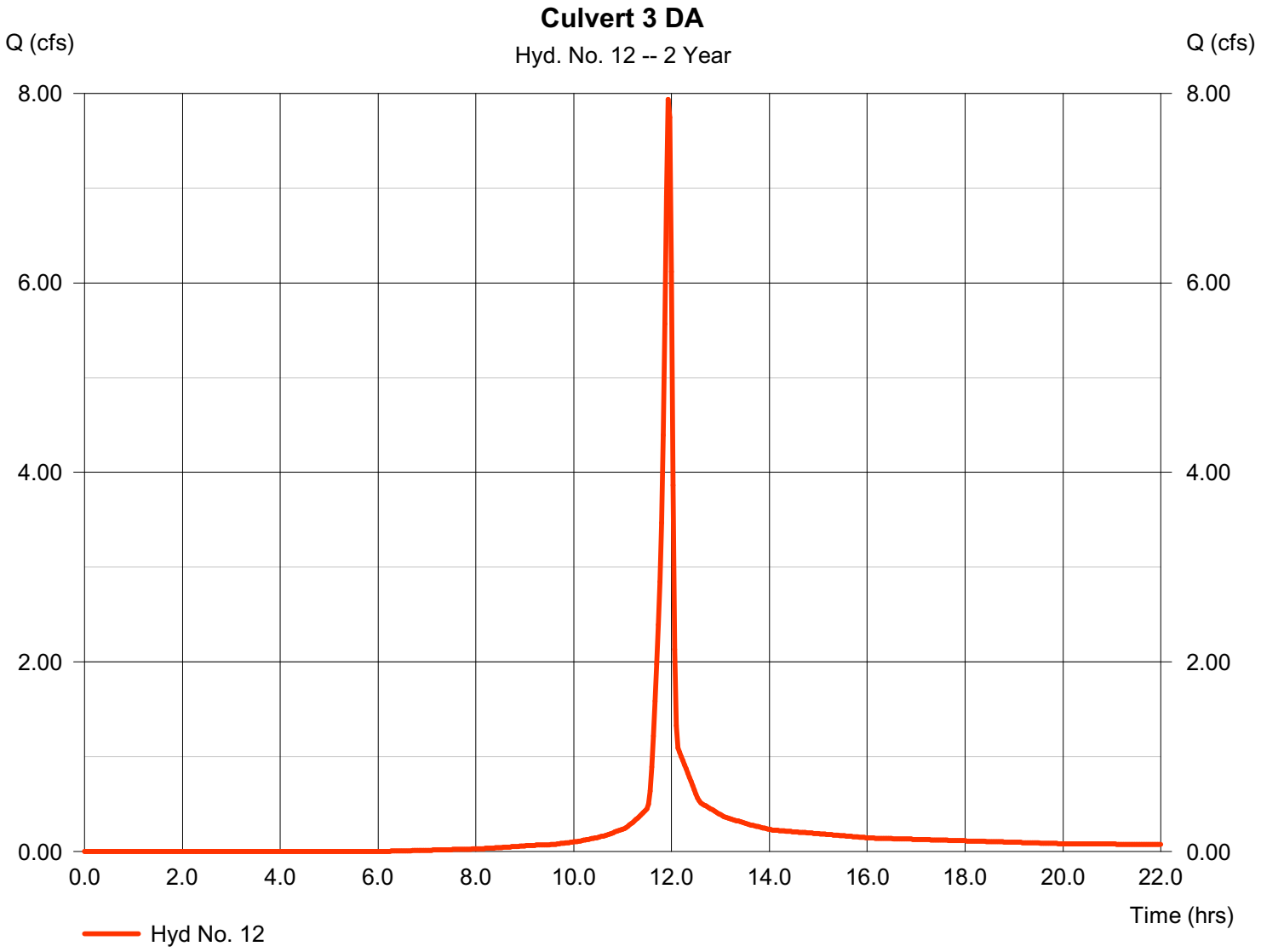
Hydrograph Report

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Hyd. No. 12

Culvert 3 DA

Hydrograph type	= SCS Runoff	Peak discharge	= 7.932 cfs
Storm frequency	= 2 yrs	Time to peak	= 11.93 hrs
Time interval	= 2 min	Hyd. volume	= 16,364 cuft
Drainage area	= 2.280 ac	Curve number	= 89
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 5.00 min
Total precip.	= 3.23 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484



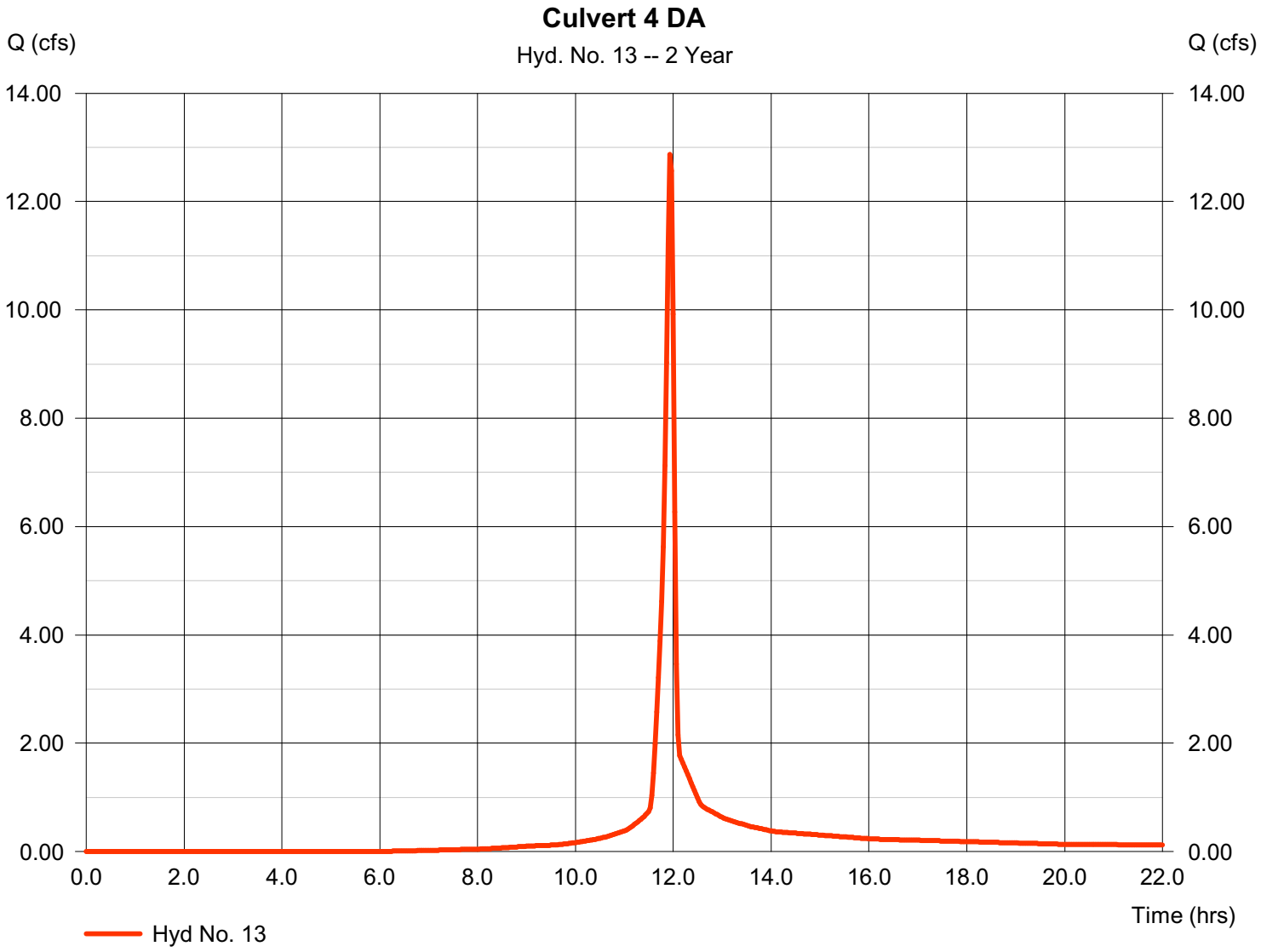
Hydrograph Report

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Hyd. No. 13

Culvert 4 DA

Hydrograph type	= SCS Runoff	Peak discharge	= 12.87 cfs
Storm frequency	= 2 yrs	Time to peak	= 11.93 hrs
Time interval	= 2 min	Hyd. volume	= 26,555 cuft
Drainage area	= 3.700 ac	Curve number	= 89
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 5.00 min
Total precip.	= 3.23 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484



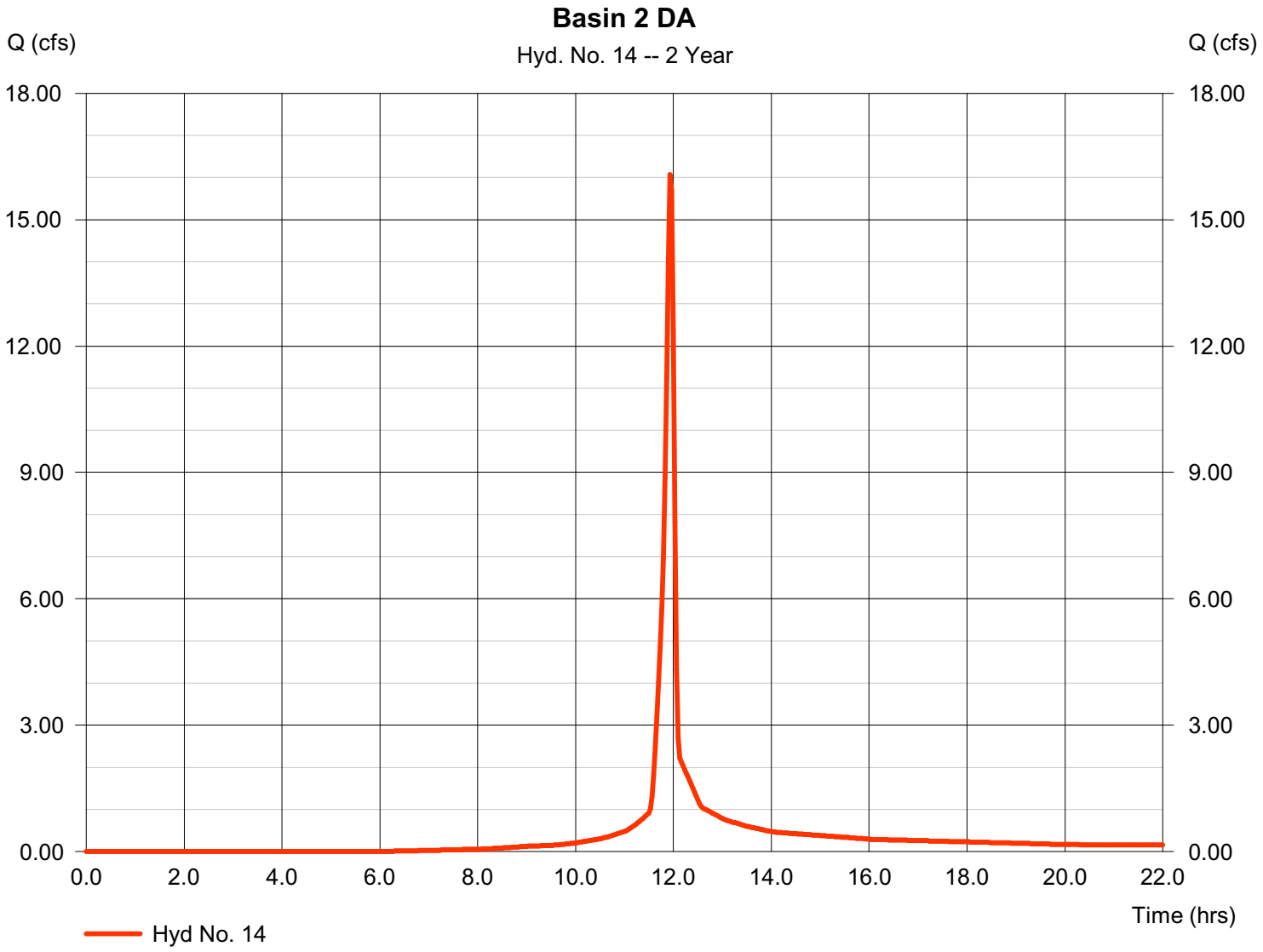
Hydrograph Report

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Hyd. No. 14

Basin 2 DA

Hydrograph type	= SCS Runoff	Peak discharge	= 16.07 cfs
Storm frequency	= 2 yrs	Time to peak	= 11.93 hrs
Time interval	= 2 min	Hyd. volume	= 33,158 cuft
Drainage area	= 4.620 ac	Curve number	= 89
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 5.00 min
Total precip.	= 3.23 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484



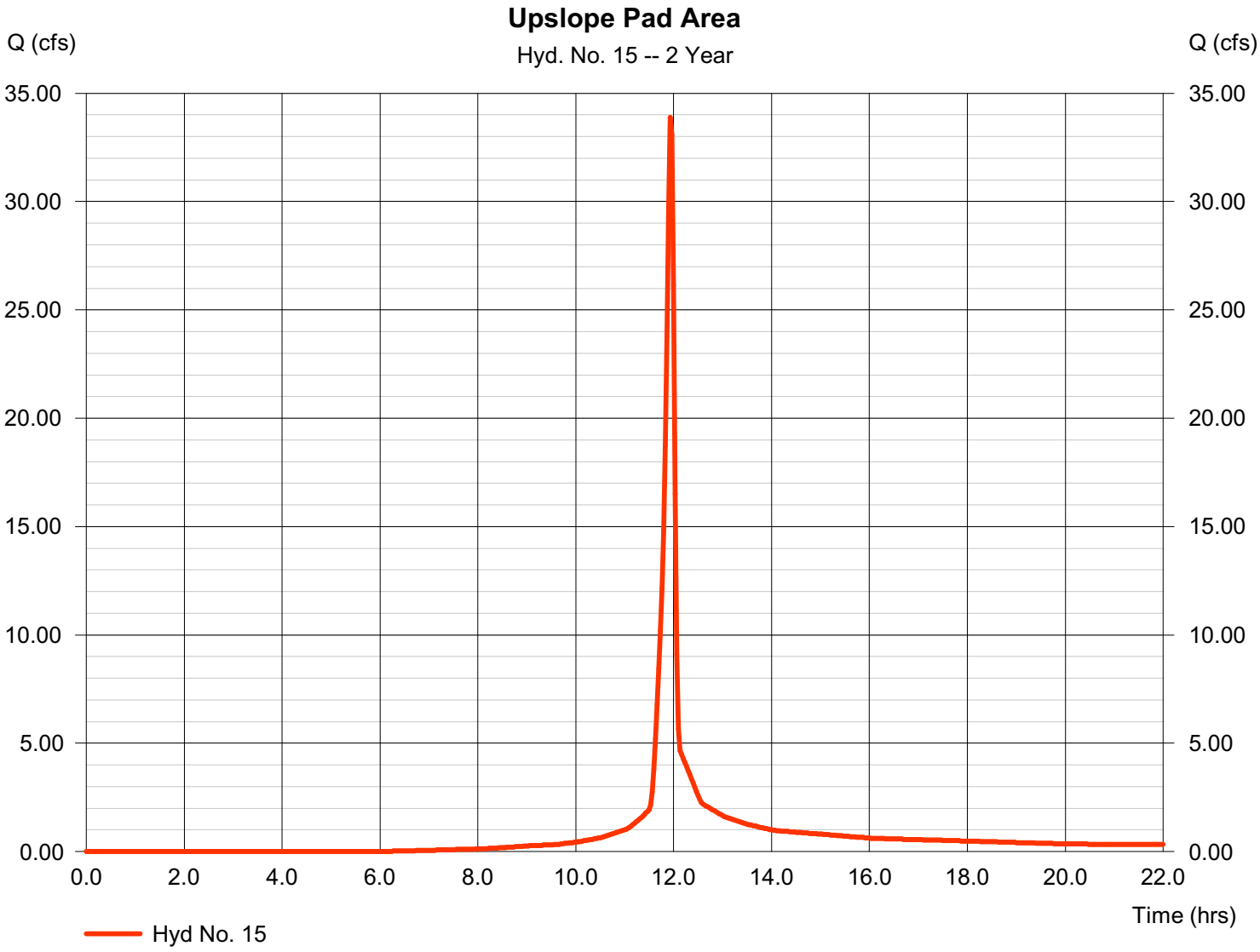
Hydrograph Report

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Hyd. No. 15

Upslope Pad Area

Hydrograph type	=	SCS Runoff	Peak discharge	=	33.89 cfs
Storm frequency	=	2 yrs	Time to peak	=	11.93 hrs
Time interval	=	2 min	Hyd. volume	=	69,904 cuft
Drainage area	=	9.740 ac	Curve number	=	89
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	5.00 min
Total precip.	=	3.23 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484



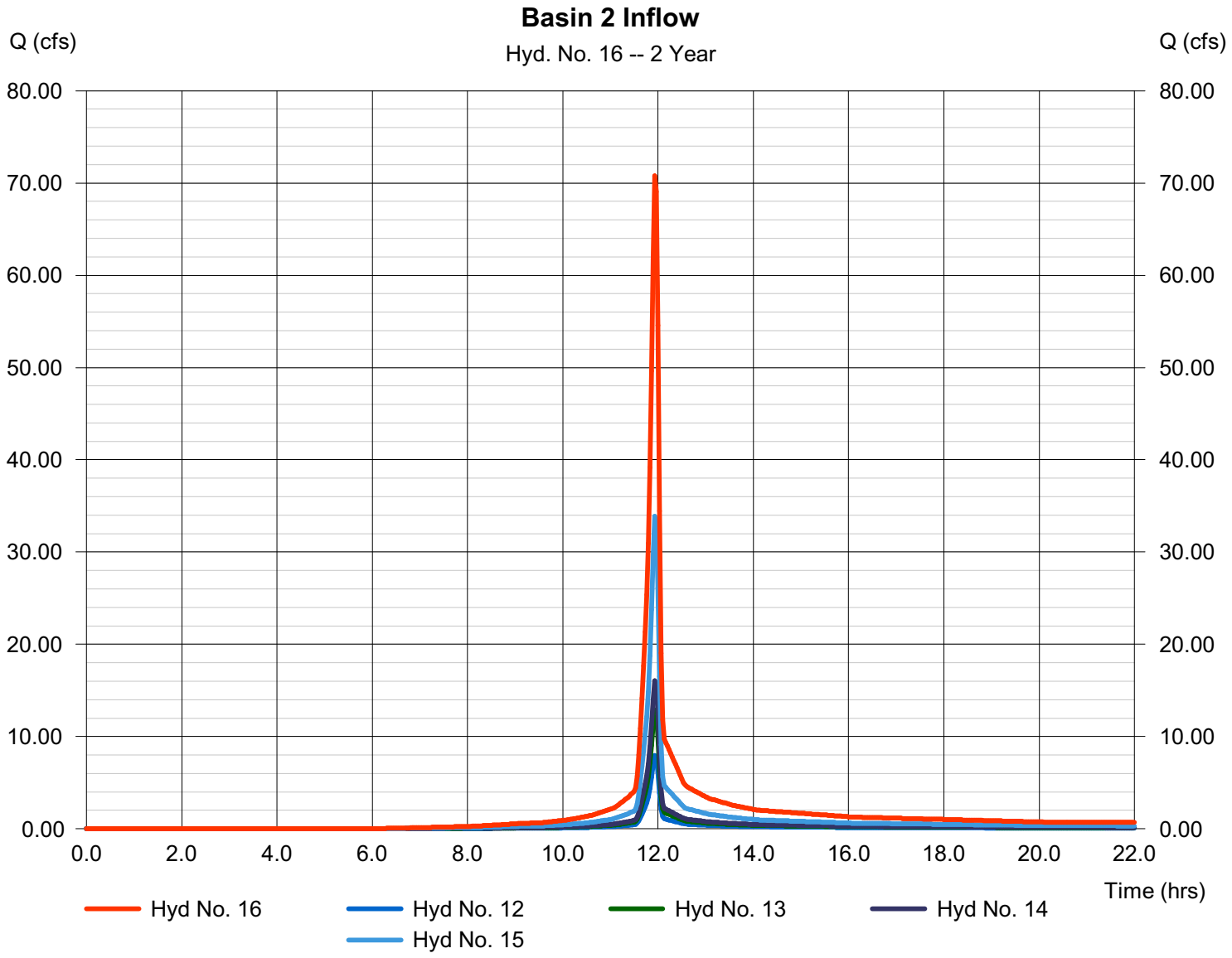
Hydrograph Report

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Hyd. No. 16

Basin 2 Inflow

Hydrograph type	= Combine	Peak discharge	= 70.77 cfs
Storm frequency	= 2 yrs	Time to peak	= 11.93 hrs
Time interval	= 2 min	Hyd. volume	= 145,980 cuft
Inflow hyds.	= 12, 13, 14, 15	Contrib. drain. area	= 20.340 ac



Hydrograph Report

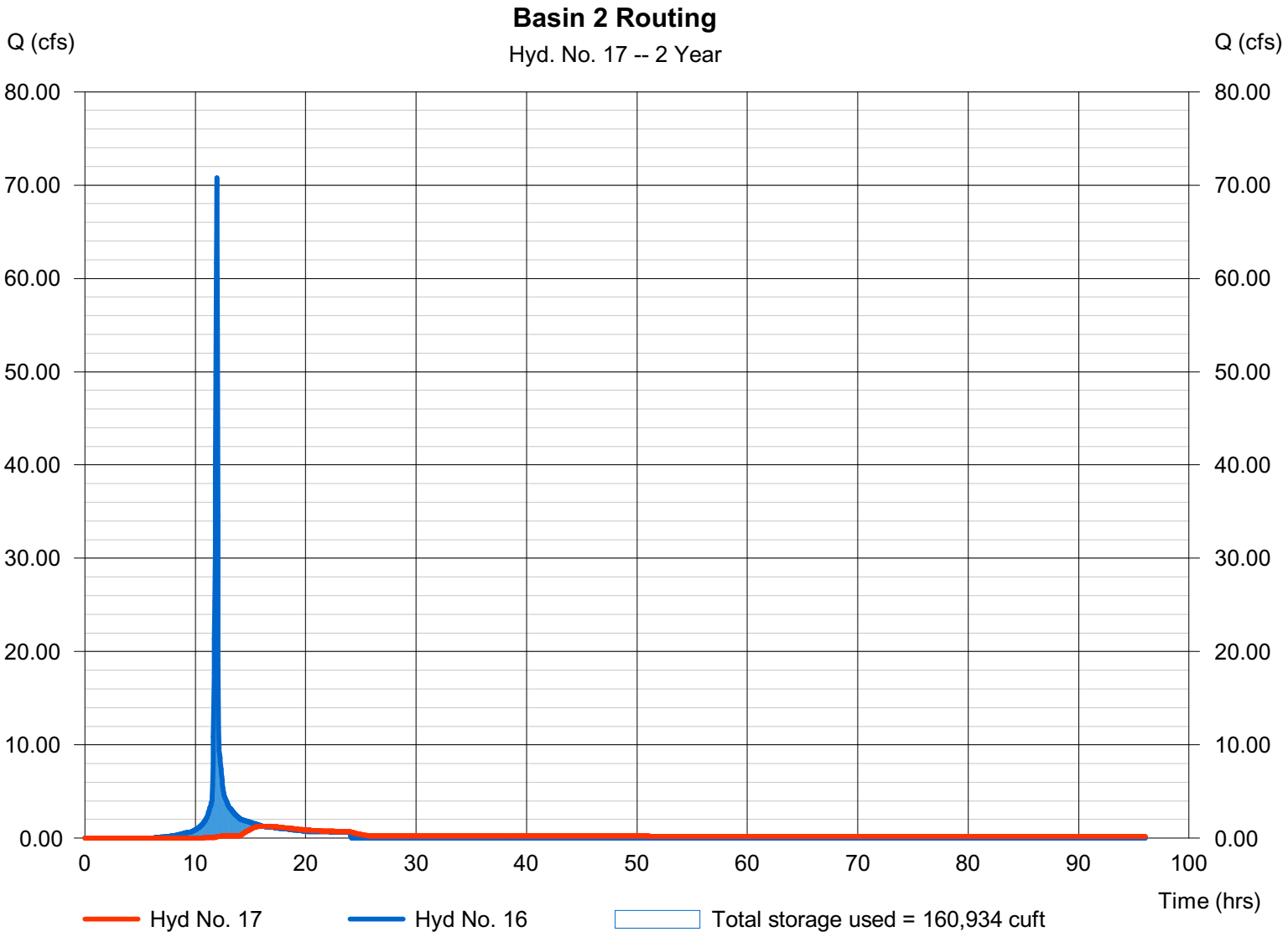
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Hyd. No. 17

Basin 2 Routing

Hydrograph type	= Reservoir	Peak discharge	= 1.293 cfs
Storm frequency	= 2 yrs	Time to peak	= 16.03 hrs
Time interval	= 2 min	Hyd. volume	= 90,053 cuft
Inflow hyd. No.	= 16 - Basin 2 Inflow	Max. Elevation	= 529.83 ft
Reservoir name	= Sediment Basin 2	Max. Storage	= 160,934 cuft

Storage Indication method used. Wet pond routing start elevation = 526.80 ft.



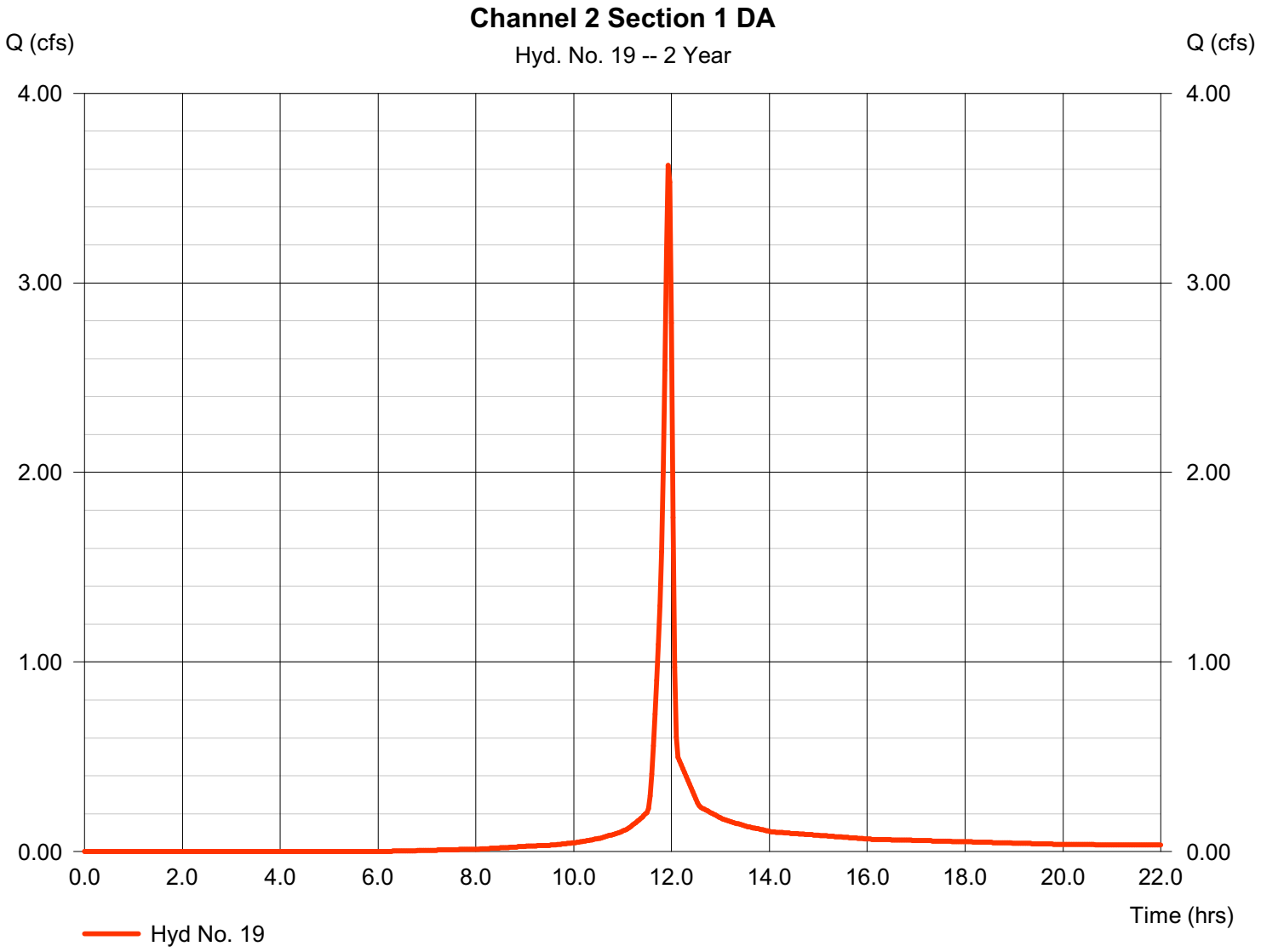
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024 Friday, 04 / 18 / 2025

Hyd. No. 19

Channel 2 Section 1 DA

Hydrograph type	= SCS Runoff	Peak discharge	= 3.618 cfs
Storm frequency	= 2 yrs	Time to peak	= 11.93 hrs
Time interval	= 2 min	Hyd. volume	= 7,464 cuft
Drainage area	= 1.040 ac	Curve number	= 89
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 5.00 min
Total precip.	= 3.23 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484



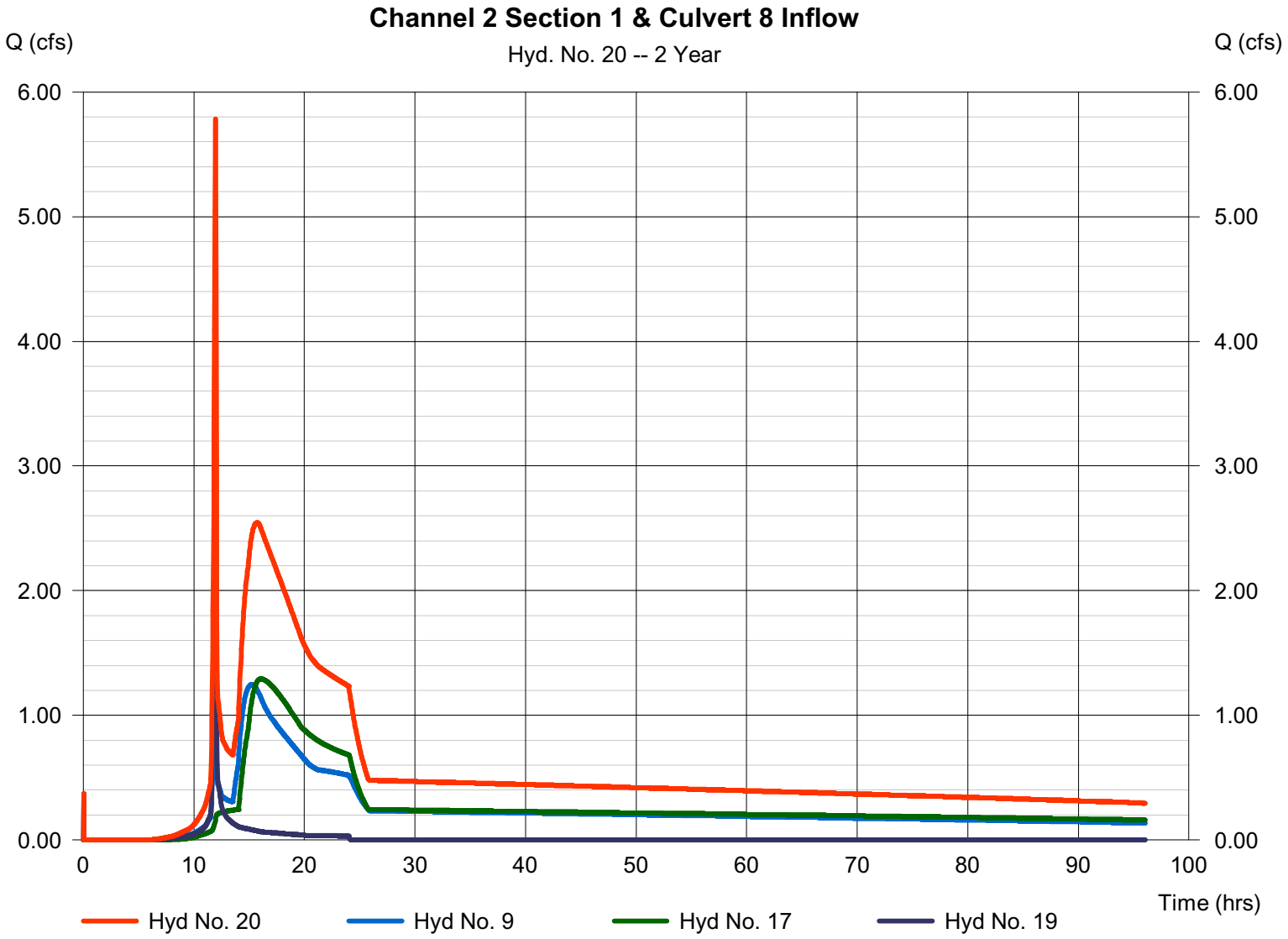
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024 Friday, 04 / 18 / 2025

Hyd. No. 20

Channel 2 Section 1 & Culvert 8 Inflow

Hydrograph type	= Combine	Peak discharge	= 5.784 cfs
Storm frequency	= 2 yrs	Time to peak	= 11.93 hrs
Time interval	= 2 min	Hyd. volume	= 181,324 cuft
Inflow hyds.	= 9, 17, 19	Contrib. drain. area	= 1.040 ac



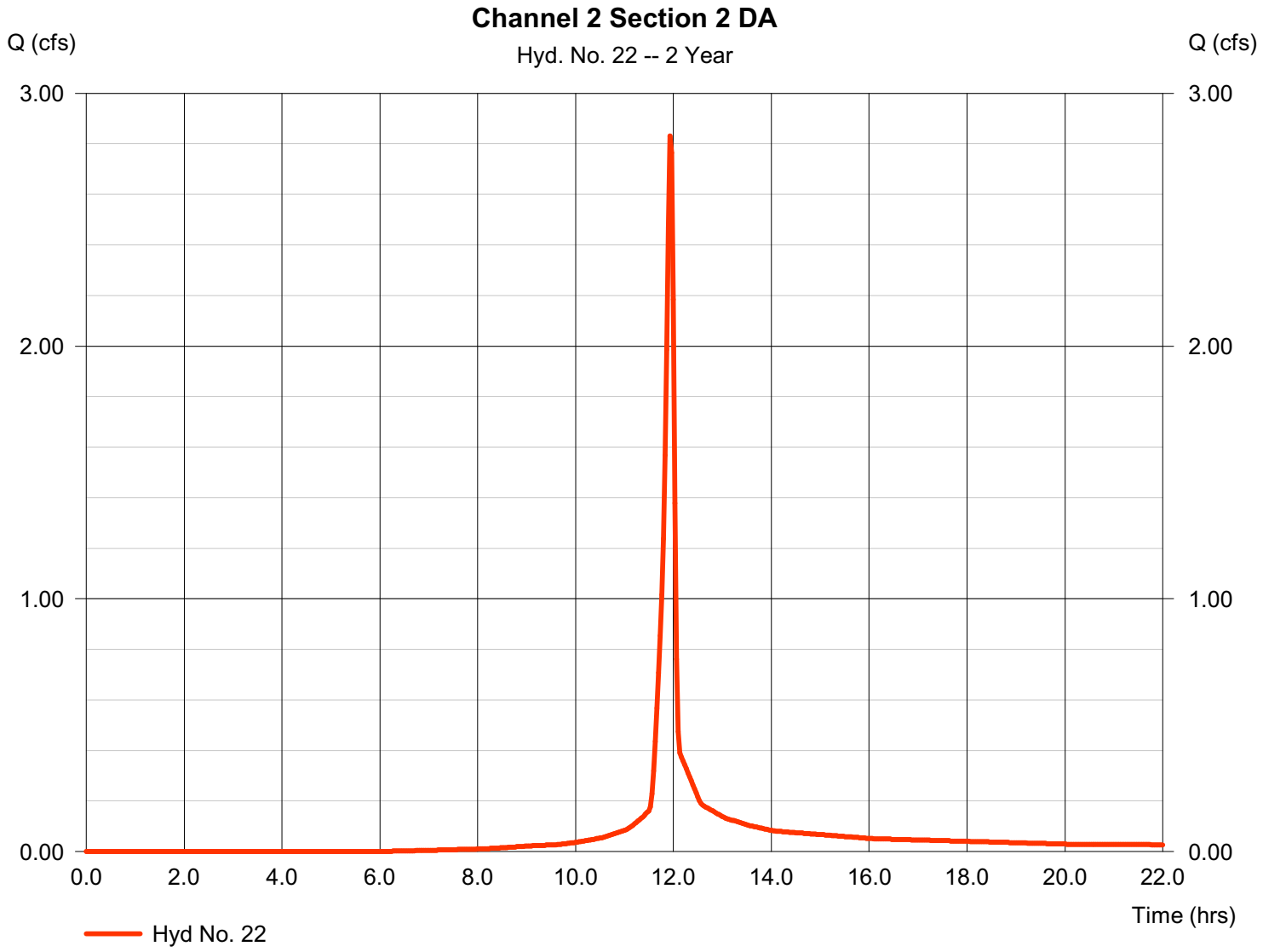
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024 Friday, 04 / 18 / 2025

Hyd. No. 22

Channel 2 Section 2 DA

Hydrograph type	= SCS Runoff	Peak discharge	= 2.832 cfs
Storm frequency	= 2 yrs	Time to peak	= 11.93 hrs
Time interval	= 2 min	Hyd. volume	= 5,842 cuft
Drainage area	= 0.814 ac	Curve number	= 89
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 5.00 min
Total precip.	= 3.23 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484



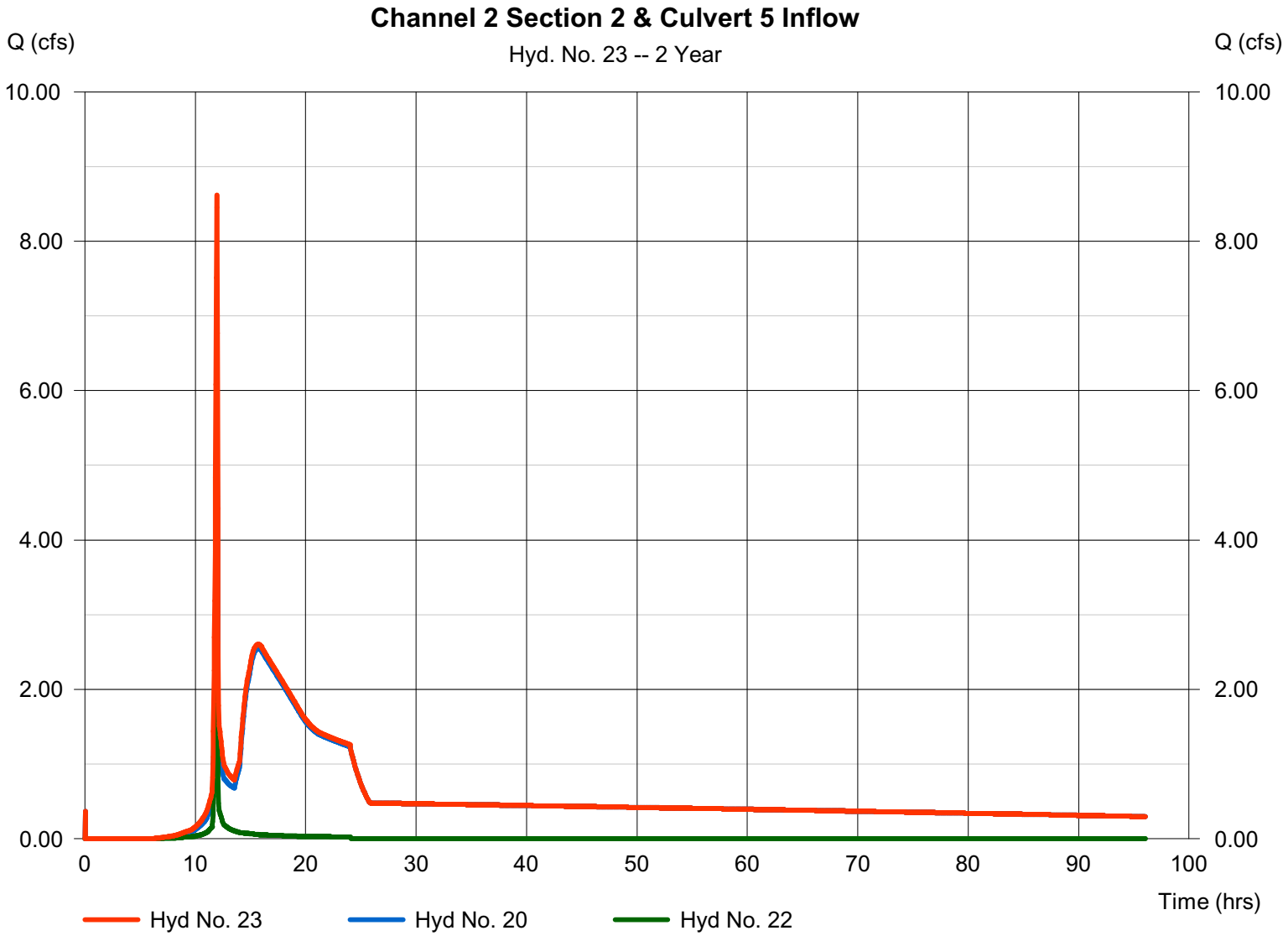
Hydrograph Report

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Hyd. No. 23

Channel 2 Section 2 & Culvert 5 Inflow

Hydrograph type	= Combine	Peak discharge	= 8.616 cfs
Storm frequency	= 2 yrs	Time to peak	= 11.93 hrs
Time interval	= 2 min	Hyd. volume	= 187,167 cuft
Inflow hyds.	= 20, 22	Contrib. drain. area	= 0.814 ac



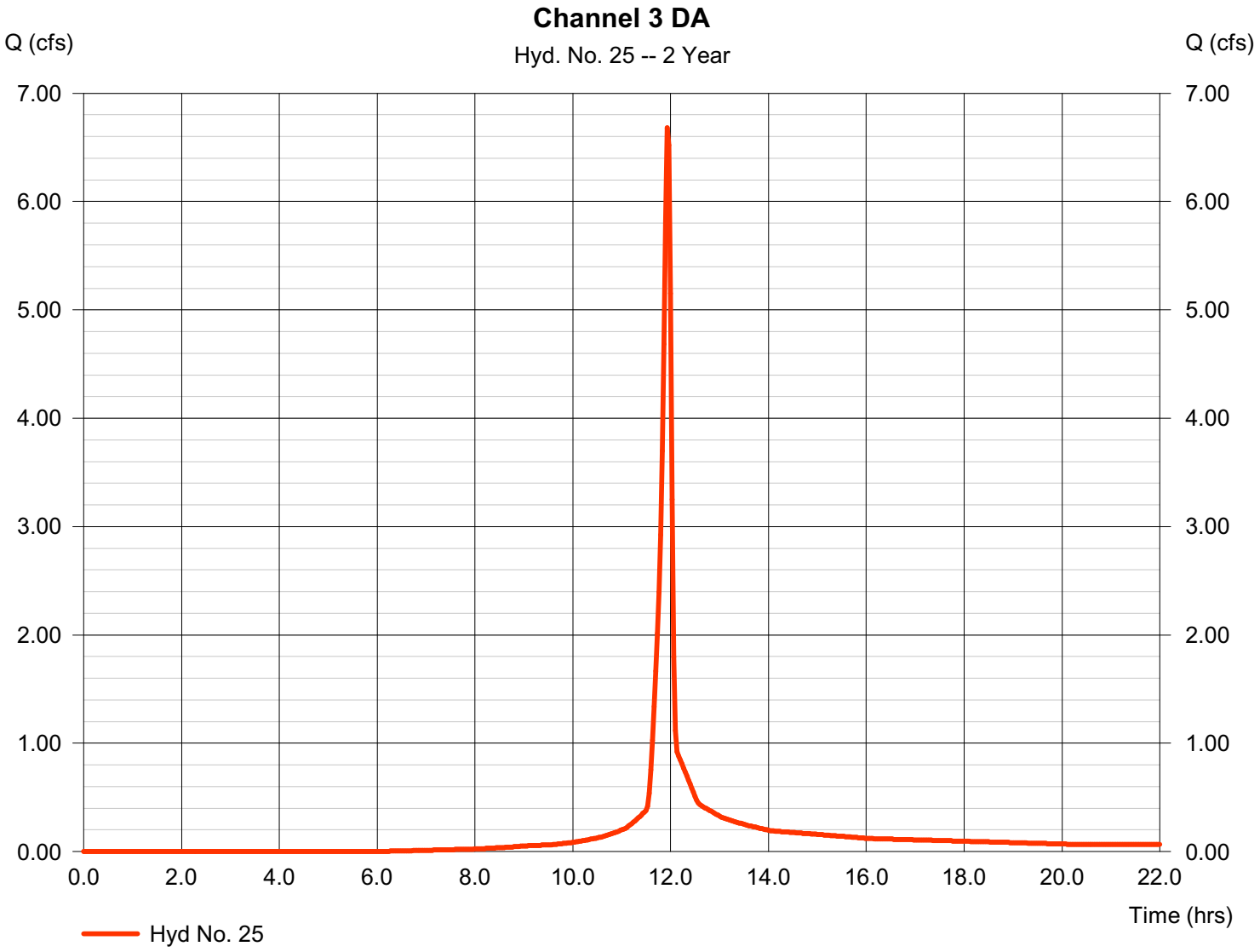
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024 Friday, 04 / 18 / 2025

Hyd. No. 25

Channel 3 DA

Hydrograph type	=	SCS Runoff	Peak discharge	=	6.680 cfs
Storm frequency	=	2 yrs	Time to peak	=	11.93 hrs
Time interval	=	2 min	Hyd. volume	=	13,780 cuft
Drainage area	=	1.920 ac	Curve number	=	89
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	5.00 min
Total precip.	=	3.23 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484



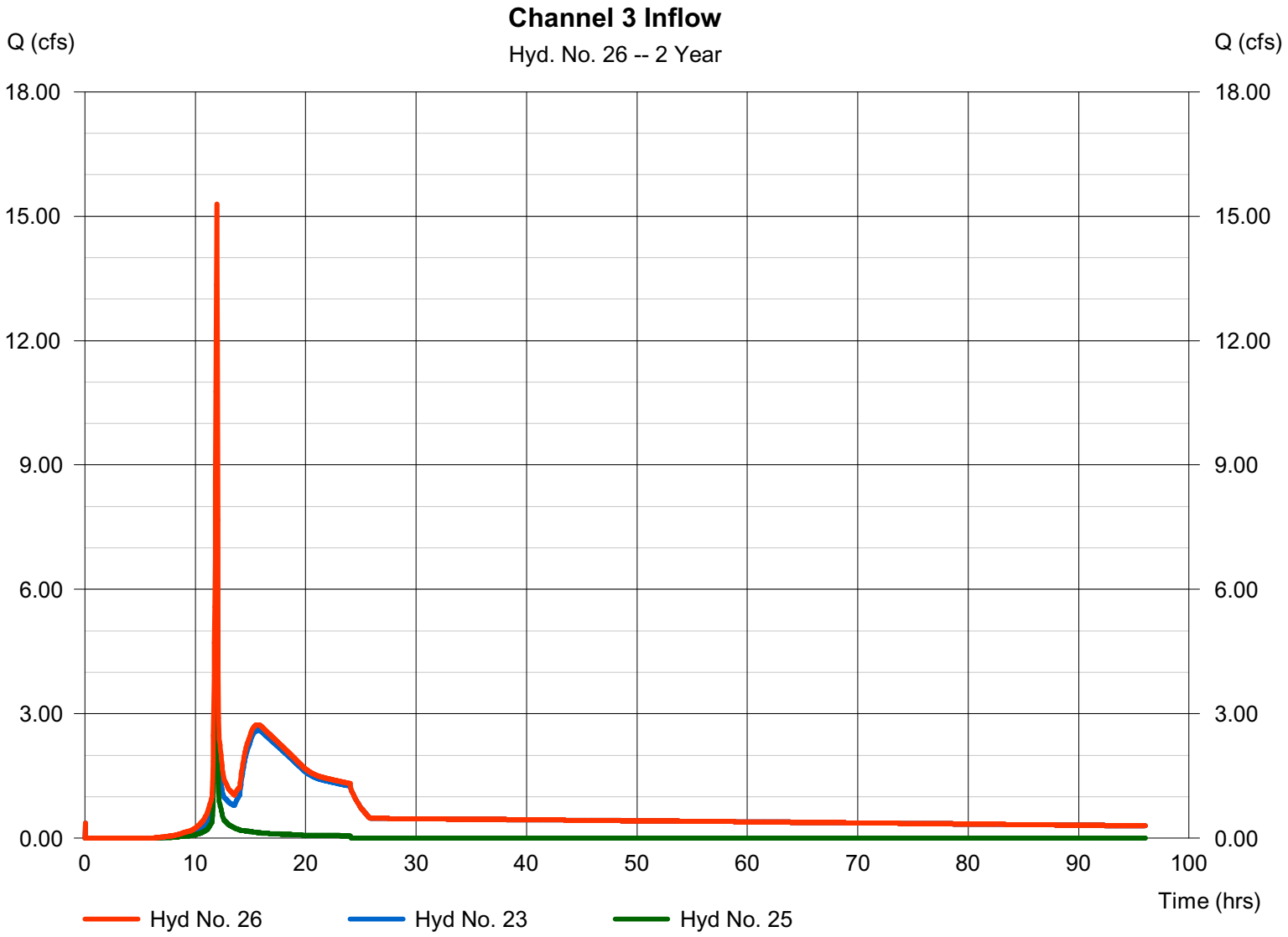
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024 Friday, 04 / 18 / 2025

Hyd. No. 26

Channel 3 Inflow

Hydrograph type	= Combine	Peak discharge	= 15.30 cfs
Storm frequency	= 2 yrs	Time to peak	= 11.93 hrs
Time interval	= 2 min	Hyd. volume	= 200,946 cuft
Inflow hyds.	= 23, 25	Contrib. drain. area	= 1.920 ac



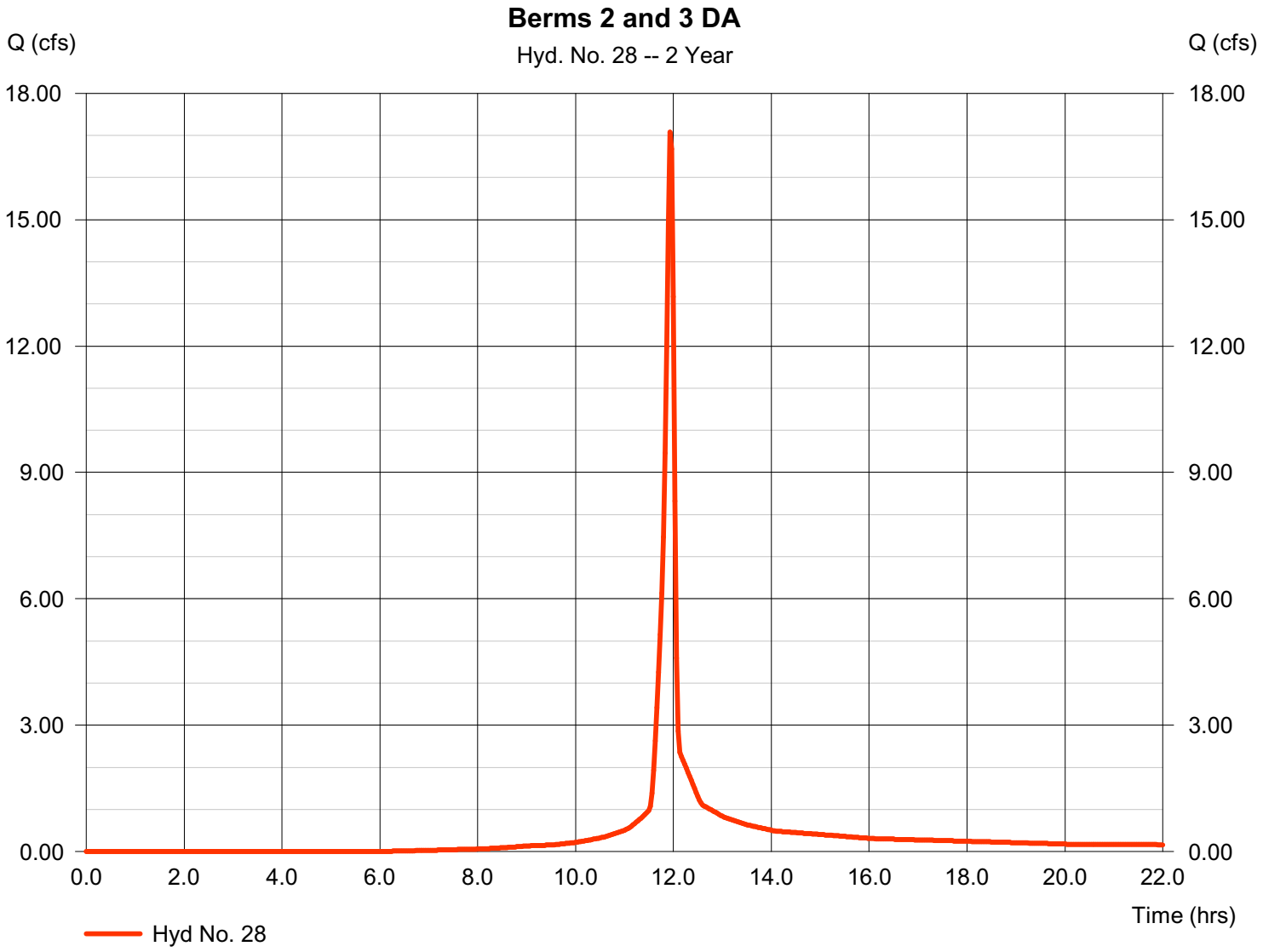
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024 Friday, 04 / 18 / 2025

Hyd. No. 28

Berms 2 and 3 DA

Hydrograph type	= SCS Runoff	Peak discharge	= 17.08 cfs
Storm frequency	= 2 yrs	Time to peak	= 11.93 hrs
Time interval	= 2 min	Hyd. volume	= 35,239 cuft
Drainage area	= 4.910 ac	Curve number	= 89
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 5.00 min
Total precip.	= 3.23 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484



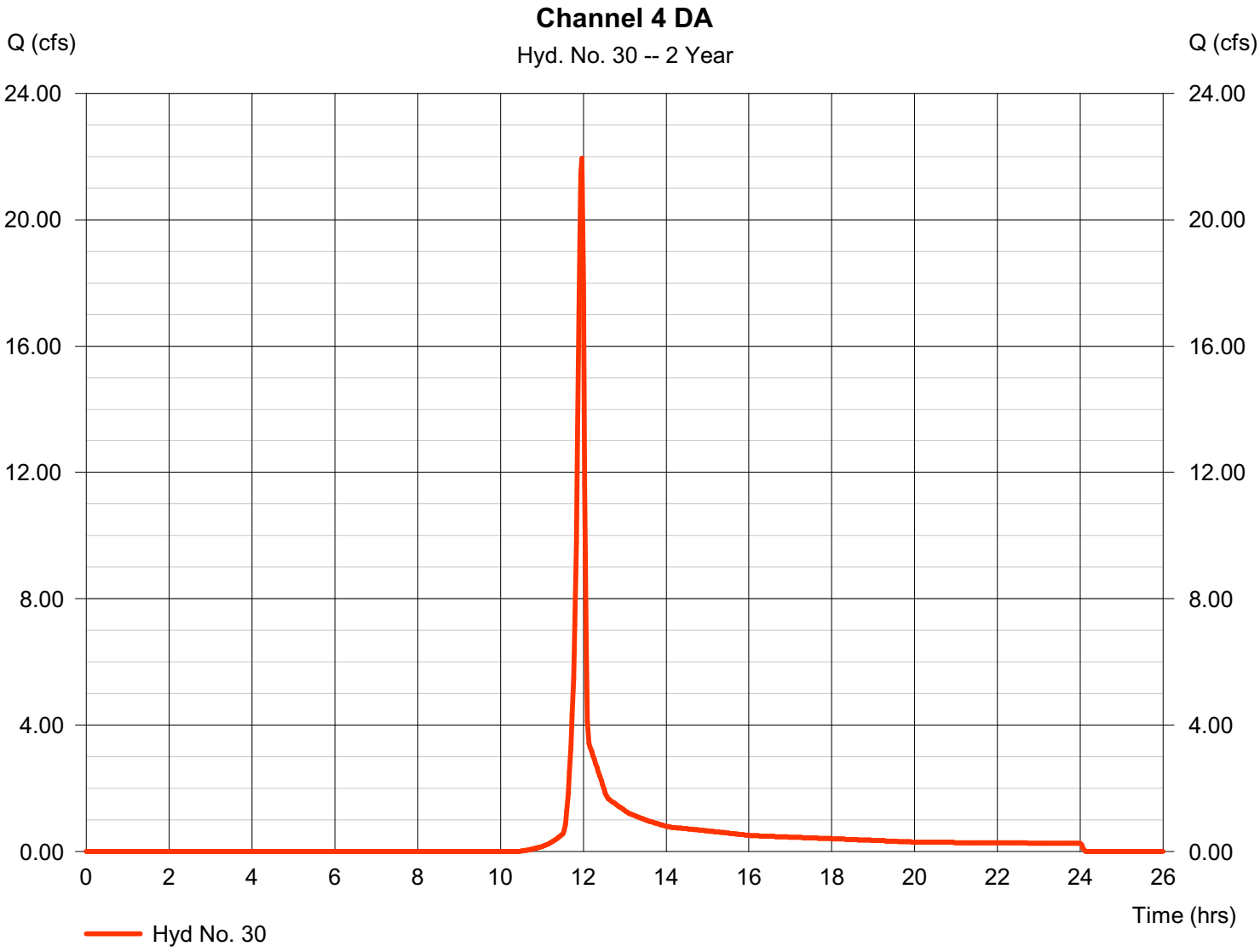
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024 Friday, 04 / 18 / 2025

Hyd. No. 30

Channel 4 DA

Hydrograph type	=	SCS Runoff	Peak discharge	=	21.94 cfs
Storm frequency	=	2 yrs	Time to peak	=	11.97 hrs
Time interval	=	2 min	Hyd. volume	=	43,868 cuft
Drainage area	=	10.990 ac	Curve number	=	76
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	TR55	Time of conc. (Tc)	=	6.00 min
Total precip.	=	3.23 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484



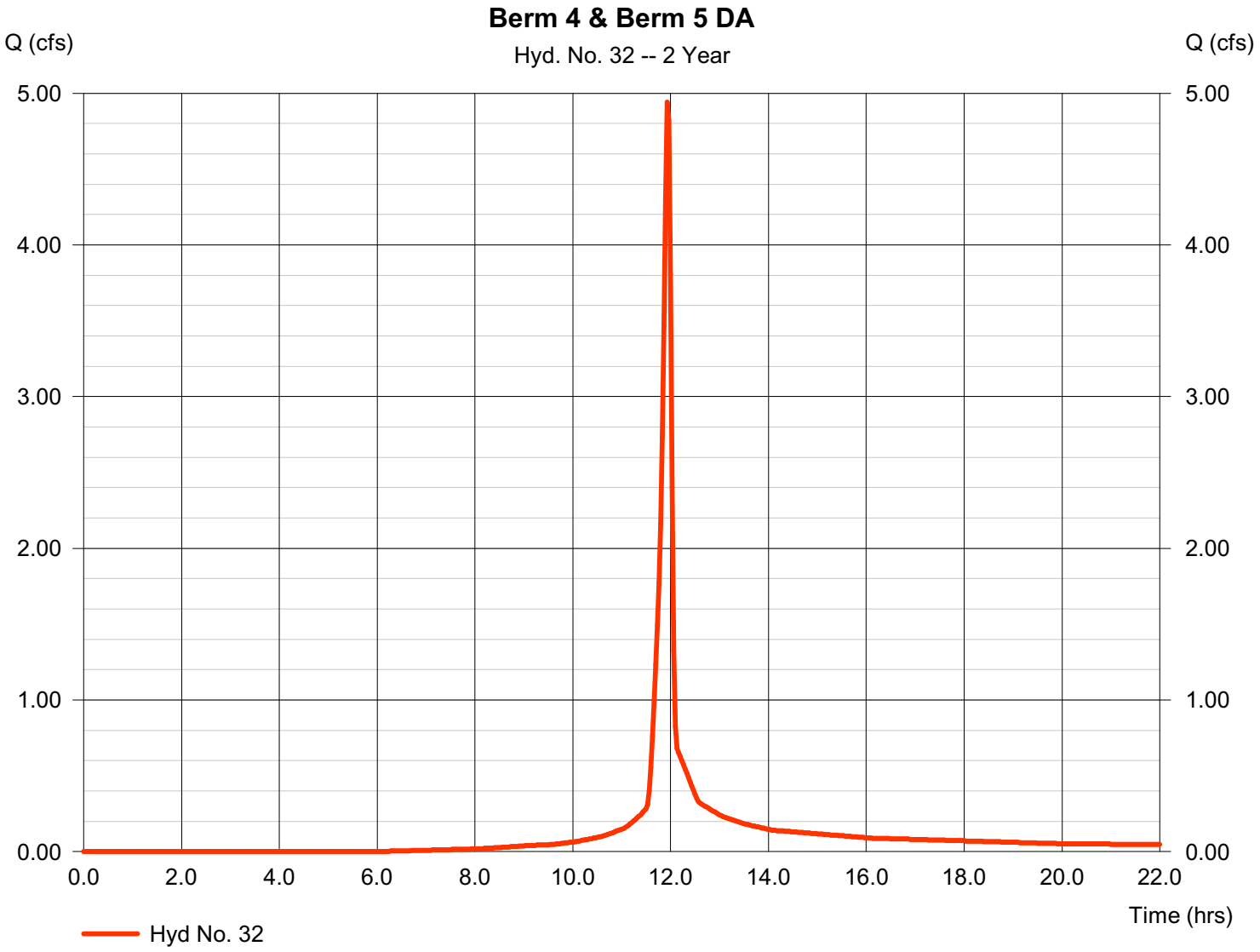
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024 Friday, 04 / 18 / 2025

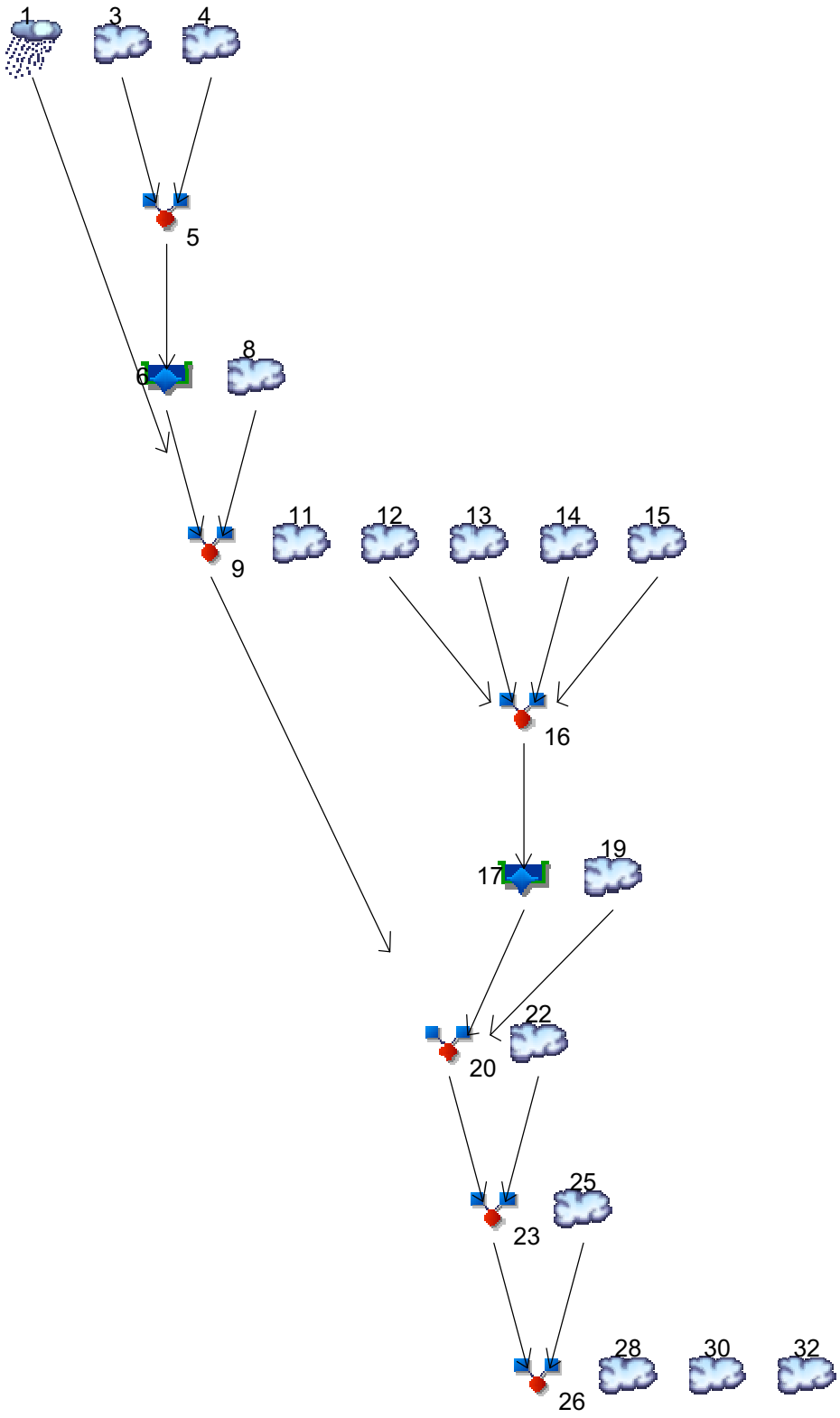
Hyd. No. 32

Berm 4 & Berm 5 DA

Hydrograph type	= SCS Runoff	Peak discharge	= 4.940 cfs
Storm frequency	= 2 yrs	Time to peak	= 11.93 hrs
Time interval	= 2 min	Hyd. volume	= 10,191 cuft
Drainage area	= 1.420 ac	Curve number	= 89
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 5.00 min
Total precip.	= 3.23 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484



Watershed Model Schematic



Hydrograph Summary Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024

Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	Manual	0.368	2	2	44	------	------	------	Clarifying Pond Discharge
3	SCS Runoff	43.59	2	722	124,636	------	------	------	Culvert 2 & Berm 1 DA
4	SCS Runoff	10.67	2	716	22,342	------	------	------	Basin 1 DA
5	Combine	50.24	2	720	146,978	3, 4	------	------	Basin 1 Inflow
6	Reservoir	5.976	2	752	119,081	5	534.06	158,598	Basin 1 Routing
8	SCS Runoff	2.526	2	716	5,291	------	------	------	Channel 1 DA
9	Combine	6.151	2	752	124,417	1, 6, 8	------	------	Channel 1 & Culvert 6 Inflow
11	SCS Runoff	4.631	2	716	9,701	------	------	------	Channel 5 & Culvert 7 DA
12	SCS Runoff	10.67	2	716	22,342	------	------	------	Culvert 3 DA
13	SCS Runoff	17.31	2	716	36,256	------	------	------	Culvert 4 DA
14	SCS Runoff	21.61	2	716	45,271	------	------	------	Basin 2 DA
15	SCS Runoff	45.56	2	716	95,443	------	------	------	Upslope Pad Area
16	Combine	95.14	2	716	199,312	12, 13, 14, 15	------	------	Basin 2 Inflow
17	Reservoir	5.413	2	766	143,157	16	530.10	171,559	Basin 2 Routing
19	SCS Runoff	4.865	2	716	10,191	------	------	------	Channel 2 Section 1 DA
20	Combine	11.74	2	754	277,765	9, 17, 19	------	------	Channel 2 Section 1 & Culvert 8 Inflo
22	SCS Runoff	3.808	2	716	7,976	------	------	------	Channel 2 Section 2 DA
23	Combine	11.99	2	754	285,742	20, 22	------	------	Channel 2 Section 2 & Culvert 5 Inflo
25	SCS Runoff	8.981	2	716	18,814	------	------	------	Channel 3 DA
26	Combine	20.55	2	716	304,556	23, 25	------	------	Channel 3 Inflow
28	SCS Runoff	22.97	2	716	48,113	------	------	------	Berms 2 and 3 DA
30	SCS Runoff	33.22	2	718	66,745	------	------	------	Channel 4 DA
32	SCS Runoff	6.642	2	716	13,915	------	------	------	Berm 4 & Berm 5 DA

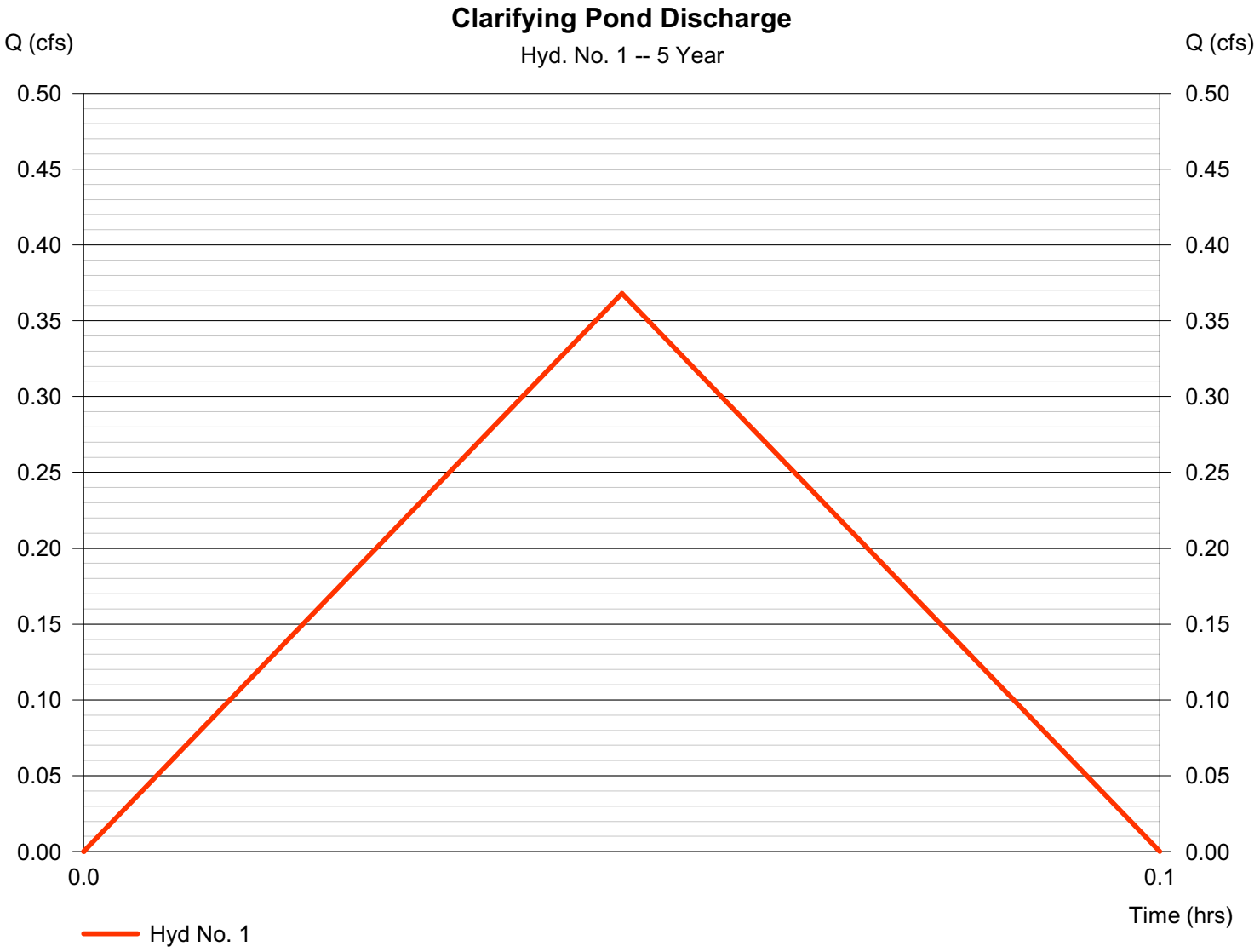
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024 Friday, 04 / 18 / 2025

Hyd. No. 1

Clarifying Pond Discharge

Hydrograph type	= Manual	Peak discharge	= 0.368 cfs
Storm frequency	= 5 yrs	Time to peak	= 0.03 hrs
Time interval	= 2 min	Hyd. volume	= 44 cuft



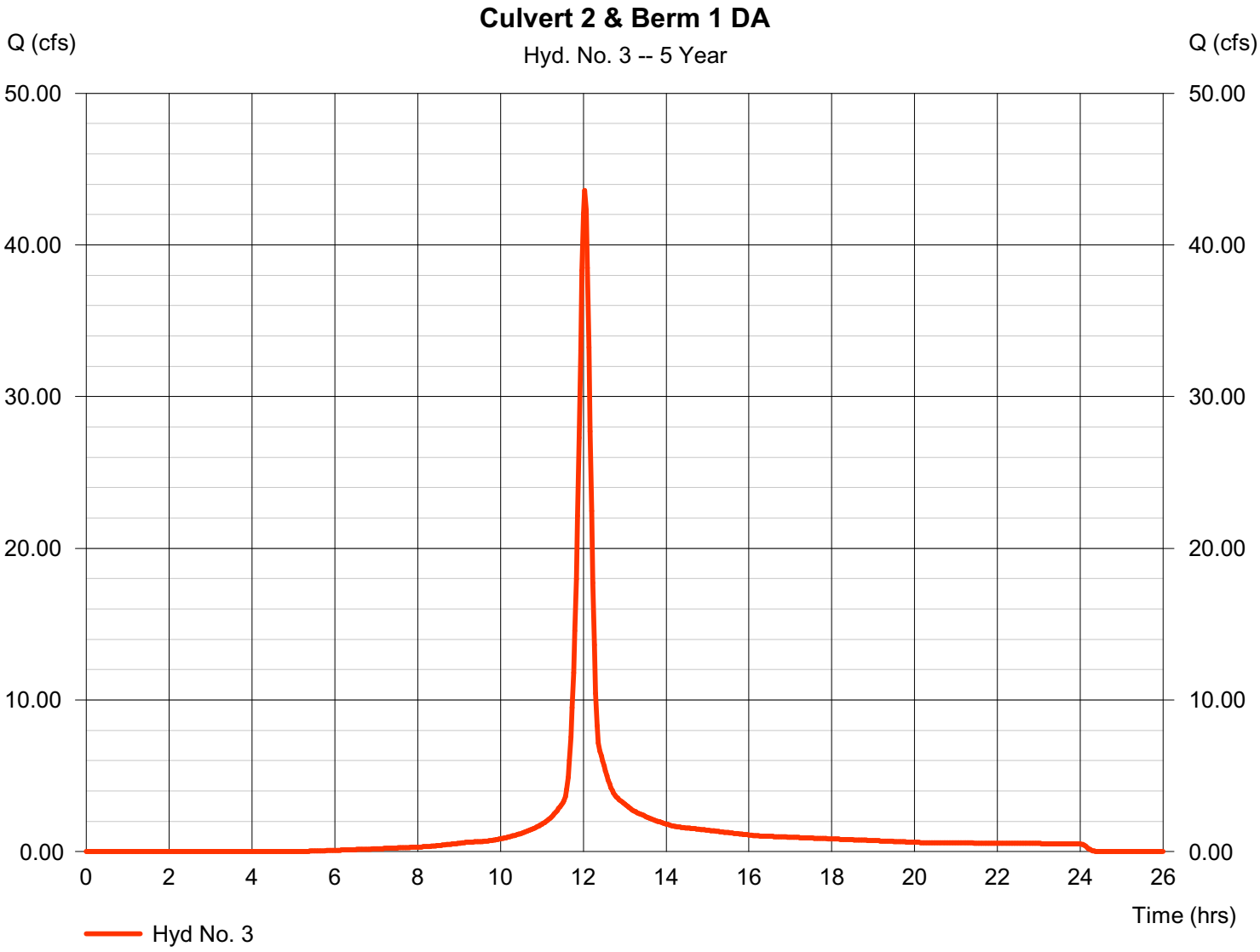
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024 Friday, 04 / 18 / 2025

Hyd. No. 3

Culvert 2 & Berm 1 DA

Hydrograph type	= SCS Runoff	Peak discharge	= 43.59 cfs
Storm frequency	= 5 yrs	Time to peak	= 12.03 hrs
Time interval	= 2 min	Hyd. volume	= 124,636 cuft
Drainage area	= 12.230 ac	Curve number	= 89
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 15.00 min
Total precip.	= 4.06 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484



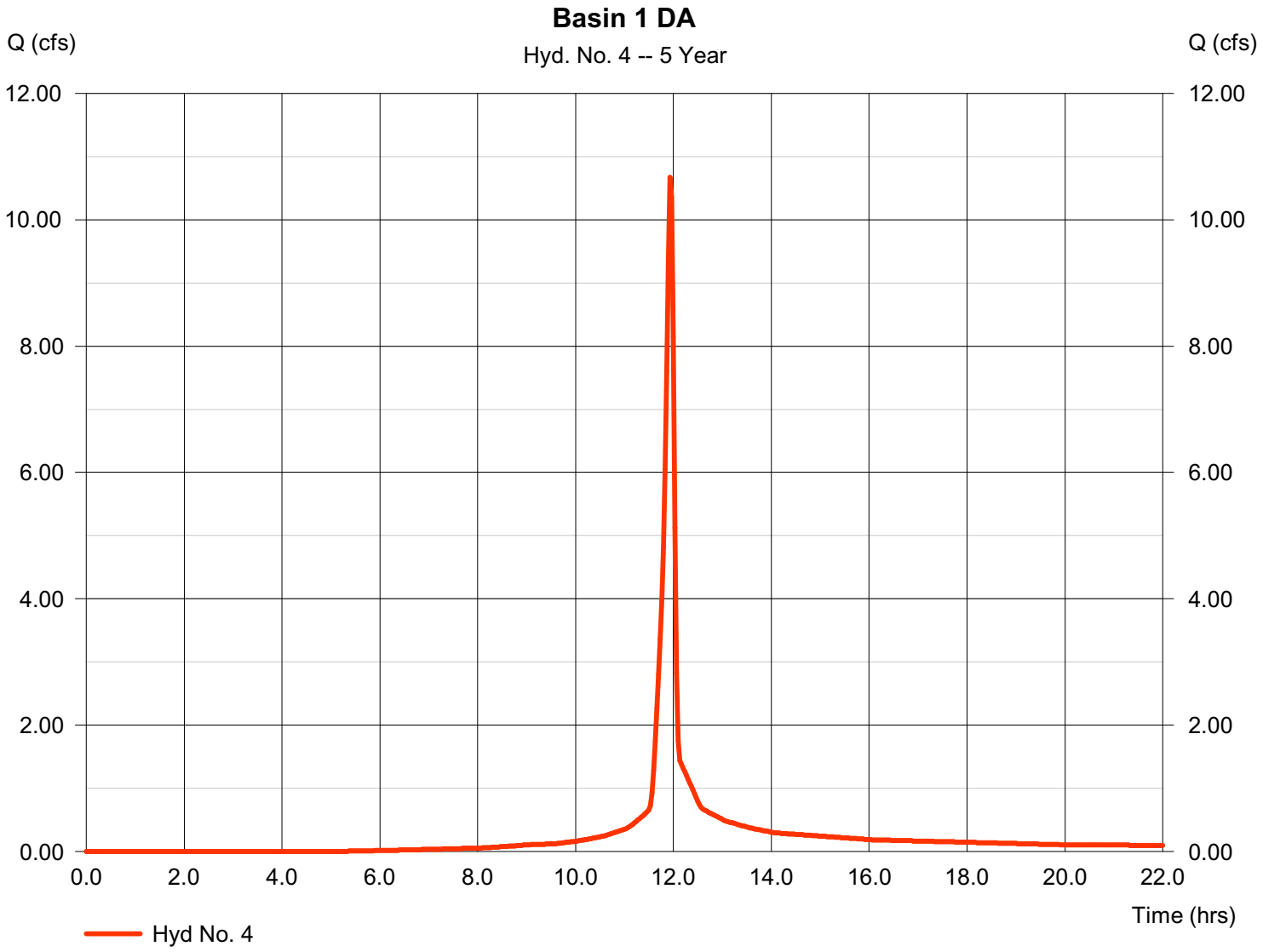
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024 Friday, 04 / 18 / 2025

Hyd. No. 4

Basin 1 DA

Hydrograph type	= SCS Runoff	Peak discharge	= 10.67 cfs
Storm frequency	= 5 yrs	Time to peak	= 11.93 hrs
Time interval	= 2 min	Hyd. volume	= 22,342 cuft
Drainage area	= 2.280 ac	Curve number	= 89
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 5.00 min
Total precip.	= 4.06 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484



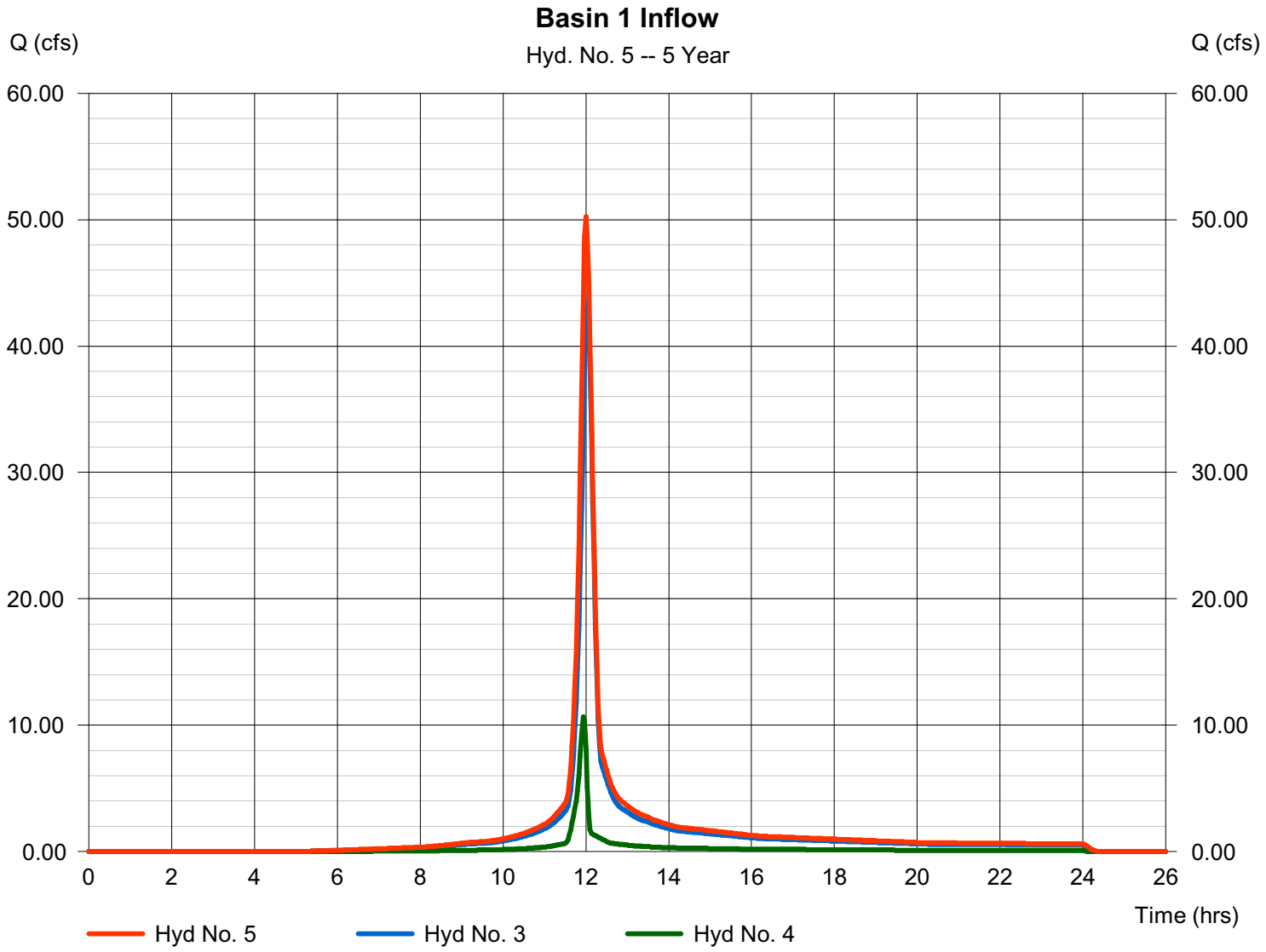
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024 Friday, 04 / 18 / 2025

Hyd. No. 5

Basin 1 Inflow

Hydrograph type	= Combine	Peak discharge	= 50.24 cfs
Storm frequency	= 5 yrs	Time to peak	= 12.00 hrs
Time interval	= 2 min	Hyd. volume	= 146,978 cuft
Inflow hyds.	= 3, 4	Contrib. drain. area	= 14.510 ac



Hydrograph Report

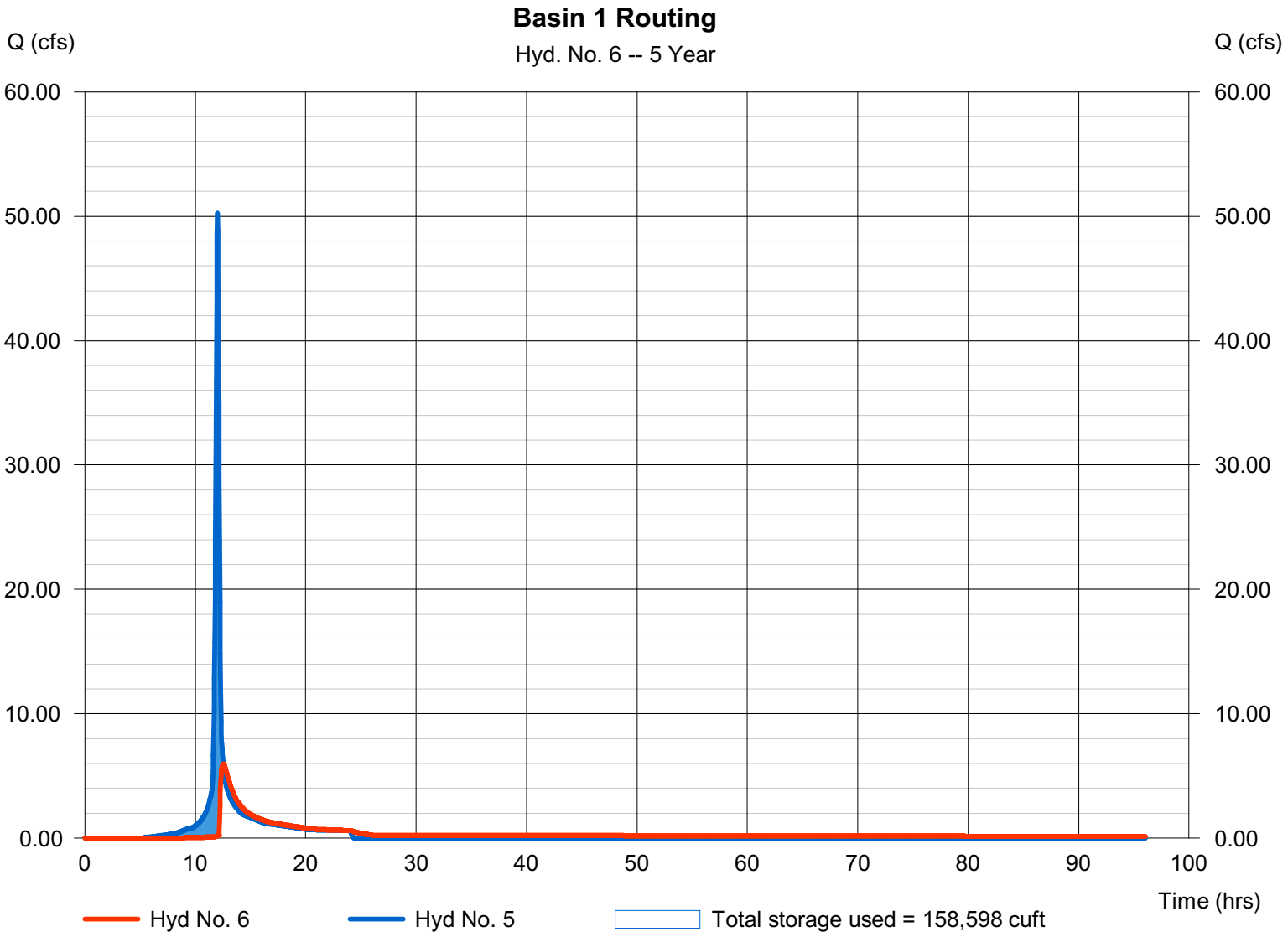
Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024 Friday, 04 / 18 / 2025

Hyd. No. 6

Basin 1 Routing

Hydrograph type	= Reservoir	Peak discharge	= 5.976 cfs
Storm frequency	= 5 yrs	Time to peak	= 12.53 hrs
Time interval	= 2 min	Hyd. volume	= 119,081 cuft
Inflow hyd. No.	= 5 - Basin 1 Inflow	Max. Elevation	= 534.06 ft
Reservoir name	= Sediment Basin 1	Max. Storage	= 158,598 cuft

Storage Indication method used. Wet pond routing start elevation = 530.30 ft.



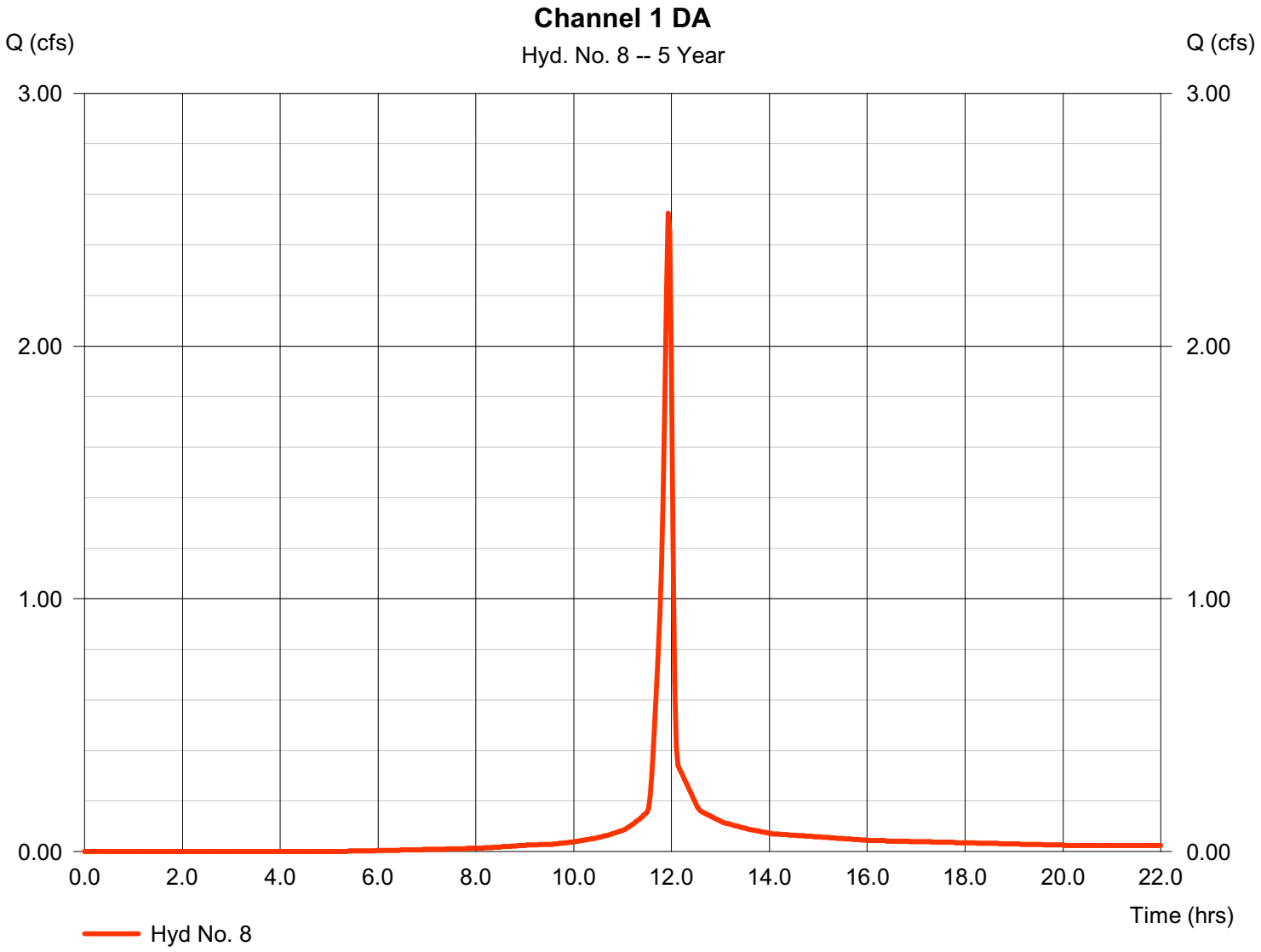
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024 Friday, 04 / 18 / 2025

Hyd. No. 8

Channel 1 DA

Hydrograph type	=	SCS Runoff	Peak discharge	=	2.526 cfs
Storm frequency	=	5 yrs	Time to peak	=	11.93 hrs
Time interval	=	2 min	Hyd. volume	=	5,291 cuft
Drainage area	=	0.540 ac	Curve number	=	89
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	5.00 min
Total precip.	=	4.06 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484



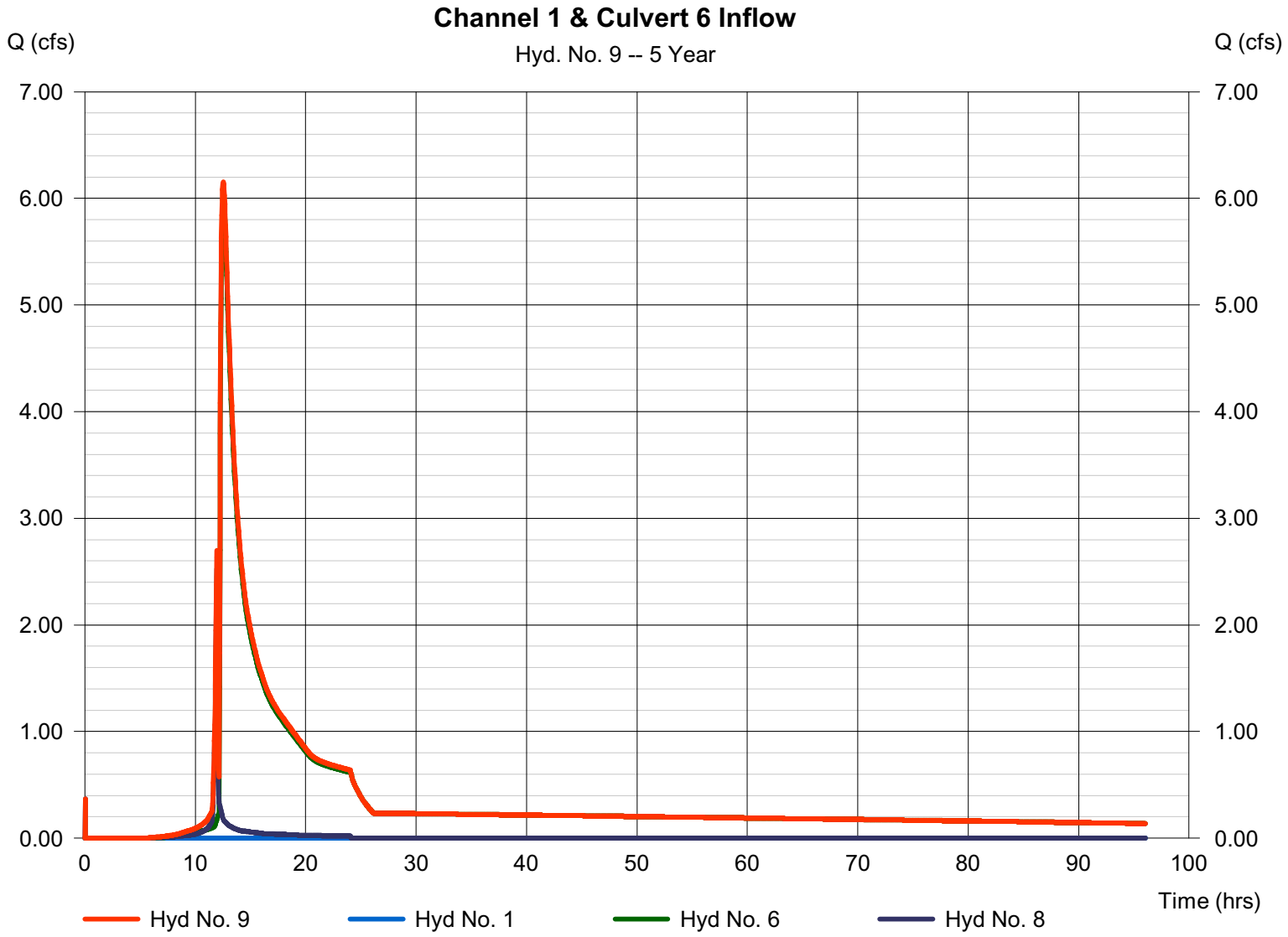
Hydrograph Report

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Hyd. No. 9

Channel 1 & Culvert 6 Inflow

Hydrograph type	= Combine	Peak discharge	= 6.151 cfs
Storm frequency	= 5 yrs	Time to peak	= 12.53 hrs
Time interval	= 2 min	Hyd. volume	= 124,417 cuft
Inflow hyds.	= 1, 6, 8	Contrib. drain. area	= 0.540 ac



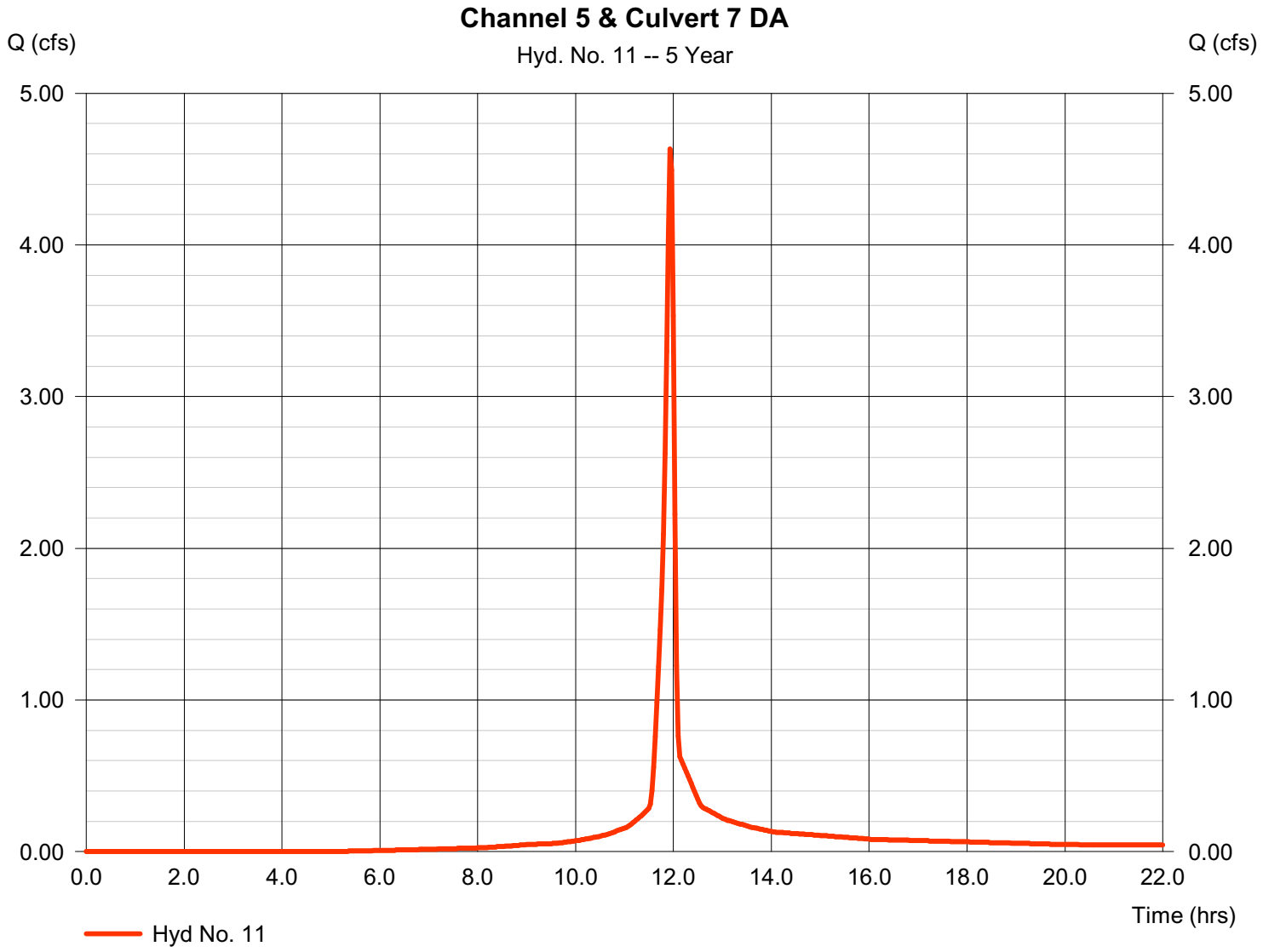
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024 Friday, 04 / 18 / 2025

Hyd. No. 11

Channel 5 & Culvert 7 DA

Hydrograph type	= SCS Runoff	Peak discharge	= 4.631 cfs
Storm frequency	= 5 yrs	Time to peak	= 11.93 hrs
Time interval	= 2 min	Hyd. volume	= 9,701 cuft
Drainage area	= 0.990 ac	Curve number	= 89
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 5.00 min
Total precip.	= 4.06 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484



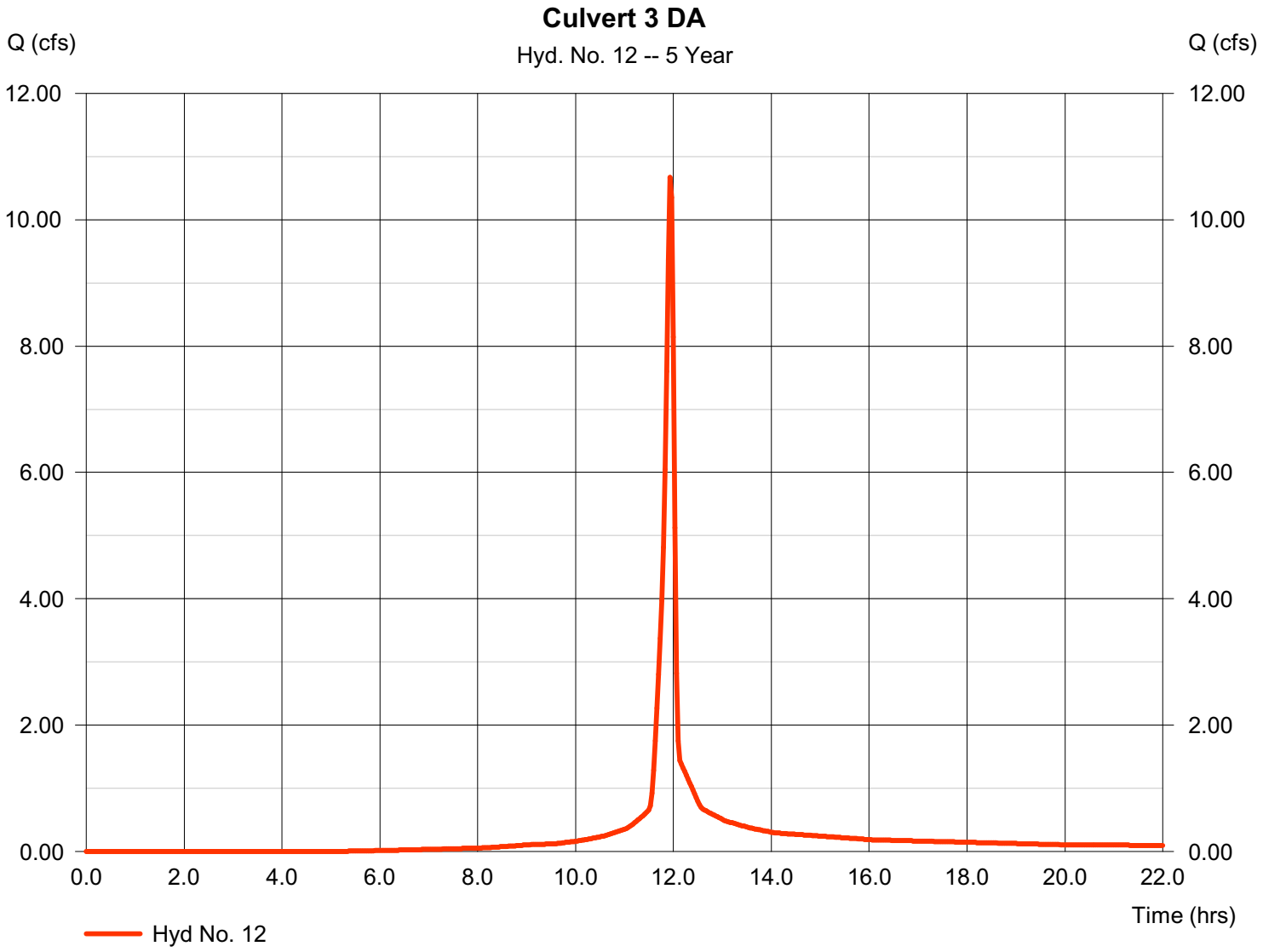
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024 Friday, 04 / 18 / 2025

Hyd. No. 12

Culvert 3 DA

Hydrograph type	= SCS Runoff	Peak discharge	= 10.67 cfs
Storm frequency	= 5 yrs	Time to peak	= 11.93 hrs
Time interval	= 2 min	Hyd. volume	= 22,342 cuft
Drainage area	= 2.280 ac	Curve number	= 89
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 5.00 min
Total precip.	= 4.06 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484



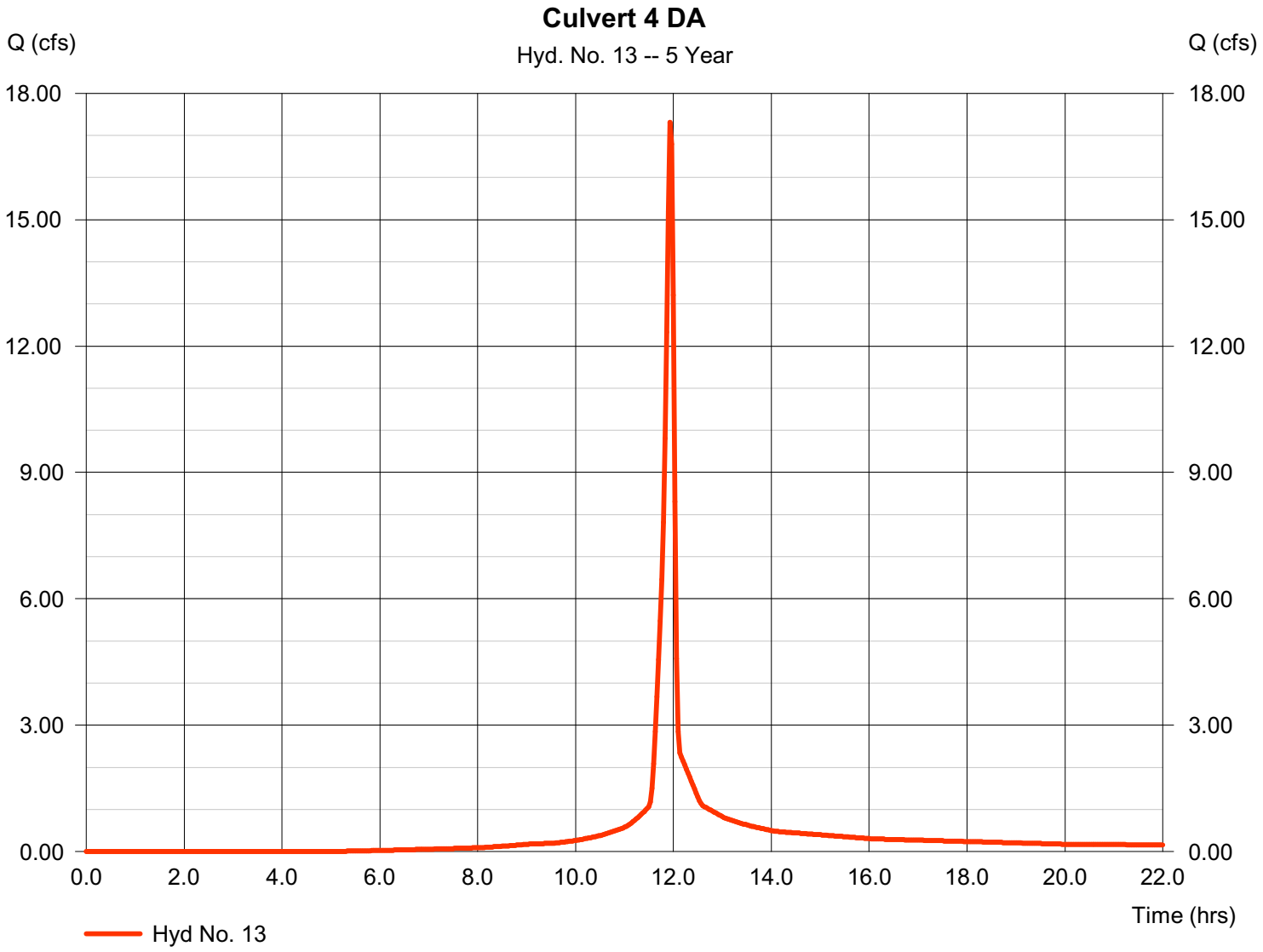
Hydrograph Report

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Hyd. No. 13

Culvert 4 DA

Hydrograph type	= SCS Runoff	Peak discharge	= 17.31 cfs
Storm frequency	= 5 yrs	Time to peak	= 11.93 hrs
Time interval	= 2 min	Hyd. volume	= 36,256 cuft
Drainage area	= 3.700 ac	Curve number	= 89
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 5.00 min
Total precip.	= 4.06 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484



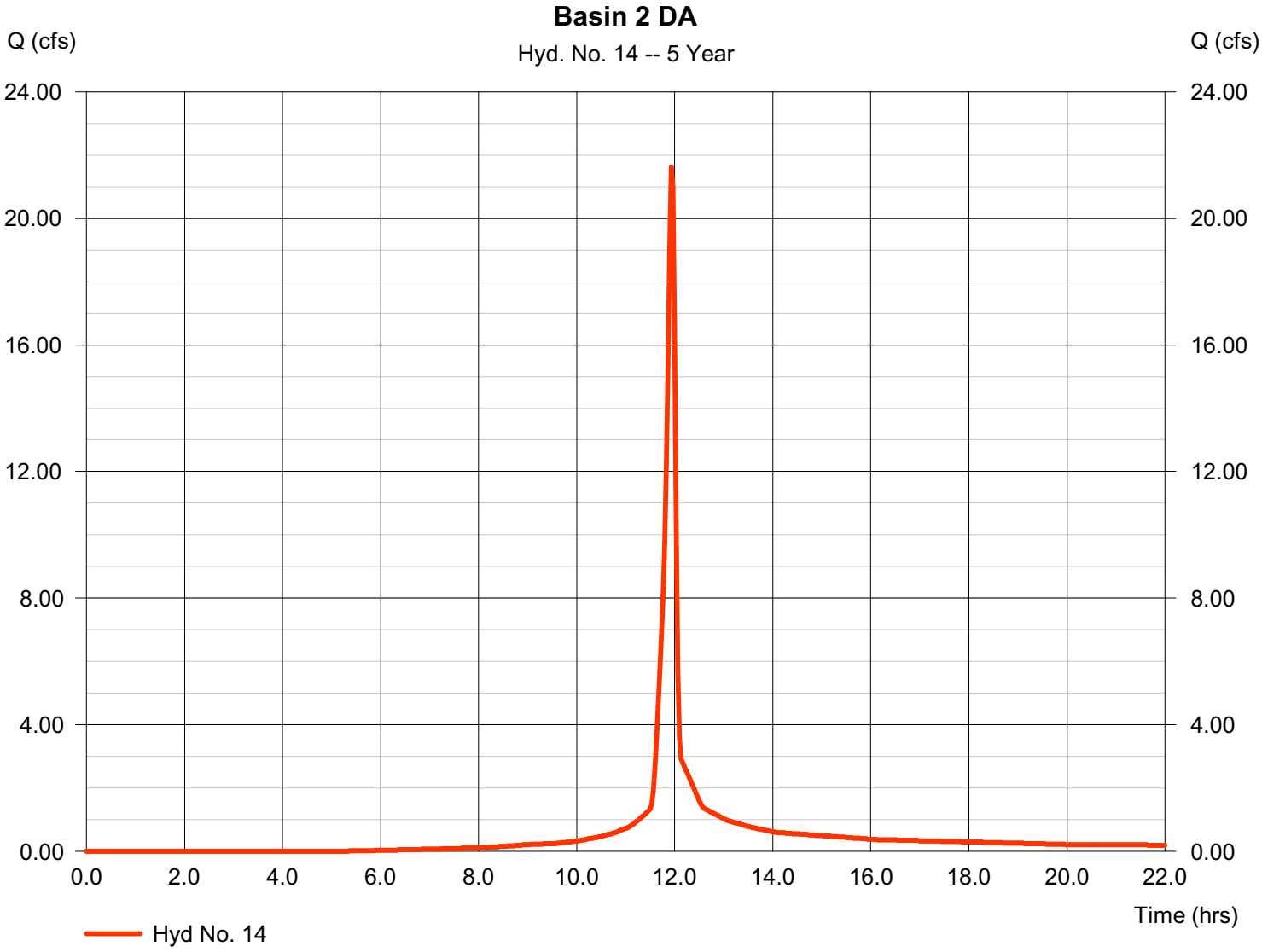
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024 Friday, 04 / 18 / 2025

Hyd. No. 14

Basin 2 DA

Hydrograph type	= SCS Runoff	Peak discharge	= 21.61 cfs
Storm frequency	= 5 yrs	Time to peak	= 11.93 hrs
Time interval	= 2 min	Hyd. volume	= 45,271 cuft
Drainage area	= 4.620 ac	Curve number	= 89
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 5.00 min
Total precip.	= 4.06 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484



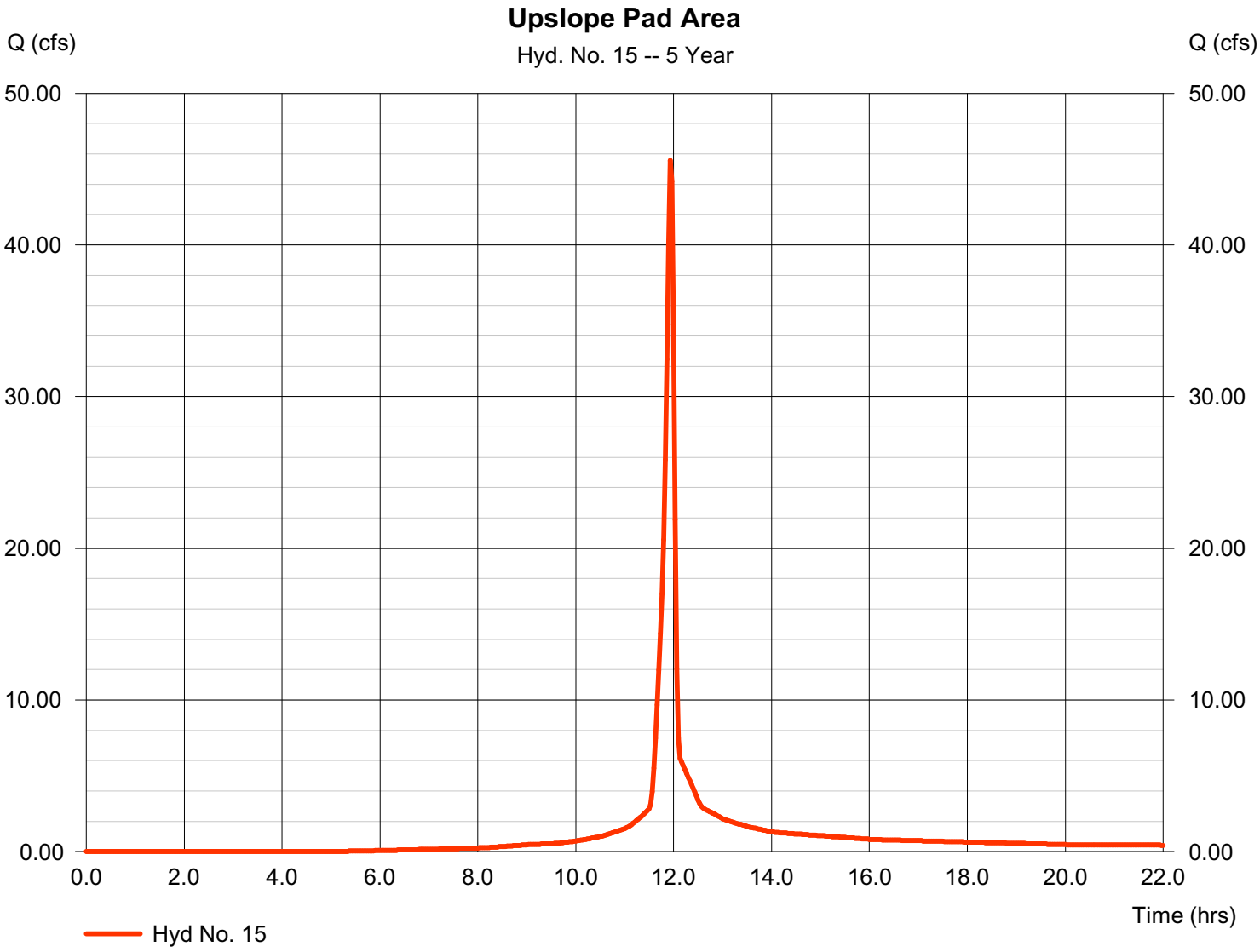
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024 Friday, 04 / 18 / 2025

Hyd. No. 15

Upslope Pad Area

Hydrograph type	= SCS Runoff	Peak discharge	= 45.56 cfs
Storm frequency	= 5 yrs	Time to peak	= 11.93 hrs
Time interval	= 2 min	Hyd. volume	= 95,443 cuft
Drainage area	= 9.740 ac	Curve number	= 89
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 5.00 min
Total precip.	= 4.06 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484



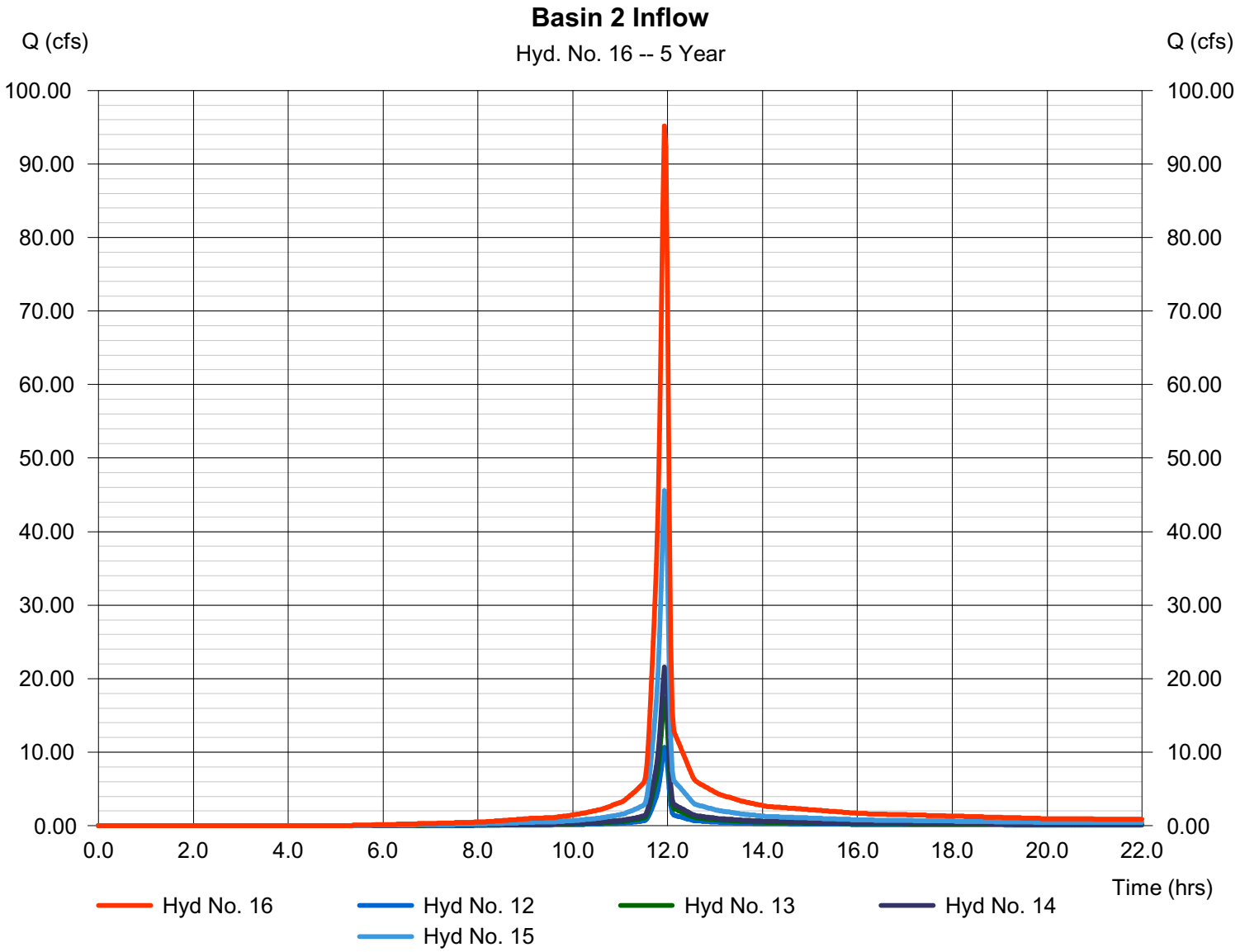
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024 Friday, 04 / 18 / 2025

Hyd. No. 16

Basin 2 Inflow

Hydrograph type	= Combine	Peak discharge	= 95.14 cfs
Storm frequency	= 5 yrs	Time to peak	= 11.93 hrs
Time interval	= 2 min	Hyd. volume	= 199,312 cuft
Inflow hyds.	= 12, 13, 14, 15	Contrib. drain. area	= 20.340 ac



Hydrograph Report

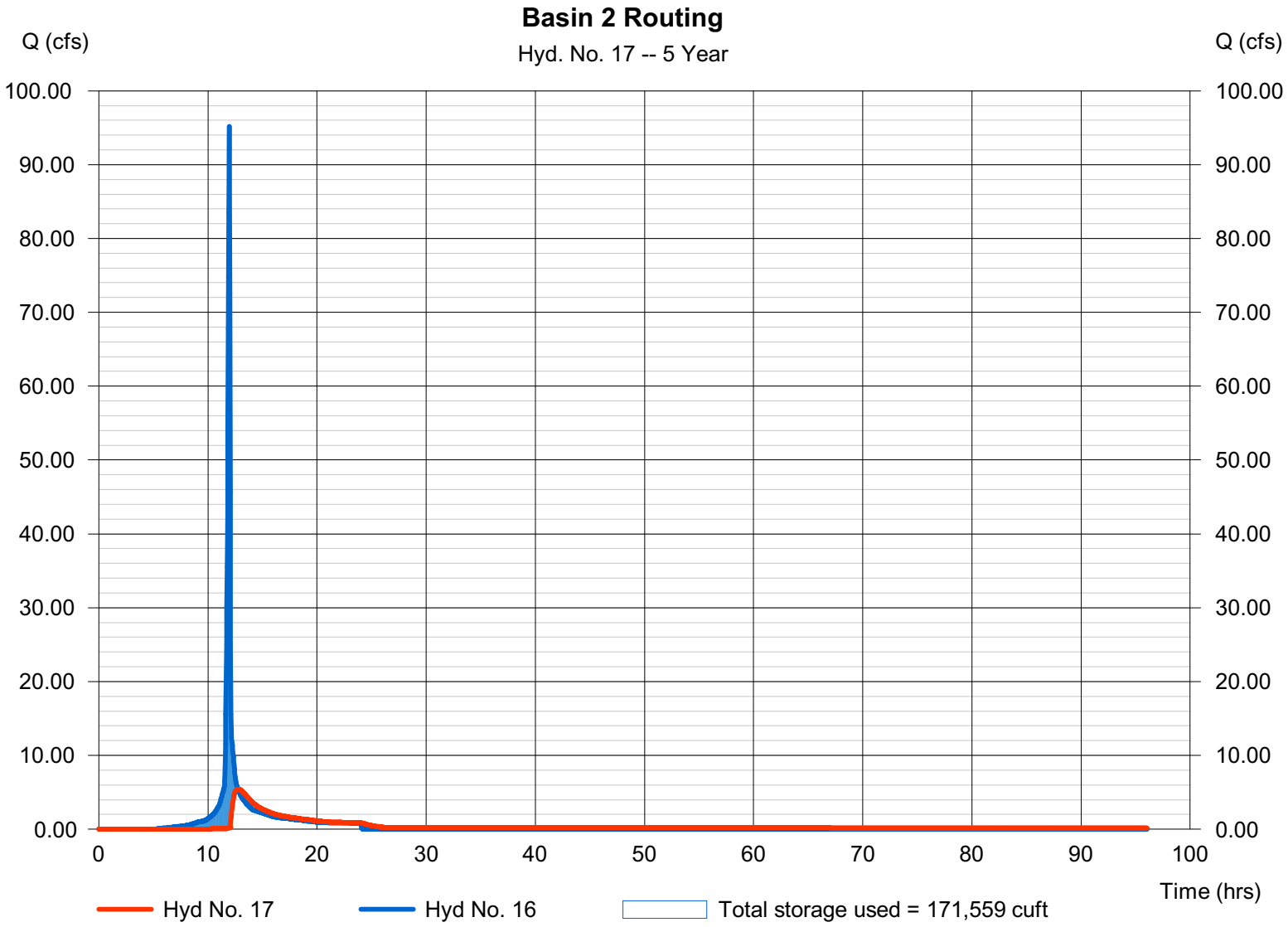
Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024 Friday, 04 / 18 / 2025

Hyd. No. 17

Basin 2 Routing

Hydrograph type	= Reservoir	Peak discharge	= 5.413 cfs
Storm frequency	= 5 yrs	Time to peak	= 12.77 hrs
Time interval	= 2 min	Hyd. volume	= 143,157 cuft
Inflow hyd. No.	= 16 - Basin 2 Inflow	Max. Elevation	= 530.10 ft
Reservoir name	= Sediment Basin 2	Max. Storage	= 171,559 cuft

Storage Indication method used. Wet pond routing start elevation = 526.80 ft.



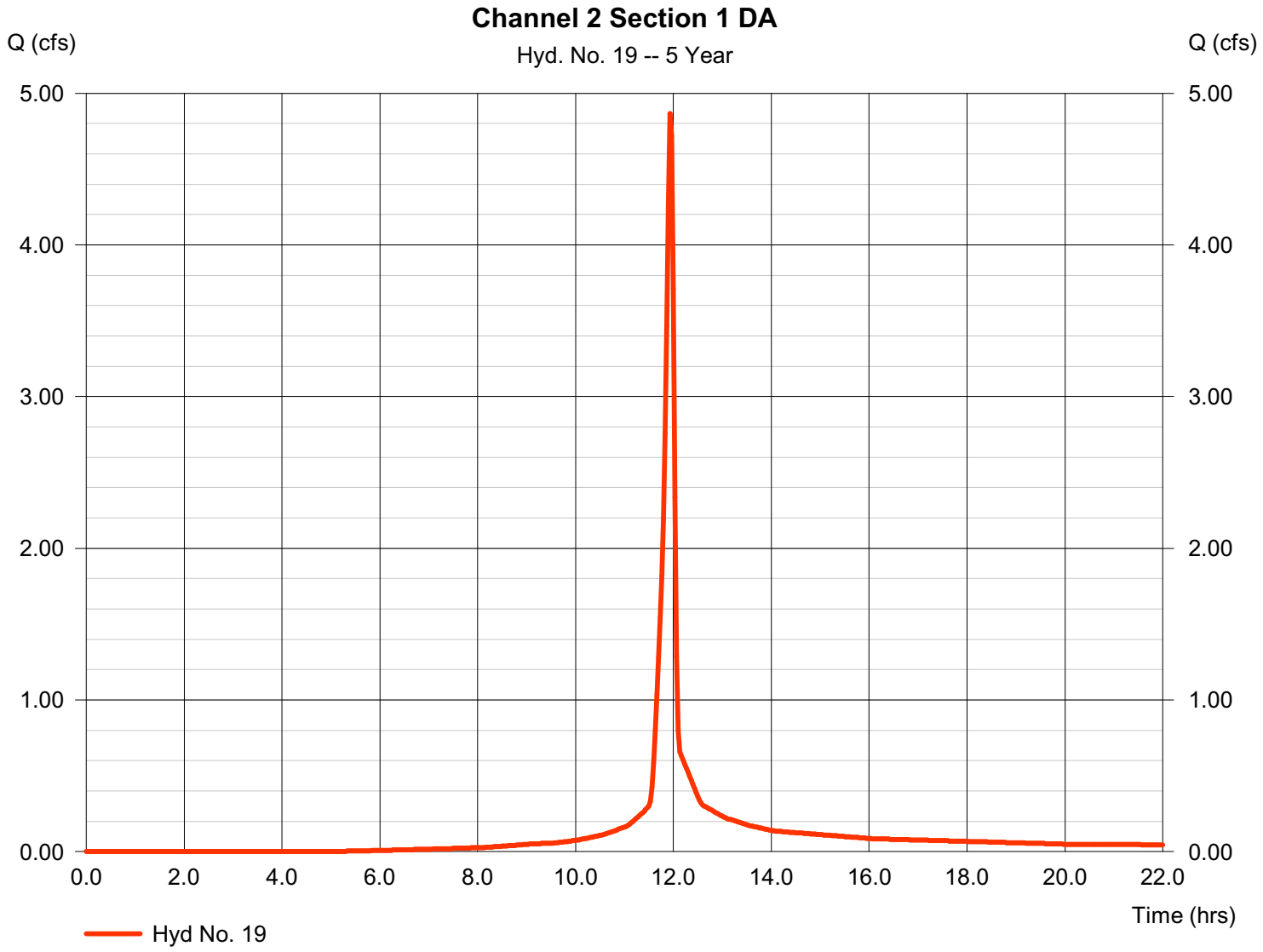
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024 Friday, 04 / 18 / 2025

Hyd. No. 19

Channel 2 Section 1 DA

Hydrograph type	= SCS Runoff	Peak discharge	= 4.865 cfs
Storm frequency	= 5 yrs	Time to peak	= 11.93 hrs
Time interval	= 2 min	Hyd. volume	= 10,191 cuft
Drainage area	= 1.040 ac	Curve number	= 89
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 5.00 min
Total precip.	= 4.06 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484



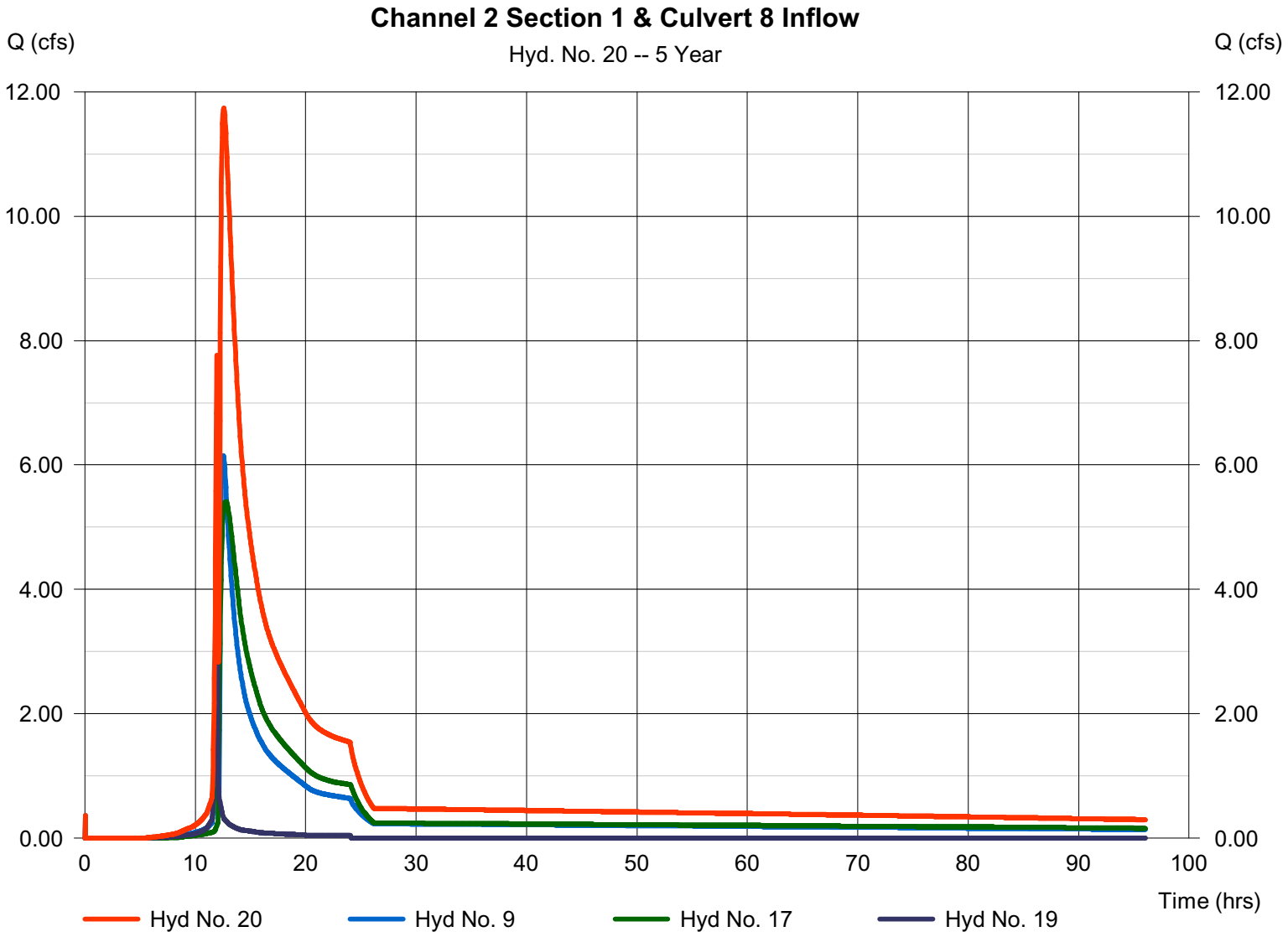
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024 Friday, 04 / 18 / 2025

Hyd. No. 20

Channel 2 Section 1 & Culvert 8 Inflow

Hydrograph type	= Combine	Peak discharge	= 11.74 cfs
Storm frequency	= 5 yrs	Time to peak	= 12.57 hrs
Time interval	= 2 min	Hyd. volume	= 277,765 cuft
Inflow hyds.	= 9, 17, 19	Contrib. drain. area	= 1.040 ac



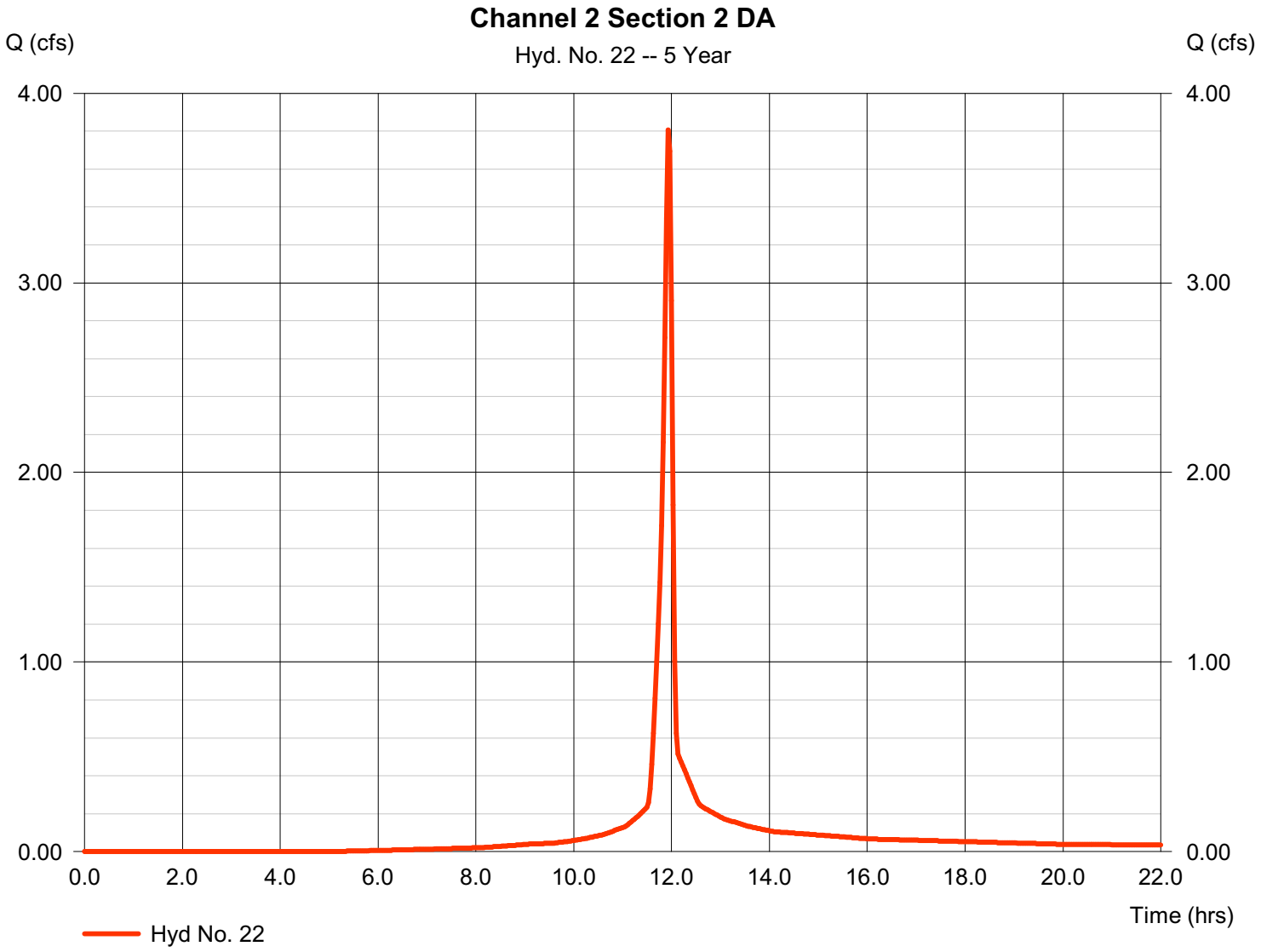
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024 Friday, 04 / 18 / 2025

Hyd. No. 22

Channel 2 Section 2 DA

Hydrograph type	= SCS Runoff	Peak discharge	= 3.808 cfs
Storm frequency	= 5 yrs	Time to peak	= 11.93 hrs
Time interval	= 2 min	Hyd. volume	= 7,976 cuft
Drainage area	= 0.814 ac	Curve number	= 89
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 5.00 min
Total precip.	= 4.06 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484



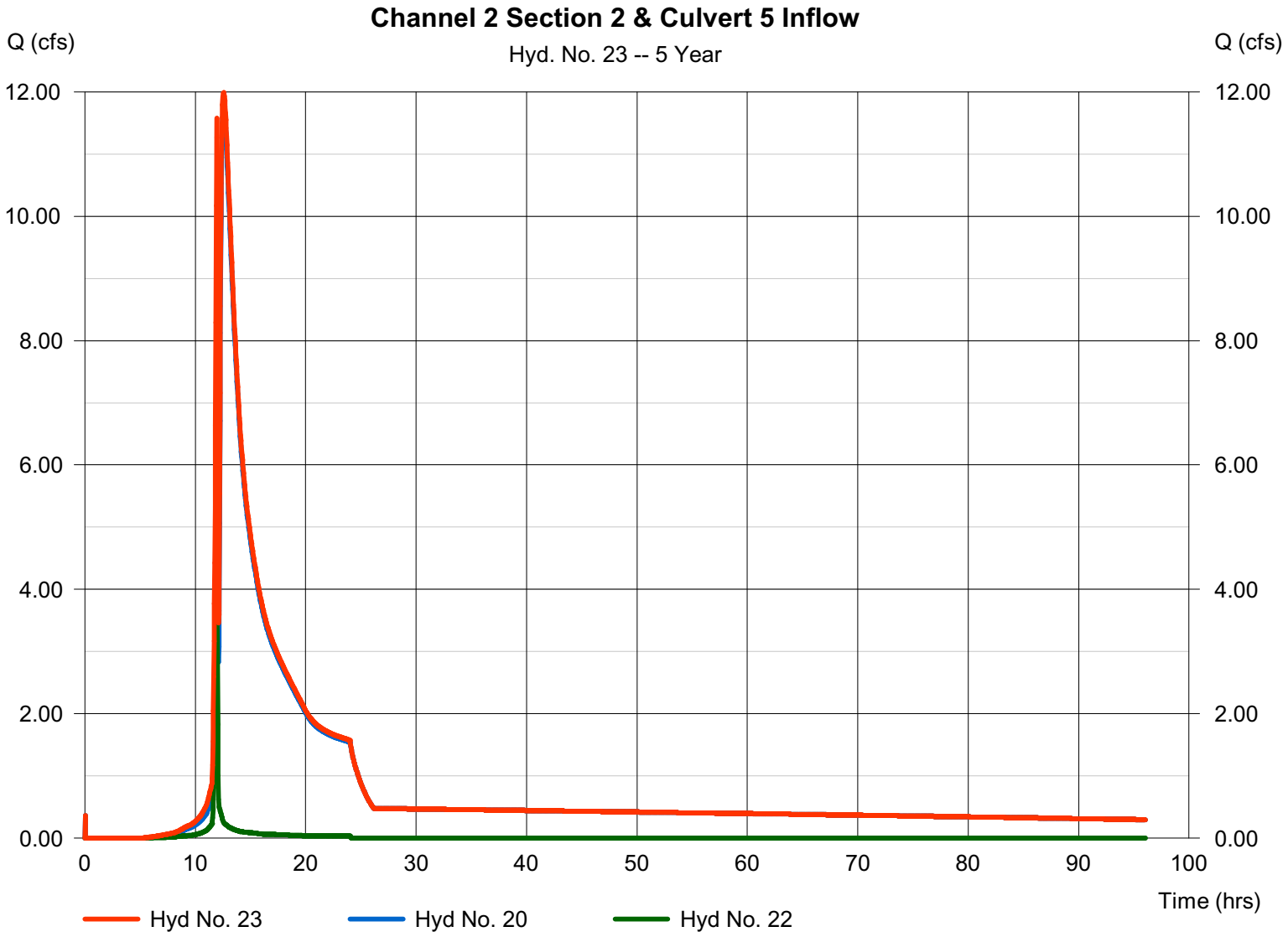
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024 Friday, 04 / 18 / 2025

Hyd. No. 23

Channel 2 Section 2 & Culvert 5 Inflow

Hydrograph type	=	Combine	Peak discharge	=	11.99 cfs
Storm frequency	=	5 yrs	Time to peak	=	12.57 hrs
Time interval	=	2 min	Hyd. volume	=	285,742 cuft
Inflow hyds.	=	20, 22	Contrib. drain. area	=	0.814 ac



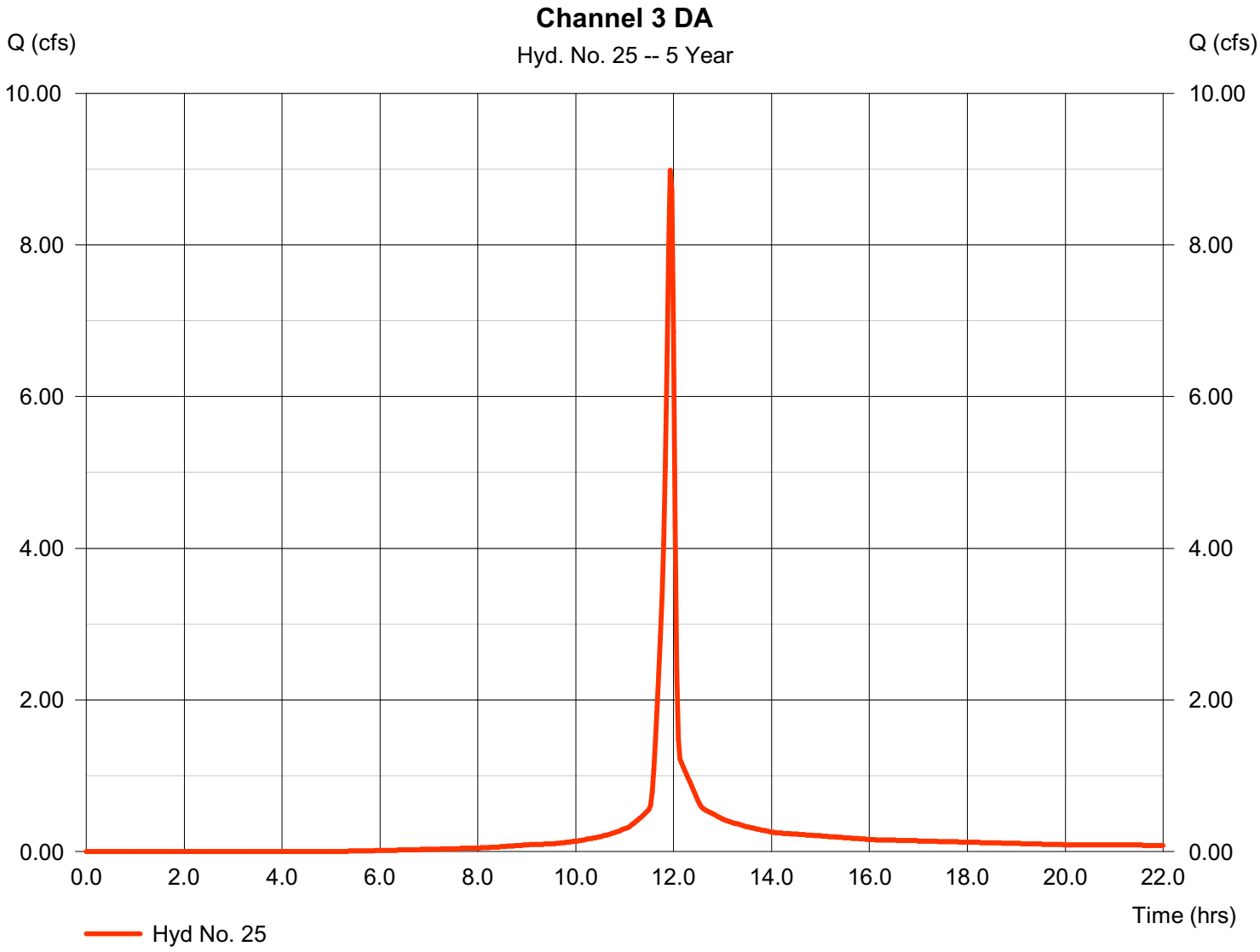
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024 Friday, 04 / 18 / 2025

Hyd. No. 25

Channel 3 DA

Hydrograph type	= SCS Runoff	Peak discharge	= 8.981 cfs
Storm frequency	= 5 yrs	Time to peak	= 11.93 hrs
Time interval	= 2 min	Hyd. volume	= 18,814 cuft
Drainage area	= 1.920 ac	Curve number	= 89
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 5.00 min
Total precip.	= 4.06 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484



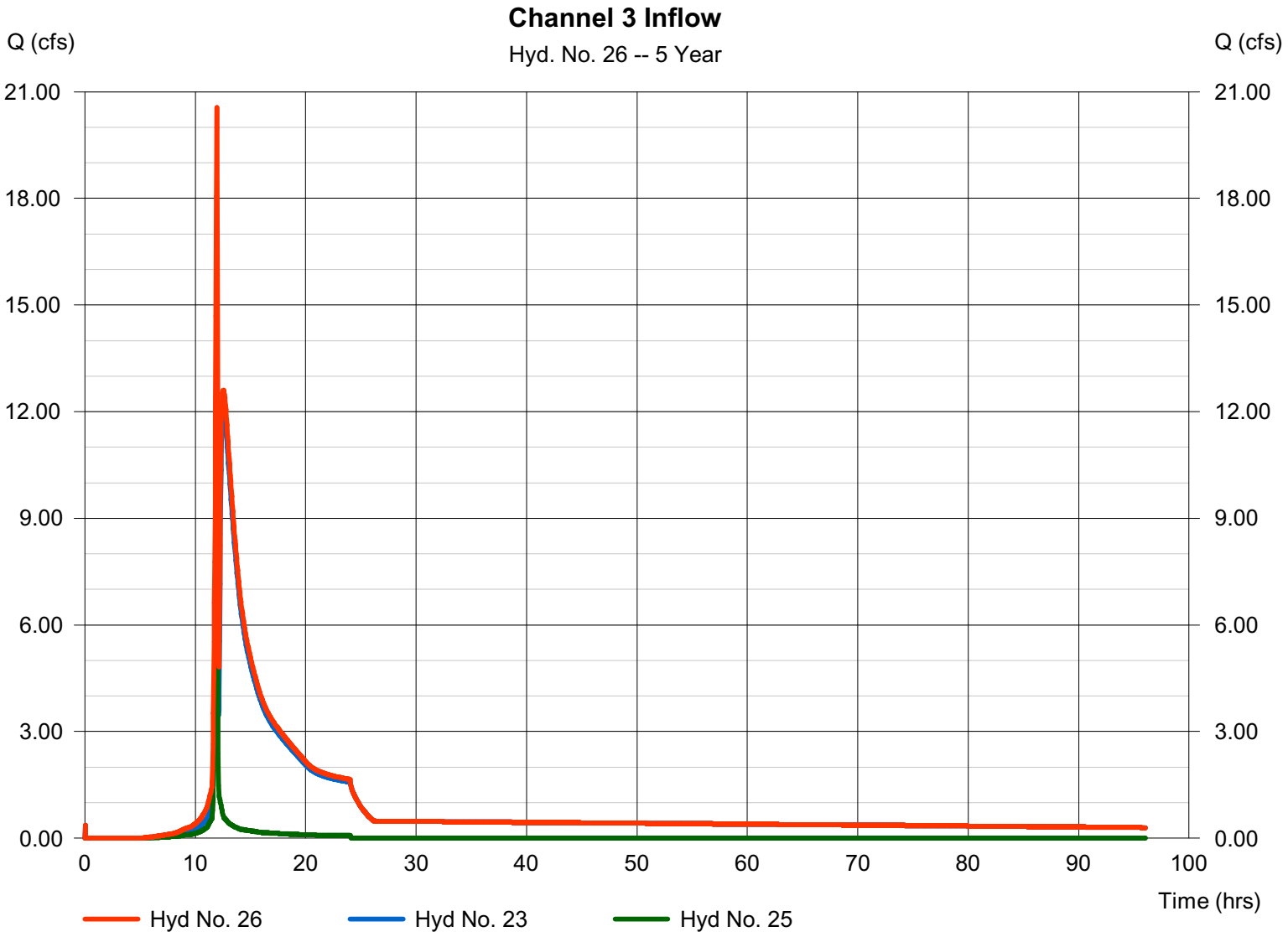
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024 Friday, 04 / 18 / 2025

Hyd. No. 26

Channel 3 Inflow

Hydrograph type	= Combine	Peak discharge	= 20.55 cfs
Storm frequency	= 5 yrs	Time to peak	= 11.93 hrs
Time interval	= 2 min	Hyd. volume	= 304,556 cuft
Inflow hyds.	= 23, 25	Contrib. drain. area	= 1.920 ac



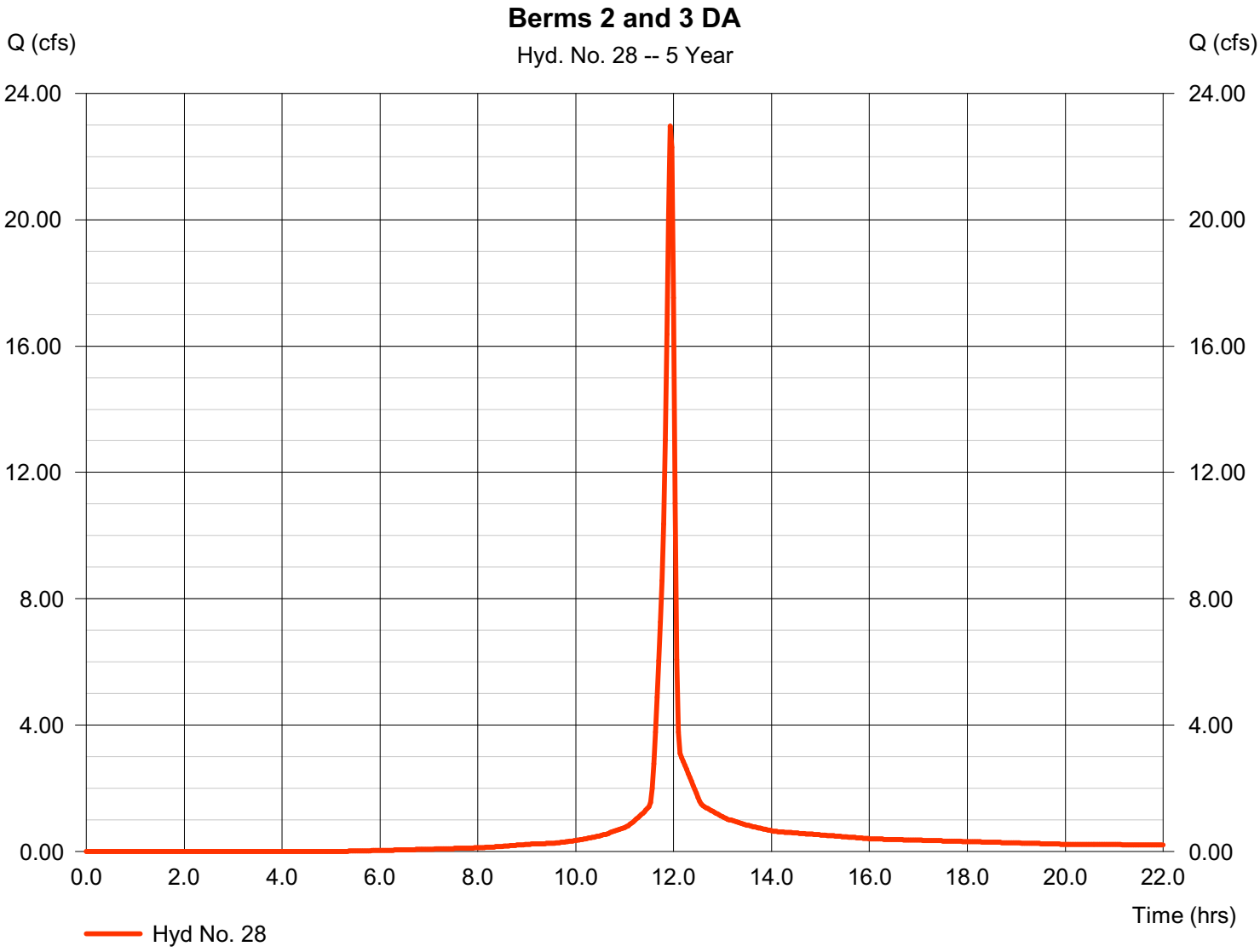
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024 Friday, 04 / 18 / 2025

Hyd. No. 28

Berms 2 and 3 DA

Hydrograph type	= SCS Runoff	Peak discharge	= 22.97 cfs
Storm frequency	= 5 yrs	Time to peak	= 11.93 hrs
Time interval	= 2 min	Hyd. volume	= 48,113 cuft
Drainage area	= 4.910 ac	Curve number	= 89
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 5.00 min
Total precip.	= 4.06 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484



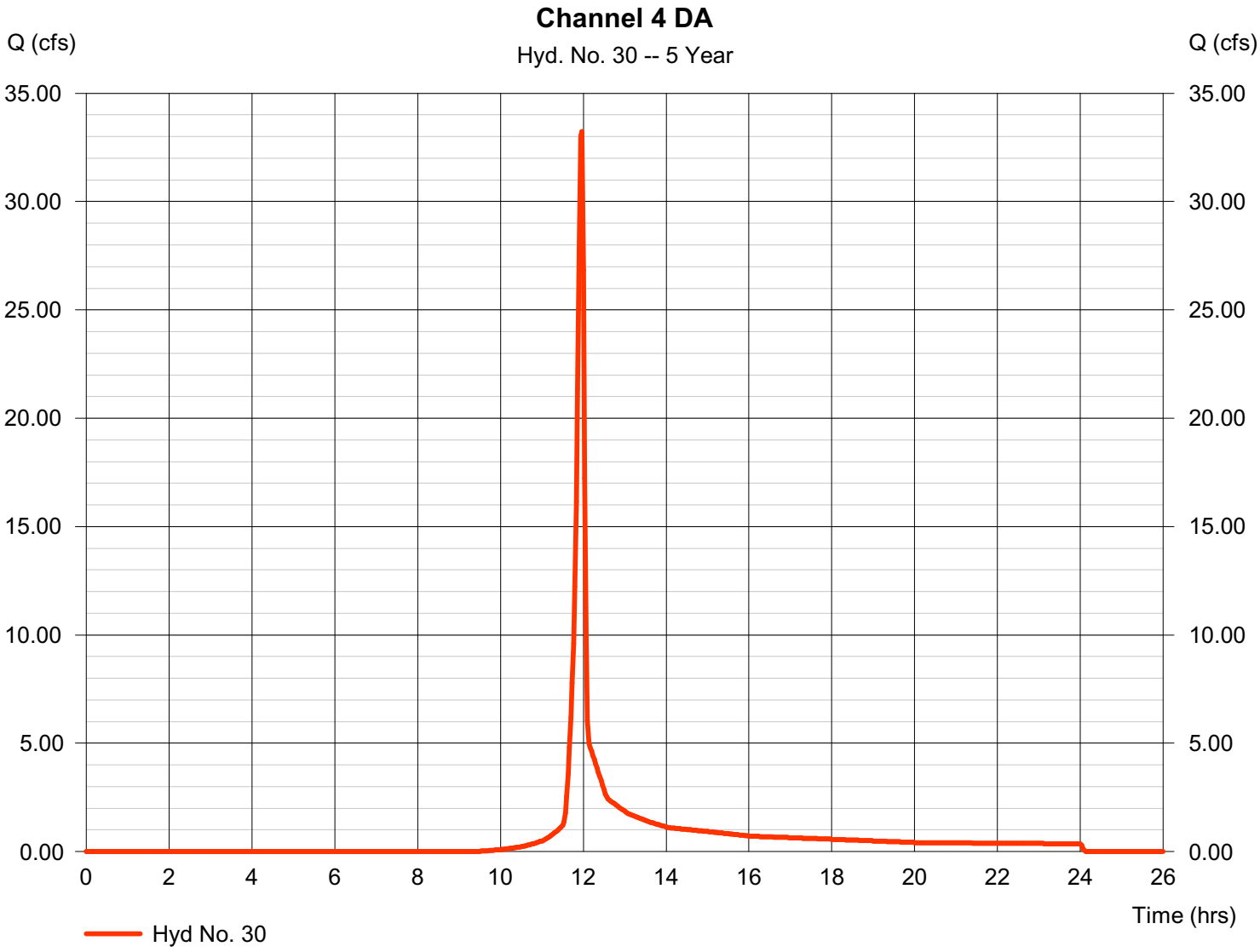
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024 Friday, 04 / 18 / 2025

Hyd. No. 30

Channel 4 DA

Hydrograph type	= SCS Runoff	Peak discharge	= 33.22 cfs
Storm frequency	= 5 yrs	Time to peak	= 11.97 hrs
Time interval	= 2 min	Hyd. volume	= 66,745 cuft
Drainage area	= 10.990 ac	Curve number	= 76
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= TR55	Time of conc. (Tc)	= 6.00 min
Total precip.	= 4.06 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484



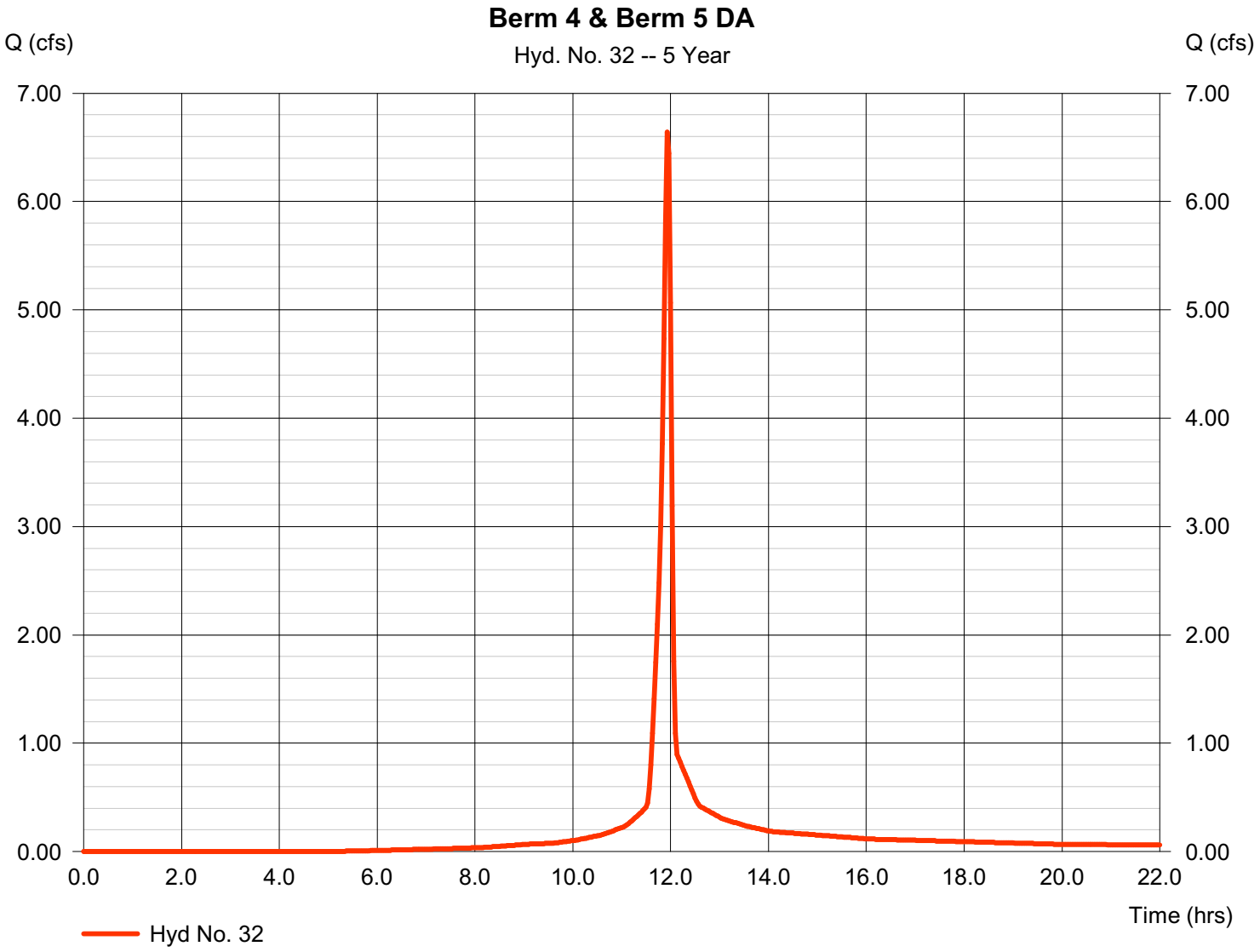
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024 Friday, 04 / 18 / 2025

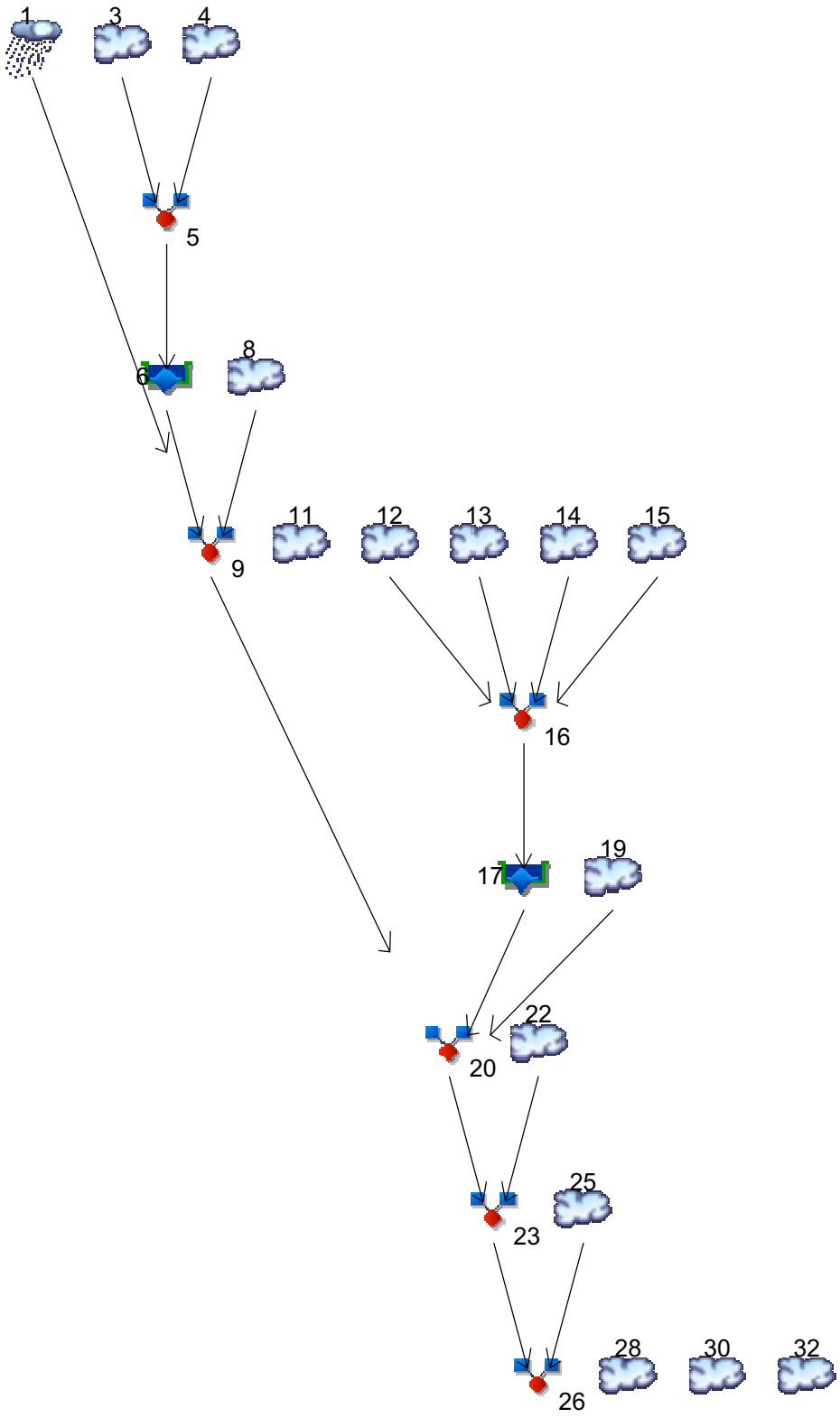
Hyd. No. 32

Berm 4 & Berm 5 DA

Hydrograph type	= SCS Runoff	Peak discharge	= 6.642 cfs
Storm frequency	= 5 yrs	Time to peak	= 11.93 hrs
Time interval	= 2 min	Hyd. volume	= 13,915 cuft
Drainage area	= 1.420 ac	Curve number	= 89
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 5.00 min
Total precip.	= 4.06 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484



Watershed Model Schematic



Hydrograph Summary Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024

Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	Manual	0.368	2	2	44	------	------	------	Clarifying Pond Discharge
3	SCS Runoff	52.99	2	722	152,928	------	------	------	Culvert 2 & Berm 1 DA
4	SCS Runoff	12.93	2	716	27,413	------	------	------	Basin 1 DA
5	Combine	61.12	2	720	180,341	3, 4	------	------	Basin 1 Inflow
6	Reservoir	15.26	2	738	152,388	5	534.50	169,968	Basin 1 Routing
8	SCS Runoff	3.063	2	716	6,493	------	------	------	Channel 1 DA
9	Combine	15.58	2	738	158,925	1, 6, 8	------	------	Channel 1 & Culvert 6 Inflow
11	SCS Runoff	5.616	2	716	11,903	------	------	------	Channel 5 & Culvert 7 DA
12	SCS Runoff	12.93	2	716	27,413	------	------	------	Culvert 3 DA
13	SCS Runoff	20.99	2	716	44,486	------	------	------	Culvert 4 DA
14	SCS Runoff	26.21	2	716	55,548	------	------	------	Basin 2 DA
15	SCS Runoff	55.25	2	716	117,108	------	------	------	Upslope Pad Area
16	Combine	115.39	2	716	244,556	12, 13, 14, 15	------	------	Basin 2 Inflow
17	Reservoir	16.08	2	728	188,301	16	530.42	185,178	Basin 2 Routing
19	SCS Runoff	5.900	2	716	12,504	------	------	------	Channel 2 Section 1 DA
20	Combine	31.61	2	736	359,730	9, 17, 19	------	------	Channel 2 Section 1 & Culvert 8 Inflo
22	SCS Runoff	4.618	2	716	9,787	------	------	------	Channel 2 Section 2 DA
23	Combine	32.15	2	734	369,517	20, 22	------	------	Channel 2 Section 2 & Culvert 5 Inflo
25	SCS Runoff	10.89	2	716	23,085	------	------	------	Channel 3 DA
26	Combine	33.43	2	734	392,602	23, 25	------	------	Channel 3 Inflow
28	SCS Runoff	27.85	2	716	59,035	------	------	------	Berms 2 and 3 DA
30	SCS Runoff	43.18	2	716	87,182	------	------	------	Channel 4 DA
32	SCS Runoff	8.056	2	716	17,073	------	------	------	Berm 4 & Berm 5 DA

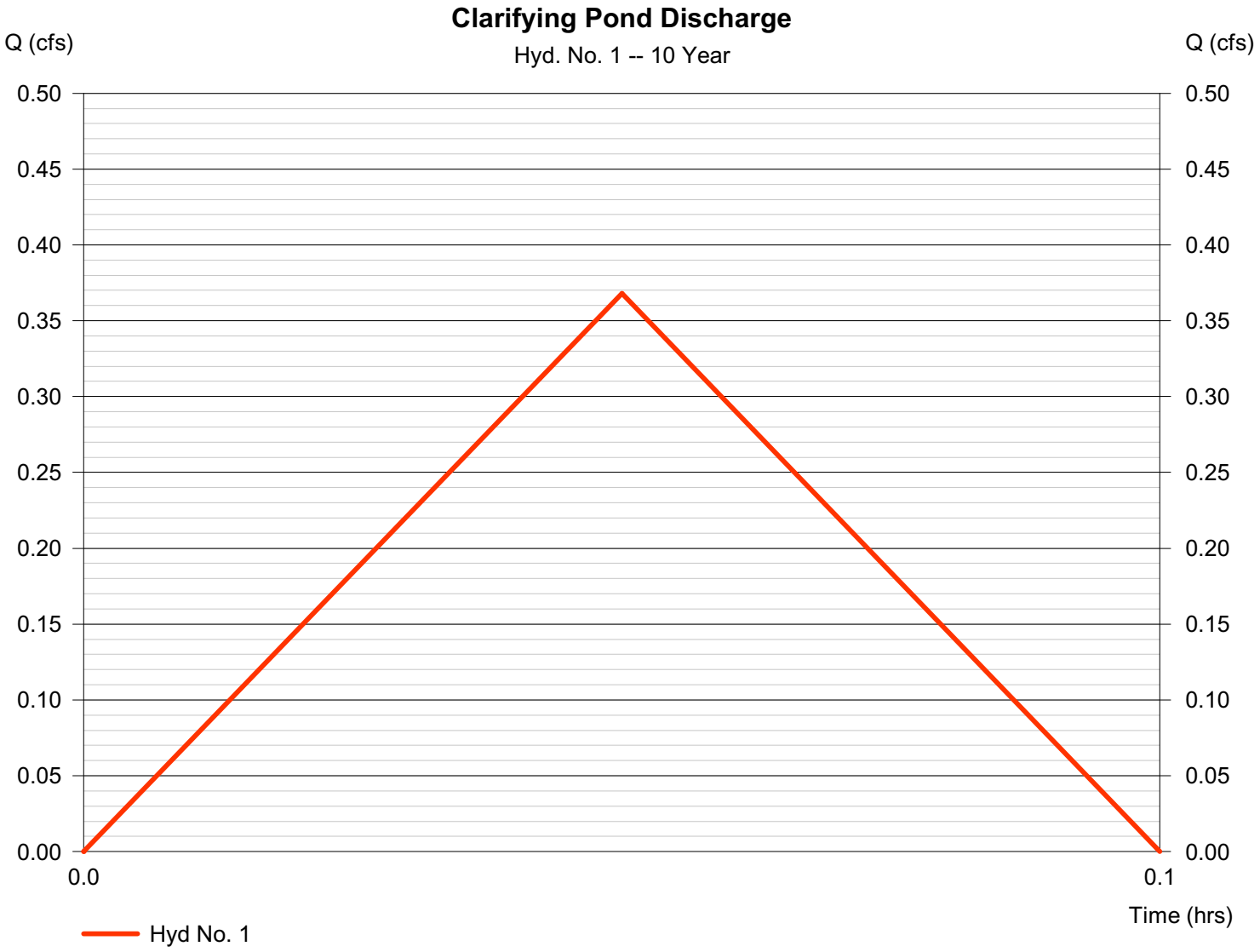
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024 Friday, 04 / 18 / 2025

Hyd. No. 1

Clarifying Pond Discharge

Hydrograph type	= Manual	Peak discharge	= 0.368 cfs
Storm frequency	= 10 yrs	Time to peak	= 0.03 hrs
Time interval	= 2 min	Hyd. volume	= 44 cuft



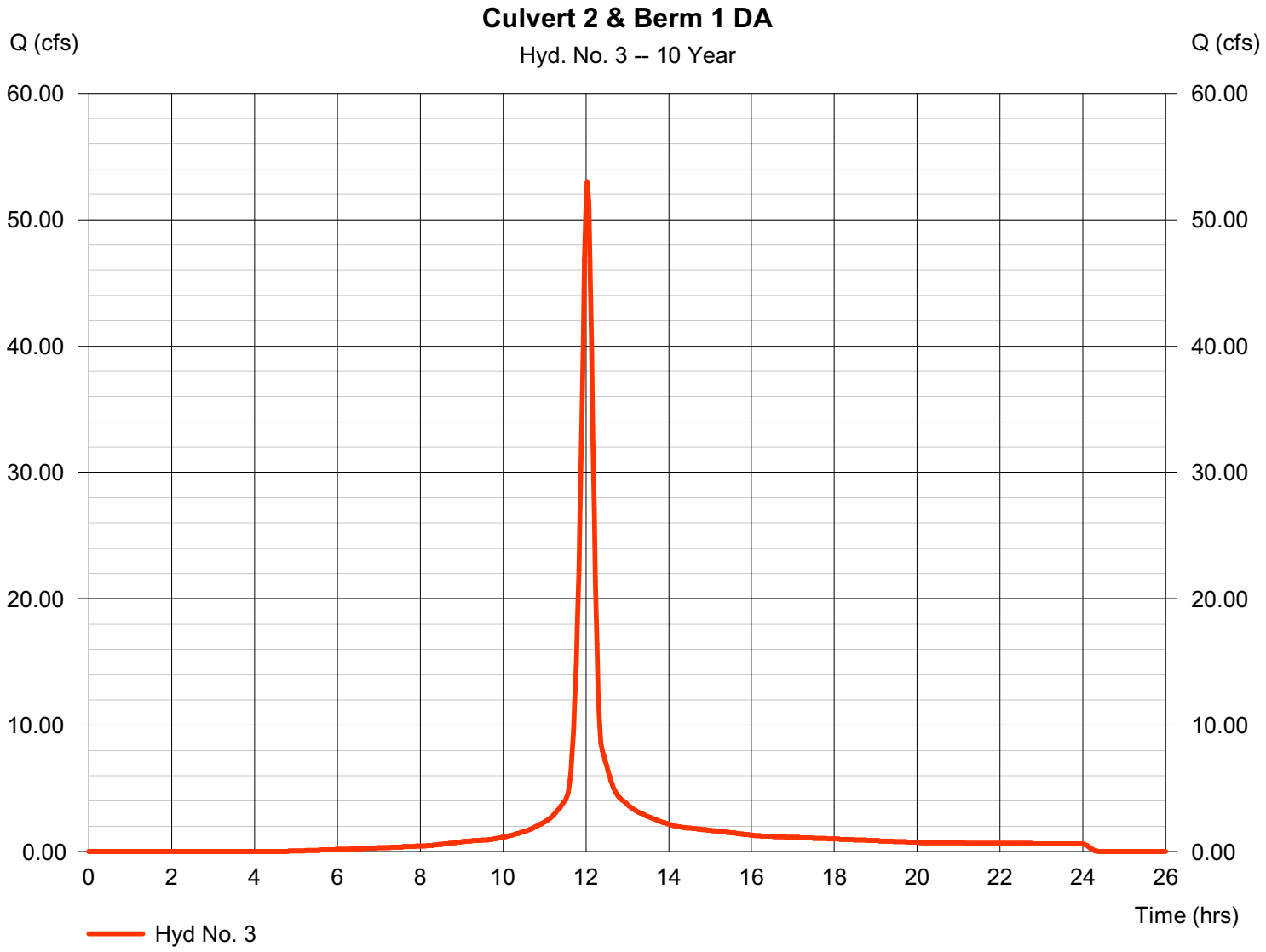
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024 Friday, 04 / 18 / 2025

Hyd. No. 3

Culvert 2 & Berm 1 DA

Hydrograph type	= SCS Runoff	Peak discharge	= 52.99 cfs
Storm frequency	= 10 yrs	Time to peak	= 12.03 hrs
Time interval	= 2 min	Hyd. volume	= 152,928 cuft
Drainage area	= 12.230 ac	Curve number	= 89
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 15.00 min
Total precip.	= 4.75 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484



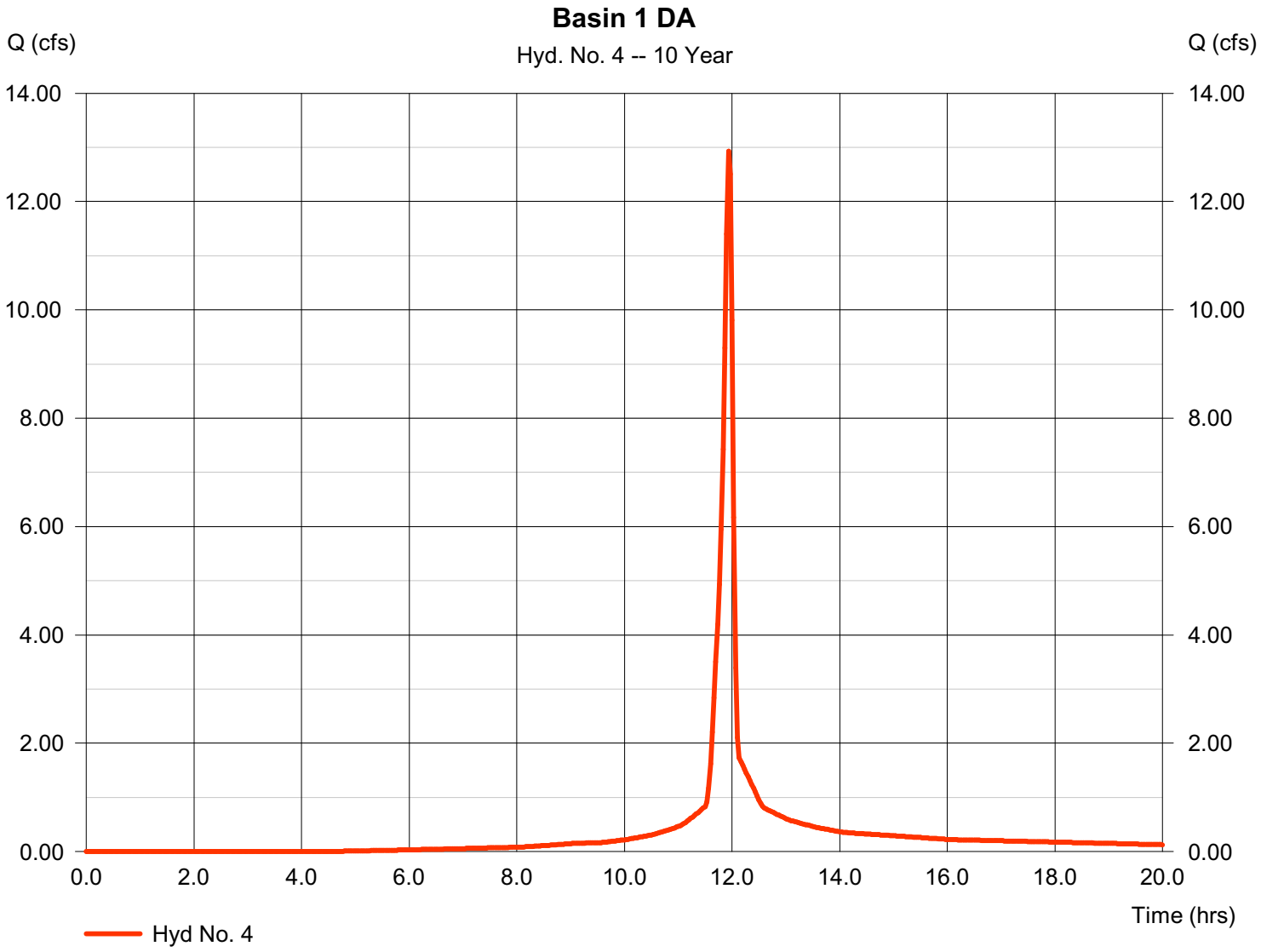
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024 Friday, 04 / 18 / 2025

Hyd. No. 4

Basin 1 DA

Hydrograph type	= SCS Runoff	Peak discharge	= 12.93 cfs
Storm frequency	= 10 yrs	Time to peak	= 11.93 hrs
Time interval	= 2 min	Hyd. volume	= 27,413 cuft
Drainage area	= 2.280 ac	Curve number	= 89
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 5.00 min
Total precip.	= 4.75 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484



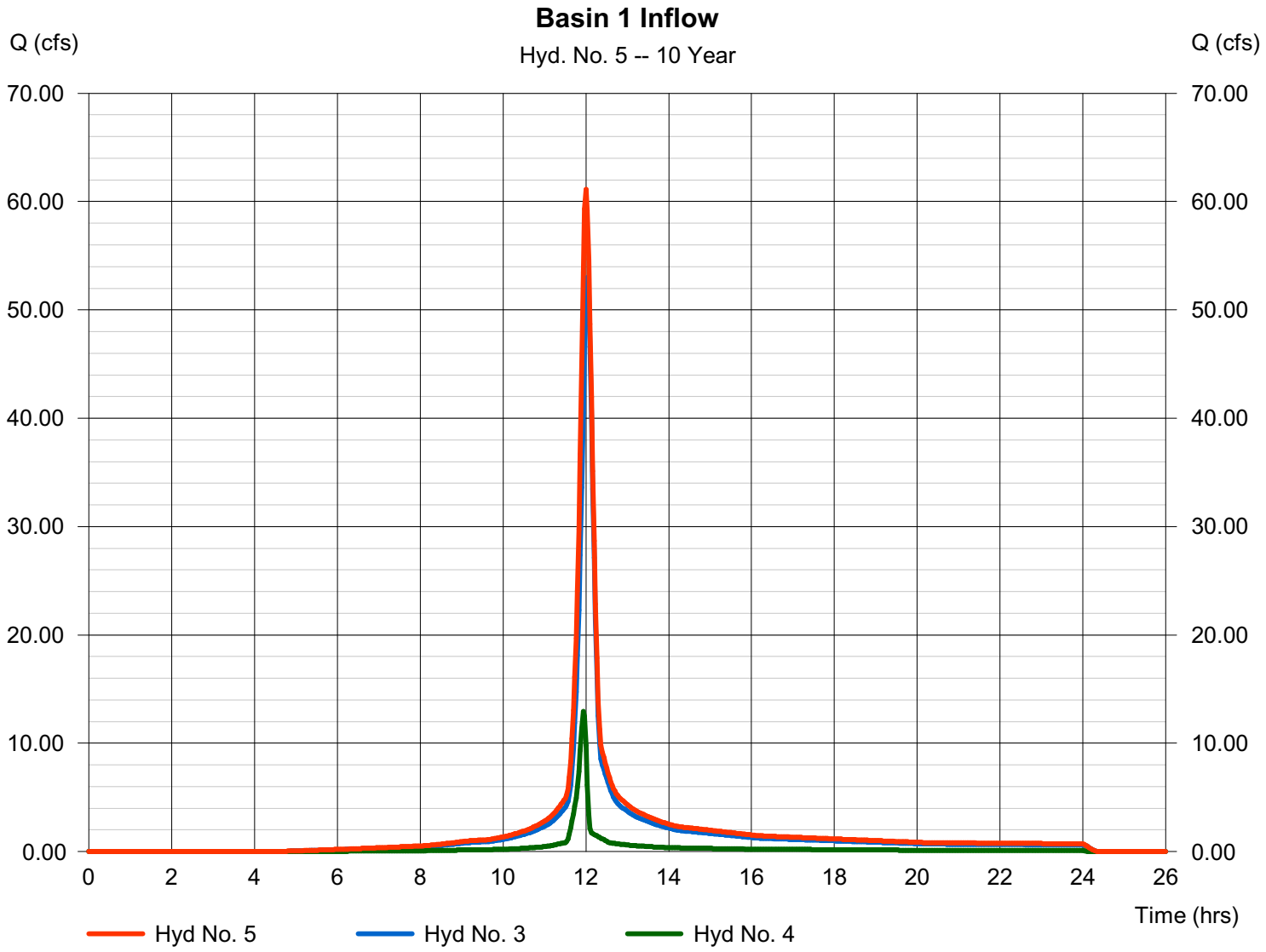
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024 Friday, 04 / 18 / 2025

Hyd. No. 5

Basin 1 Inflow

Hydrograph type	= Combine	Peak discharge	= 61.12 cfs
Storm frequency	= 10 yrs	Time to peak	= 12.00 hrs
Time interval	= 2 min	Hyd. volume	= 180,341 cuft
Inflow hyds.	= 3, 4	Contrib. drain. area	= 14.510 ac



Hydrograph Report

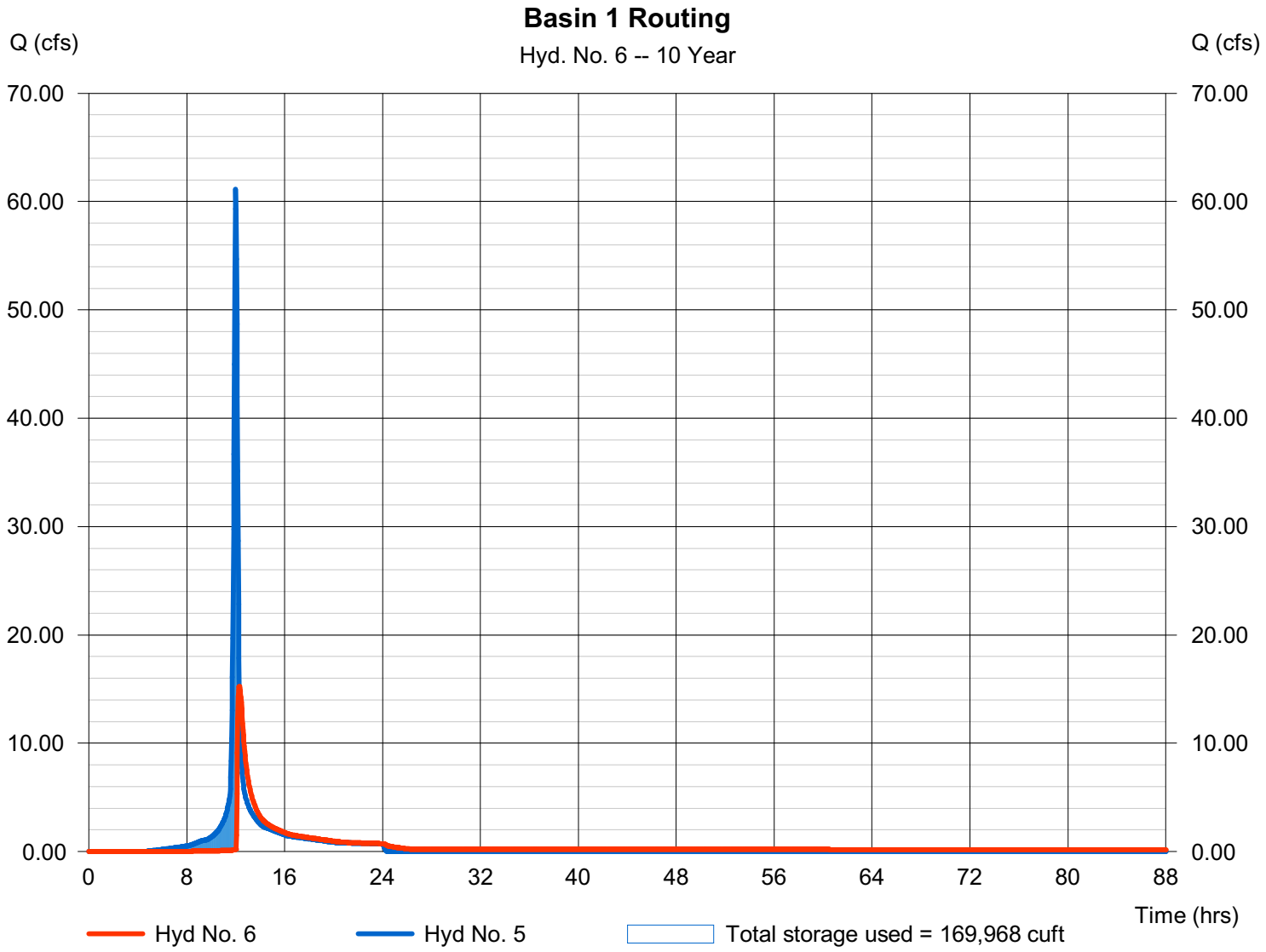
Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024 Friday, 04 / 18 / 2025

Hyd. No. 6

Basin 1 Routing

Hydrograph type	= Reservoir	Peak discharge	= 15.26 cfs
Storm frequency	= 10 yrs	Time to peak	= 12.30 hrs
Time interval	= 2 min	Hyd. volume	= 152,388 cuft
Inflow hyd. No.	= 5 - Basin 1 Inflow	Max. Elevation	= 534.50 ft
Reservoir name	= Sediment Basin 1	Max. Storage	= 169,968 cuft

Storage Indication method used. Wet pond routing start elevation = 530.30 ft.



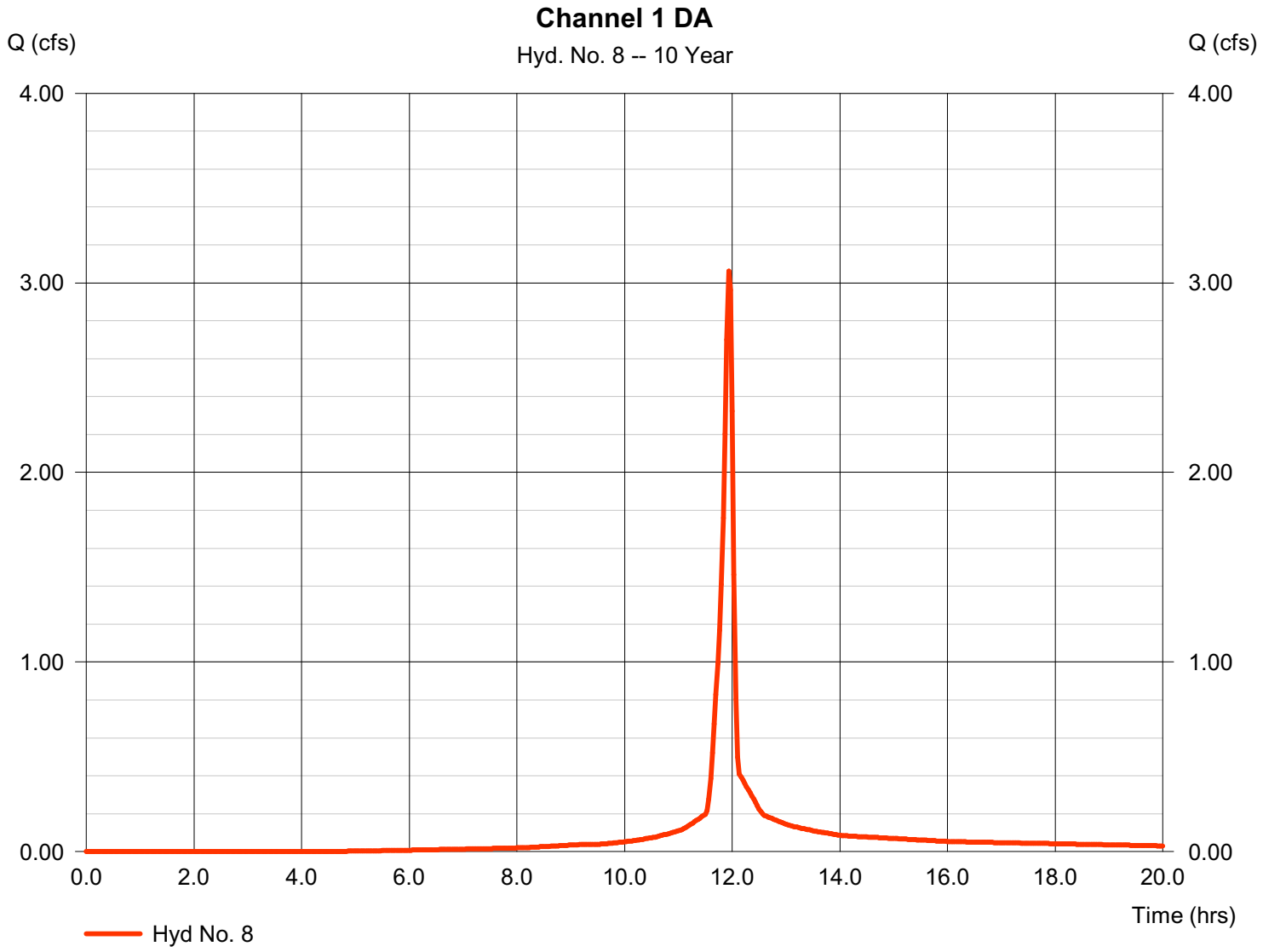
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024 Friday, 04 / 18 / 2025

Hyd. No. 8

Channel 1 DA

Hydrograph type	=	SCS Runoff	Peak discharge	=	3.063 cfs
Storm frequency	=	10 yrs	Time to peak	=	11.93 hrs
Time interval	=	2 min	Hyd. volume	=	6,493 cuft
Drainage area	=	0.540 ac	Curve number	=	89
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	5.00 min
Total precip.	=	4.75 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484



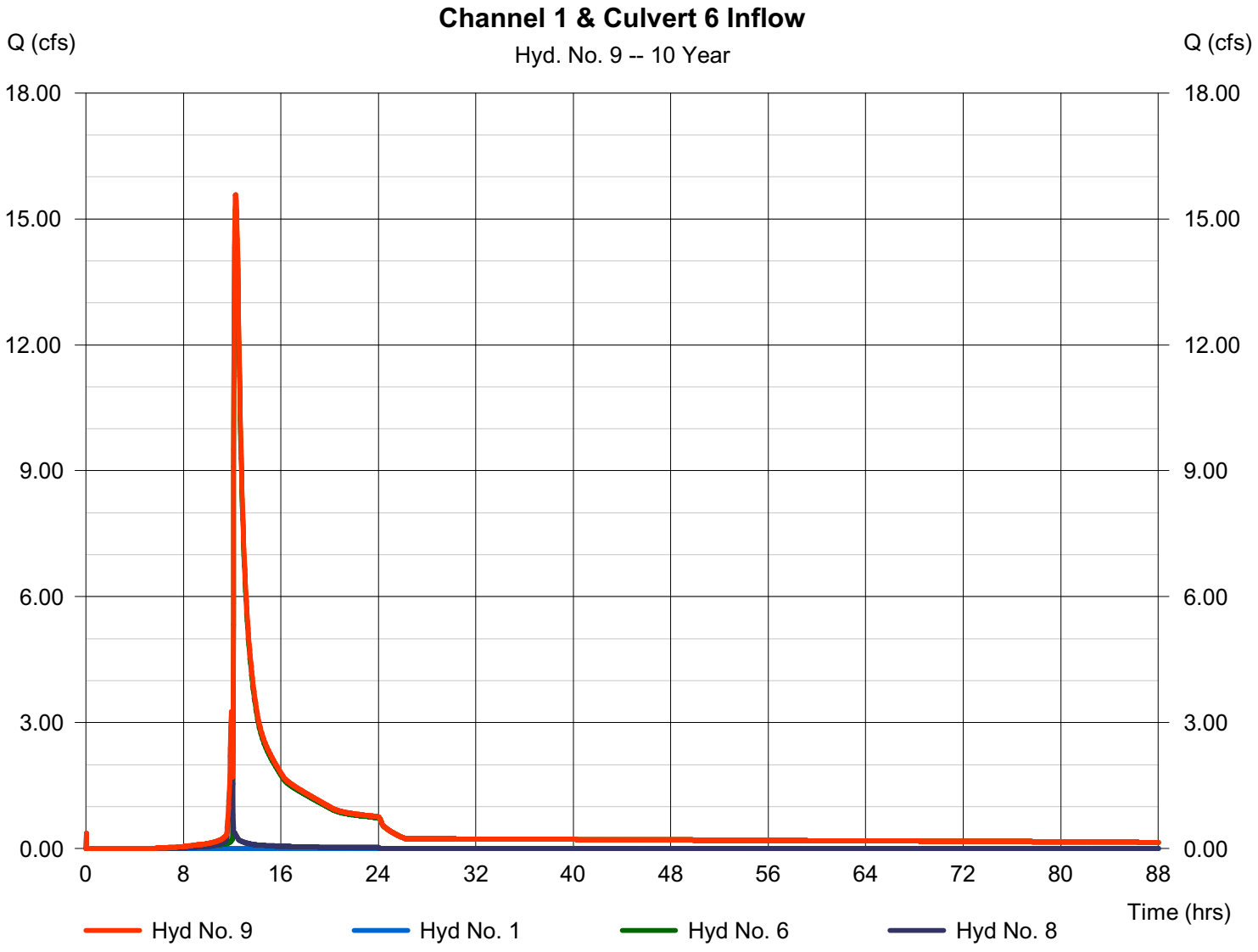
Hydrograph Report

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Hyd. No. 9

Channel 1 & Culvert 6 Inflow

Hydrograph type	=	Combine	Peak discharge	=	15.58 cfs
Storm frequency	=	10 yrs	Time to peak	=	12.30 hrs
Time interval	=	2 min	Hyd. volume	=	158,925 cuft
Inflow hyds.	=	1, 6, 8	Contrib. drain. area	=	0.540 ac



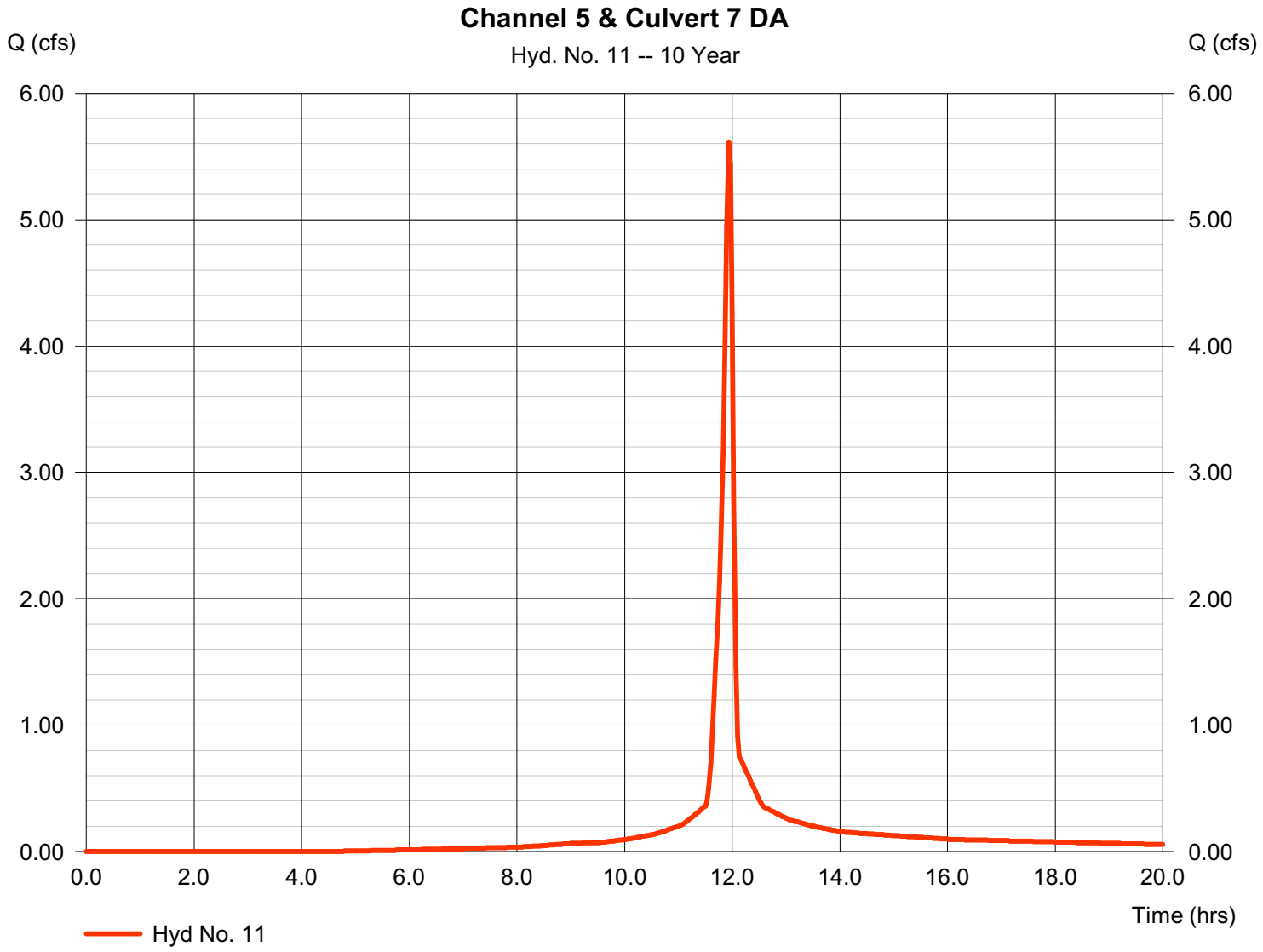
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024 Friday, 04 / 18 / 2025

Hyd. No. 11

Channel 5 & Culvert 7 DA

Hydrograph type	= SCS Runoff	Peak discharge	= 5.616 cfs
Storm frequency	= 10 yrs	Time to peak	= 11.93 hrs
Time interval	= 2 min	Hyd. volume	= 11,903 cuft
Drainage area	= 0.990 ac	Curve number	= 89
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 5.00 min
Total precip.	= 4.75 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484



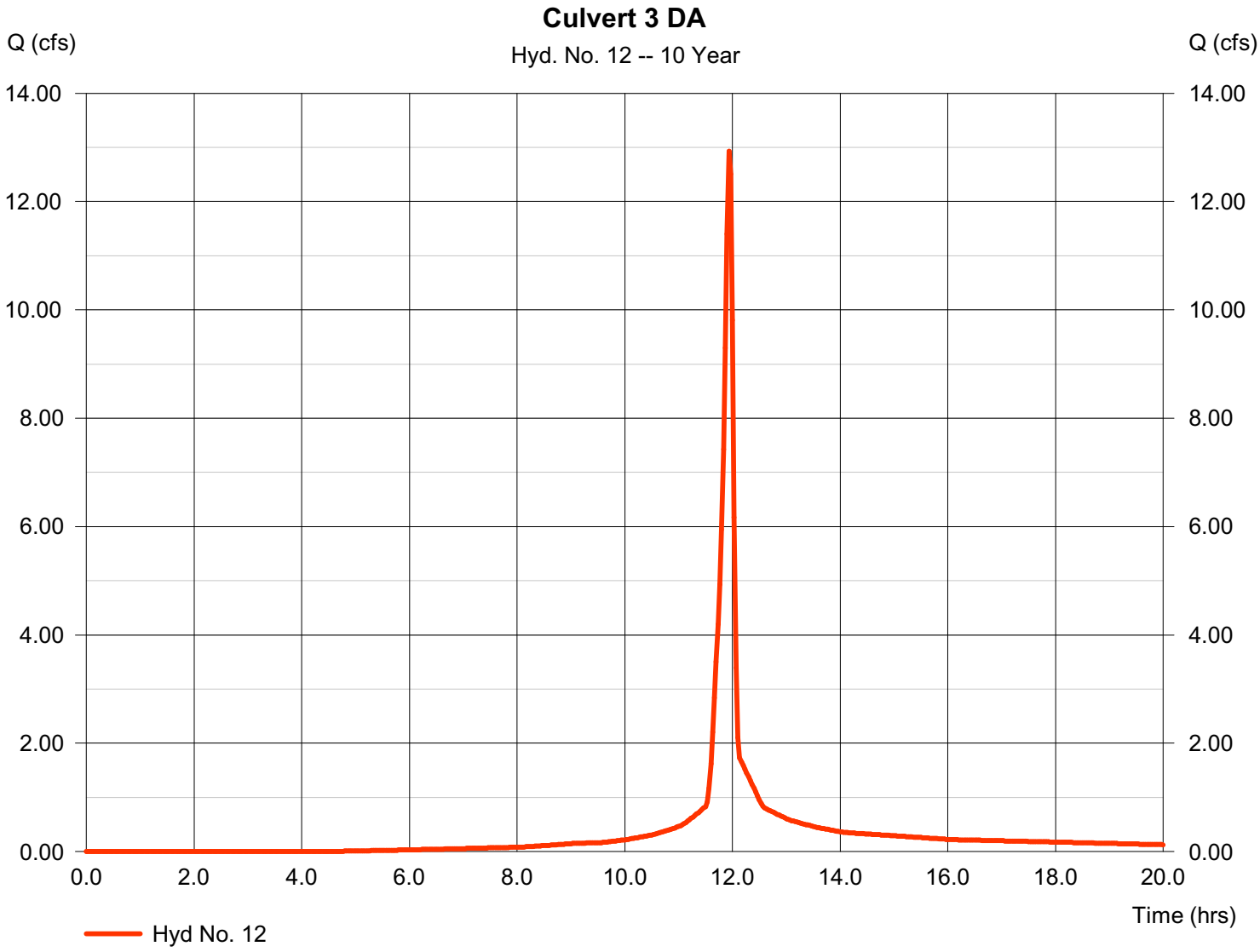
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024 Friday, 04 / 18 / 2025

Hyd. No. 12

Culvert 3 DA

Hydrograph type	=	SCS Runoff	Peak discharge	=	12.93 cfs
Storm frequency	=	10 yrs	Time to peak	=	11.93 hrs
Time interval	=	2 min	Hyd. volume	=	27,413 cuft
Drainage area	=	2.280 ac	Curve number	=	89
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	5.00 min
Total precip.	=	4.75 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484



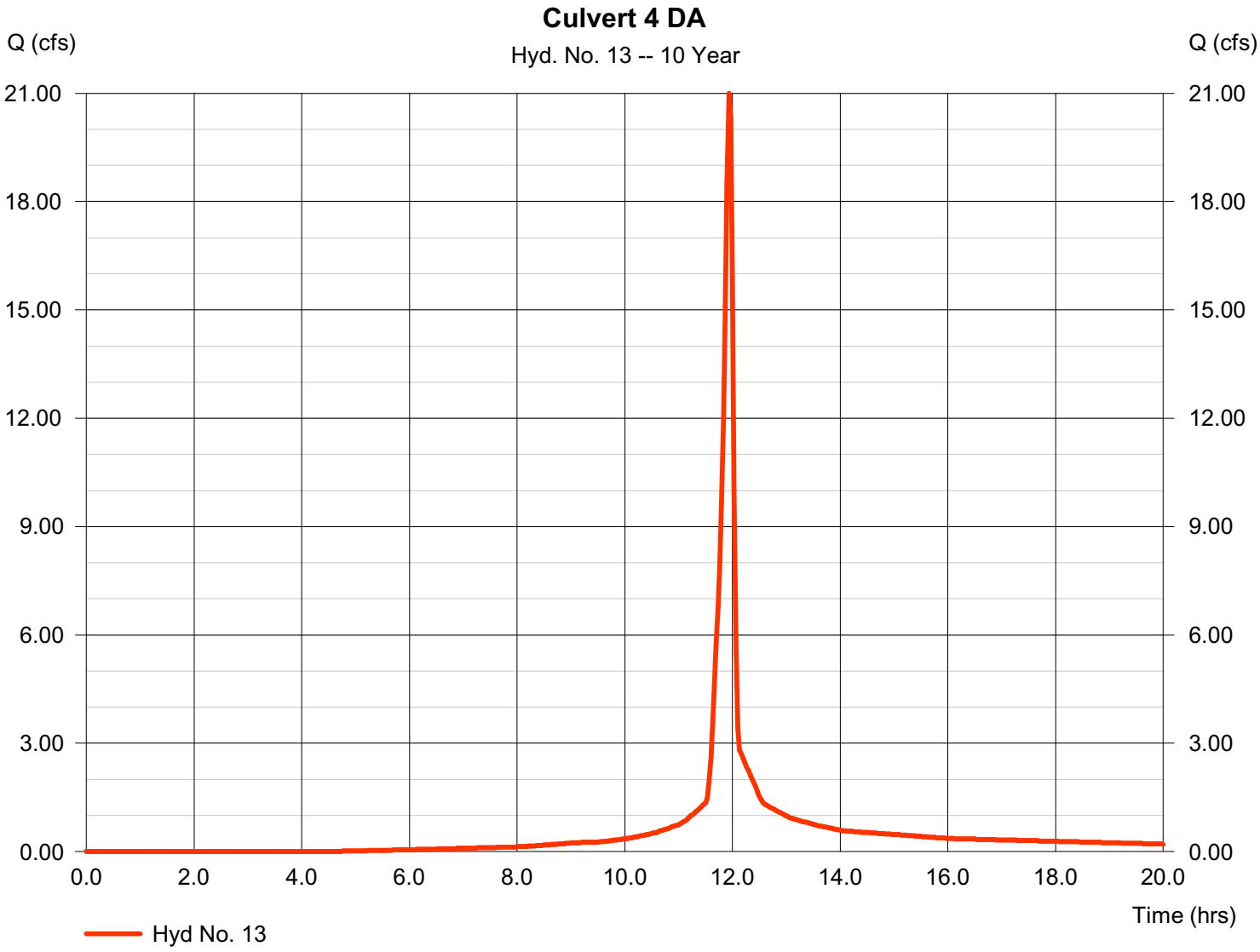
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024 Friday, 04 / 18 / 2025

Hyd. No. 13

Culvert 4 DA

Hydrograph type	=	SCS Runoff	Peak discharge	=	20.99 cfs
Storm frequency	=	10 yrs	Time to peak	=	11.93 hrs
Time interval	=	2 min	Hyd. volume	=	44,486 cuft
Drainage area	=	3.700 ac	Curve number	=	89
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	5.00 min
Total precip.	=	4.75 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484



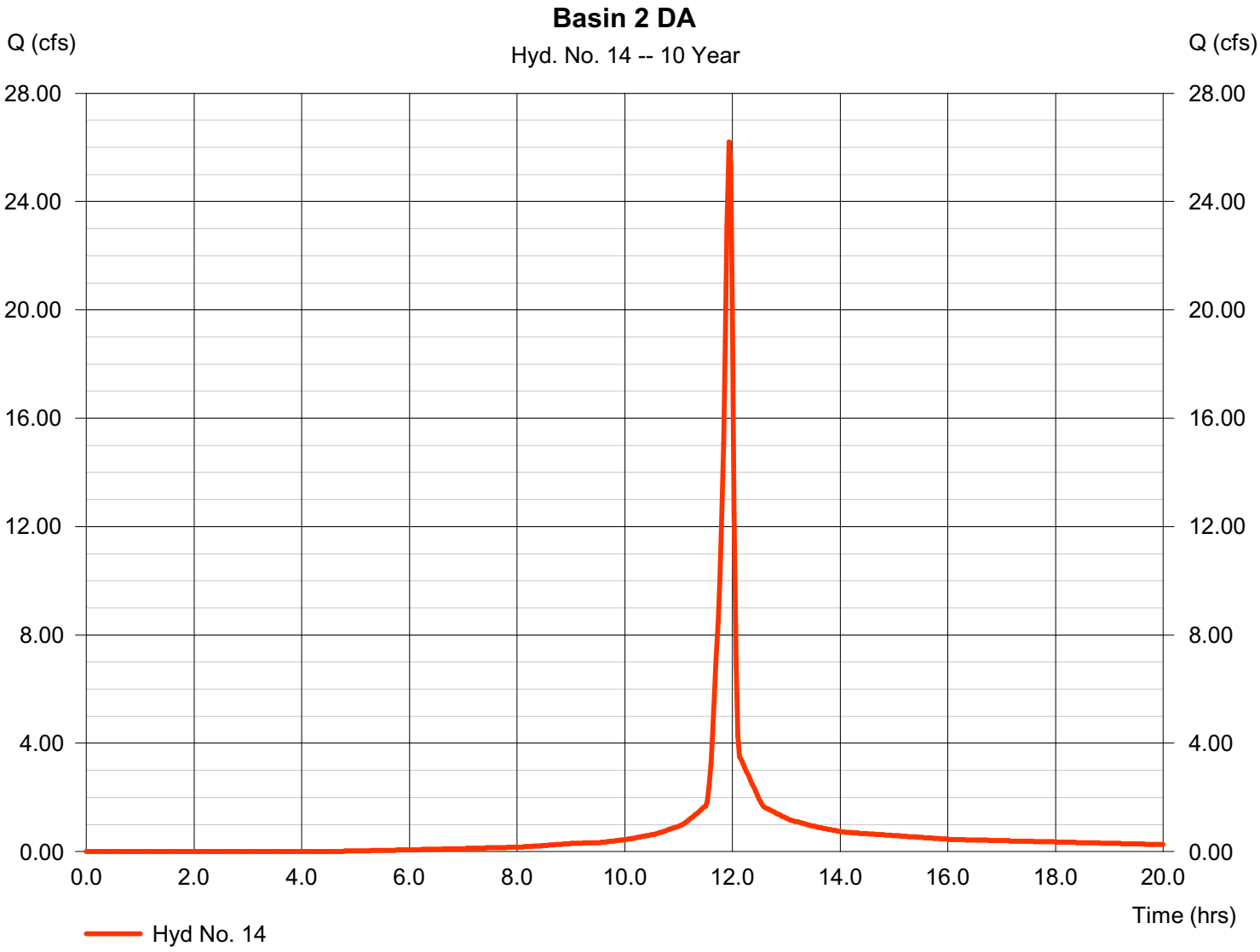
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024 Friday, 04 / 18 / 2025

Hyd. No. 14

Basin 2 DA

Hydrograph type	= SCS Runoff	Peak discharge	= 26.21 cfs
Storm frequency	= 10 yrs	Time to peak	= 11.93 hrs
Time interval	= 2 min	Hyd. volume	= 55,548 cuft
Drainage area	= 4.620 ac	Curve number	= 89
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 5.00 min
Total precip.	= 4.75 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484



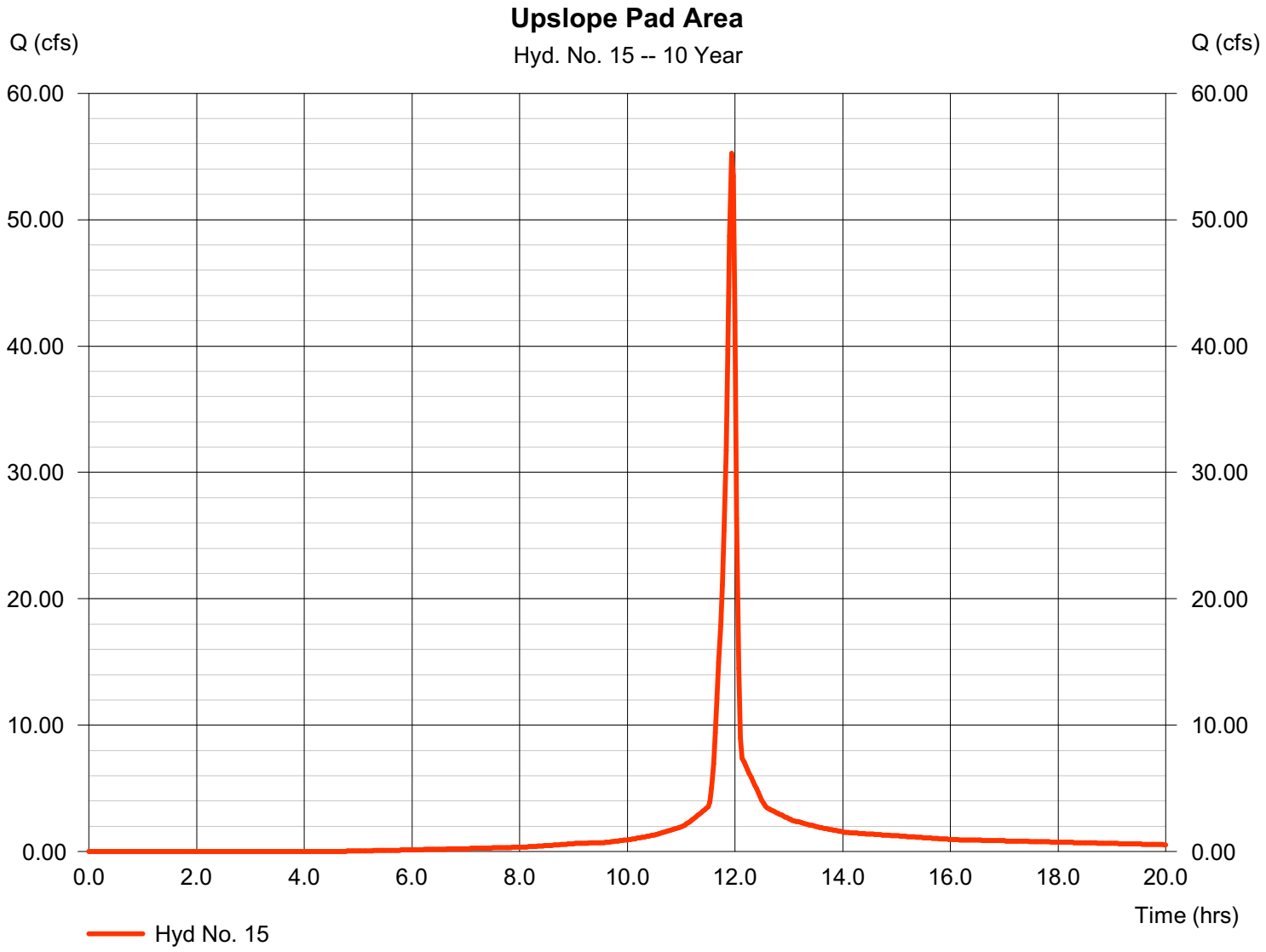
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024 Friday, 04 / 18 / 2025

Hyd. No. 15

Upslope Pad Area

Hydrograph type	= SCS Runoff	Peak discharge	= 55.25 cfs
Storm frequency	= 10 yrs	Time to peak	= 11.93 hrs
Time interval	= 2 min	Hyd. volume	= 117,108 cuft
Drainage area	= 9.740 ac	Curve number	= 89
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 5.00 min
Total precip.	= 4.75 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484



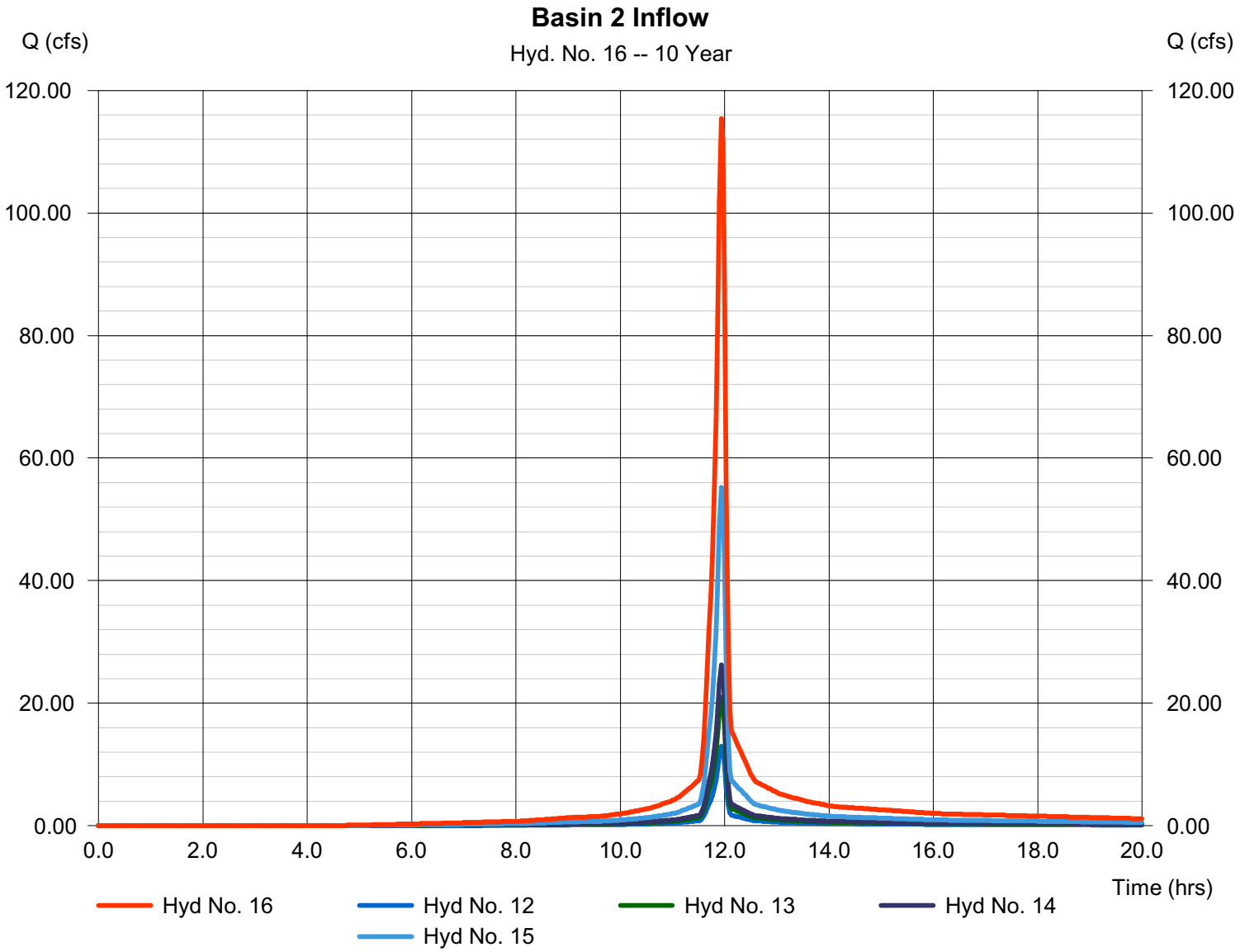
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024 Friday, 04 / 18 / 2025

Hyd. No. 16

Basin 2 Inflow

Hydrograph type	= Combine	Peak discharge	= 115.39 cfs
Storm frequency	= 10 yrs	Time to peak	= 11.93 hrs
Time interval	= 2 min	Hyd. volume	= 244,556 cuft
Inflow hyds.	= 12, 13, 14, 15	Contrib. drain. area	= 20.340 ac



Hydrograph Report

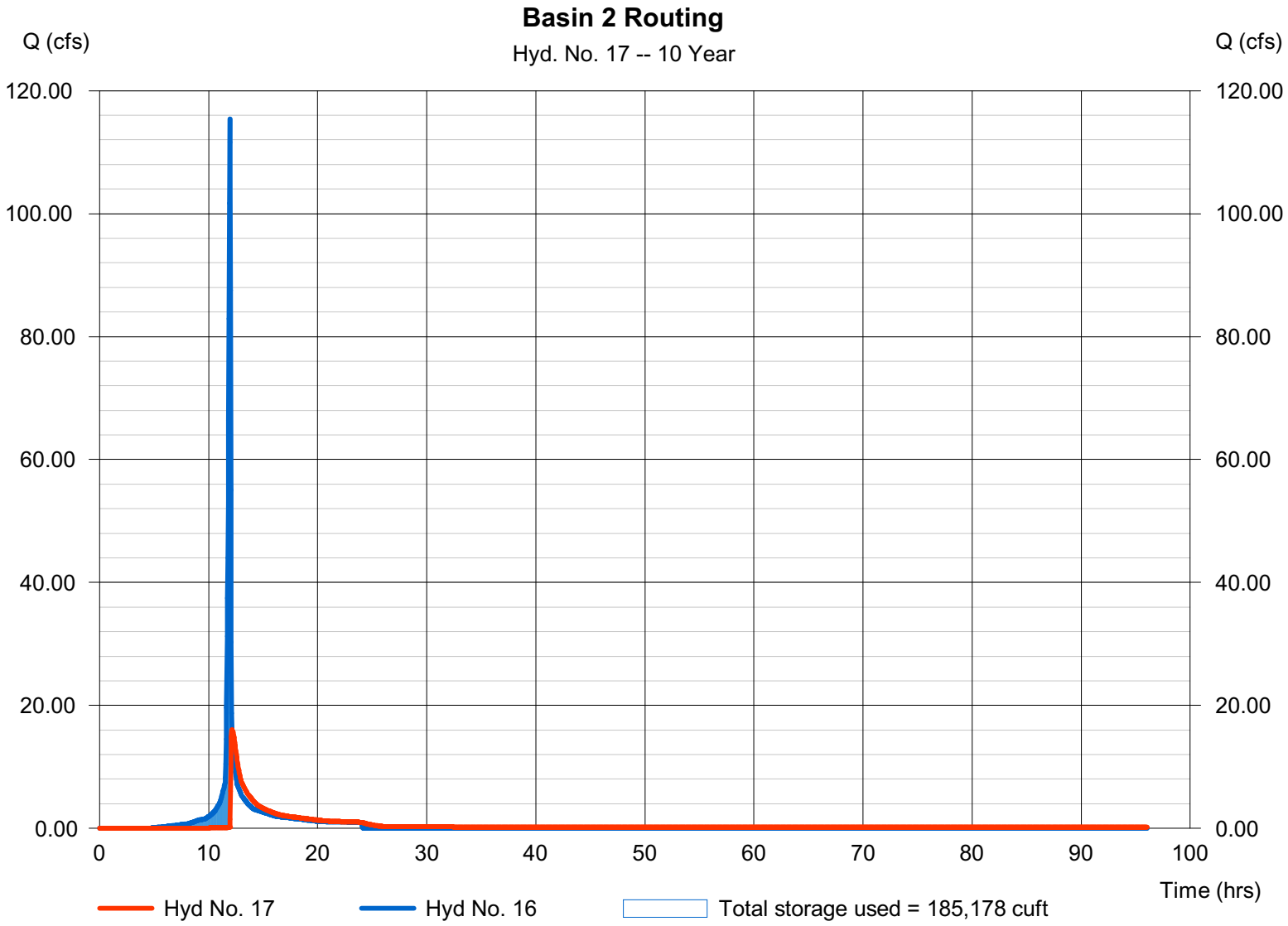
Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024 Friday, 04 / 18 / 2025

Hyd. No. 17

Basin 2 Routing

Hydrograph type	= Reservoir	Peak discharge	= 16.08 cfs
Storm frequency	= 10 yrs	Time to peak	= 12.13 hrs
Time interval	= 2 min	Hyd. volume	= 188,301 cuft
Inflow hyd. No.	= 16 - Basin 2 Inflow	Max. Elevation	= 530.42 ft
Reservoir name	= Sediment Basin 2	Max. Storage	= 185,178 cuft

Storage Indication method used. Wet pond routing start elevation = 526.80 ft.



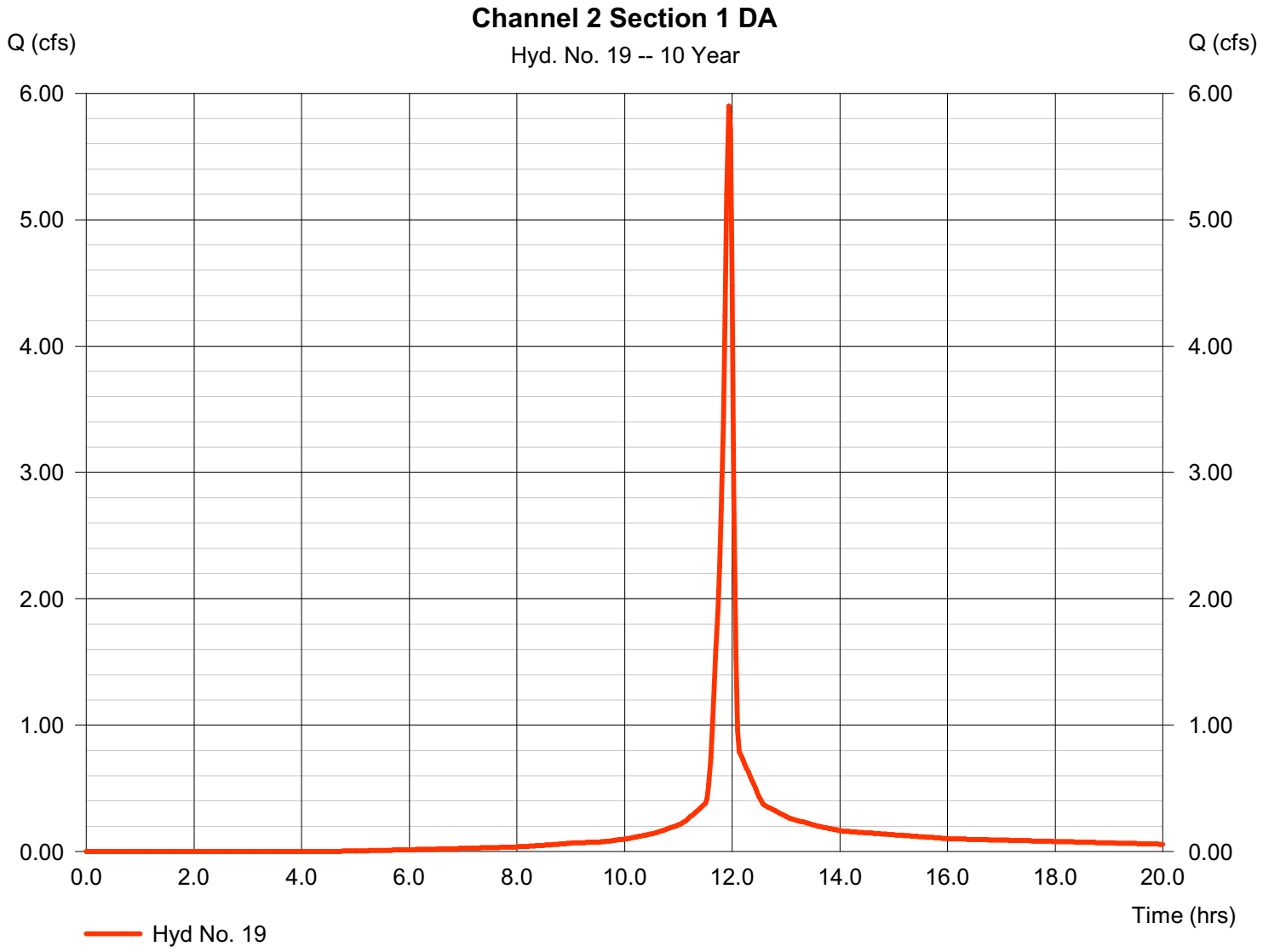
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024 Friday, 04 / 18 / 2025

Hyd. No. 19

Channel 2 Section 1 DA

Hydrograph type	= SCS Runoff	Peak discharge	= 5.900 cfs
Storm frequency	= 10 yrs	Time to peak	= 11.93 hrs
Time interval	= 2 min	Hyd. volume	= 12,504 cuft
Drainage area	= 1.040 ac	Curve number	= 89
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 5.00 min
Total precip.	= 4.75 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484



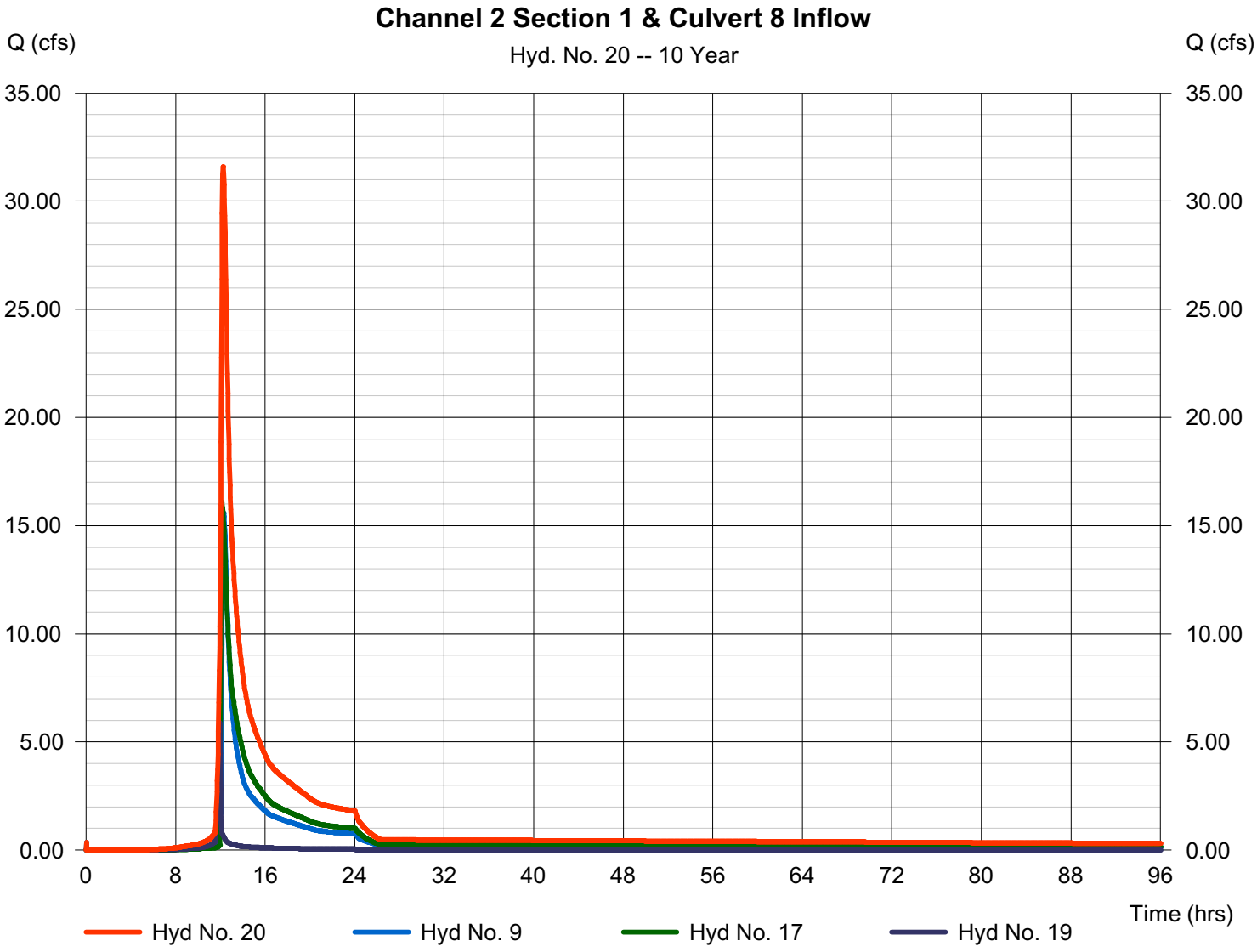
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024 Friday, 04 / 18 / 2025

Hyd. No. 20

Channel 2 Section 1 & Culvert 8 Inflow

Hydrograph type	= Combine	Peak discharge	= 31.61 cfs
Storm frequency	= 10 yrs	Time to peak	= 12.27 hrs
Time interval	= 2 min	Hyd. volume	= 359,730 cuft
Inflow hyds.	= 9, 17, 19	Contrib. drain. area	= 1.040 ac



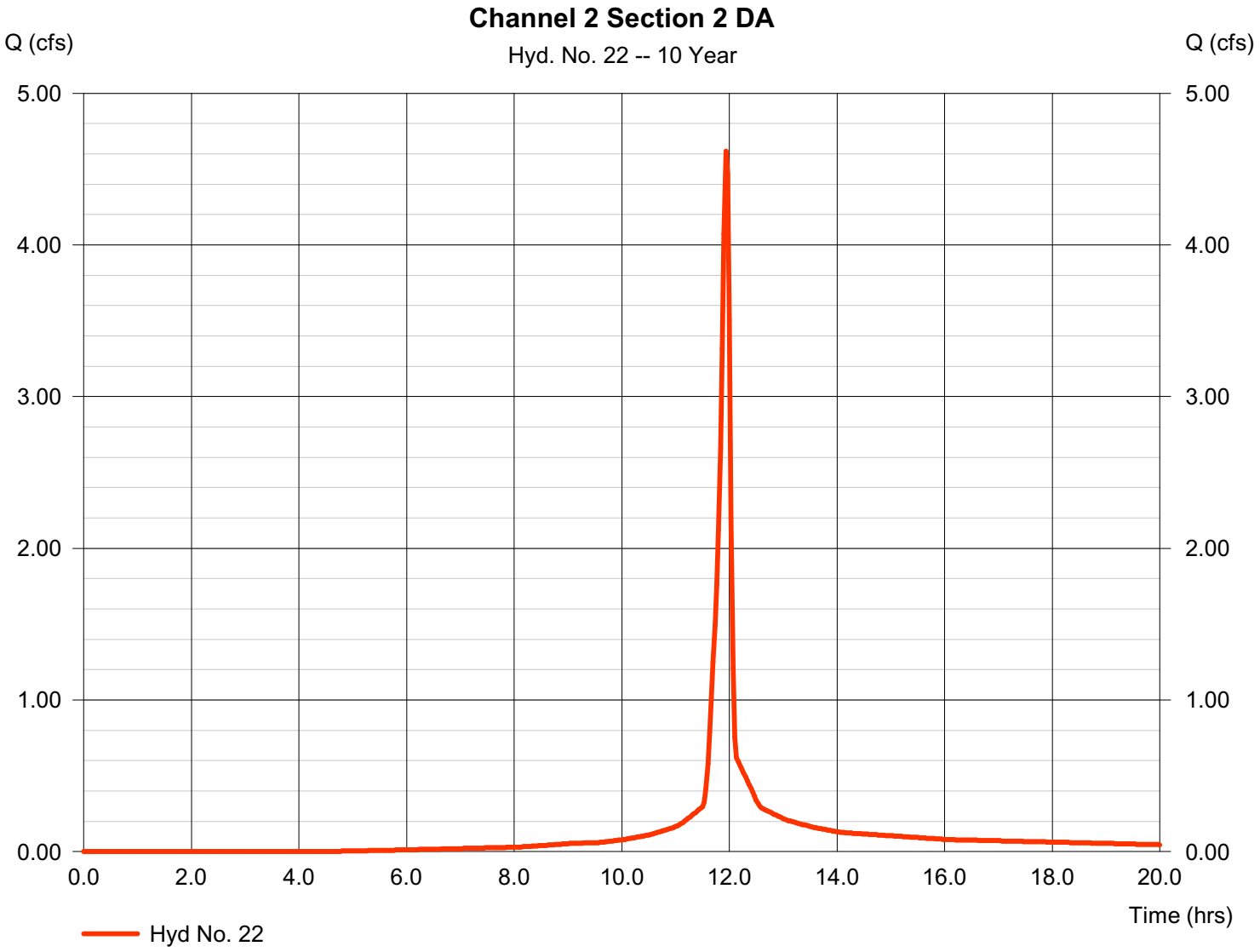
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024 Friday, 04 / 18 / 2025

Hyd. No. 22

Channel 2 Section 2 DA

Hydrograph type	= SCS Runoff	Peak discharge	= 4.618 cfs
Storm frequency	= 10 yrs	Time to peak	= 11.93 hrs
Time interval	= 2 min	Hyd. volume	= 9,787 cuft
Drainage area	= 0.814 ac	Curve number	= 89
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 5.00 min
Total precip.	= 4.75 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484



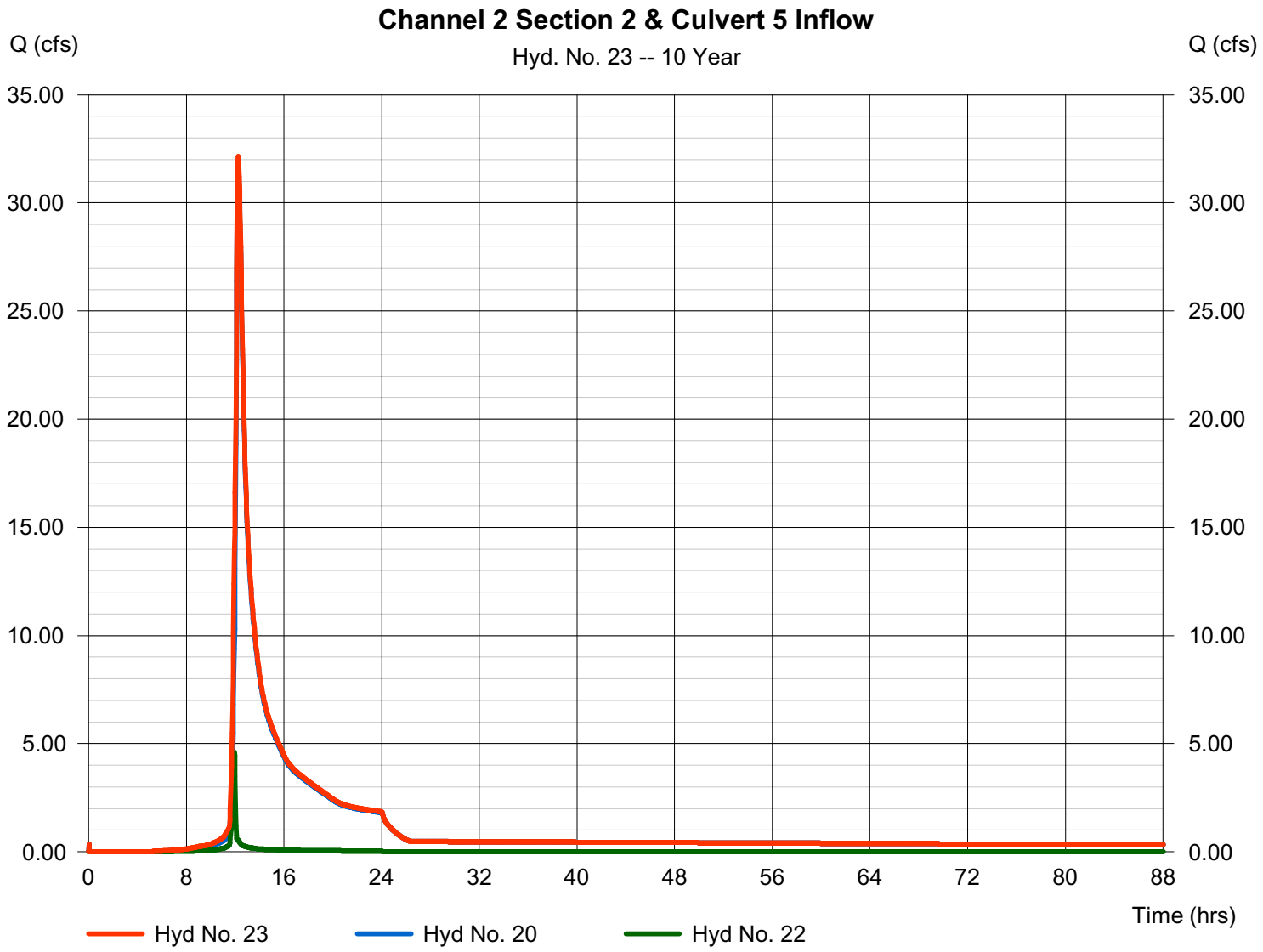
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024 Friday, 04 / 18 / 2025

Hyd. No. 23

Channel 2 Section 2 & Culvert 5 Inflow

Hydrograph type	= Combine	Peak discharge	= 32.15 cfs
Storm frequency	= 10 yrs	Time to peak	= 12.23 hrs
Time interval	= 2 min	Hyd. volume	= 369,517 cuft
Inflow hyds.	= 20, 22	Contrib. drain. area	= 0.814 ac



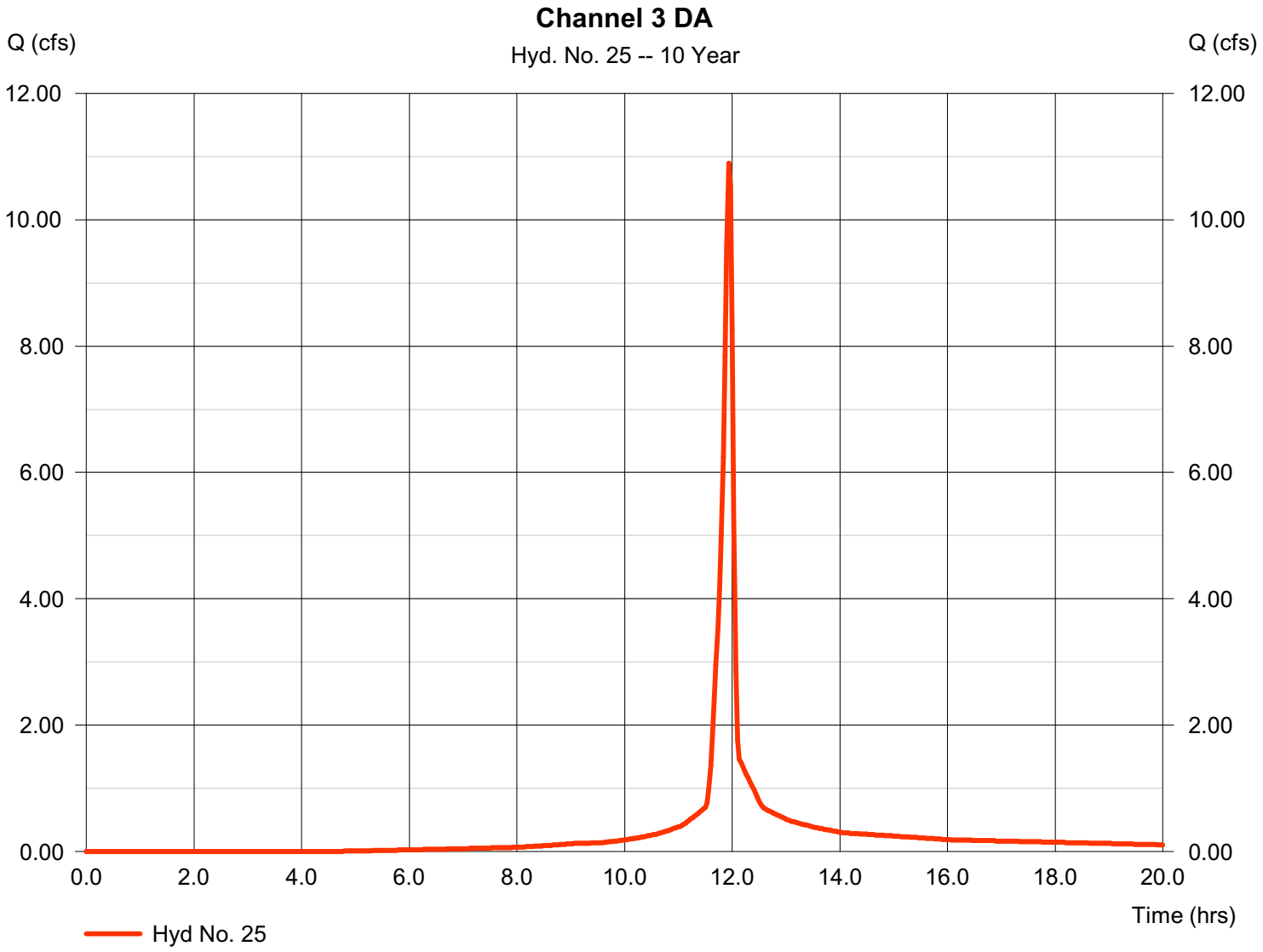
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024 Friday, 04 / 18 / 2025

Hyd. No. 25

Channel 3 DA

Hydrograph type	=	SCS Runoff	Peak discharge	=	10.89 cfs
Storm frequency	=	10 yrs	Time to peak	=	11.93 hrs
Time interval	=	2 min	Hyd. volume	=	23,085 cuft
Drainage area	=	1.920 ac	Curve number	=	89
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	5.00 min
Total precip.	=	4.75 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484



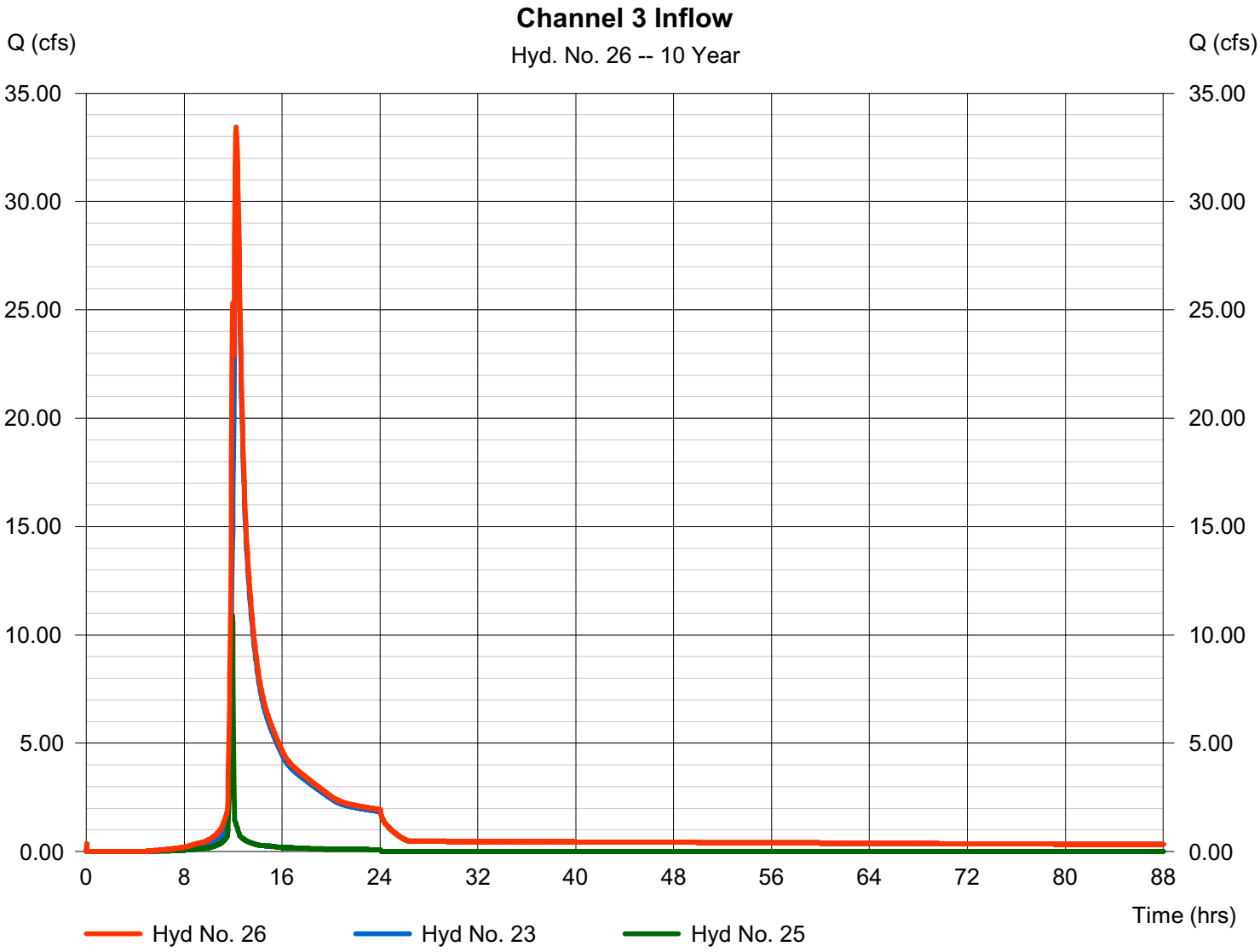
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024 Friday, 04 / 18 / 2025

Hyd. No. 26

Channel 3 Inflow

Hydrograph type	= Combine	Peak discharge	= 33.43 cfs
Storm frequency	= 10 yrs	Time to peak	= 12.23 hrs
Time interval	= 2 min	Hyd. volume	= 392,602 cuft
Inflow hyds.	= 23, 25	Contrib. drain. area	= 1.920 ac



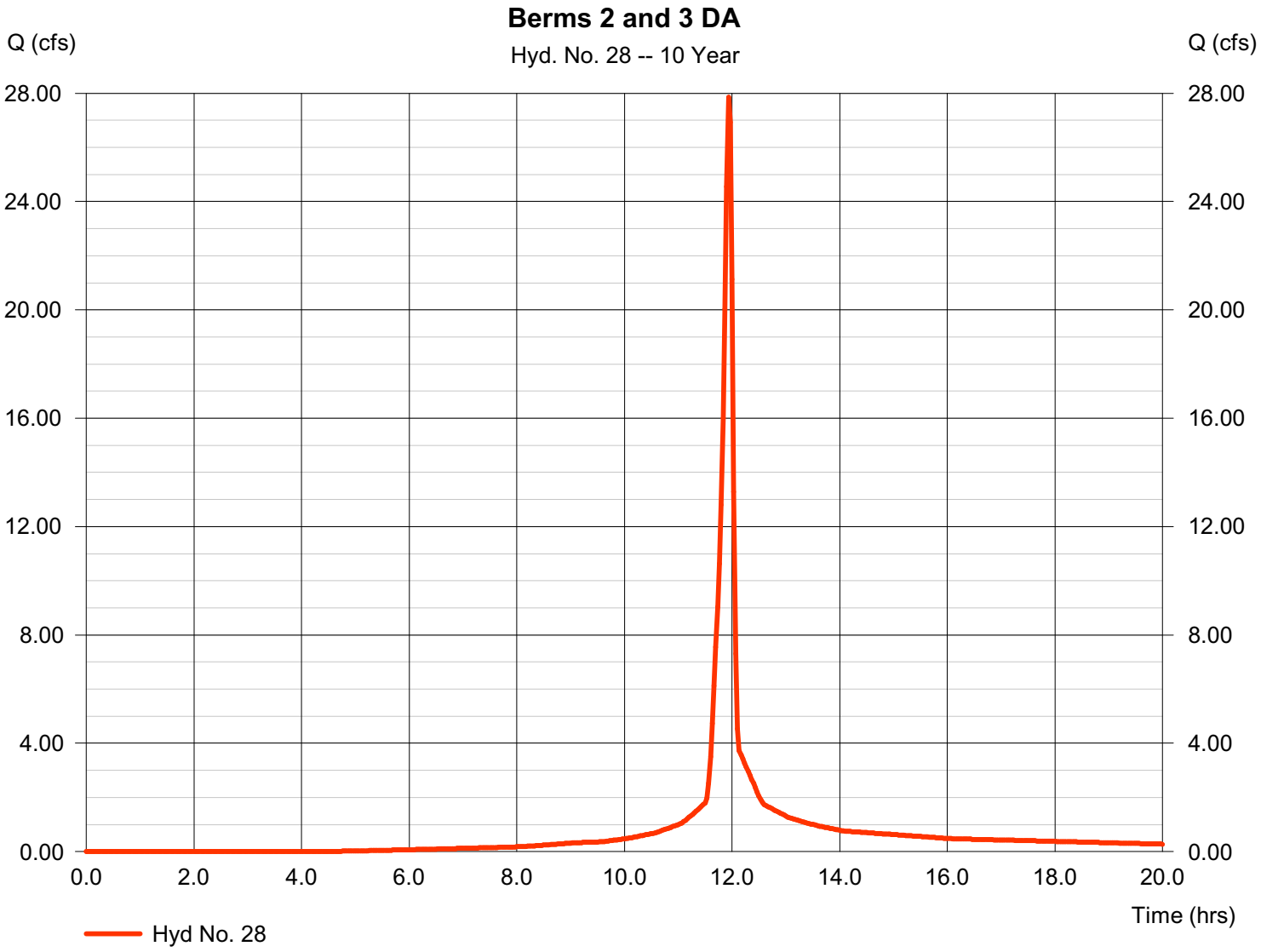
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024 Friday, 04 / 18 / 2025

Hyd. No. 28

Berms 2 and 3 DA

Hydrograph type	= SCS Runoff	Peak discharge	= 27.85 cfs
Storm frequency	= 10 yrs	Time to peak	= 11.93 hrs
Time interval	= 2 min	Hyd. volume	= 59,035 cuft
Drainage area	= 4.910 ac	Curve number	= 89
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 5.00 min
Total precip.	= 4.75 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484



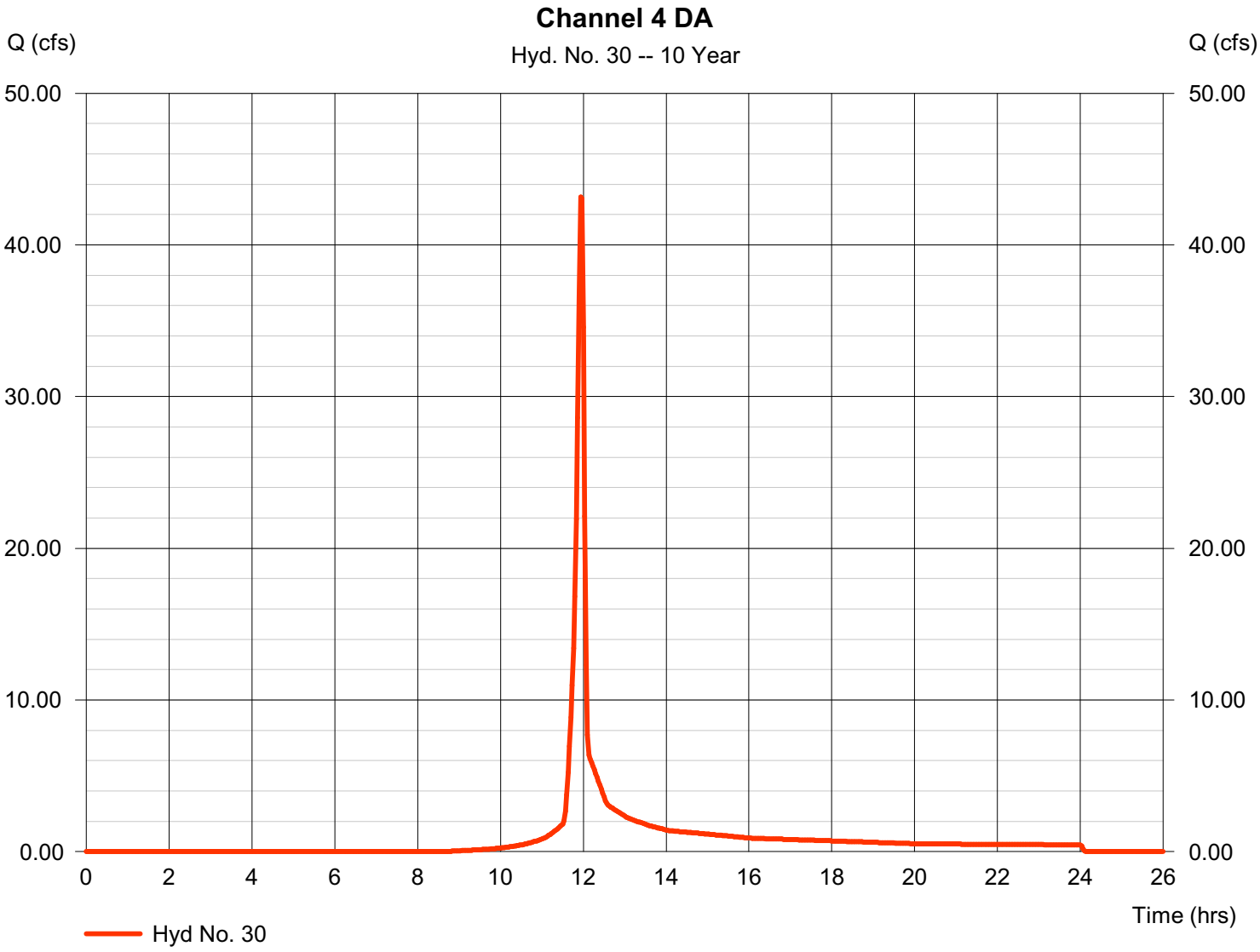
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024 Friday, 04 / 18 / 2025

Hyd. No. 30

Channel 4 DA

Hydrograph type	= SCS Runoff	Peak discharge	= 43.18 cfs
Storm frequency	= 10 yrs	Time to peak	= 11.93 hrs
Time interval	= 2 min	Hyd. volume	= 87,182 cuft
Drainage area	= 10.990 ac	Curve number	= 76
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= TR55	Time of conc. (Tc)	= 6.00 min
Total precip.	= 4.75 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484



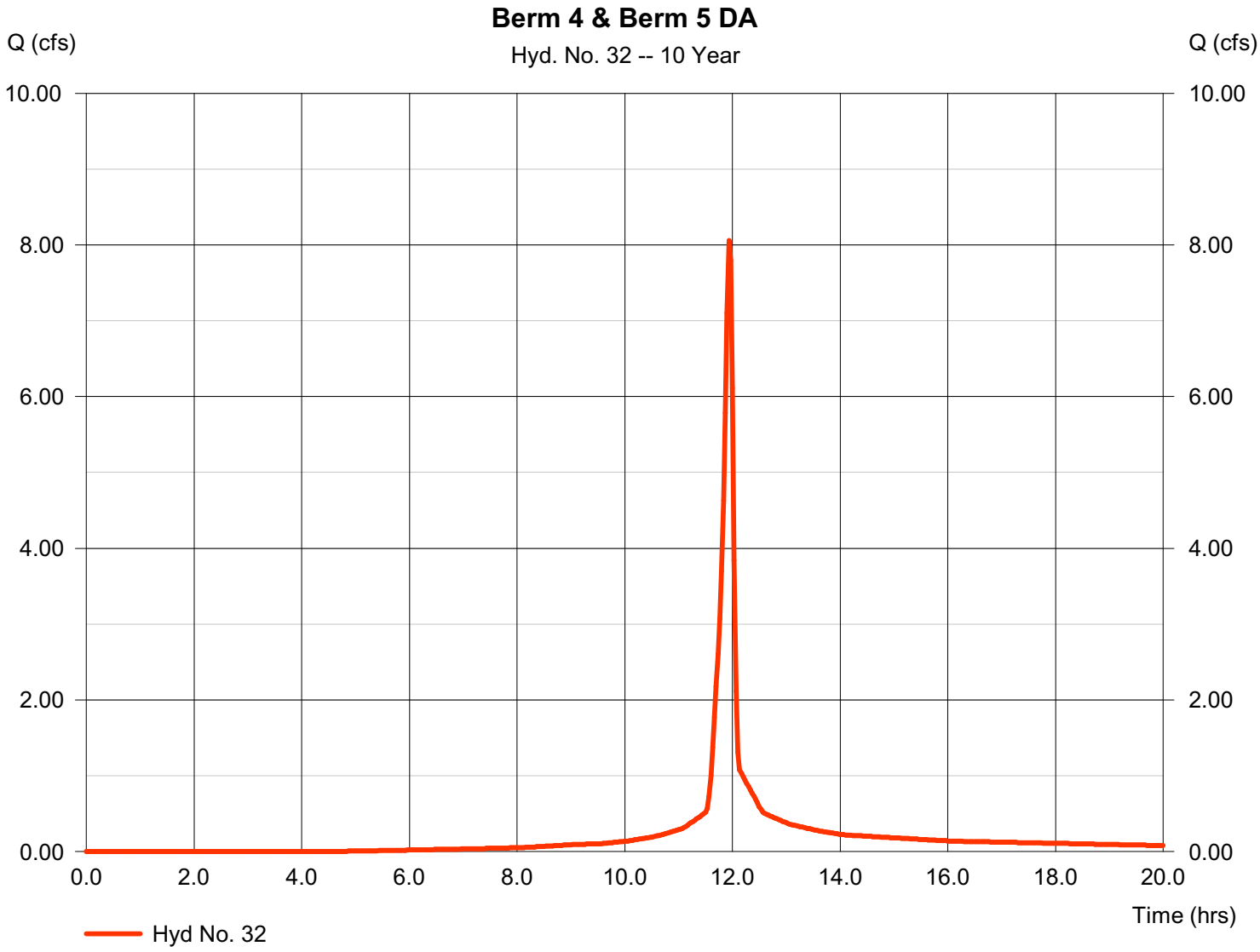
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024 Friday, 04 / 18 / 2025

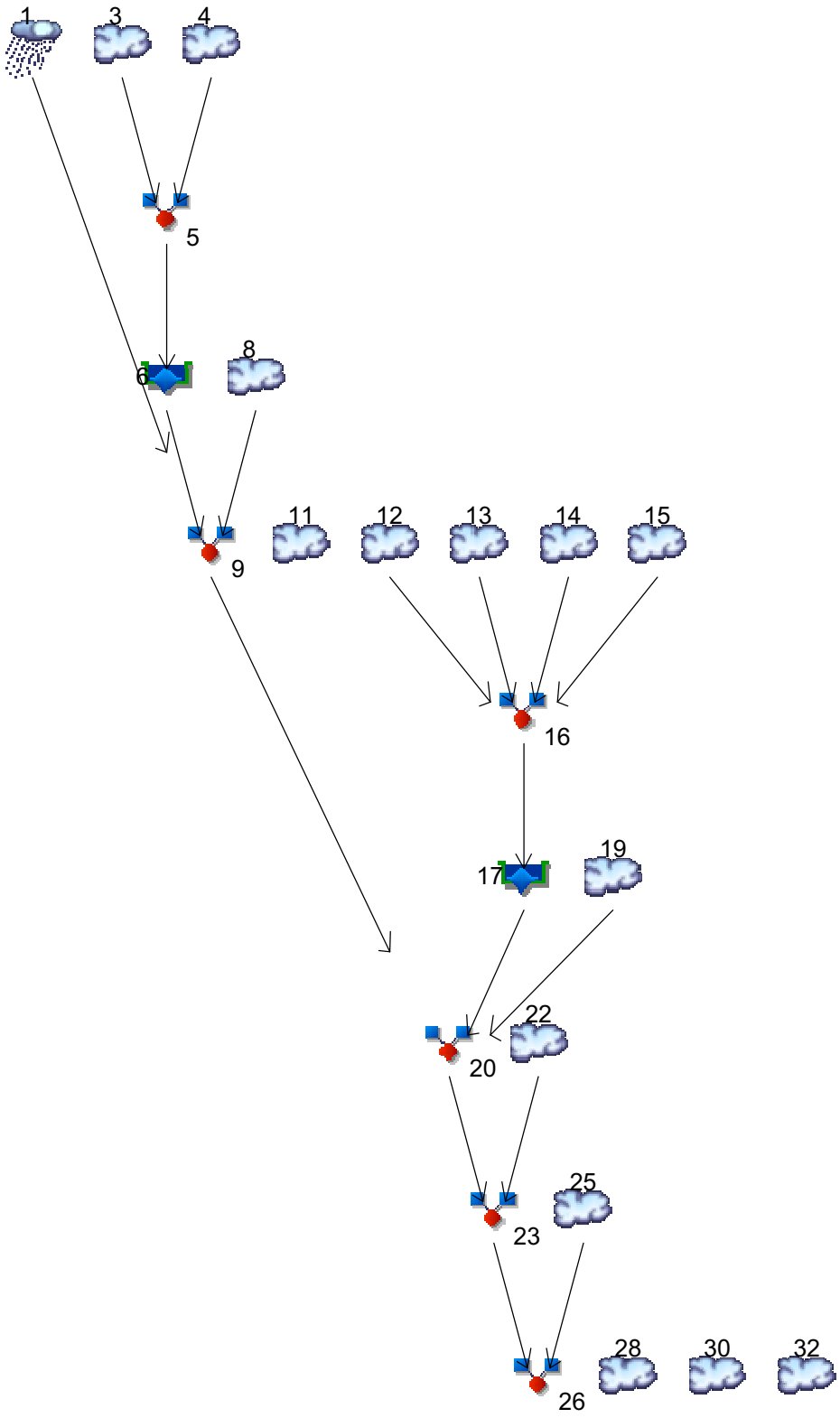
Hyd. No. 32

Berm 4 & Berm 5 DA

Hydrograph type	= SCS Runoff	Peak discharge	= 8.056 cfs
Storm frequency	= 10 yrs	Time to peak	= 11.93 hrs
Time interval	= 2 min	Hyd. volume	= 17,073 cuft
Drainage area	= 1.420 ac	Curve number	= 89
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 5.00 min
Total precip.	= 4.75 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484



Watershed Model Schematic



Hydrograph Summary Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024

Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	Manual	0.368	2	2	44	------	------	------	Clarifying Pond Discharge
3	SCS Runoff	66.72	2	722	194,921	------	------	------	Culvert 2 & Berm 1 DA
4	SCS Runoff	16.24	2	716	34,941	------	------	------	Basin 1 DA
5	Combine	77.01	2	720	229,862	3, 4	------	------	Basin 1 Inflow
6	Reservoir	45.53	2	730	201,842	5	534.90	180,397	Basin 1 Routing
8	SCS Runoff	3.847	2	716	8,275	------	------	------	Channel 1 DA
9	Combine	46.02	2	730	210,162	1, 6, 8	------	------	Channel 1 & Culvert 6 Inflow
11	SCS Runoff	7.052	2	716	15,172	------	------	------	Channel 5 & Culvert 7 DA
12	SCS Runoff	16.24	2	716	34,941	------	------	------	Culvert 3 DA
13	SCS Runoff	26.36	2	716	56,702	------	------	------	Culvert 4 DA
14	SCS Runoff	32.91	2	716	70,801	------	------	------	Basin 2 DA
15	SCS Runoff	69.38	2	716	149,265	------	------	------	Upslope Pad Area
16	Combine	144.89	2	716	311,710	12, 13, 14, 15	------	------	Basin 2 Inflow
17	Reservoir	46.40	2	724	255,345	16	531.06	212,077	Basin 2 Routing
19	SCS Runoff	7.408	2	716	15,938	------	------	------	Channel 2 Section 1 DA
20	Combine	86.02	2	728	481,445	9, 17, 19	------	------	Channel 2 Section 1 & Culvert 8 Inflo
22	SCS Runoff	5.798	2	716	12,475	------	------	------	Channel 2 Section 2 DA
23	Combine	86.78	2	728	493,920	20, 22	------	------	Channel 2 Section 2 & Culvert 5 Inflo
25	SCS Runoff	13.68	2	716	29,424	------	------	------	Channel 3 DA
26	Combine	88.59	2	728	523,344	23, 25	------	------	Channel 3 Inflow
28	SCS Runoff	34.98	2	716	75,246	------	------	------	Berms 2 and 3 DA
30	SCS Runoff	58.56	2	716	118,708	------	------	------	Channel 4 DA
32	SCS Runoff	10.12	2	716	21,761	------	------	------	Berm 4 & Berm 5 DA

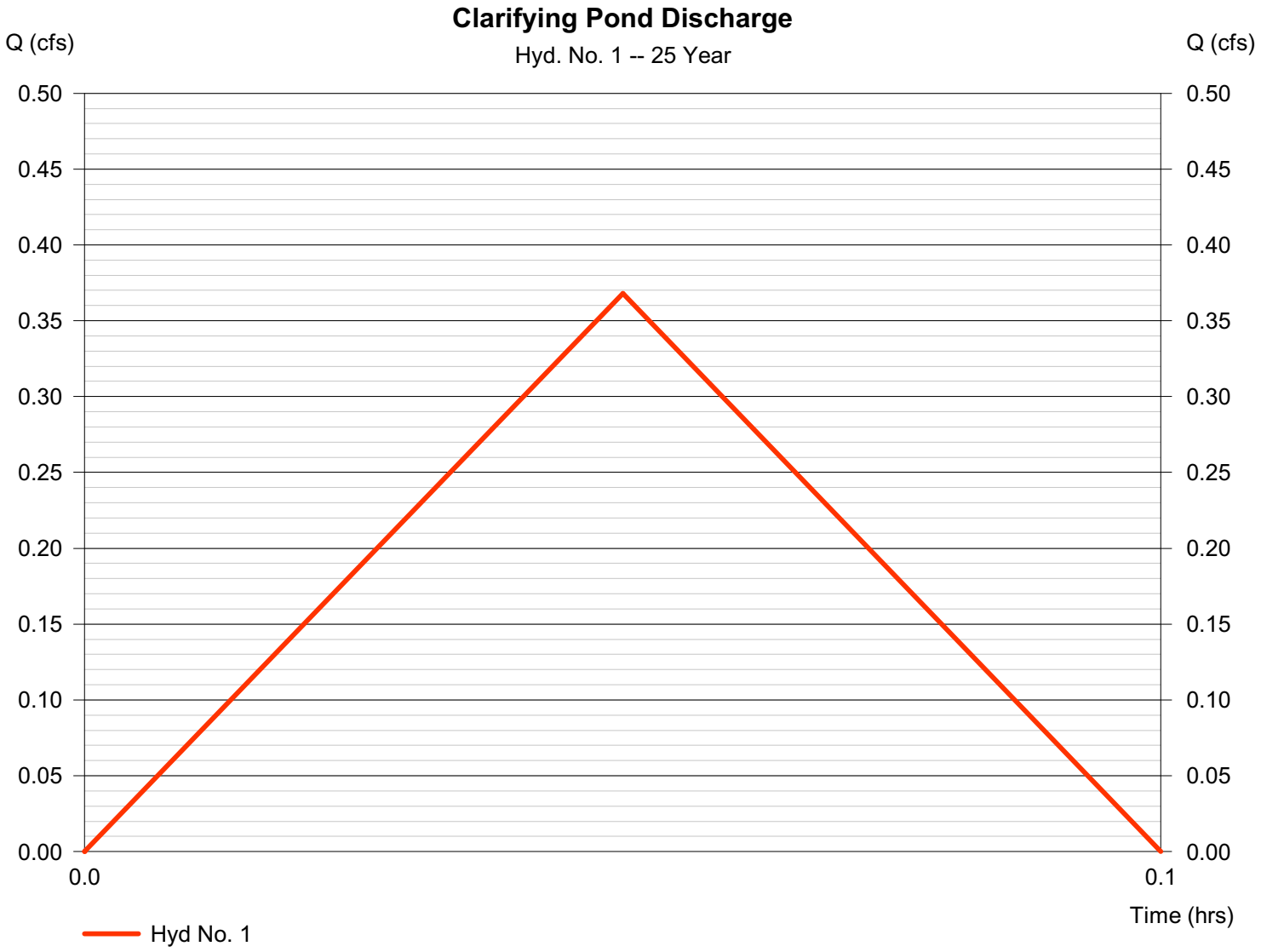
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024 Friday, 04 / 18 / 2025

Hyd. No. 1

Clarifying Pond Discharge

Hydrograph type	= Manual	Peak discharge	= 0.368 cfs
Storm frequency	= 25 yrs	Time to peak	= 0.03 hrs
Time interval	= 2 min	Hyd. volume	= 44 cuft



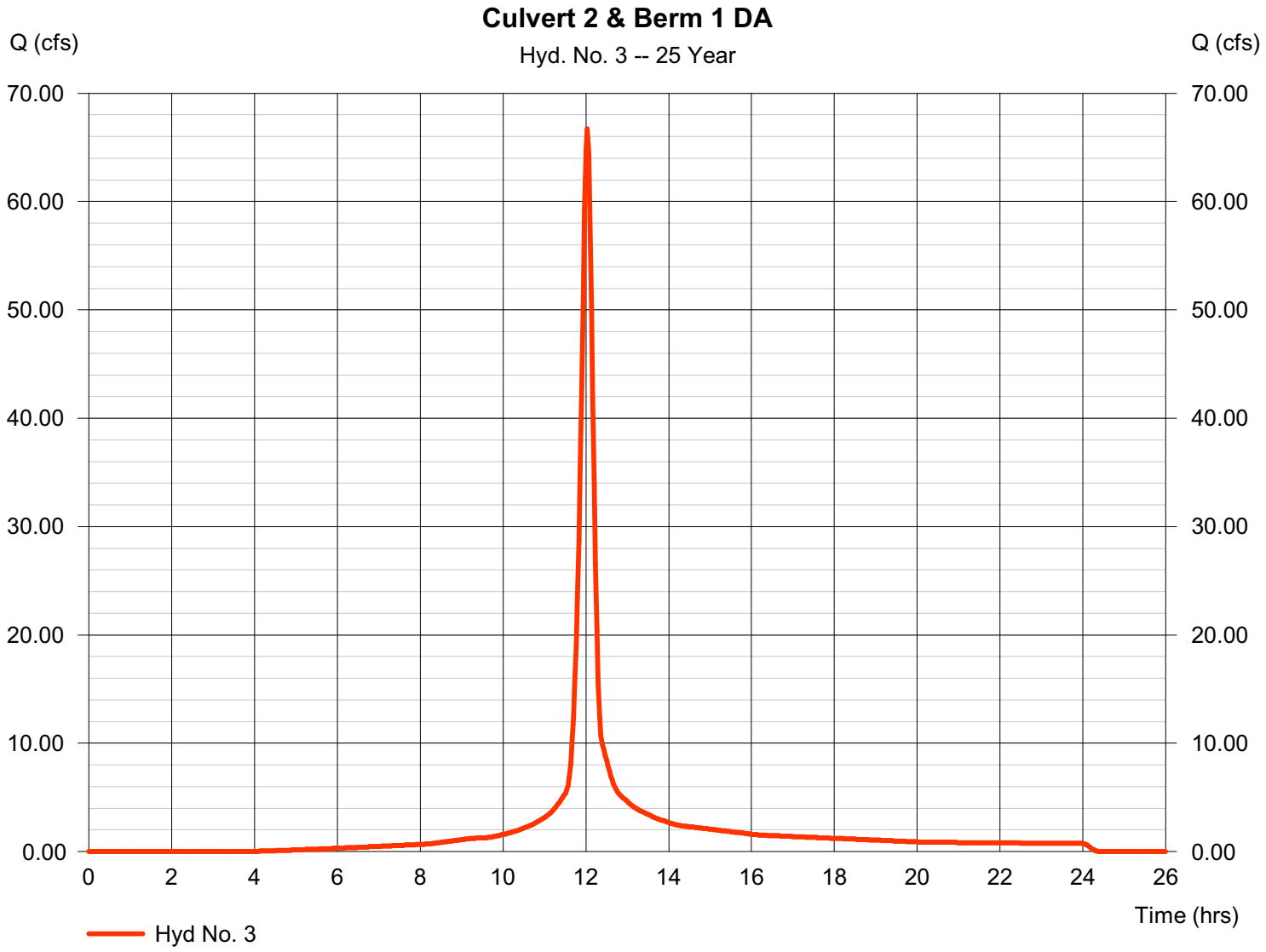
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024 Friday, 04 / 18 / 2025

Hyd. No. 3

Culvert 2 & Berm 1 DA

Hydrograph type	= SCS Runoff	Peak discharge	= 66.72 cfs
Storm frequency	= 25 yrs	Time to peak	= 12.03 hrs
Time interval	= 2 min	Hyd. volume	= 194,921 cuft
Drainage area	= 12.230 ac	Curve number	= 89
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 15.00 min
Total precip.	= 5.76 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484



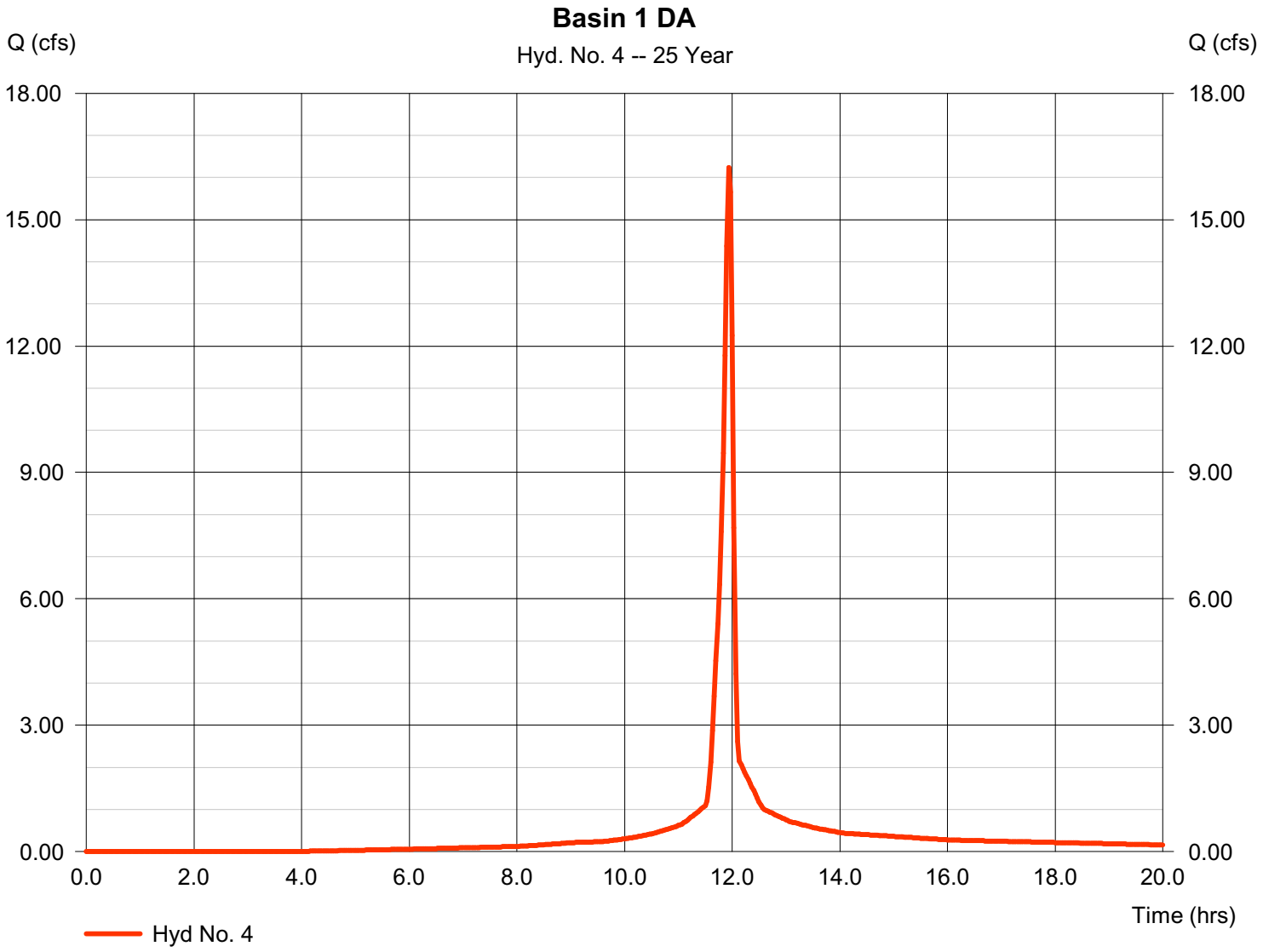
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024 Friday, 04 / 18 / 2025

Hyd. No. 4

Basin 1 DA

Hydrograph type	= SCS Runoff	Peak discharge	= 16.24 cfs
Storm frequency	= 25 yrs	Time to peak	= 11.93 hrs
Time interval	= 2 min	Hyd. volume	= 34,941 cuft
Drainage area	= 2.280 ac	Curve number	= 89
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 5.00 min
Total precip.	= 5.76 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484



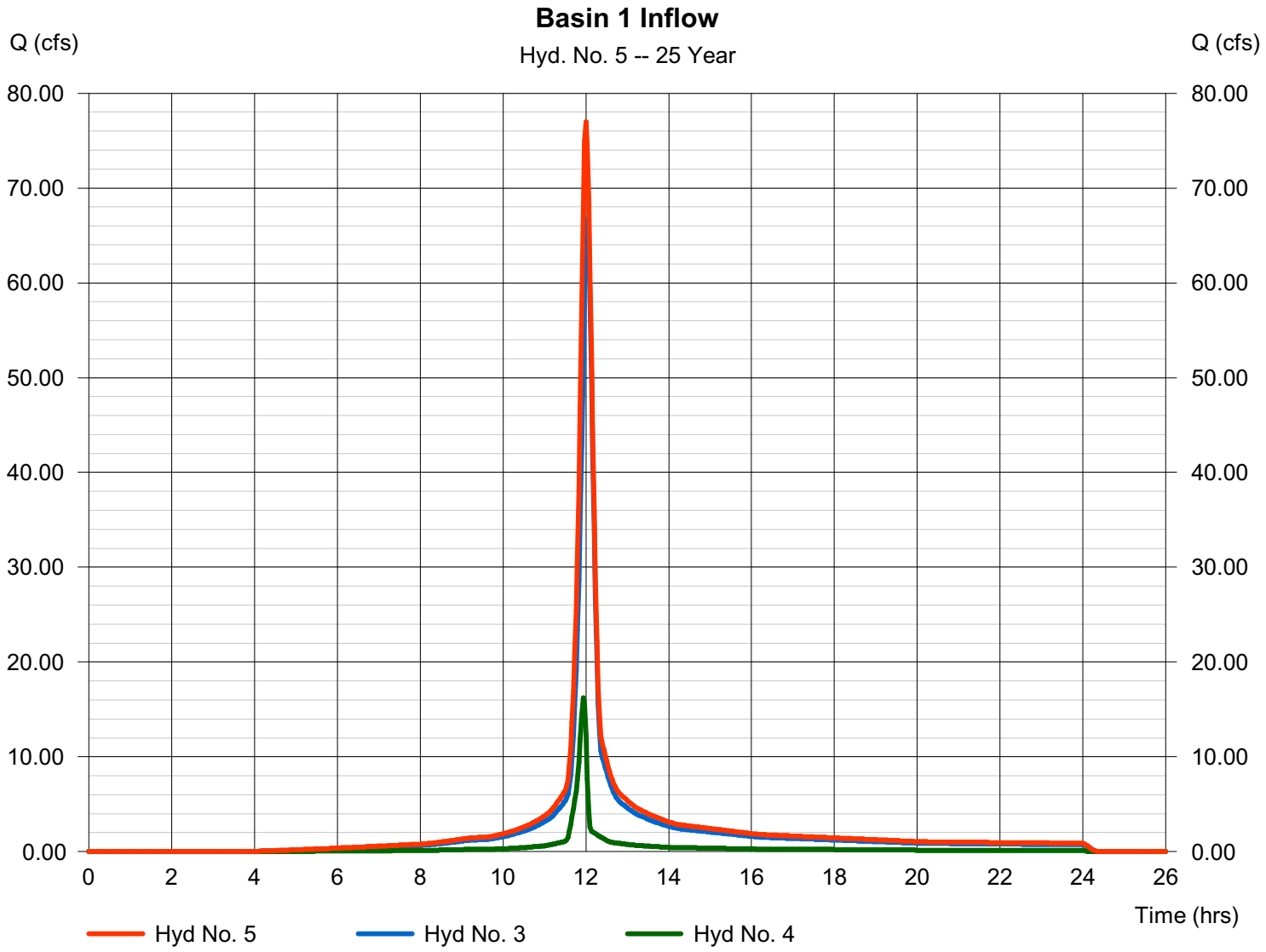
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024 Friday, 04 / 18 / 2025

Hyd. No. 5

Basin 1 Inflow

Hydrograph type	= Combine	Peak discharge	= 77.01 cfs
Storm frequency	= 25 yrs	Time to peak	= 12.00 hrs
Time interval	= 2 min	Hyd. volume	= 229,862 cuft
Inflow hyds.	= 3, 4	Contrib. drain. area	= 14.510 ac



Hydrograph Report

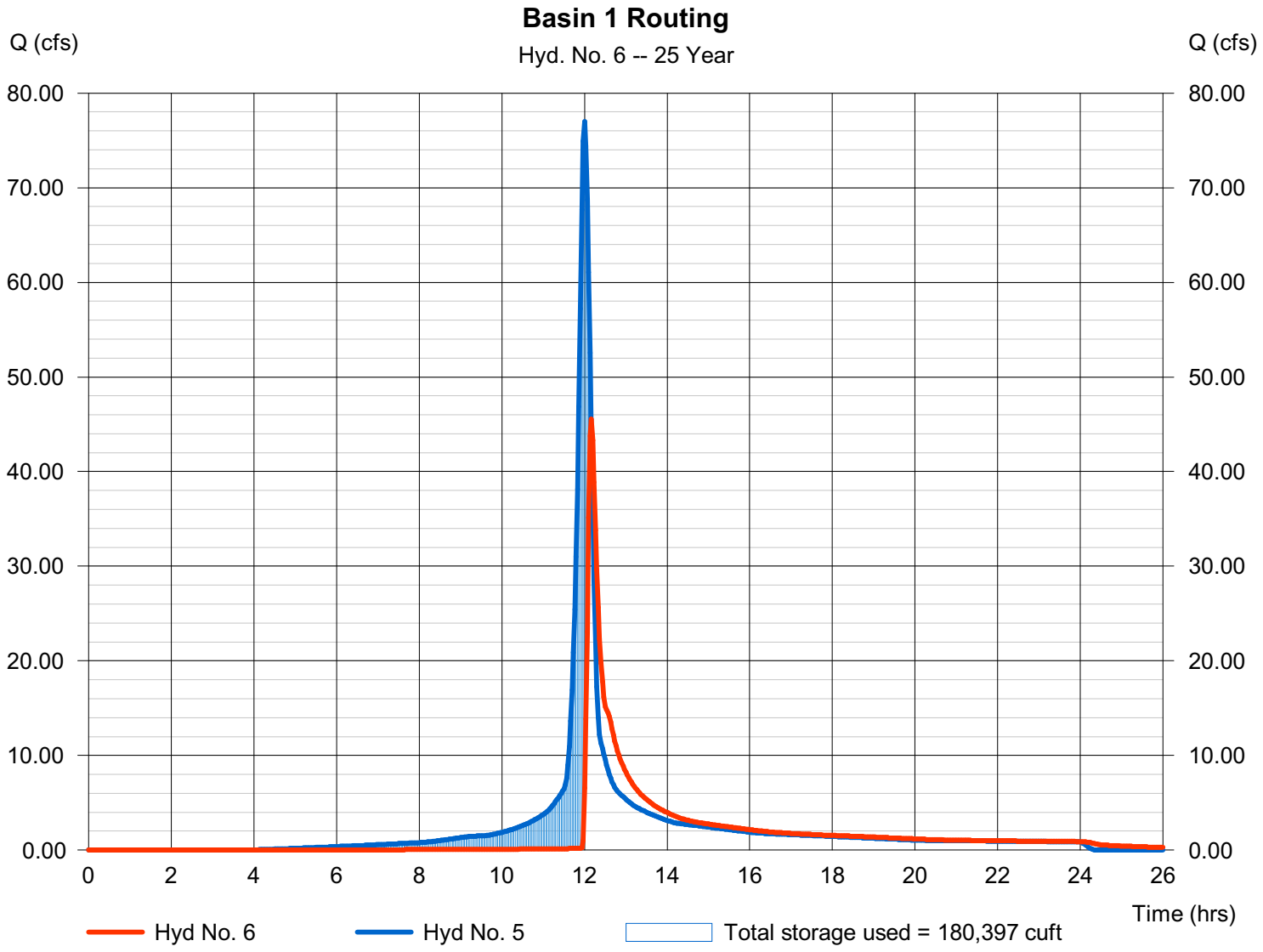
Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024 Friday, 04 / 18 / 2025

Hyd. No. 6

Basin 1 Routing

Hydrograph type	= Reservoir	Peak discharge	= 45.53 cfs
Storm frequency	= 25 yrs	Time to peak	= 12.17 hrs
Time interval	= 2 min	Hyd. volume	= 201,842 cuft
Inflow hyd. No.	= 5 - Basin 1 Inflow	Max. Elevation	= 534.90 ft
Reservoir name	= Sediment Basin 1	Max. Storage	= 180,397 cuft

Storage Indication method used. Wet pond routing start elevation = 530.30 ft.



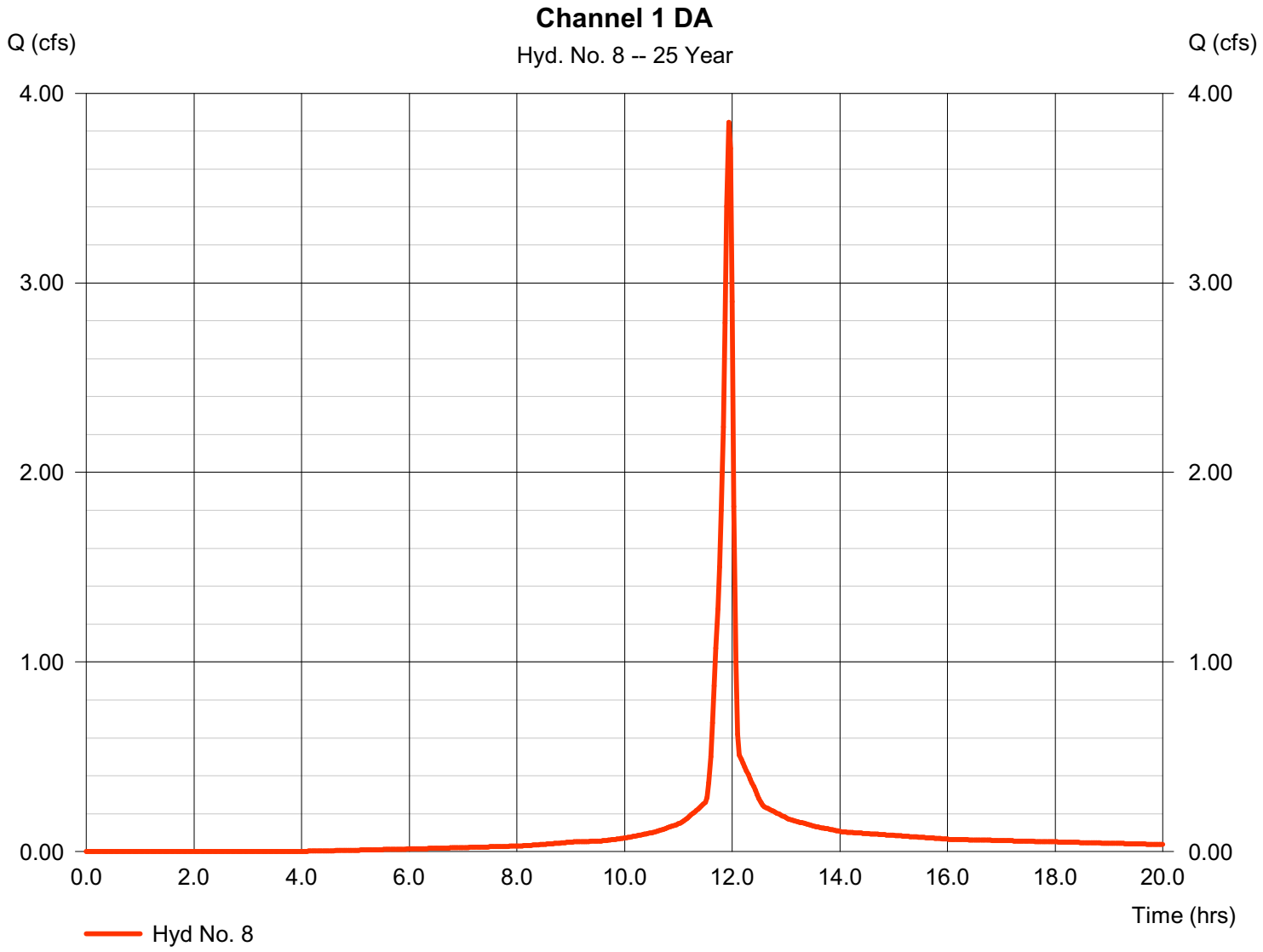
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024 Friday, 04 / 18 / 2025

Hyd. No. 8

Channel 1 DA

Hydrograph type	=	SCS Runoff	Peak discharge	=	3.847 cfs
Storm frequency	=	25 yrs	Time to peak	=	11.93 hrs
Time interval	=	2 min	Hyd. volume	=	8,275 cuft
Drainage area	=	0.540 ac	Curve number	=	89
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	5.00 min
Total precip.	=	5.76 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484



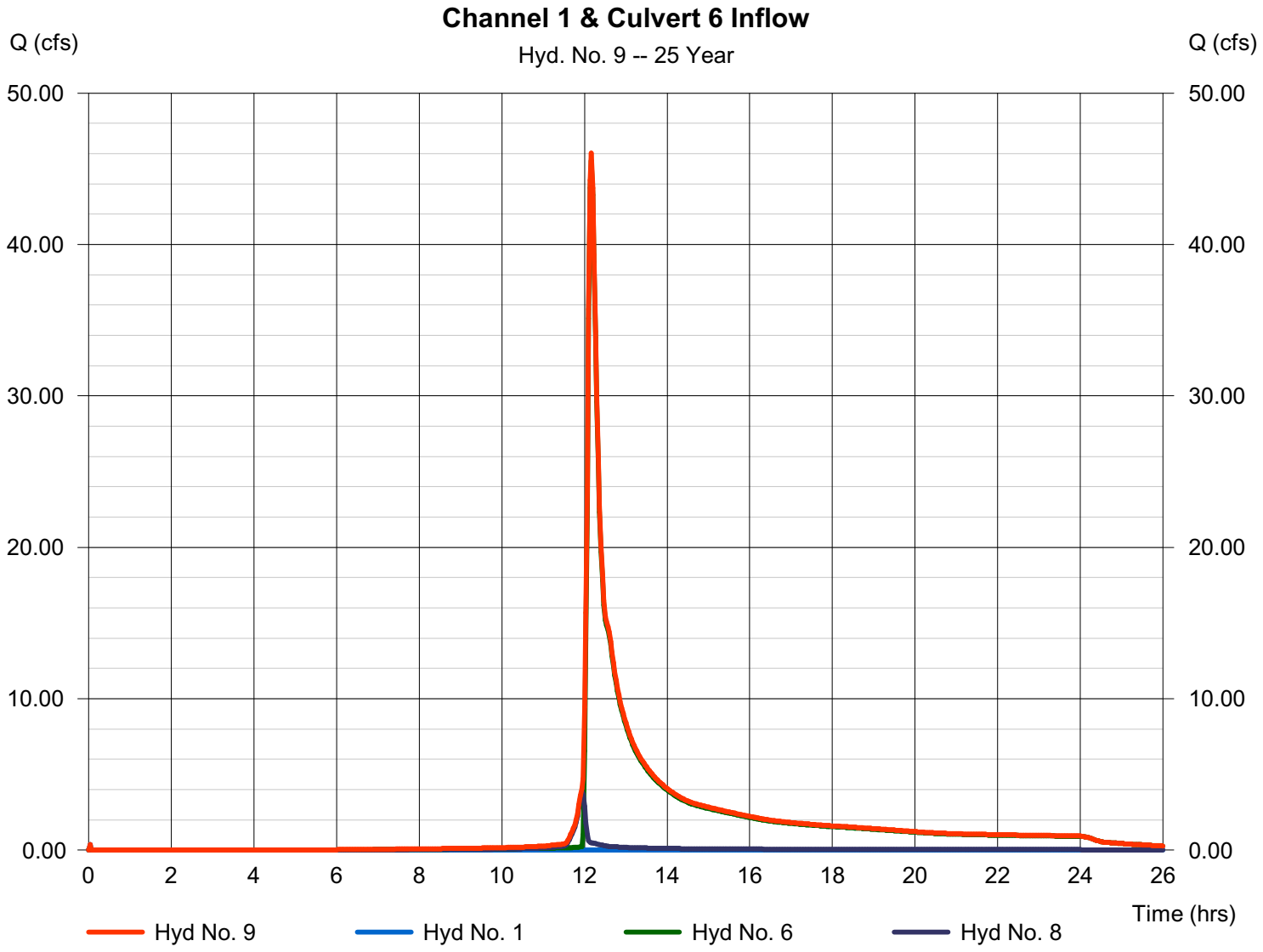
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024 Friday, 04 / 18 / 2025

Hyd. No. 9

Channel 1 & Culvert 6 Inflow

Hydrograph type	= Combine	Peak discharge	= 46.02 cfs
Storm frequency	= 25 yrs	Time to peak	= 12.17 hrs
Time interval	= 2 min	Hyd. volume	= 210,162 cuft
Inflow hyds.	= 1, 6, 8	Contrib. drain. area	= 0.540 ac



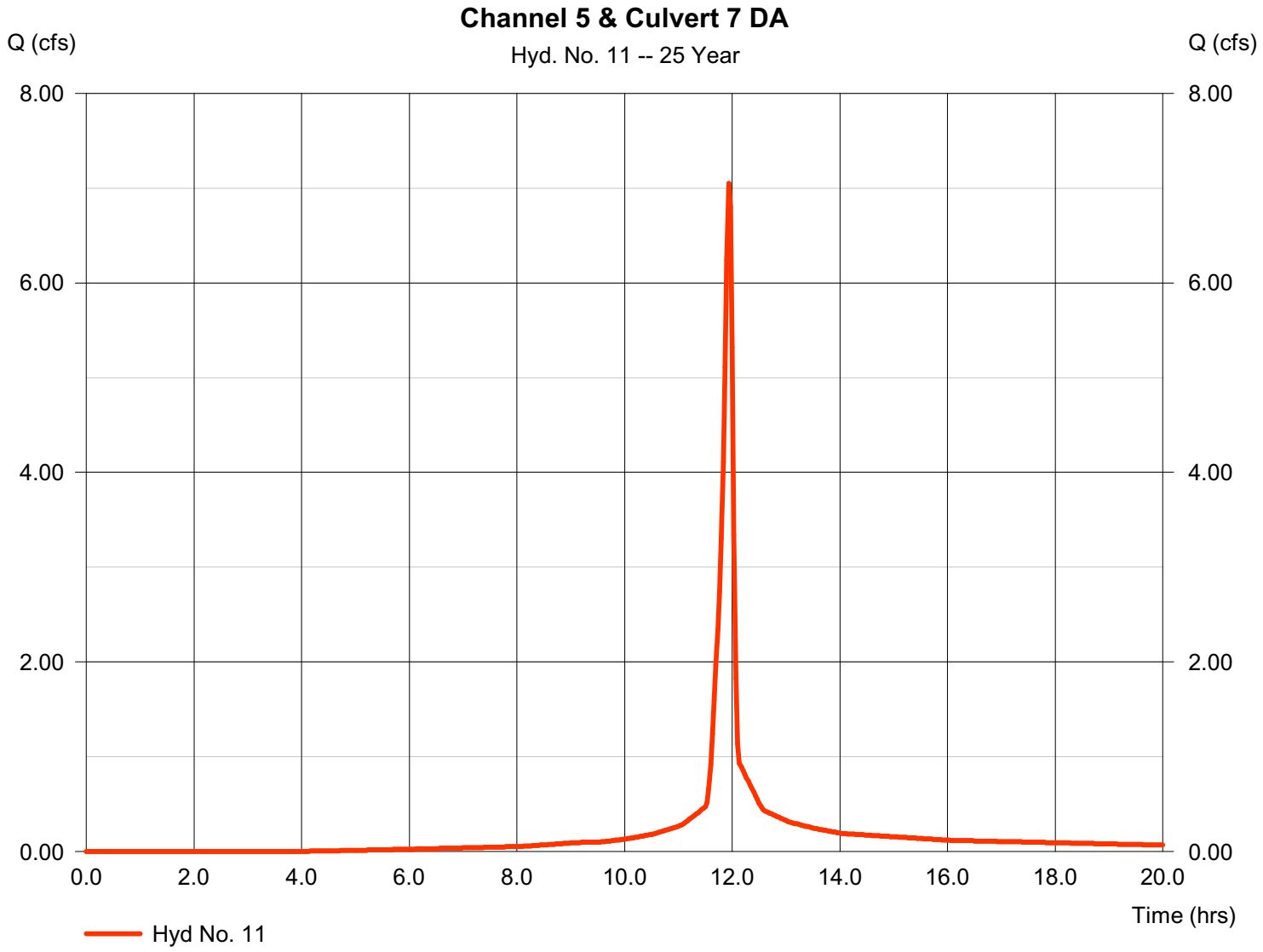
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024 Friday, 04 / 18 / 2025

Hyd. No. 11

Channel 5 & Culvert 7 DA

Hydrograph type	= SCS Runoff	Peak discharge	= 7.052 cfs
Storm frequency	= 25 yrs	Time to peak	= 11.93 hrs
Time interval	= 2 min	Hyd. volume	= 15,172 cuft
Drainage area	= 0.990 ac	Curve number	= 89
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 5.00 min
Total precip.	= 5.76 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484



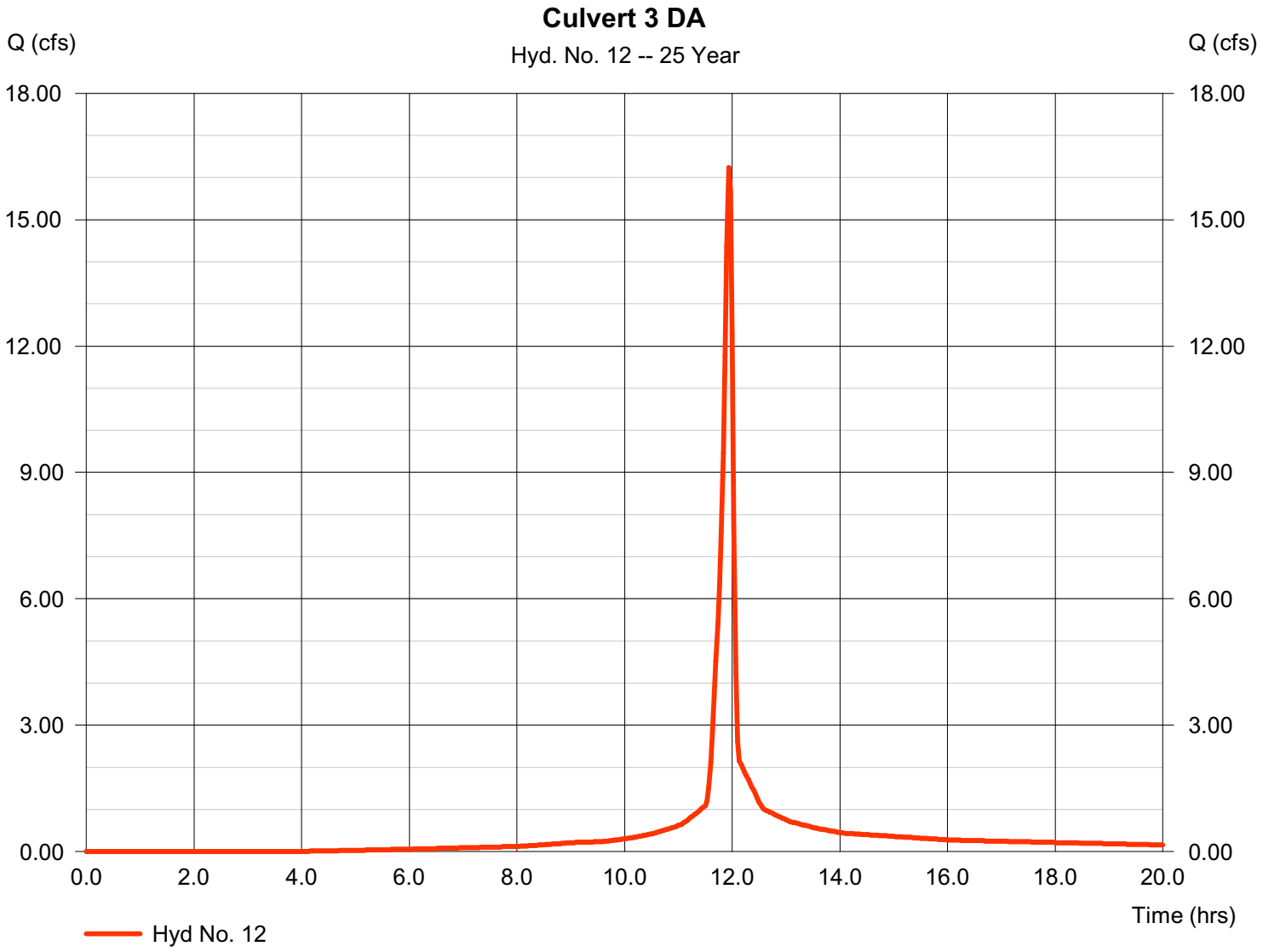
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024 Friday, 04 / 18 / 2025

Hyd. No. 12

Culvert 3 DA

Hydrograph type	=	SCS Runoff	Peak discharge	=	16.24 cfs
Storm frequency	=	25 yrs	Time to peak	=	11.93 hrs
Time interval	=	2 min	Hyd. volume	=	34,941 cuft
Drainage area	=	2.280 ac	Curve number	=	89
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	5.00 min
Total precip.	=	5.76 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484



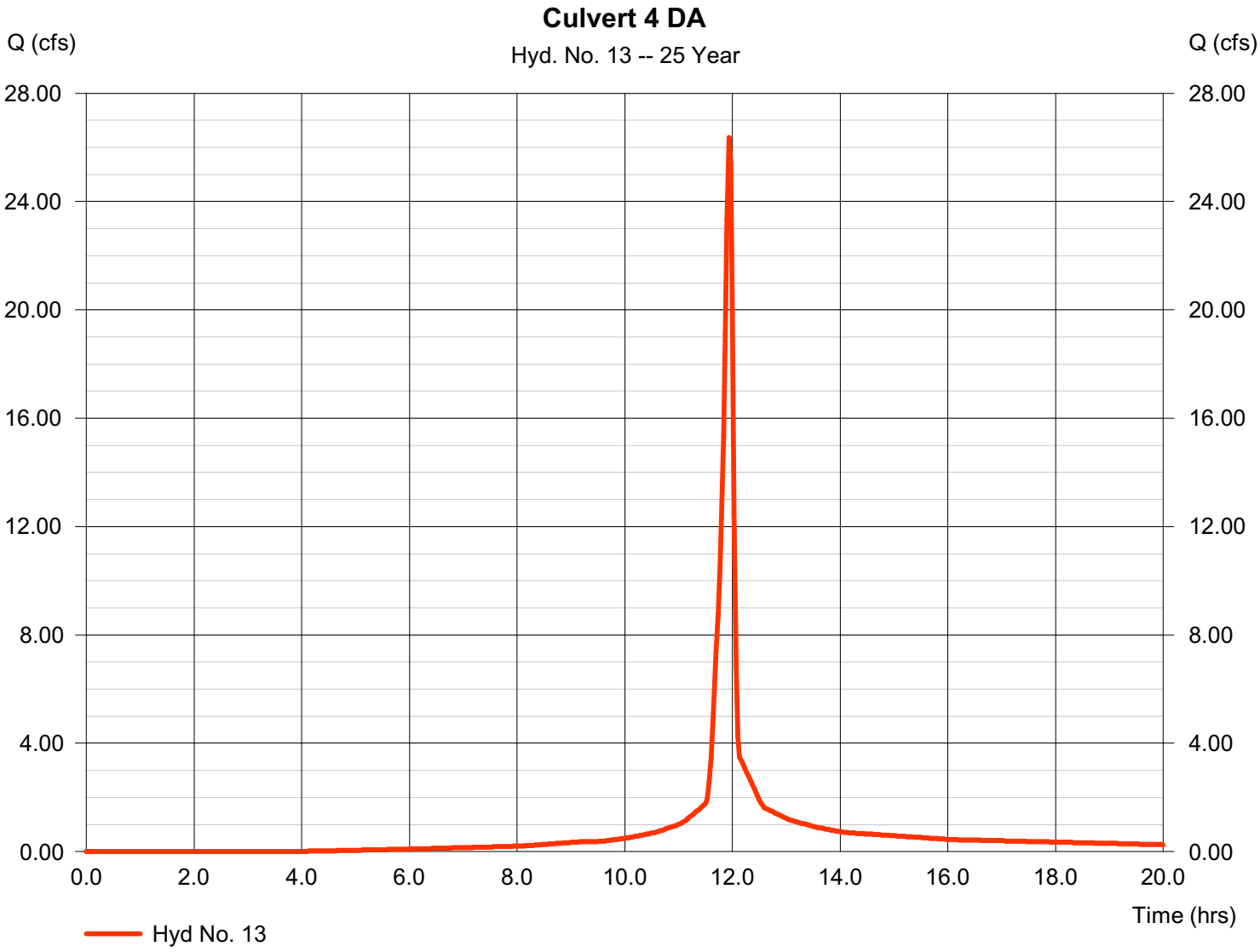
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024 Friday, 04 / 18 / 2025

Hyd. No. 13

Culvert 4 DA

Hydrograph type	=	SCS Runoff	Peak discharge	=	26.36 cfs
Storm frequency	=	25 yrs	Time to peak	=	11.93 hrs
Time interval	=	2 min	Hyd. volume	=	56,702 cuft
Drainage area	=	3.700 ac	Curve number	=	89
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	5.00 min
Total precip.	=	5.76 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484



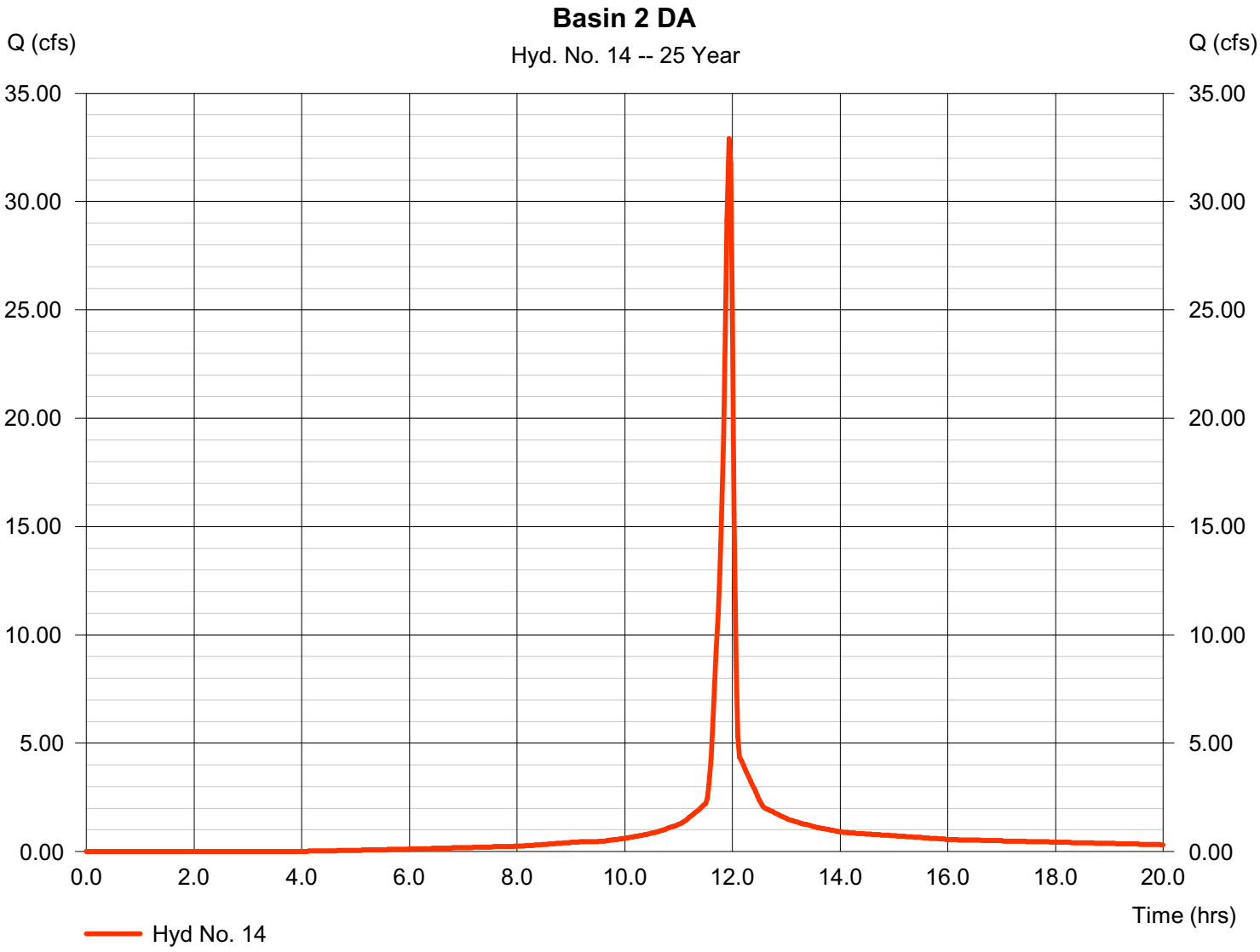
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024 Friday, 04 / 18 / 2025

Hyd. No. 14

Basin 2 DA

Hydrograph type	=	SCS Runoff	Peak discharge	=	32.91 cfs
Storm frequency	=	25 yrs	Time to peak	=	11.93 hrs
Time interval	=	2 min	Hyd. volume	=	70,801 cuft
Drainage area	=	4.620 ac	Curve number	=	89
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	5.00 min
Total precip.	=	5.76 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484



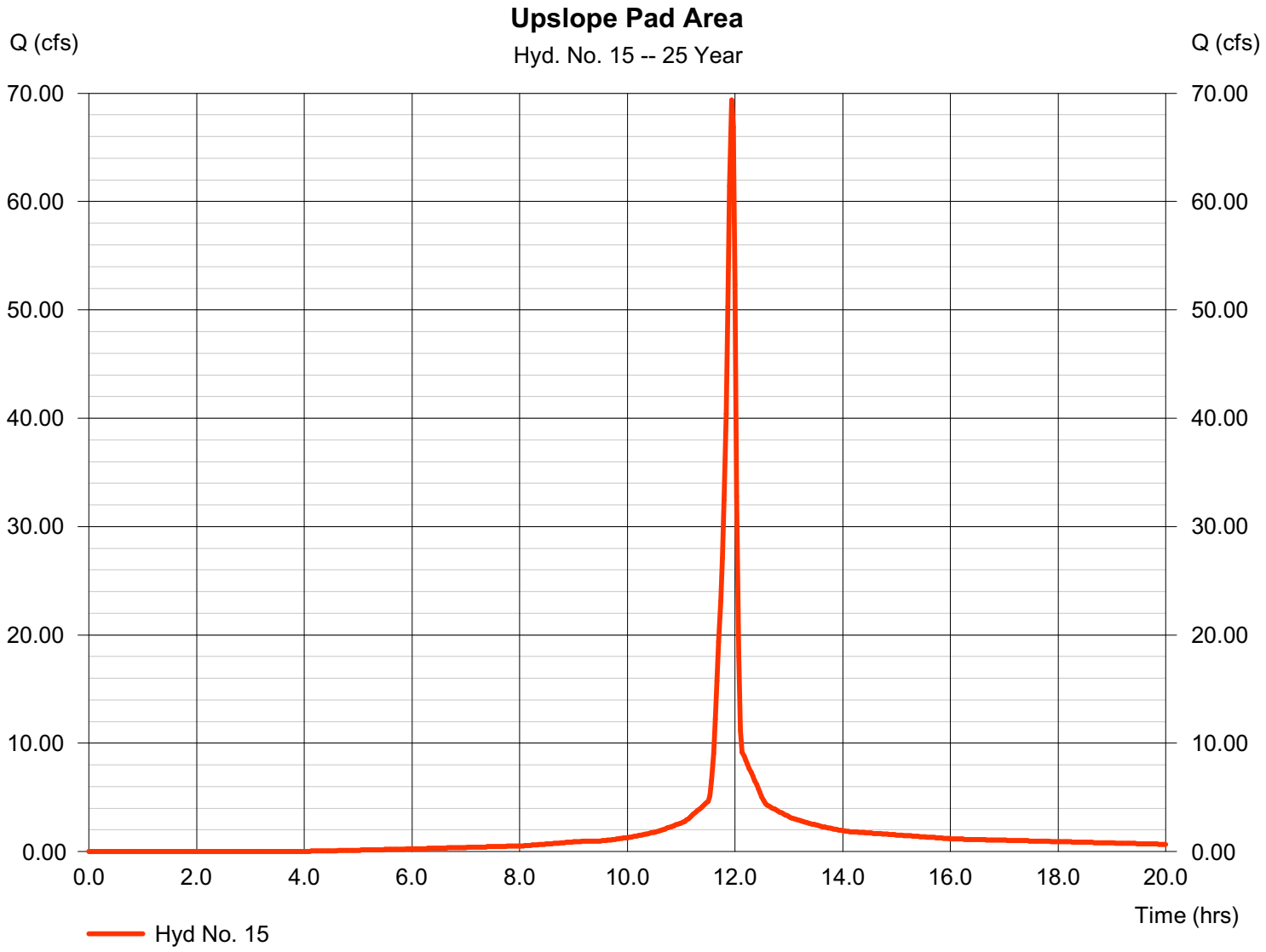
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024 Friday, 04 / 18 / 2025

Hyd. No. 15

Upslope Pad Area

Hydrograph type	=	SCS Runoff	Peak discharge	=	69.38 cfs
Storm frequency	=	25 yrs	Time to peak	=	11.93 hrs
Time interval	=	2 min	Hyd. volume	=	149,265 cuft
Drainage area	=	9.740 ac	Curve number	=	89
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	5.00 min
Total precip.	=	5.76 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484



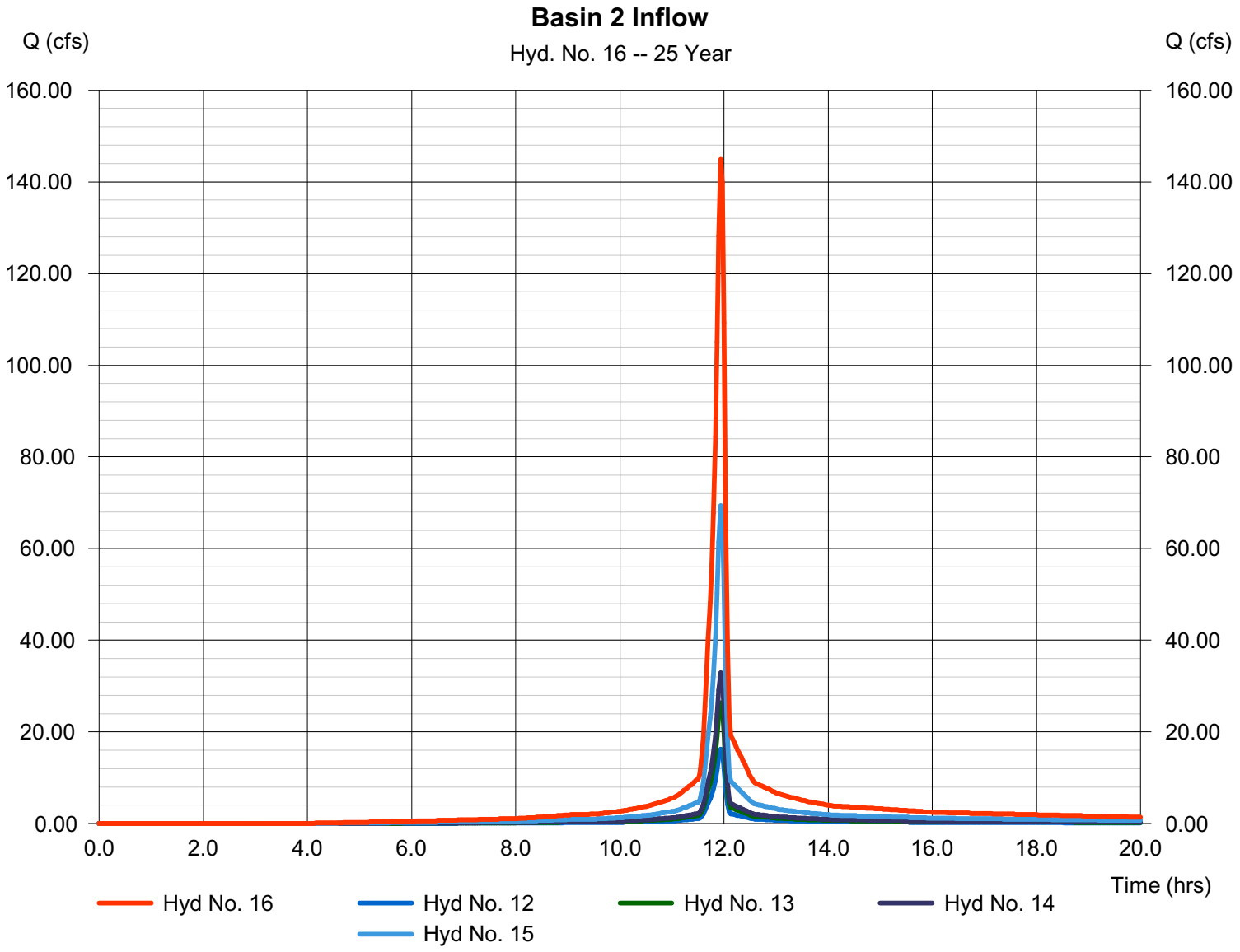
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024 Friday, 04 / 18 / 2025

Hyd. No. 16

Basin 2 Inflow

Hydrograph type	= Combine	Peak discharge	= 144.89 cfs
Storm frequency	= 25 yrs	Time to peak	= 11.93 hrs
Time interval	= 2 min	Hyd. volume	= 311,710 cuft
Inflow hyds.	= 12, 13, 14, 15	Contrib. drain. area	= 20.340 ac



Hydrograph Report

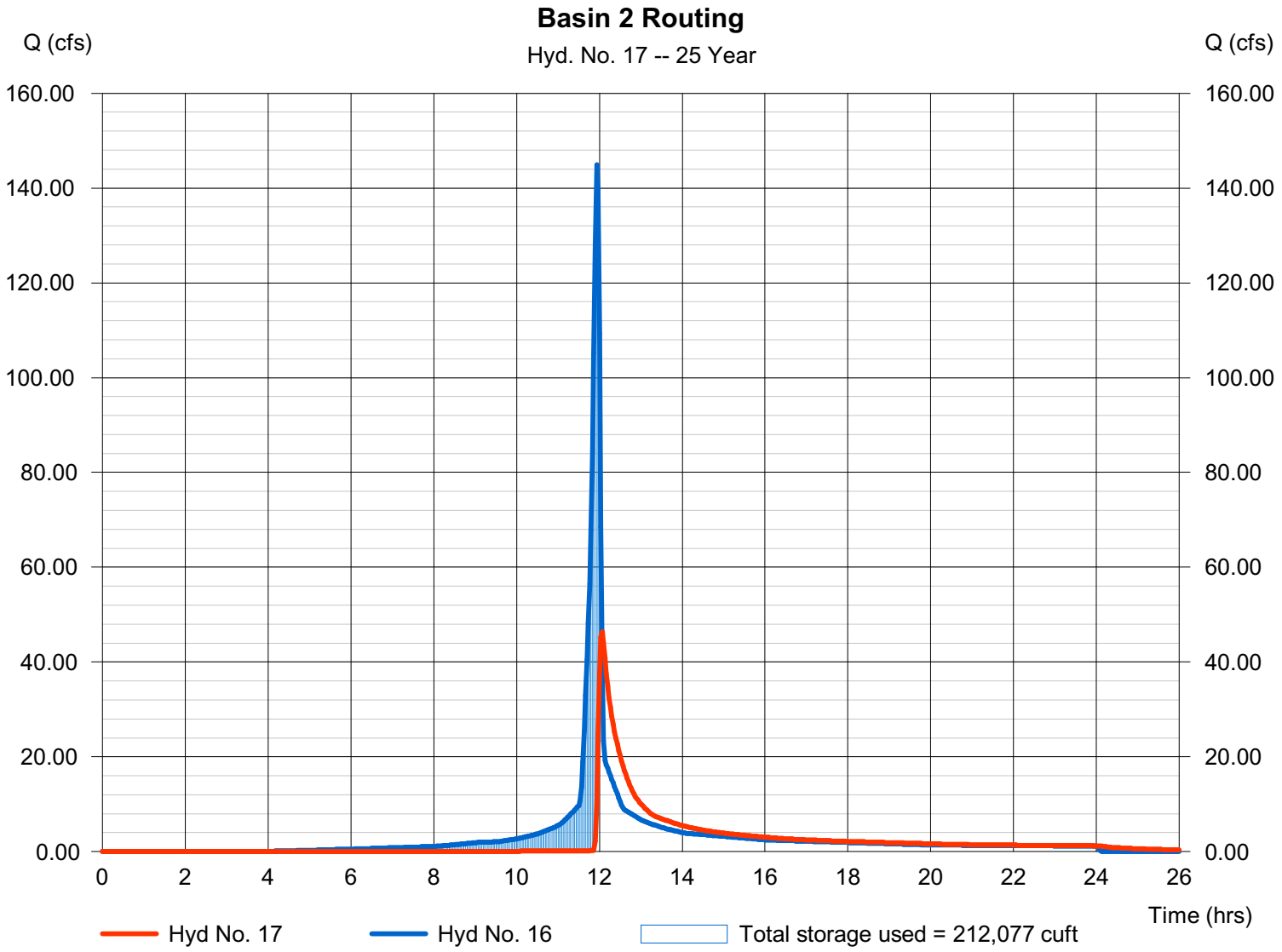
Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024 Friday, 04 / 18 / 2025

Hyd. No. 17

Basin 2 Routing

Hydrograph type	= Reservoir	Peak discharge	= 46.40 cfs
Storm frequency	= 25 yrs	Time to peak	= 12.07 hrs
Time interval	= 2 min	Hyd. volume	= 255,345 cuft
Inflow hyd. No.	= 16 - Basin 2 Inflow	Max. Elevation	= 531.06 ft
Reservoir name	= Sediment Basin 2	Max. Storage	= 212,077 cuft

Storage Indication method used. Wet pond routing start elevation = 526.80 ft.



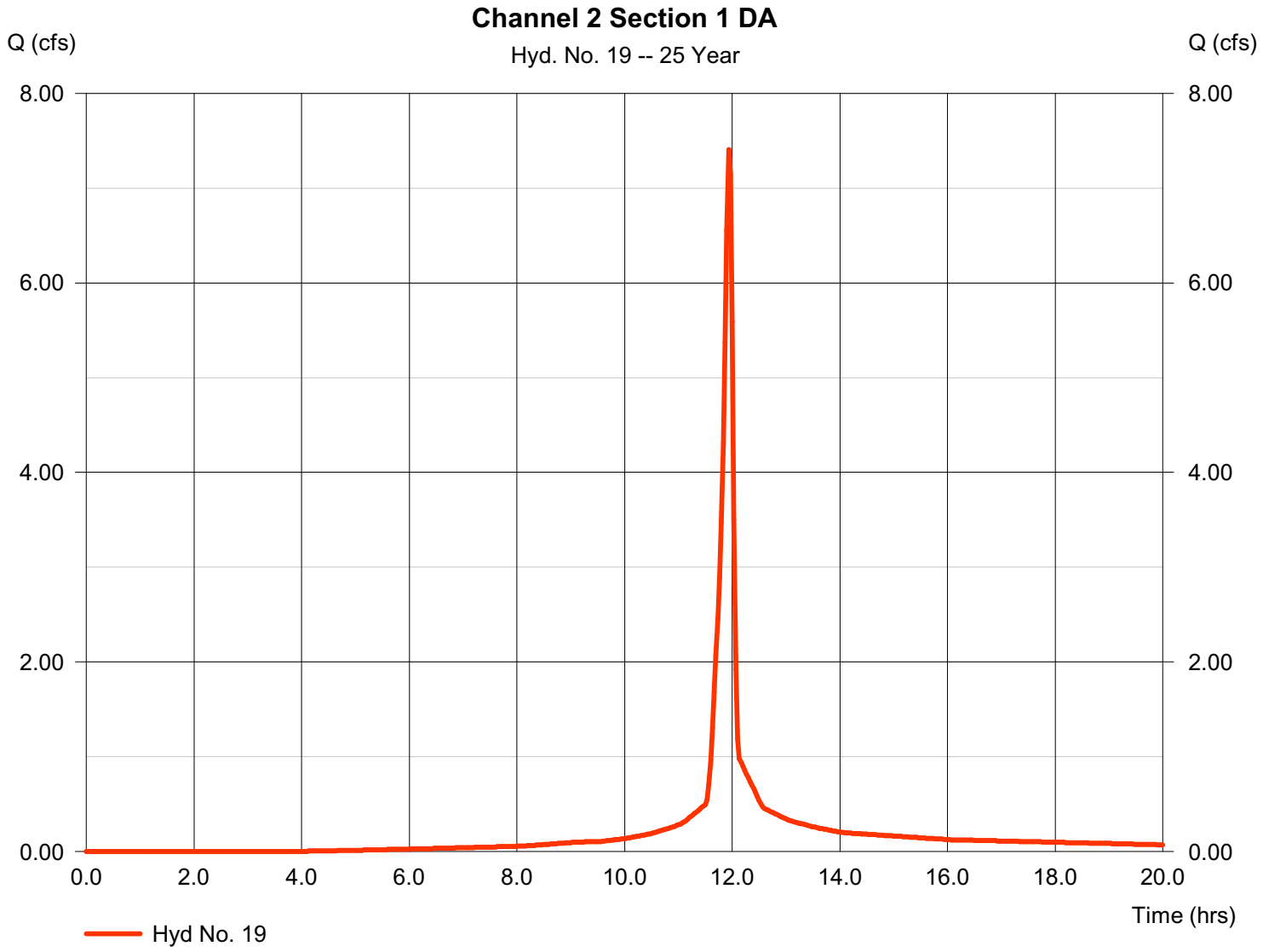
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024 Friday, 04 / 18 / 2025

Hyd. No. 19

Channel 2 Section 1 DA

Hydrograph type	= SCS Runoff	Peak discharge	= 7.408 cfs
Storm frequency	= 25 yrs	Time to peak	= 11.93 hrs
Time interval	= 2 min	Hyd. volume	= 15,938 cuft
Drainage area	= 1.040 ac	Curve number	= 89
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 5.00 min
Total precip.	= 5.76 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484



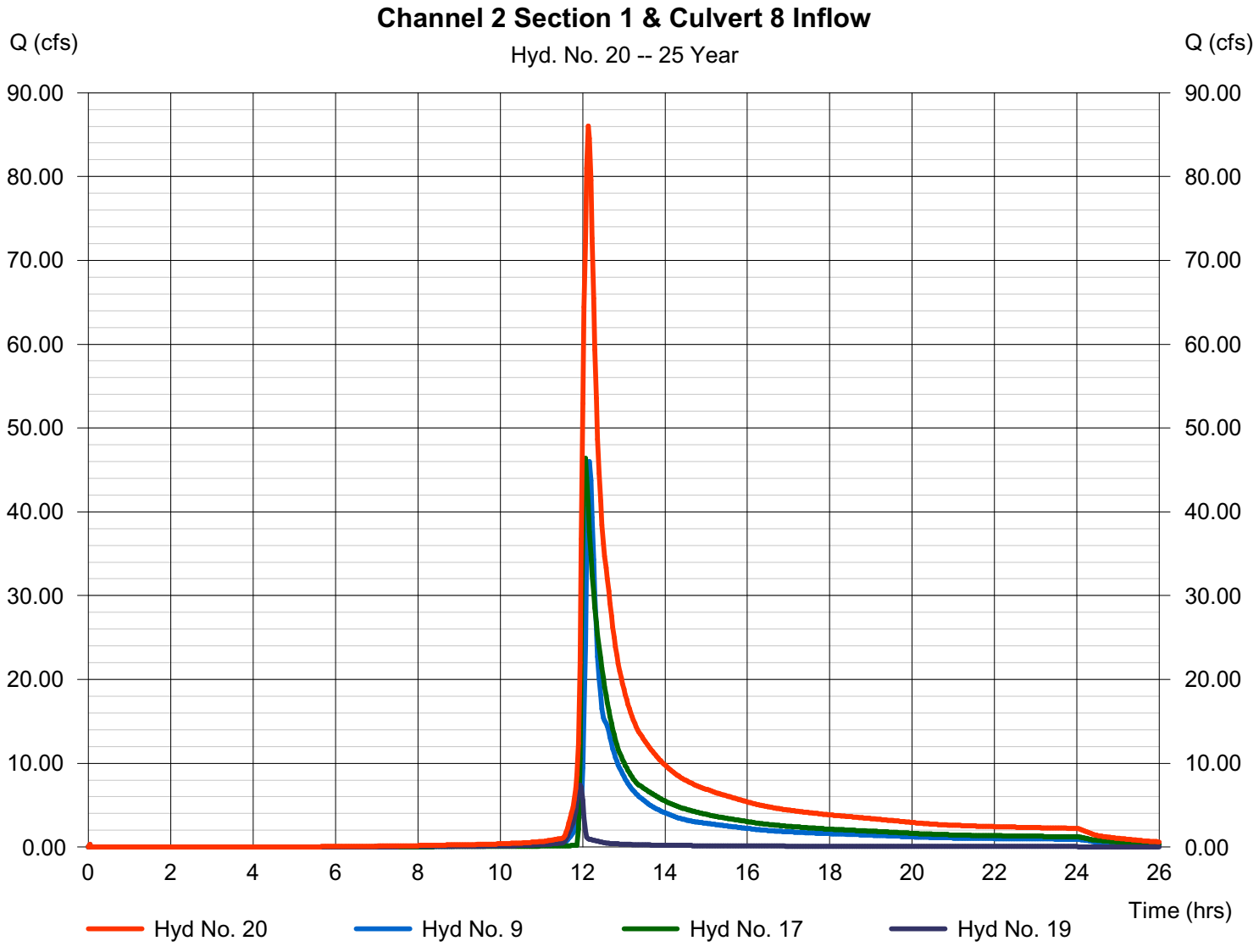
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024 Friday, 04 / 18 / 2025

Hyd. No. 20

Channel 2 Section 1 & Culvert 8 Inflow

Hydrograph type	= Combine	Peak discharge	= 86.02 cfs
Storm frequency	= 25 yrs	Time to peak	= 12.13 hrs
Time interval	= 2 min	Hyd. volume	= 481,445 cuft
Inflow hyds.	= 9, 17, 19	Contrib. drain. area	= 1.040 ac



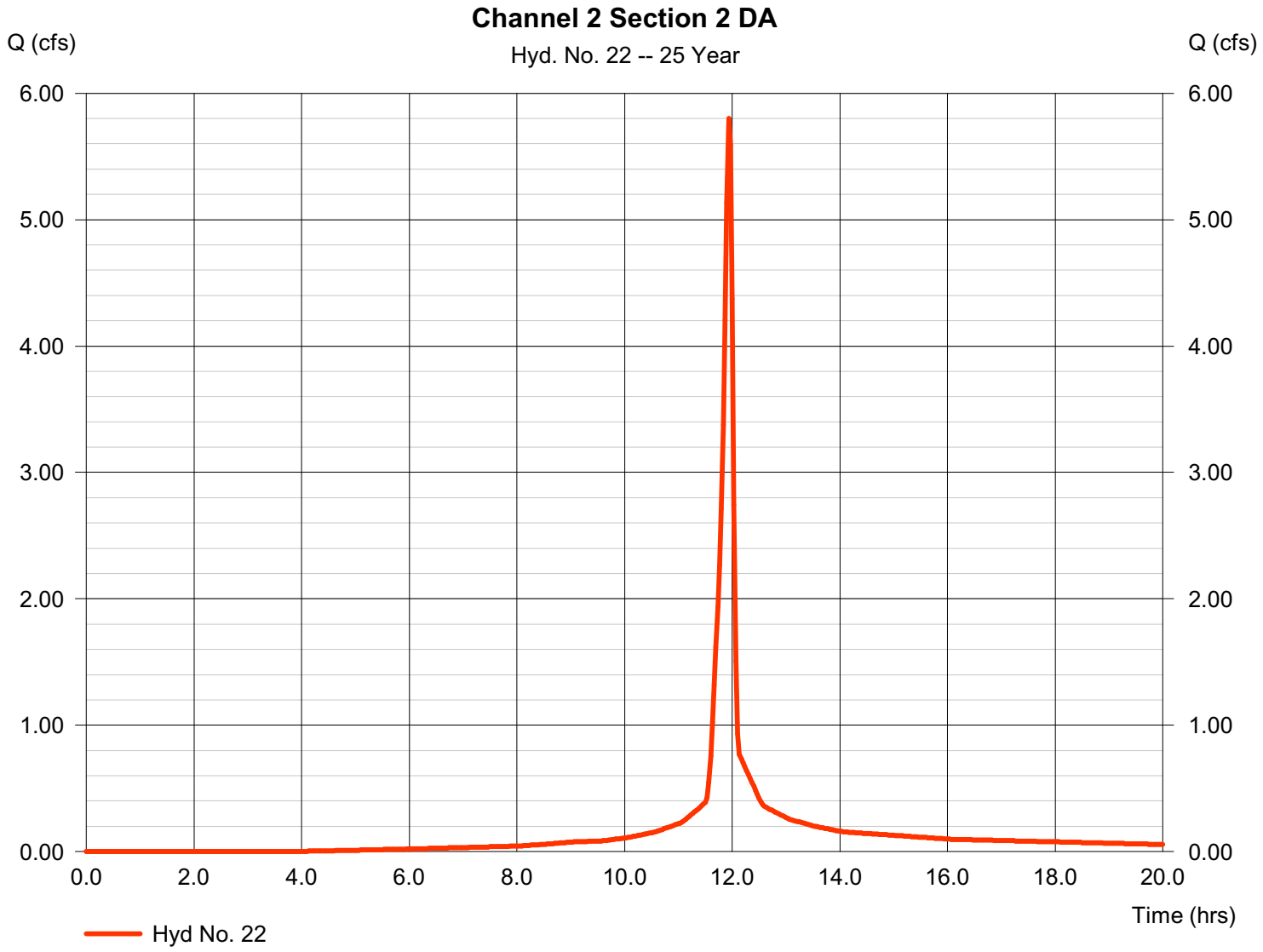
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024 Friday, 04 / 18 / 2025

Hyd. No. 22

Channel 2 Section 2 DA

Hydrograph type	= SCS Runoff	Peak discharge	= 5.798 cfs
Storm frequency	= 25 yrs	Time to peak	= 11.93 hrs
Time interval	= 2 min	Hyd. volume	= 12,475 cuft
Drainage area	= 0.814 ac	Curve number	= 89
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 5.00 min
Total precip.	= 5.76 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484



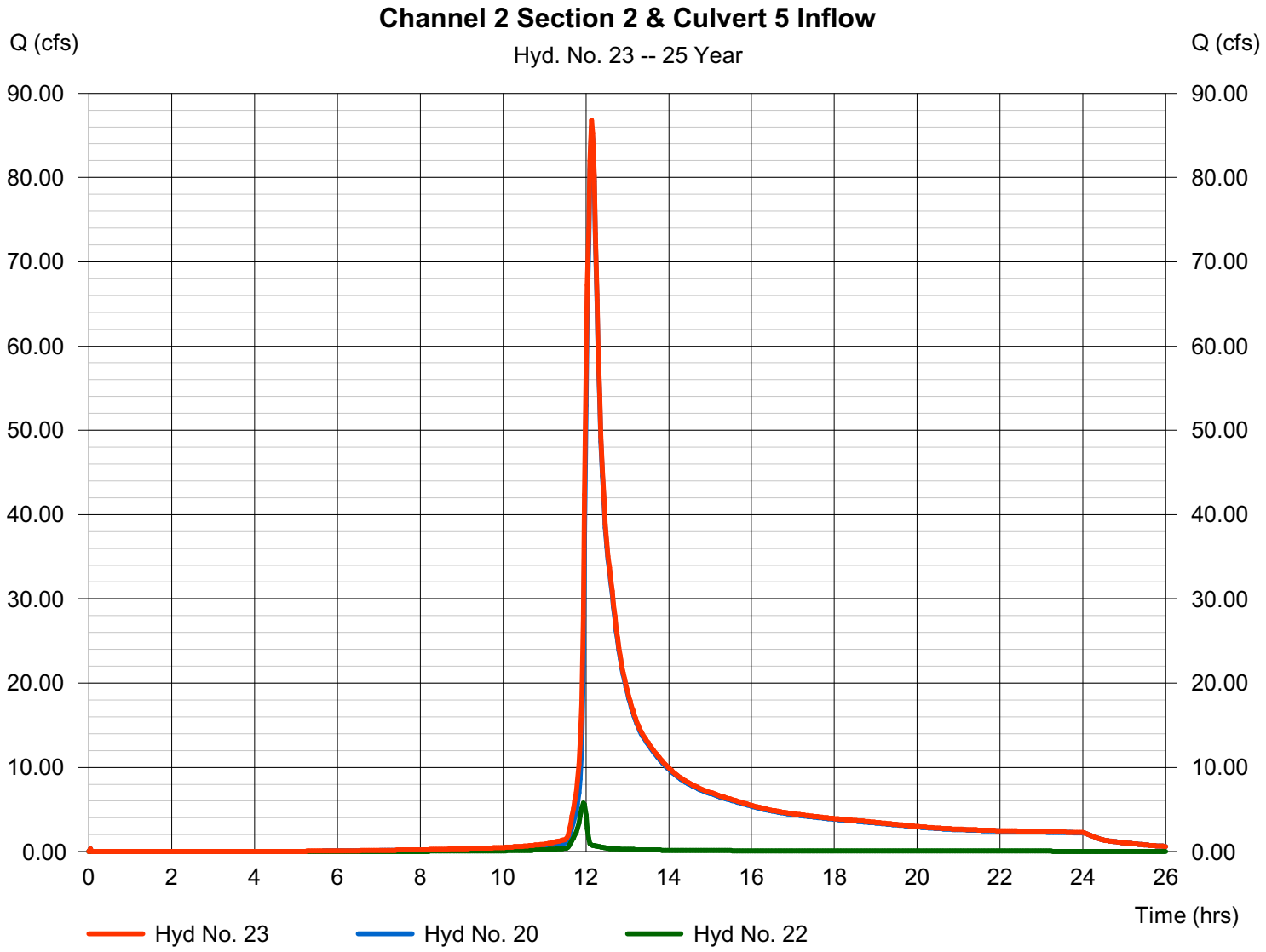
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024 Friday, 04 / 18 / 2025

Hyd. No. 23

Channel 2 Section 2 & Culvert 5 Inflow

Hydrograph type	= Combine	Peak discharge	= 86.78 cfs
Storm frequency	= 25 yrs	Time to peak	= 12.13 hrs
Time interval	= 2 min	Hyd. volume	= 493,920 cuft
Inflow hyds.	= 20, 22	Contrib. drain. area	= 0.814 ac



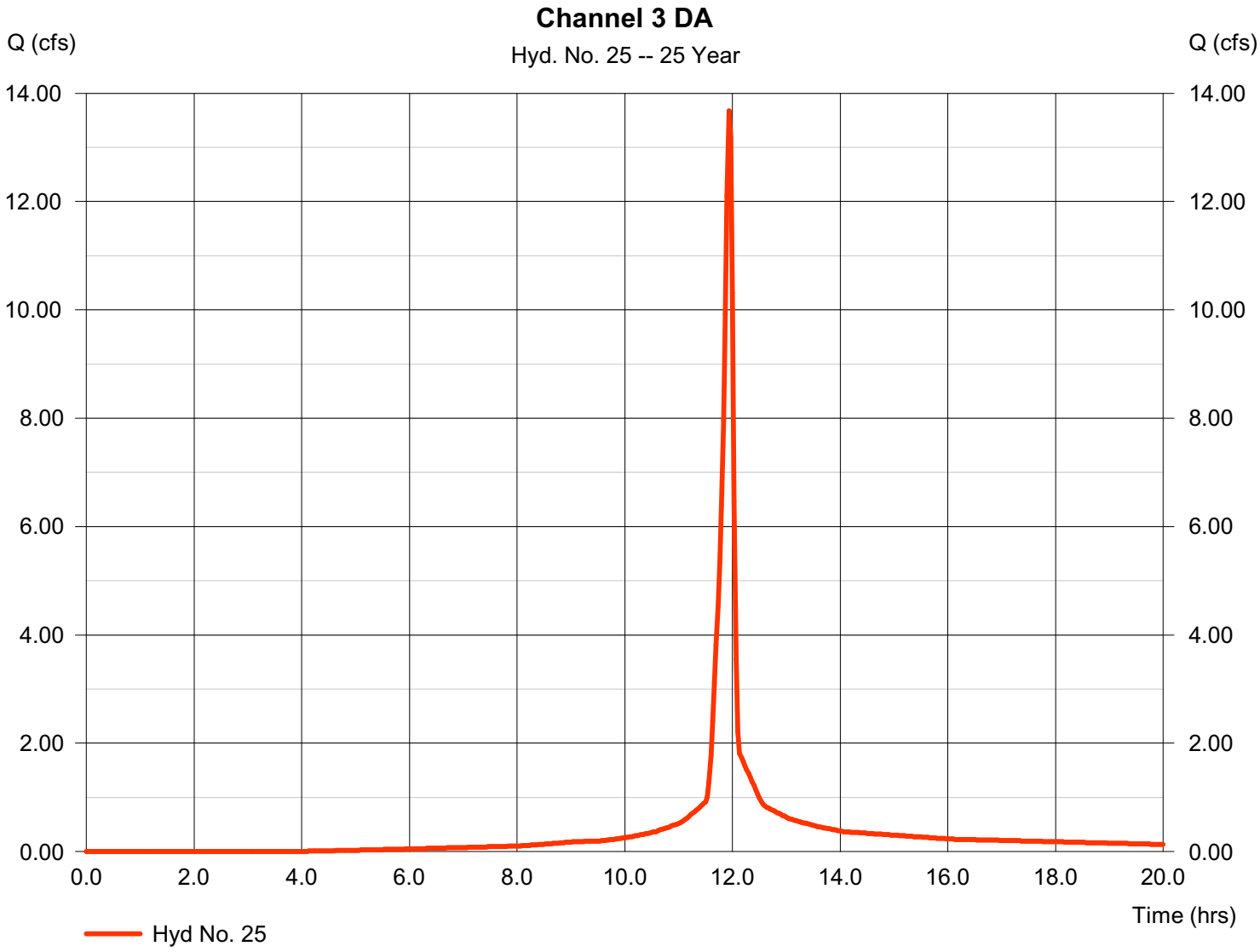
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024 Friday, 04 / 18 / 2025

Hyd. No. 25

Channel 3 DA

Hydrograph type	=	SCS Runoff	Peak discharge	=	13.68 cfs
Storm frequency	=	25 yrs	Time to peak	=	11.93 hrs
Time interval	=	2 min	Hyd. volume	=	29,424 cuft
Drainage area	=	1.920 ac	Curve number	=	89
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	5.00 min
Total precip.	=	5.76 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484



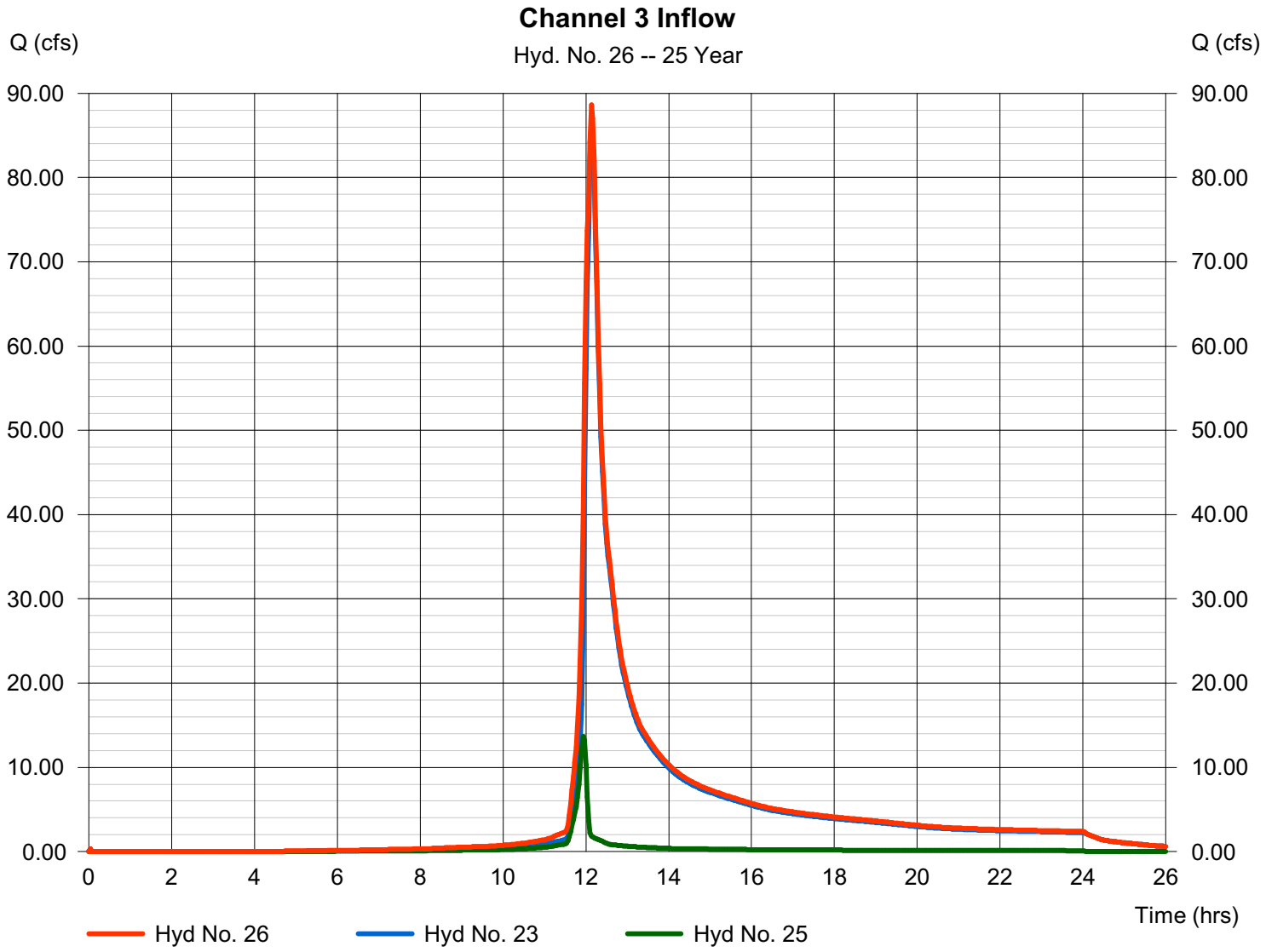
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024 Friday, 04 / 18 / 2025

Hyd. No. 26

Channel 3 Inflow

Hydrograph type	= Combine	Peak discharge	= 88.59 cfs
Storm frequency	= 25 yrs	Time to peak	= 12.13 hrs
Time interval	= 2 min	Hyd. volume	= 523,344 cuft
Inflow hyds.	= 23, 25	Contrib. drain. area	= 1.920 ac



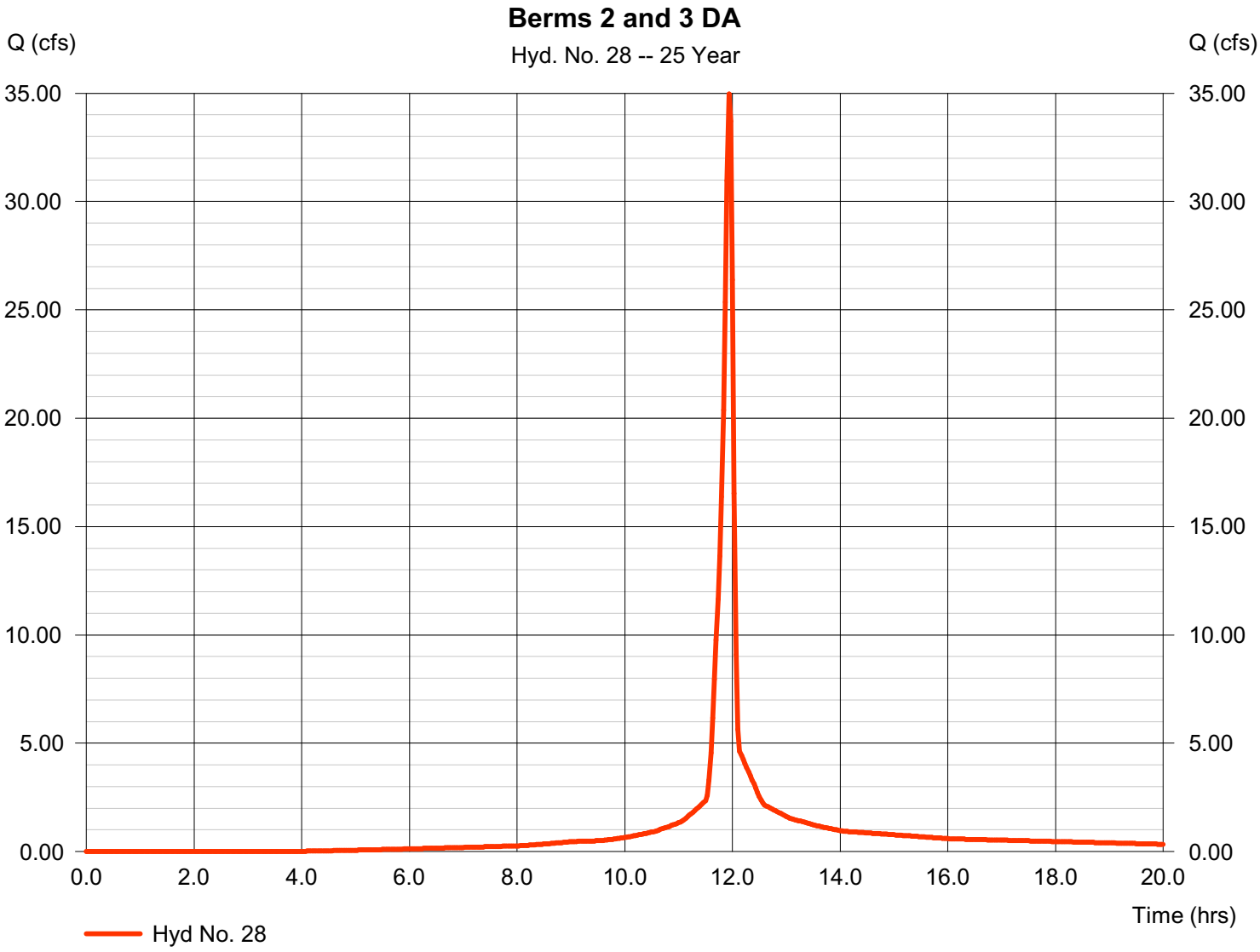
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024 Friday, 04 / 18 / 2025

Hyd. No. 28

Berms 2 and 3 DA

Hydrograph type	= SCS Runoff	Peak discharge	= 34.98 cfs
Storm frequency	= 25 yrs	Time to peak	= 11.93 hrs
Time interval	= 2 min	Hyd. volume	= 75,246 cuft
Drainage area	= 4.910 ac	Curve number	= 89
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 5.00 min
Total precip.	= 5.76 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484



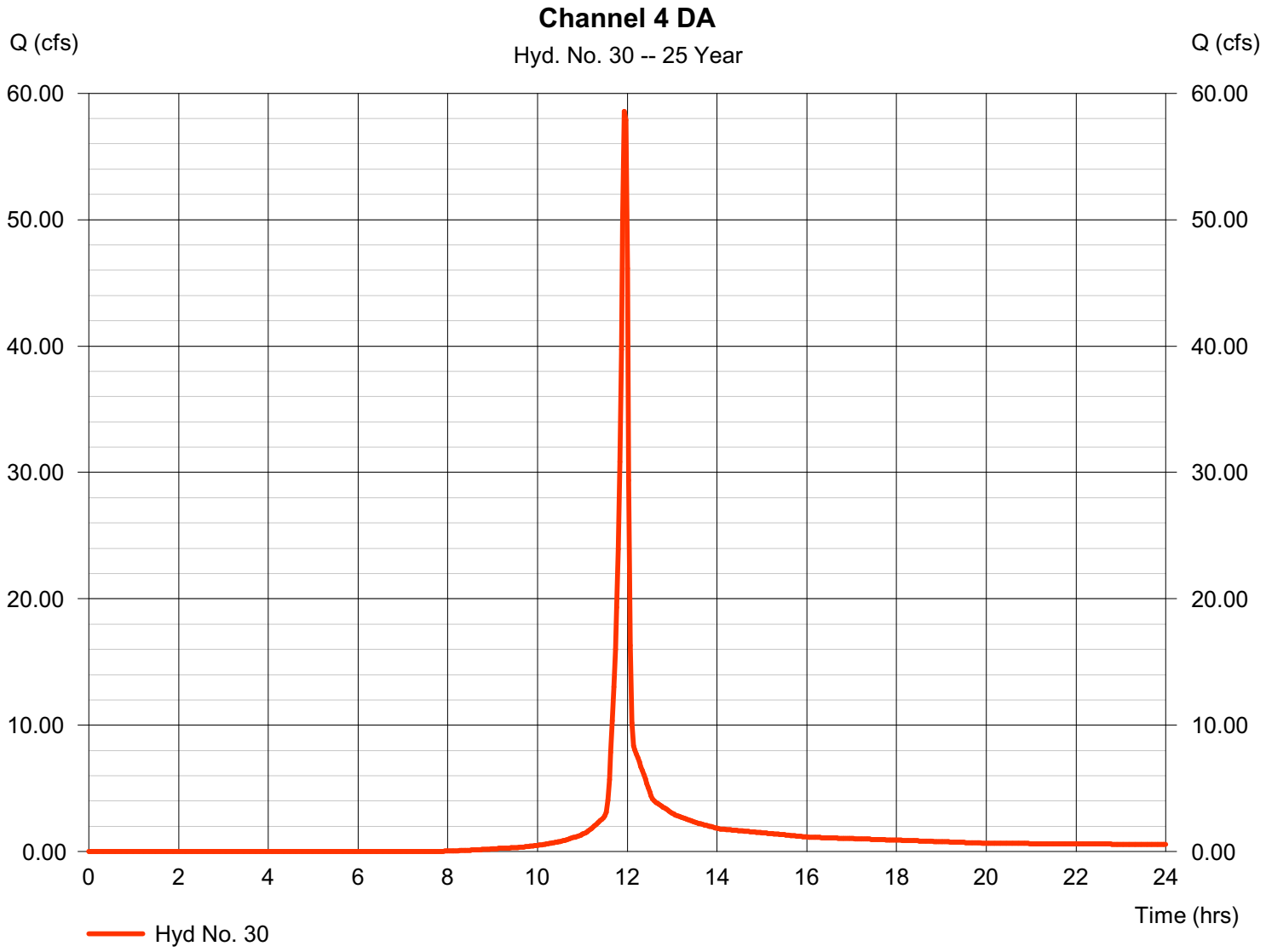
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024 Friday, 04 / 18 / 2025

Hyd. No. 30

Channel 4 DA

Hydrograph type	=	SCS Runoff	Peak discharge	=	58.56 cfs
Storm frequency	=	25 yrs	Time to peak	=	11.93 hrs
Time interval	=	2 min	Hyd. volume	=	118,708 cuft
Drainage area	=	10.990 ac	Curve number	=	76
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	TR55	Time of conc. (Tc)	=	6.00 min
Total precip.	=	5.76 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484



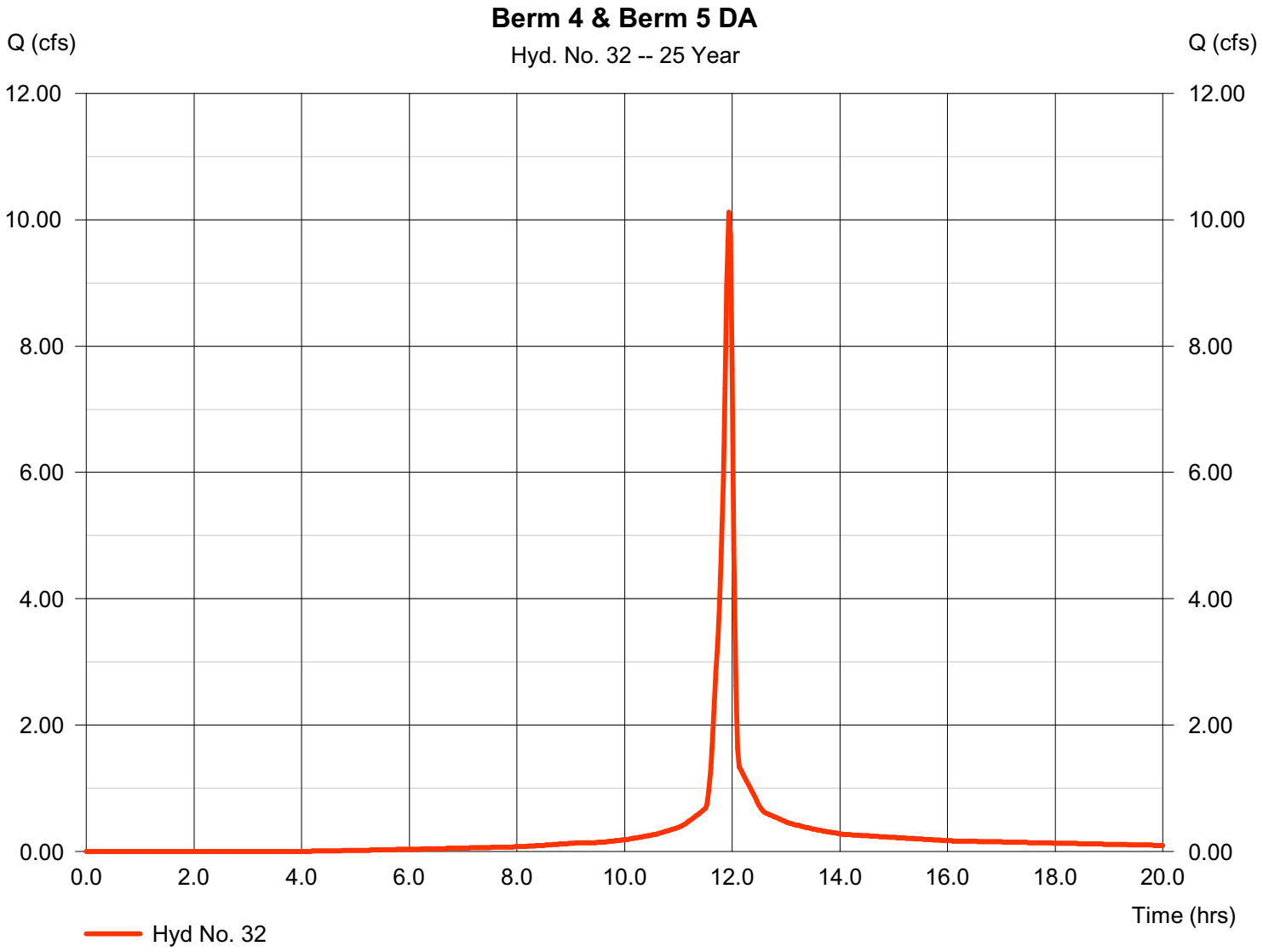
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024 Friday, 04 / 18 / 2025

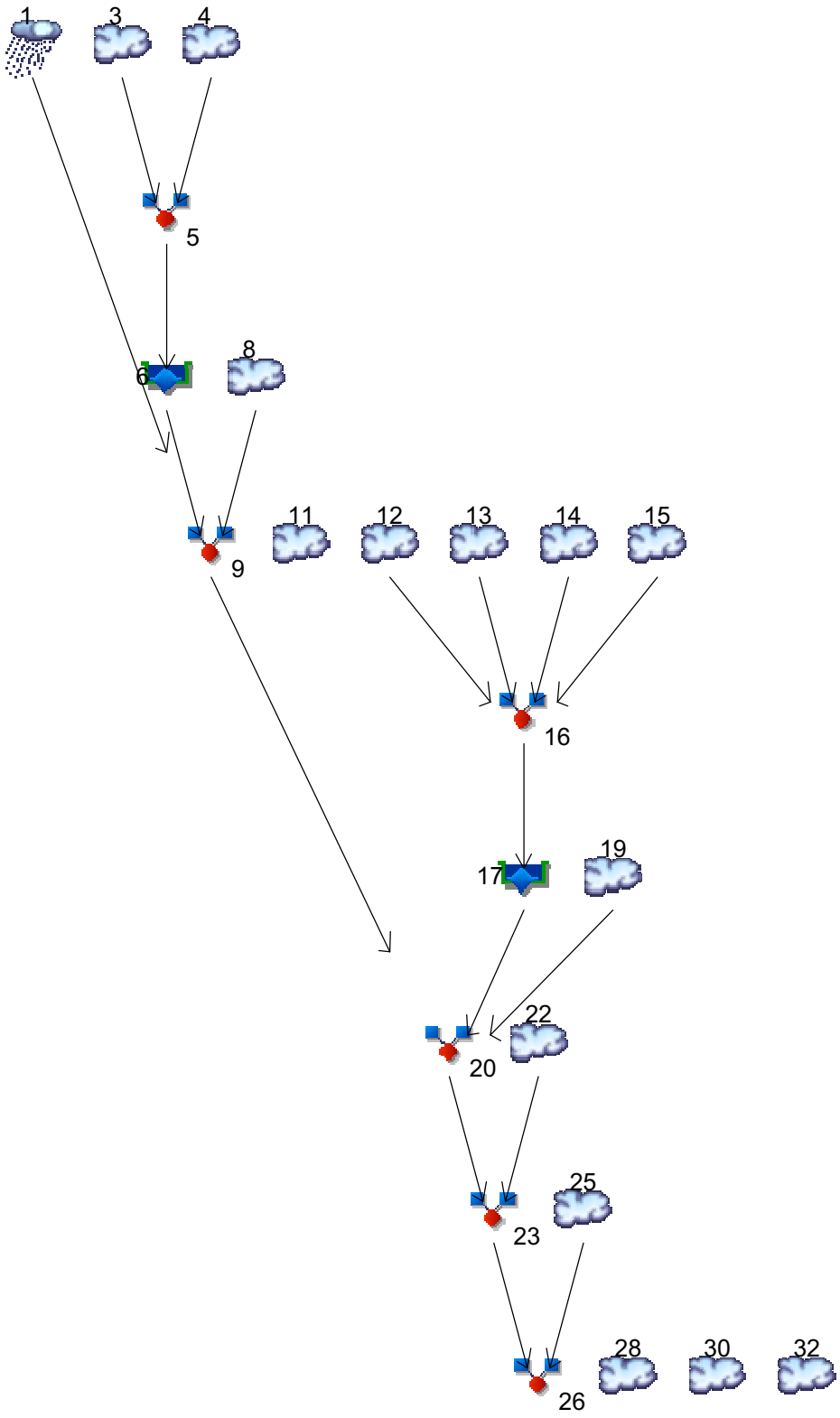
Hyd. No. 32

Berm 4 & Berm 5 DA

Hydrograph type	= SCS Runoff	Peak discharge	= 10.12 cfs
Storm frequency	= 25 yrs	Time to peak	= 11.93 hrs
Time interval	= 2 min	Hyd. volume	= 21,761 cuft
Drainage area	= 1.420 ac	Curve number	= 89
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 5.00 min
Total precip.	= 5.76 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484



Watershed Model Schematic



Hydrograph Summary Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024

Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	Manual	0.368	2	2	44	------	------	------	Clarifying Pond Discharge
3	SCS Runoff	78.21	2	722	230,618	------	------	------	Culvert 2 & Berm 1 DA
4	SCS Runoff	19.01	2	716	41,340	------	------	------	Basin 1 DA
5	Combine	90.31	2	720	271,957	3, 4	------	------	Basin 1 Inflow
6	Reservoir	66.17	2	728	243,890	5	535.12	186,212	Basin 1 Routing
8	SCS Runoff	4.502	2	716	9,791	------	------	------	Channel 1 DA
9	Combine	66.76	2	728	253,725	1, 6, 8	------	------	Channel 1 & Culvert 6 Inflow
11	SCS Runoff	8.254	2	716	17,950	------	------	------	Channel 5 & Culvert 7 DA
12	SCS Runoff	19.01	2	716	41,340	------	------	------	Culvert 3 DA
13	SCS Runoff	30.85	2	716	67,086	------	------	------	Culvert 4 DA
14	SCS Runoff	38.52	2	716	83,767	------	------	------	Basin 2 DA
15	SCS Runoff	81.20	2	716	176,600	------	------	------	Upslope Pad Area
16	Combine	169.58	2	716	368,794	12, 13, 14, 15	------	------	Basin 2 Inflow
17	Reservoir	75.02	2	722	312,352	16	531.51	231,704	Basin 2 Routing
19	SCS Runoff	8.671	2	716	18,857	------	------	------	Channel 2 Section 1 DA
20	Combine	136.64	2	724	584,934	9, 17, 19	------	------	Channel 2 Section 1 & Culvert 8 Inflo
22	SCS Runoff	6.787	2	716	14,759	------	------	------	Channel 2 Section 2 DA
23	Combine	138.39	2	724	599,692	20, 22	------	------	Channel 2 Section 2 & Culvert 5 Inflo
25	SCS Runoff	16.01	2	716	34,812	------	------	------	Channel 3 DA
26	Combine	142.53	2	724	634,505	23, 25	------	------	Channel 3 Inflow
28	SCS Runoff	40.94	2	716	89,025	------	------	------	Berms 2 and 3 DA
30	SCS Runoff	71.79	2	716	146,311	------	------	------	Channel 4 DA
32	SCS Runoff	11.84	2	716	25,747	------	------	------	Berm 4 & Berm 5 DA

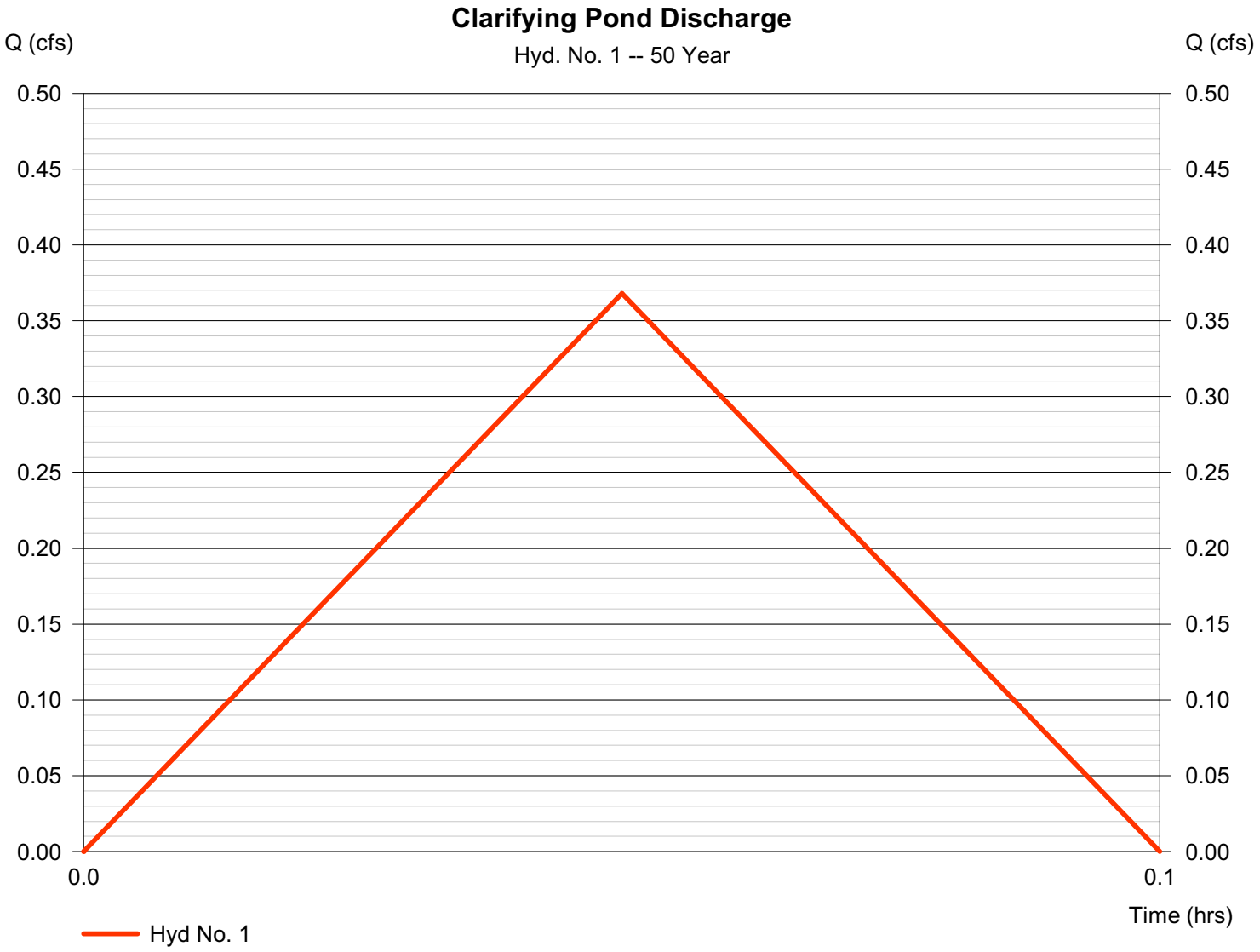
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024 Friday, 04 / 18 / 2025

Hyd. No. 1

Clarifying Pond Discharge

Hydrograph type	=	Manual	Peak discharge	=	0.368 cfs
Storm frequency	=	50 yrs	Time to peak	=	0.03 hrs
Time interval	=	2 min	Hyd. volume	=	44 cuft



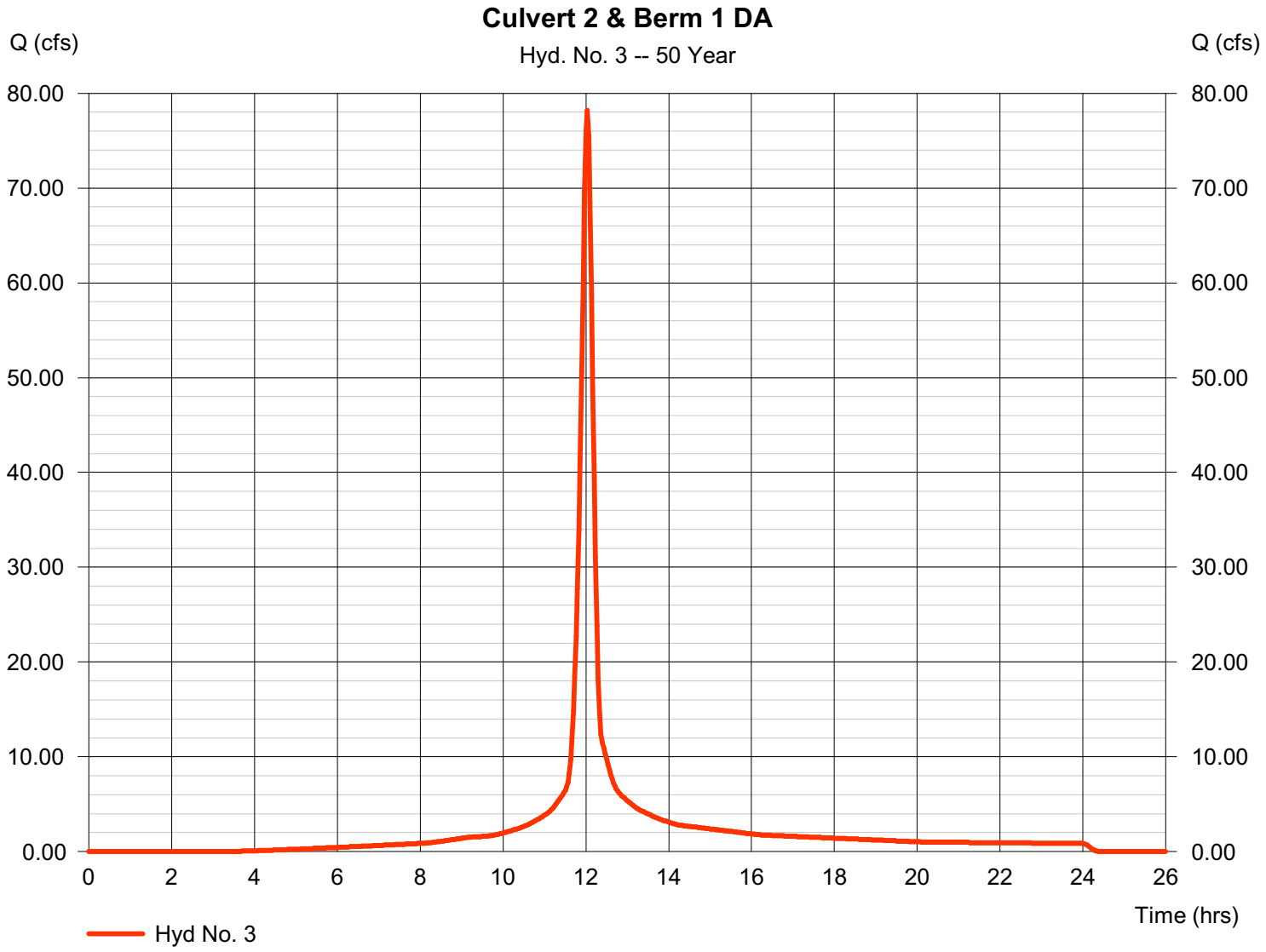
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024 Friday, 04 / 18 / 2025

Hyd. No. 3

Culvert 2 & Berm 1 DA

Hydrograph type	= SCS Runoff	Peak discharge	= 78.21 cfs
Storm frequency	= 50 yrs	Time to peak	= 12.03 hrs
Time interval	= 2 min	Hyd. volume	= 230,618 cuft
Drainage area	= 12.230 ac	Curve number	= 89
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 15.00 min
Total precip.	= 6.61 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484



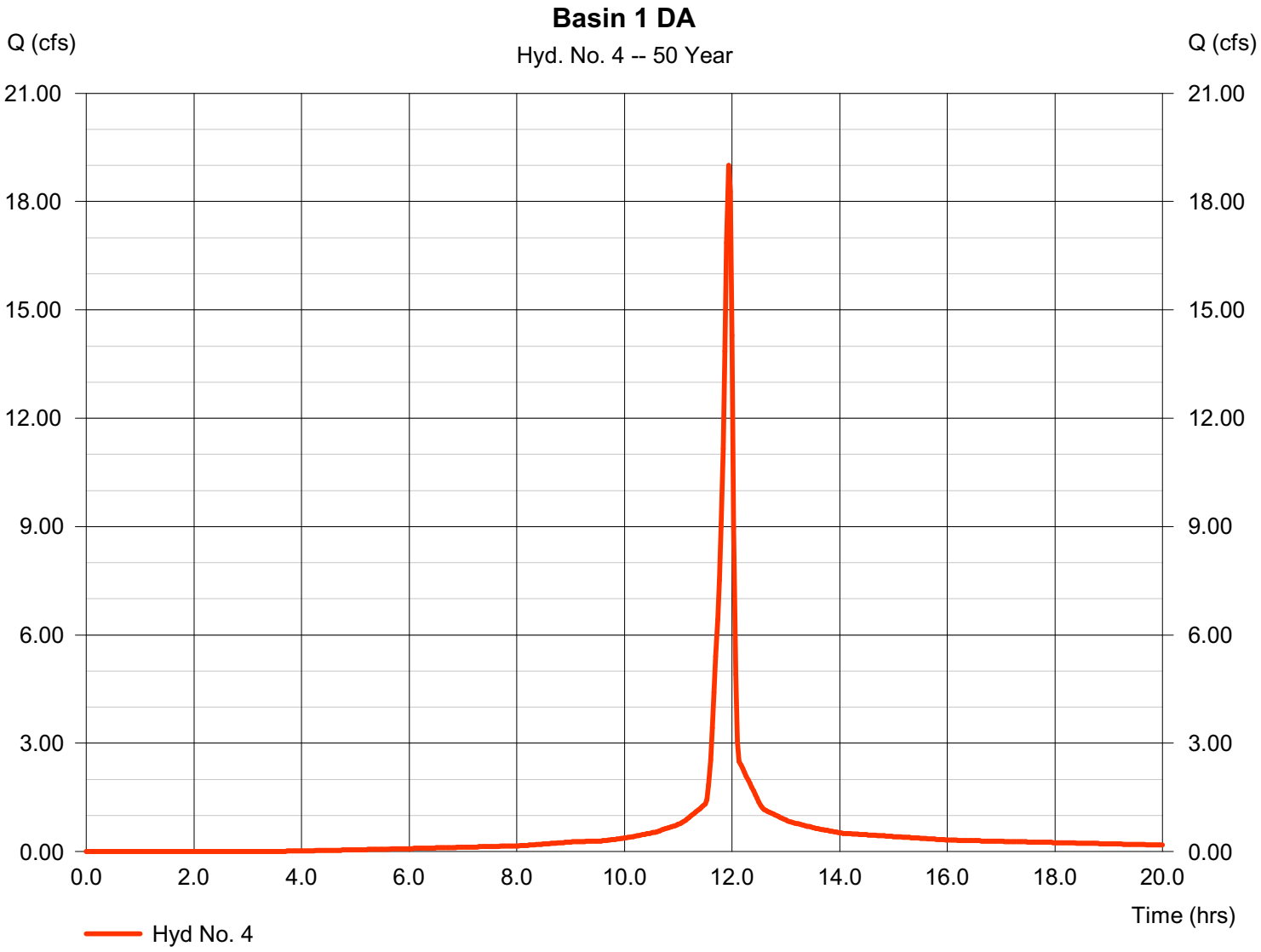
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024 Friday, 04 / 18 / 2025

Hyd. No. 4

Basin 1 DA

Hydrograph type	= SCS Runoff	Peak discharge	= 19.01 cfs
Storm frequency	= 50 yrs	Time to peak	= 11.93 hrs
Time interval	= 2 min	Hyd. volume	= 41,340 cuft
Drainage area	= 2.280 ac	Curve number	= 89
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 5.00 min
Total precip.	= 6.61 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484



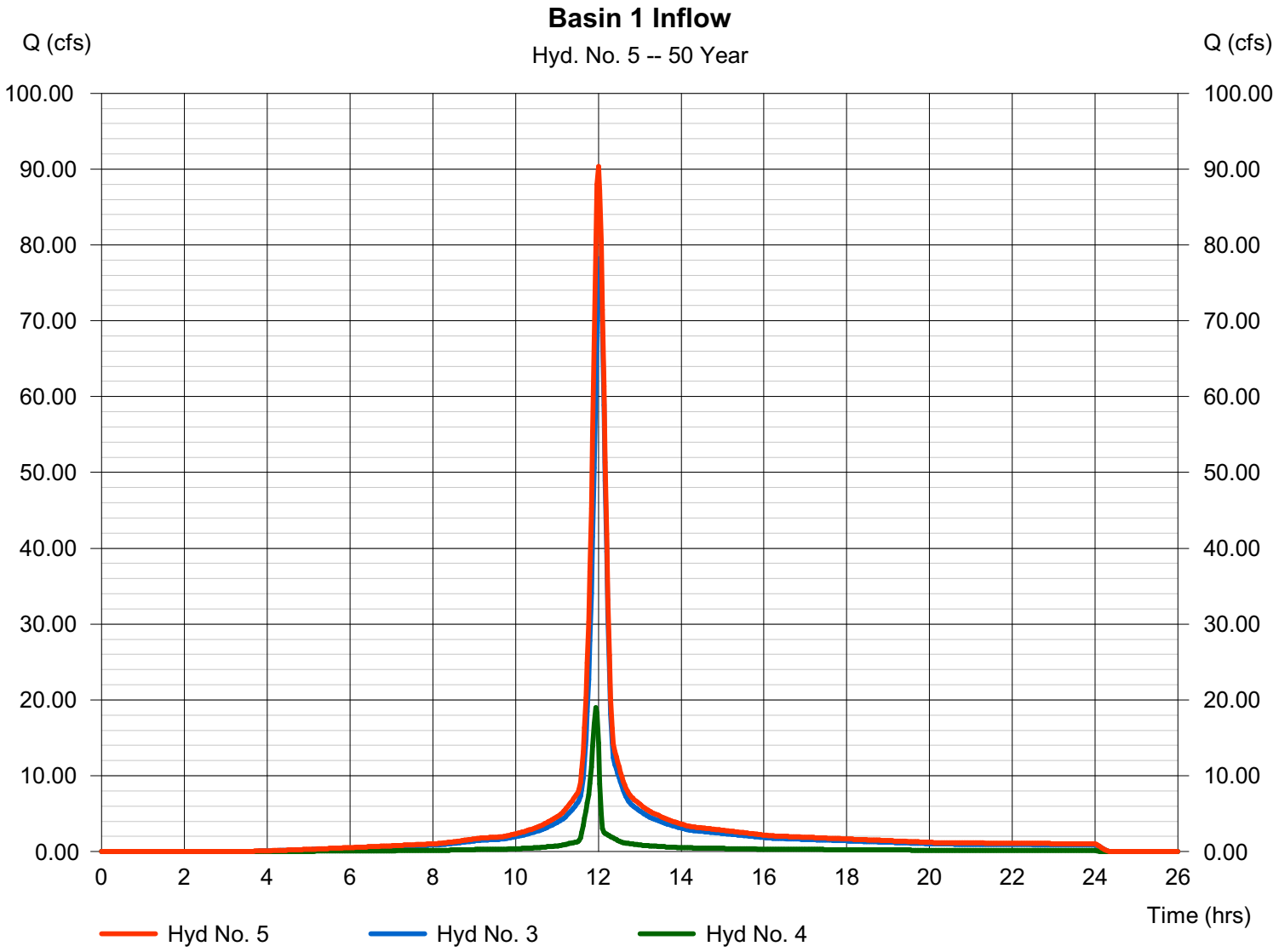
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024 Friday, 04 / 18 / 2025

Hyd. No. 5

Basin 1 Inflow

Hydrograph type	= Combine	Peak discharge	= 90.31 cfs
Storm frequency	= 50 yrs	Time to peak	= 12.00 hrs
Time interval	= 2 min	Hyd. volume	= 271,957 cuft
Inflow hyds.	= 3, 4	Contrib. drain. area	= 14.510 ac



Hydrograph Report

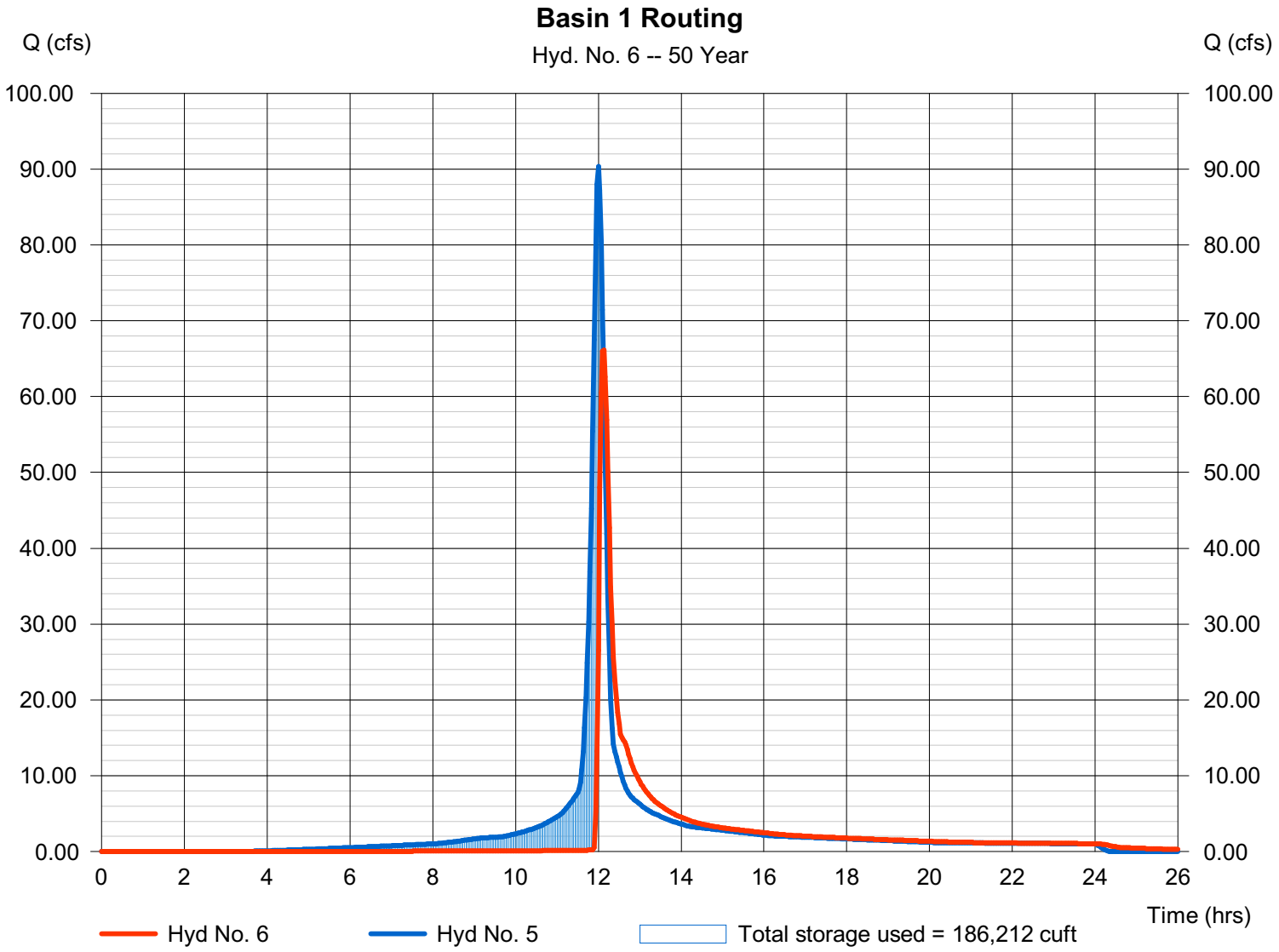
Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024 Friday, 04 / 18 / 2025

Hyd. No. 6

Basin 1 Routing

Hydrograph type	=	Reservoir	Peak discharge	=	66.17 cfs
Storm frequency	=	50 yrs	Time to peak	=	12.13 hrs
Time interval	=	2 min	Hyd. volume	=	243,890 cuft
Inflow hyd. No.	=	5 - Basin 1 Inflow	Max. Elevation	=	535.12 ft
Reservoir name	=	Sediment Basin 1	Max. Storage	=	186,212 cuft

Storage Indication method used. Wet pond routing start elevation = 530.30 ft.



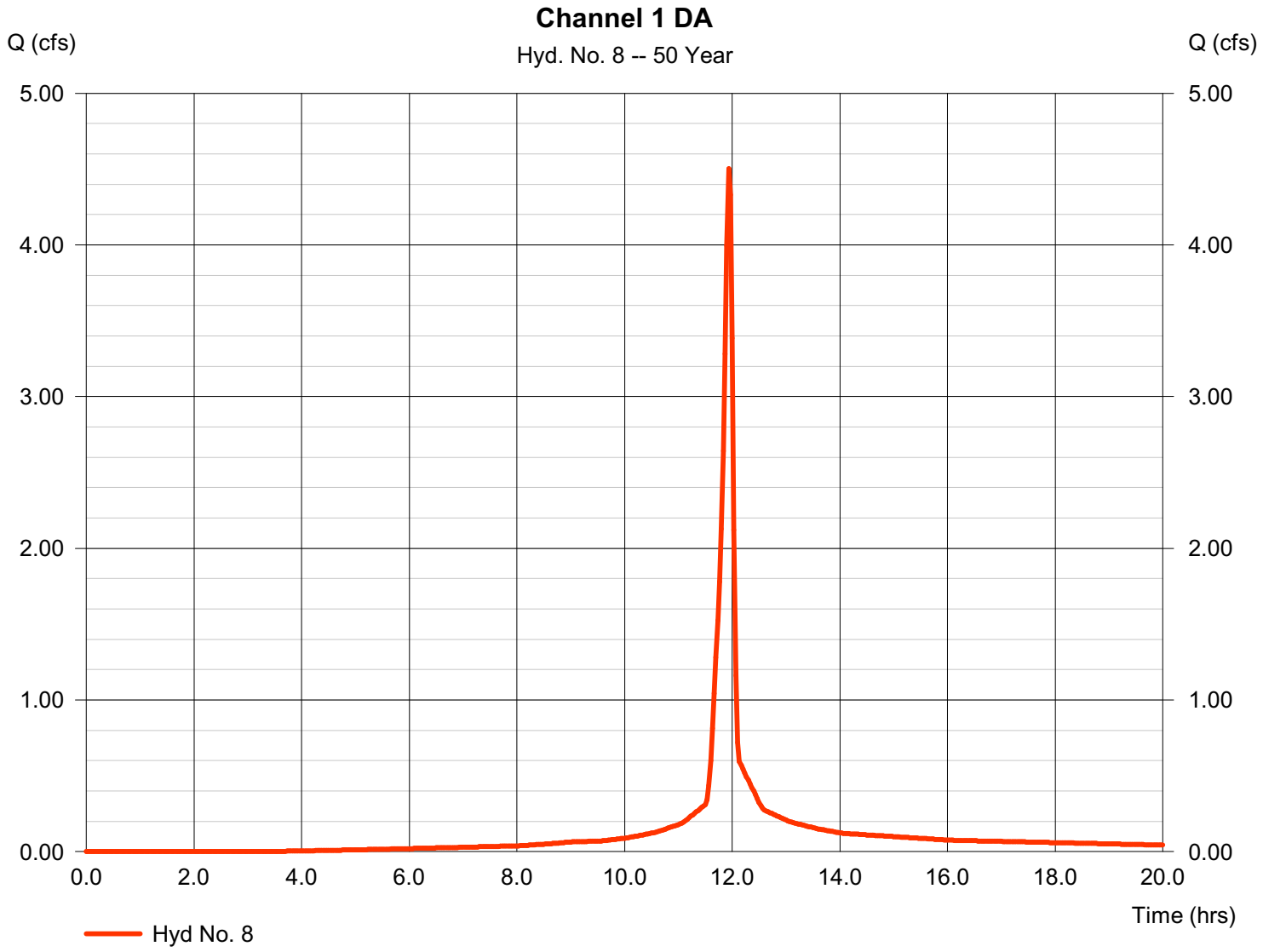
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024 Friday, 04 / 18 / 2025

Hyd. No. 8

Channel 1 DA

Hydrograph type	=	SCS Runoff	Peak discharge	=	4.502 cfs
Storm frequency	=	50 yrs	Time to peak	=	11.93 hrs
Time interval	=	2 min	Hyd. volume	=	9,791 cuft
Drainage area	=	0.540 ac	Curve number	=	89
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	5.00 min
Total precip.	=	6.61 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484



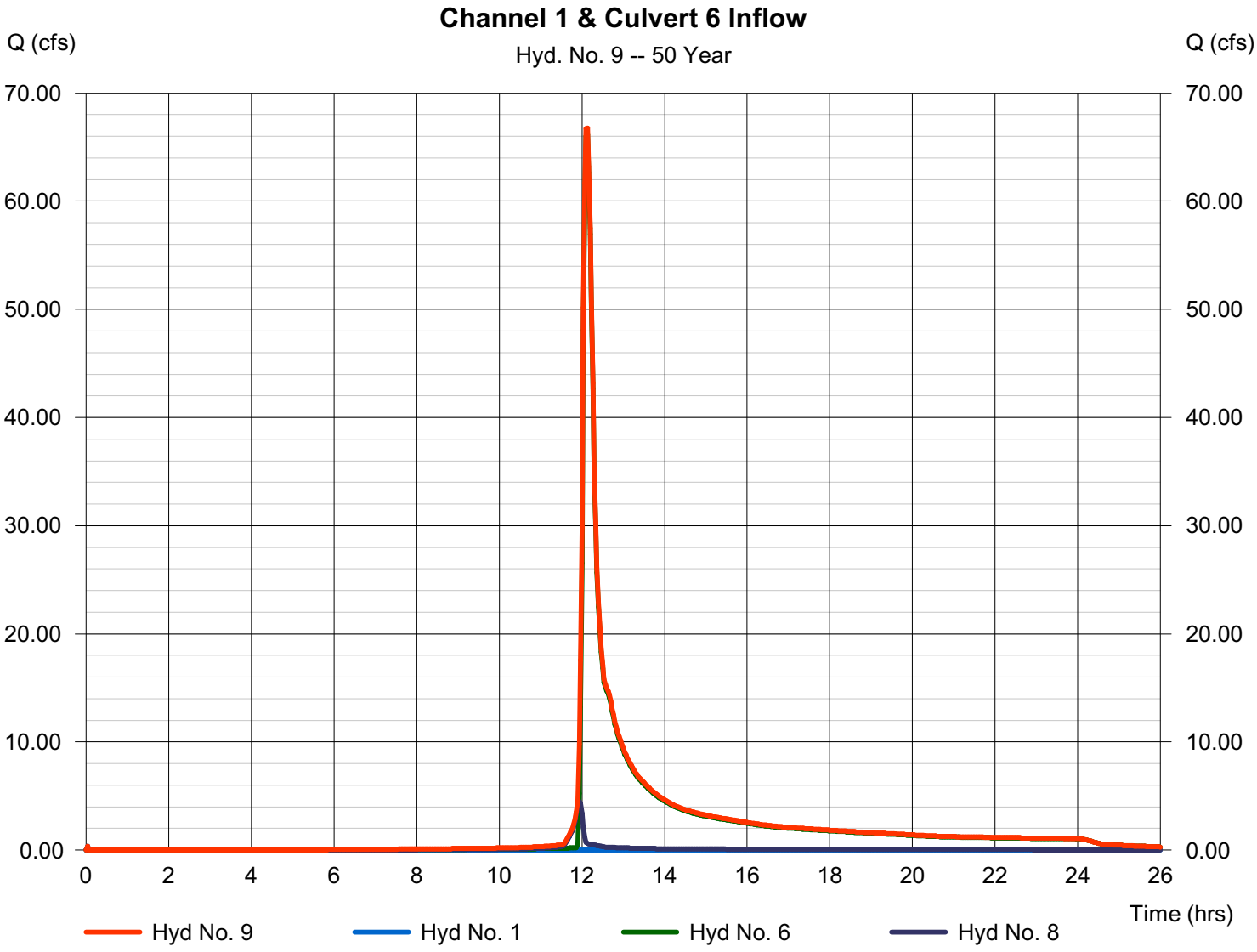
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024 Friday, 04 / 18 / 2025

Hyd. No. 9

Channel 1 & Culvert 6 Inflow

Hydrograph type	=	Combine	Peak discharge	=	66.76 cfs
Storm frequency	=	50 yrs	Time to peak	=	12.13 hrs
Time interval	=	2 min	Hyd. volume	=	253,725 cuft
Inflow hyds.	=	1, 6, 8	Contrib. drain. area	=	0.540 ac



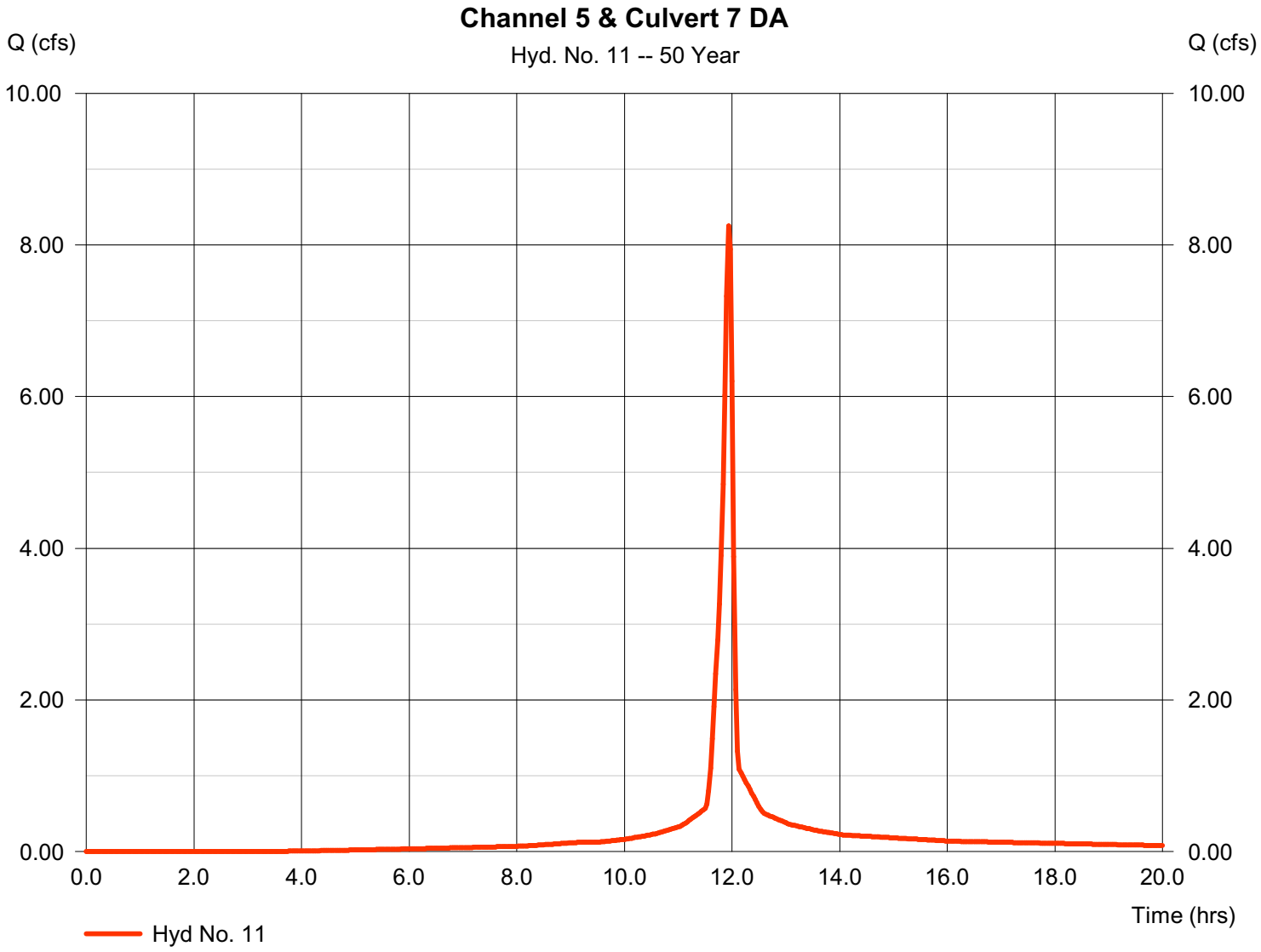
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024 Friday, 04 / 18 / 2025

Hyd. No. 11

Channel 5 & Culvert 7 DA

Hydrograph type	= SCS Runoff	Peak discharge	= 8.254 cfs
Storm frequency	= 50 yrs	Time to peak	= 11.93 hrs
Time interval	= 2 min	Hyd. volume	= 17,950 cuft
Drainage area	= 0.990 ac	Curve number	= 89
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 5.00 min
Total precip.	= 6.61 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484



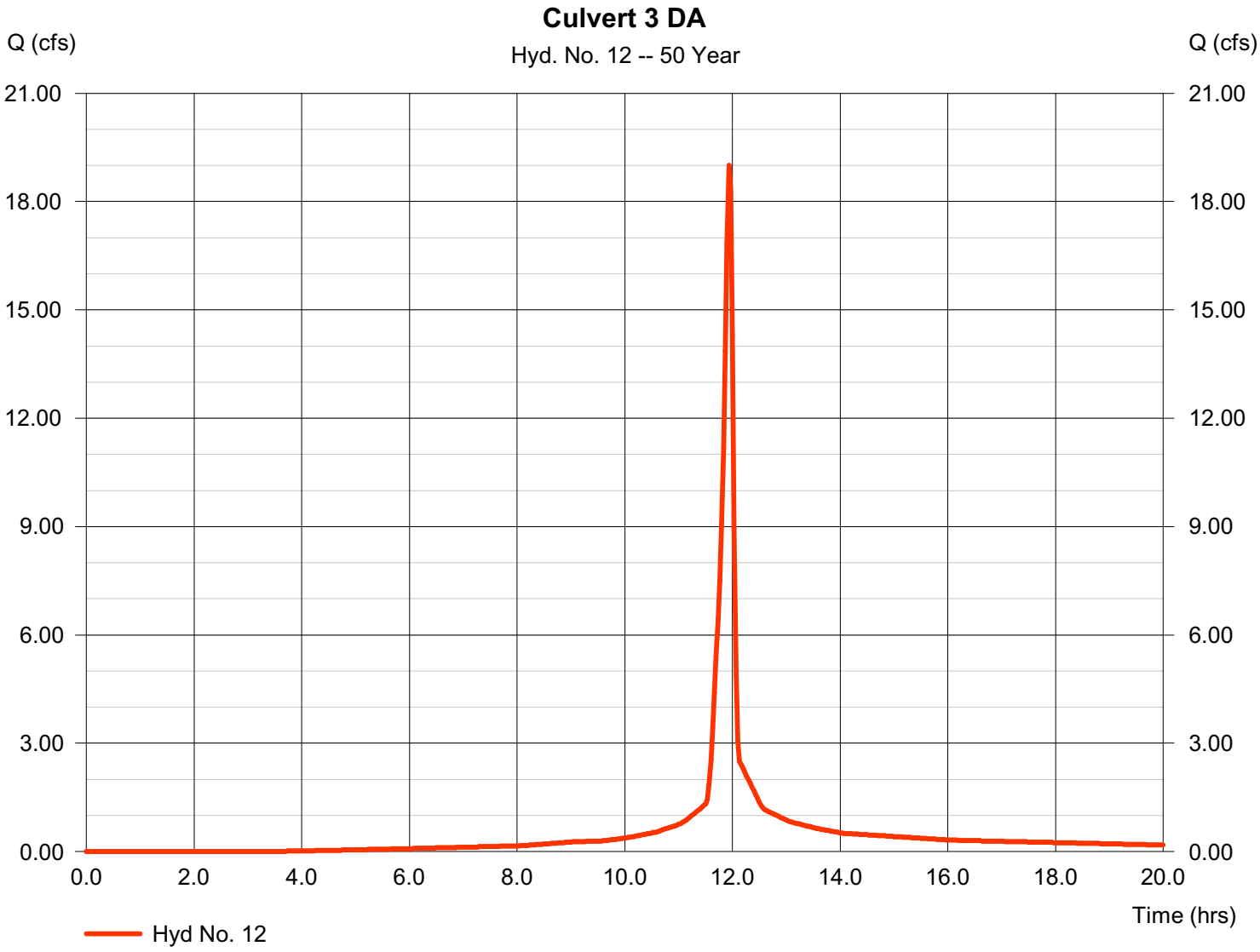
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024 Friday, 04 / 18 / 2025

Hyd. No. 12

Culvert 3 DA

Hydrograph type	=	SCS Runoff	Peak discharge	=	19.01 cfs
Storm frequency	=	50 yrs	Time to peak	=	11.93 hrs
Time interval	=	2 min	Hyd. volume	=	41,340 cuft
Drainage area	=	2.280 ac	Curve number	=	89
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	5.00 min
Total precip.	=	6.61 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484



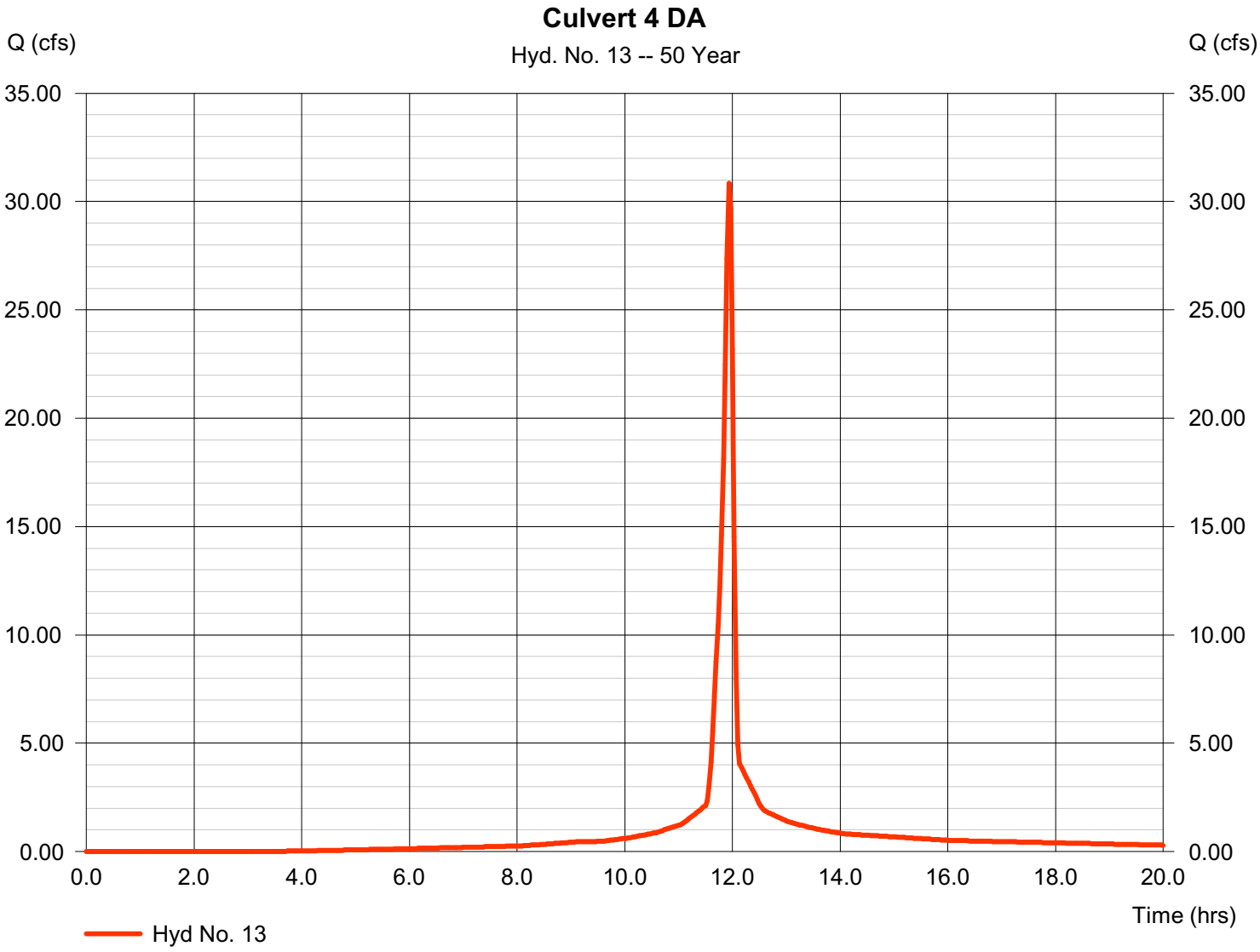
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024 Friday, 04 / 18 / 2025

Hyd. No. 13

Culvert 4 DA

Hydrograph type	=	SCS Runoff	Peak discharge	=	30.85 cfs
Storm frequency	=	50 yrs	Time to peak	=	11.93 hrs
Time interval	=	2 min	Hyd. volume	=	67,086 cuft
Drainage area	=	3.700 ac	Curve number	=	89
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	5.00 min
Total precip.	=	6.61 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484



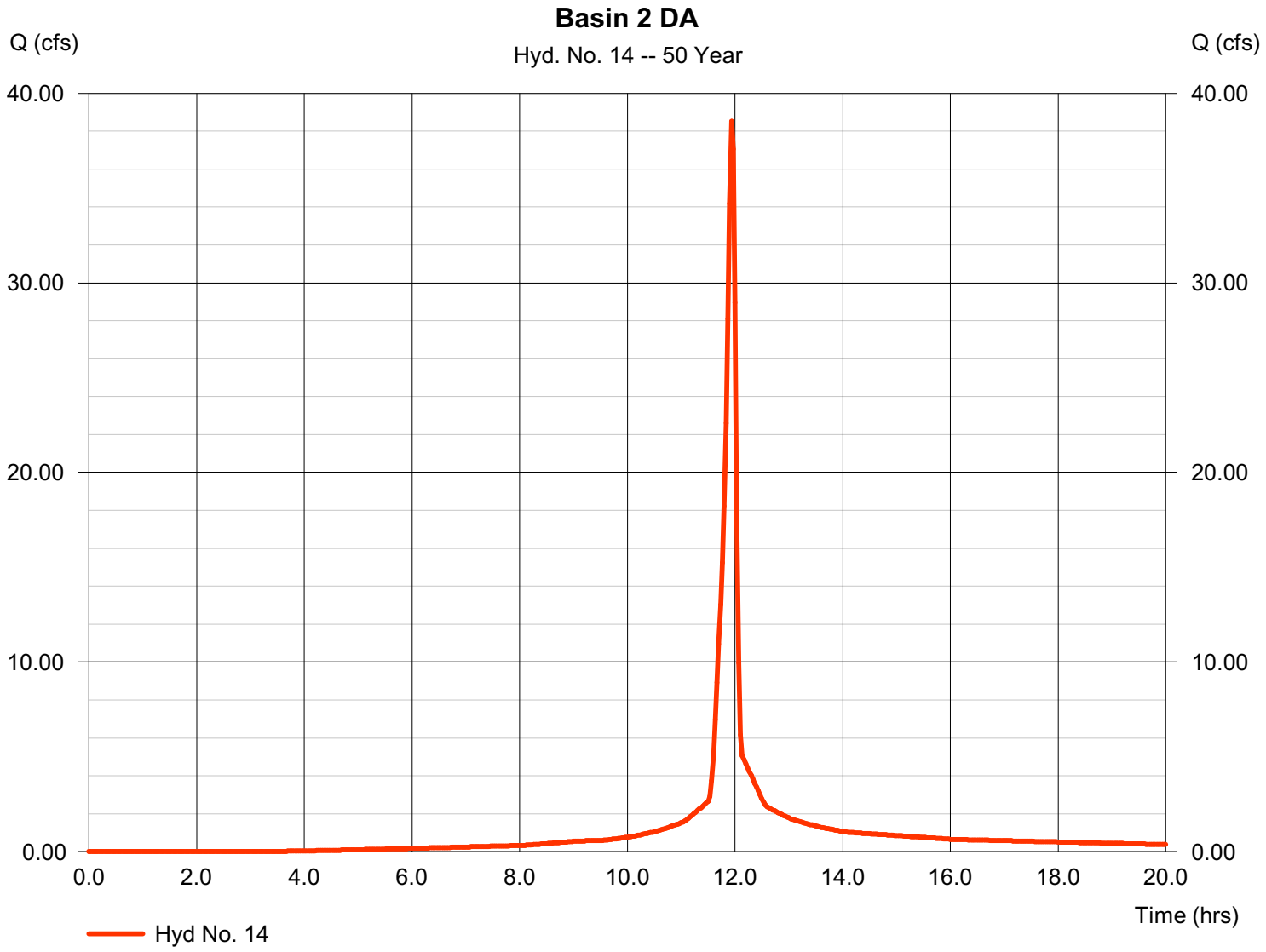
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024 Friday, 04 / 18 / 2025

Hyd. No. 14

Basin 2 DA

Hydrograph type	= SCS Runoff	Peak discharge	= 38.52 cfs
Storm frequency	= 50 yrs	Time to peak	= 11.93 hrs
Time interval	= 2 min	Hyd. volume	= 83,767 cuft
Drainage area	= 4.620 ac	Curve number	= 89
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 5.00 min
Total precip.	= 6.61 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484



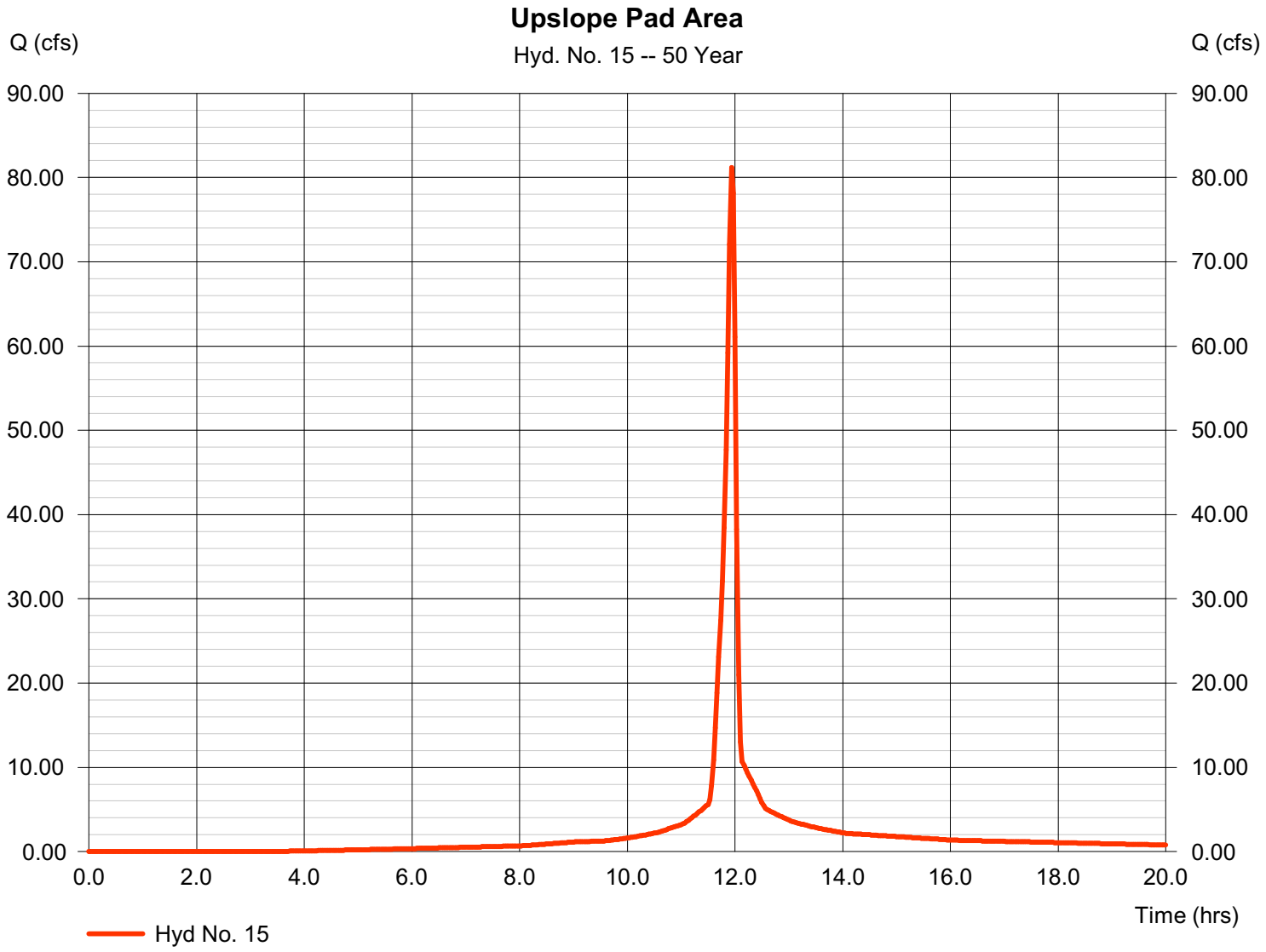
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024 Friday, 04 / 18 / 2025

Hyd. No. 15

Upslope Pad Area

Hydrograph type	=	SCS Runoff	Peak discharge	=	81.20 cfs
Storm frequency	=	50 yrs	Time to peak	=	11.93 hrs
Time interval	=	2 min	Hyd. volume	=	176,600 cuft
Drainage area	=	9.740 ac	Curve number	=	89
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	5.00 min
Total precip.	=	6.61 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484



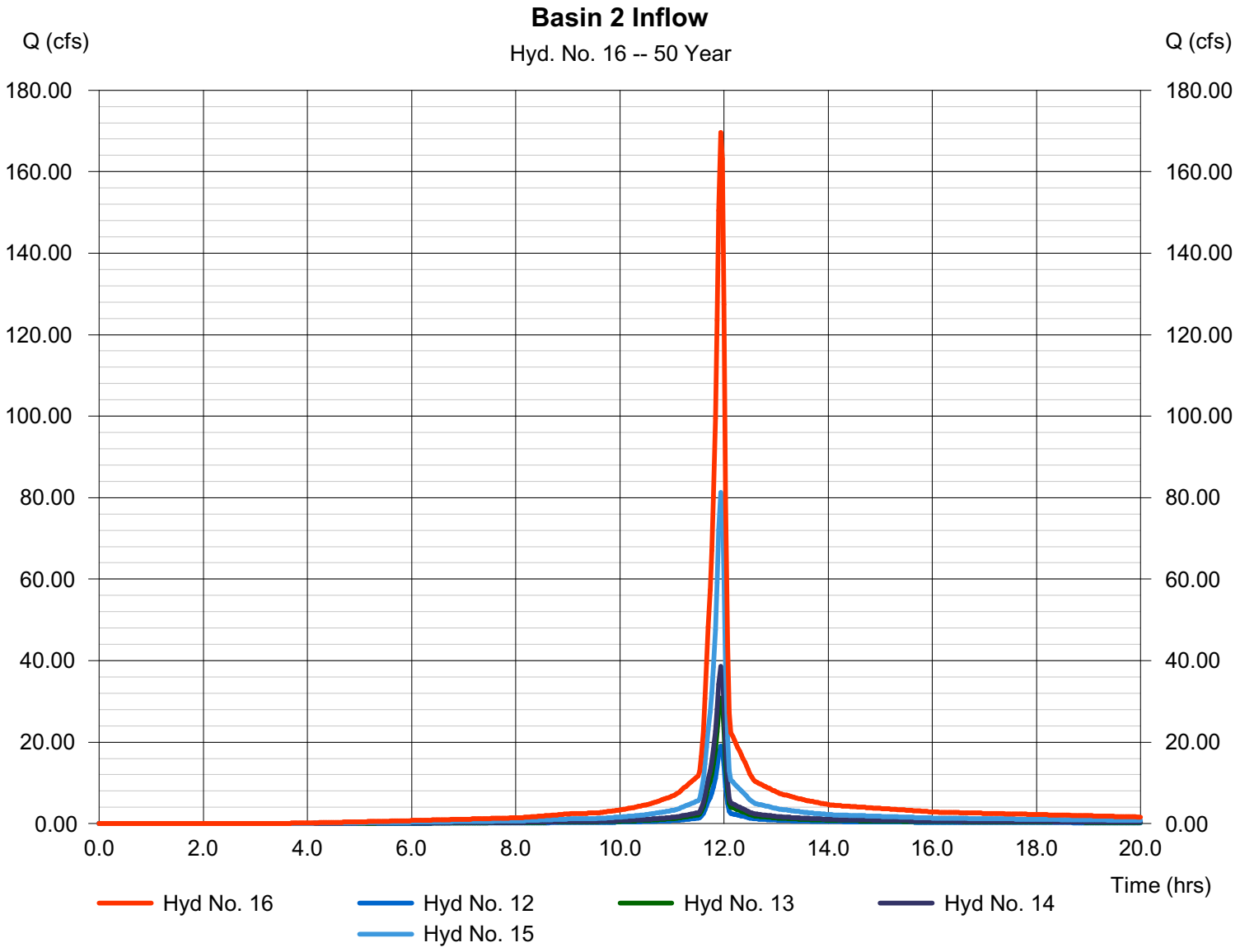
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024 Friday, 04 / 18 / 2025

Hyd. No. 16

Basin 2 Inflow

Hydrograph type	= Combine	Peak discharge	= 169.58 cfs
Storm frequency	= 50 yrs	Time to peak	= 11.93 hrs
Time interval	= 2 min	Hyd. volume	= 368,794 cuft
Inflow hyds.	= 12, 13, 14, 15	Contrib. drain. area	= 20.340 ac



Hydrograph Report

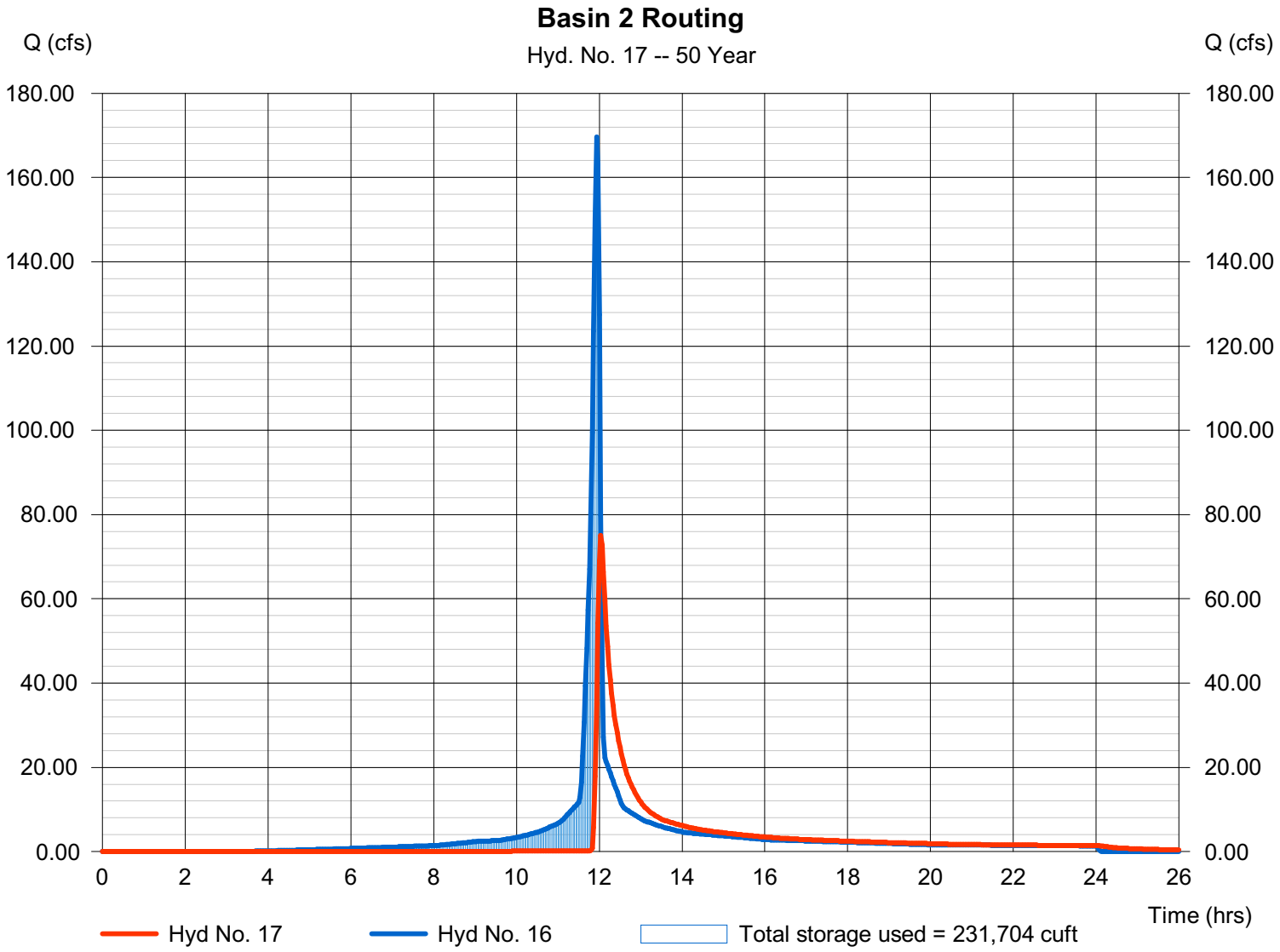
Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024 Friday, 04 / 18 / 2025

Hyd. No. 17

Basin 2 Routing

Hydrograph type	= Reservoir	Peak discharge	= 75.02 cfs
Storm frequency	= 50 yrs	Time to peak	= 12.03 hrs
Time interval	= 2 min	Hyd. volume	= 312,352 cuft
Inflow hyd. No.	= 16 - Basin 2 Inflow	Max. Elevation	= 531.51 ft
Reservoir name	= Sediment Basin 2	Max. Storage	= 231,704 cuft

Storage Indication method used. Wet pond routing start elevation = 526.80 ft.



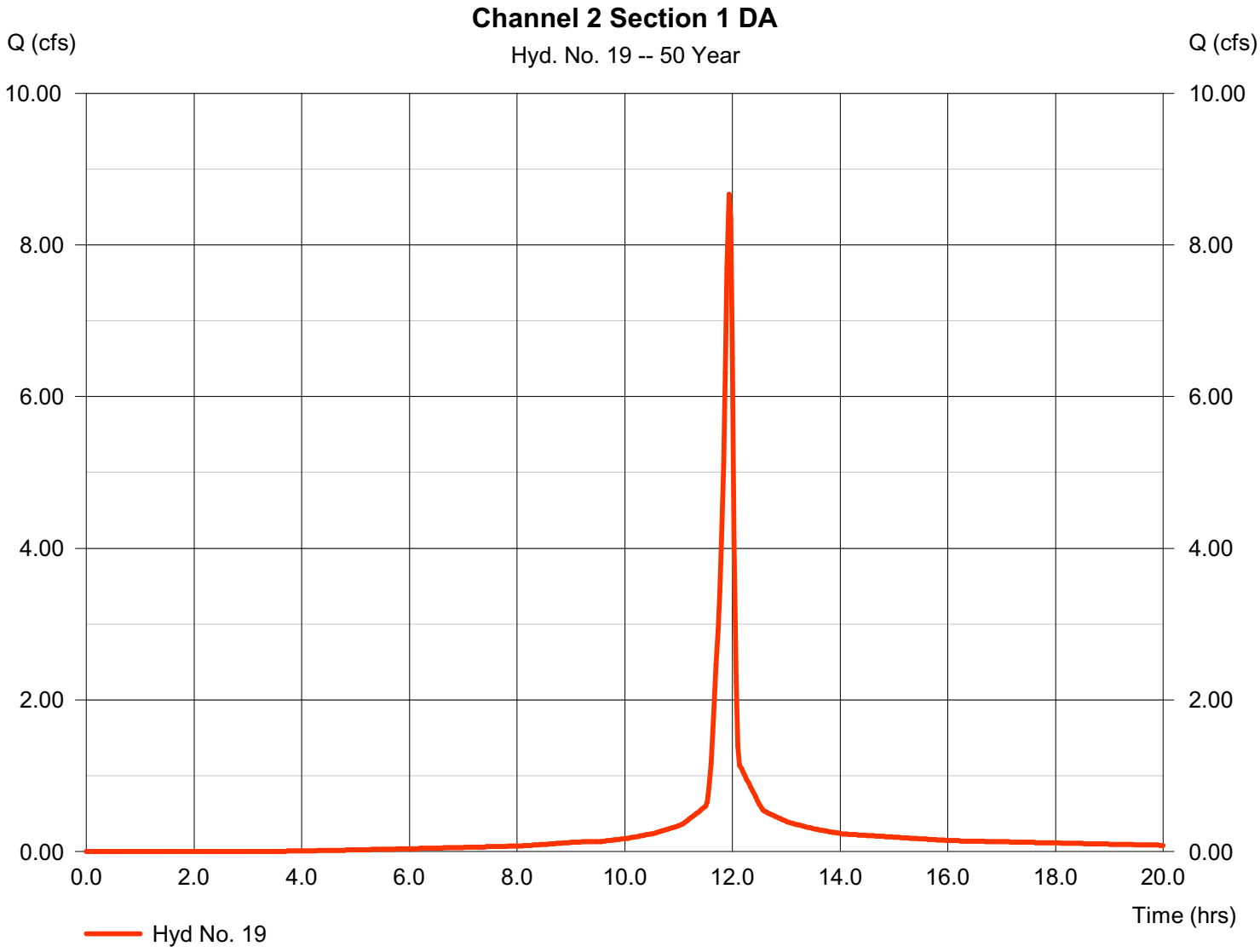
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024 Friday, 04 / 18 / 2025

Hyd. No. 19

Channel 2 Section 1 DA

Hydrograph type	= SCS Runoff	Peak discharge	= 8.671 cfs
Storm frequency	= 50 yrs	Time to peak	= 11.93 hrs
Time interval	= 2 min	Hyd. volume	= 18,857 cuft
Drainage area	= 1.040 ac	Curve number	= 89
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 5.00 min
Total precip.	= 6.61 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484



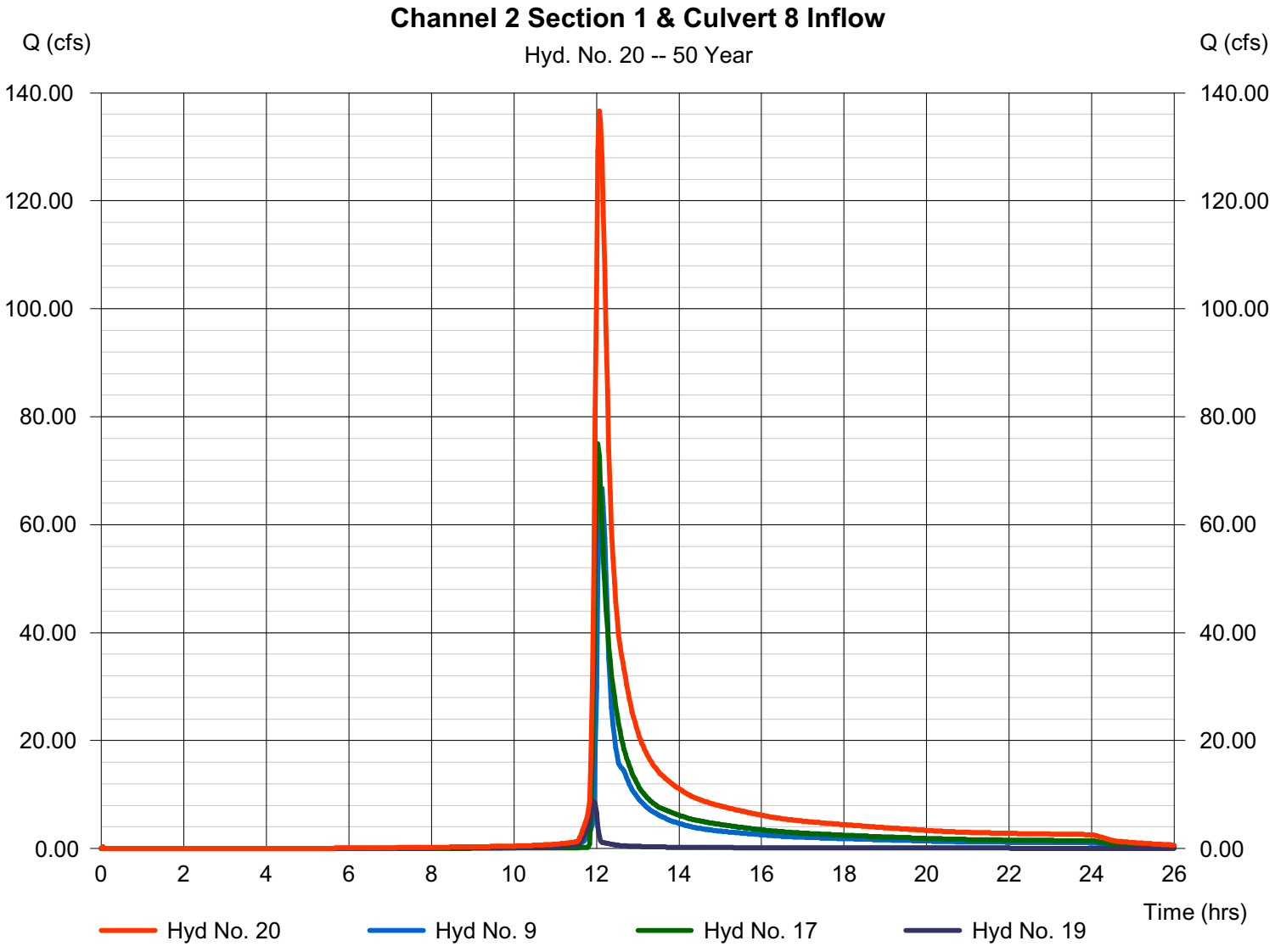
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024 Friday, 04 / 18 / 2025

Hyd. No. 20

Channel 2 Section 1 & Culvert 8 Inflow

Hydrograph type	= Combine	Peak discharge	= 136.64 cfs
Storm frequency	= 50 yrs	Time to peak	= 12.07 hrs
Time interval	= 2 min	Hyd. volume	= 584,934 cuft
Inflow hyds.	= 9, 17, 19	Contrib. drain. area	= 1.040 ac



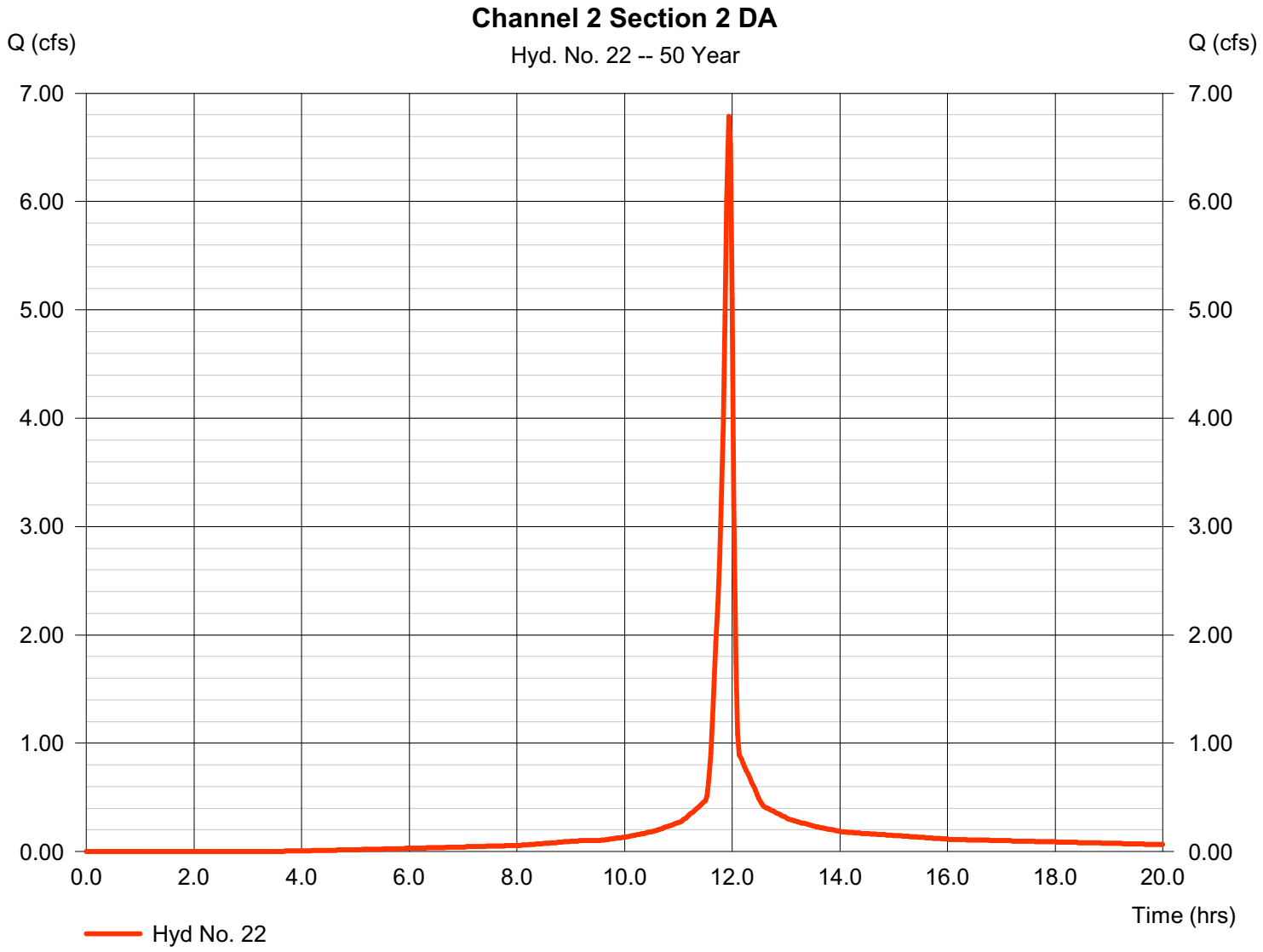
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024 Friday, 04 / 18 / 2025

Hyd. No. 22

Channel 2 Section 2 DA

Hydrograph type	= SCS Runoff	Peak discharge	= 6.787 cfs
Storm frequency	= 50 yrs	Time to peak	= 11.93 hrs
Time interval	= 2 min	Hyd. volume	= 14,759 cuft
Drainage area	= 0.814 ac	Curve number	= 89
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 5.00 min
Total precip.	= 6.61 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484



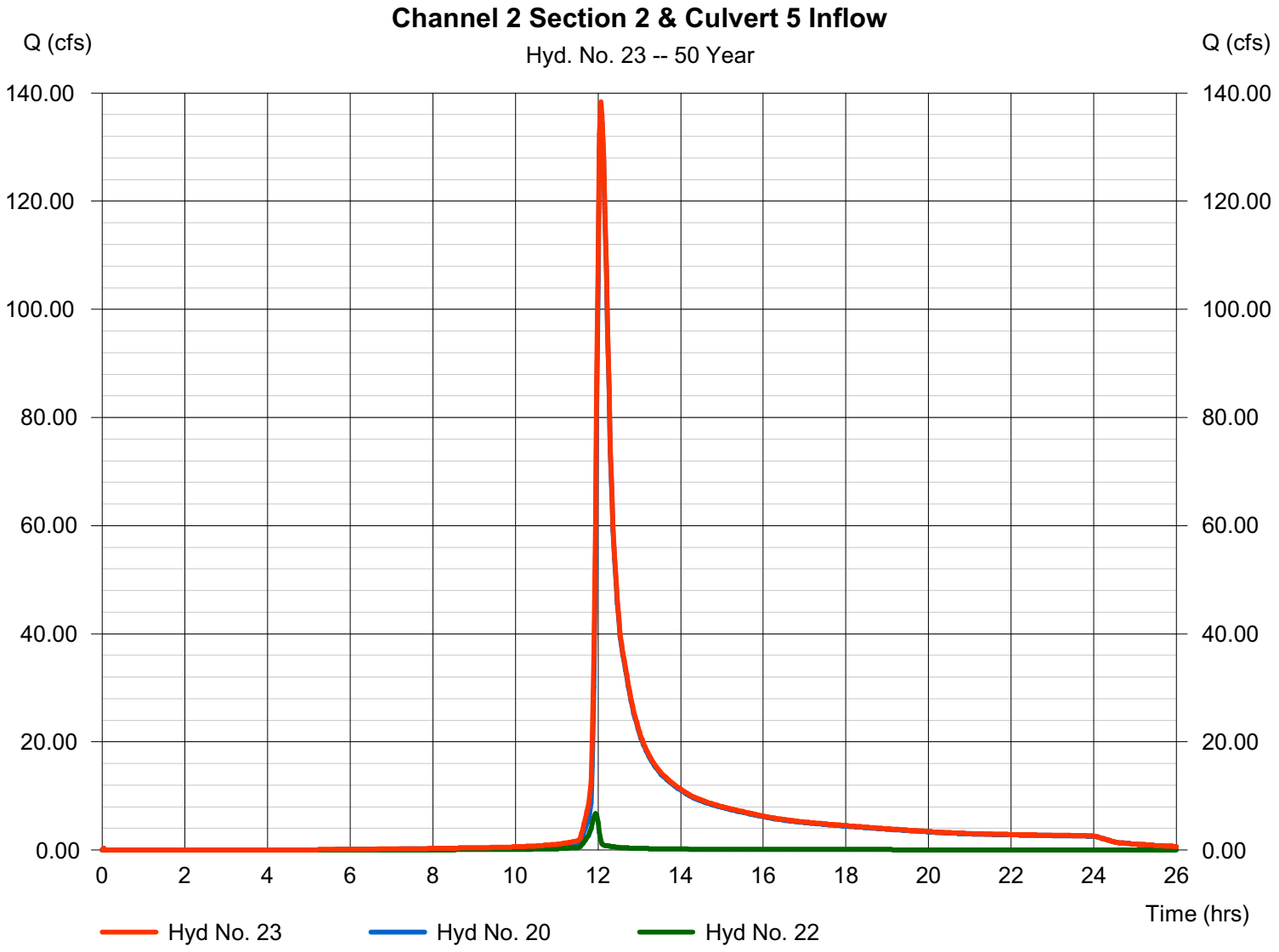
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024 Friday, 04 / 18 / 2025

Hyd. No. 23

Channel 2 Section 2 & Culvert 5 Inflow

Hydrograph type	= Combine	Peak discharge	= 138.39 cfs
Storm frequency	= 50 yrs	Time to peak	= 12.07 hrs
Time interval	= 2 min	Hyd. volume	= 599,692 cuft
Inflow hyds.	= 20, 22	Contrib. drain. area	= 0.814 ac



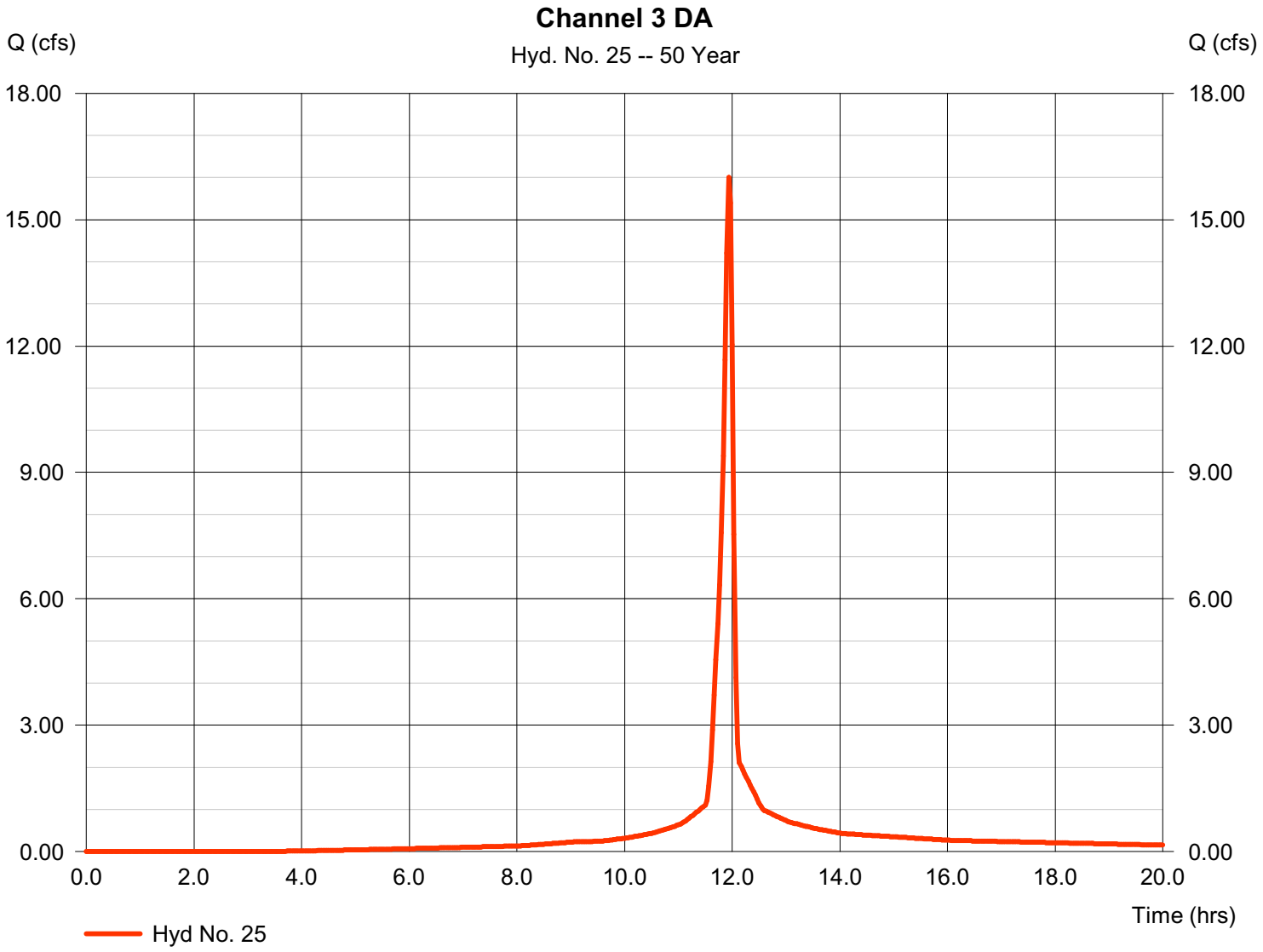
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024 Friday, 04 / 18 / 2025

Hyd. No. 25

Channel 3 DA

Hydrograph type	=	SCS Runoff	Peak discharge	=	16.01 cfs
Storm frequency	=	50 yrs	Time to peak	=	11.93 hrs
Time interval	=	2 min	Hyd. volume	=	34,812 cuft
Drainage area	=	1.920 ac	Curve number	=	89
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	5.00 min
Total precip.	=	6.61 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484



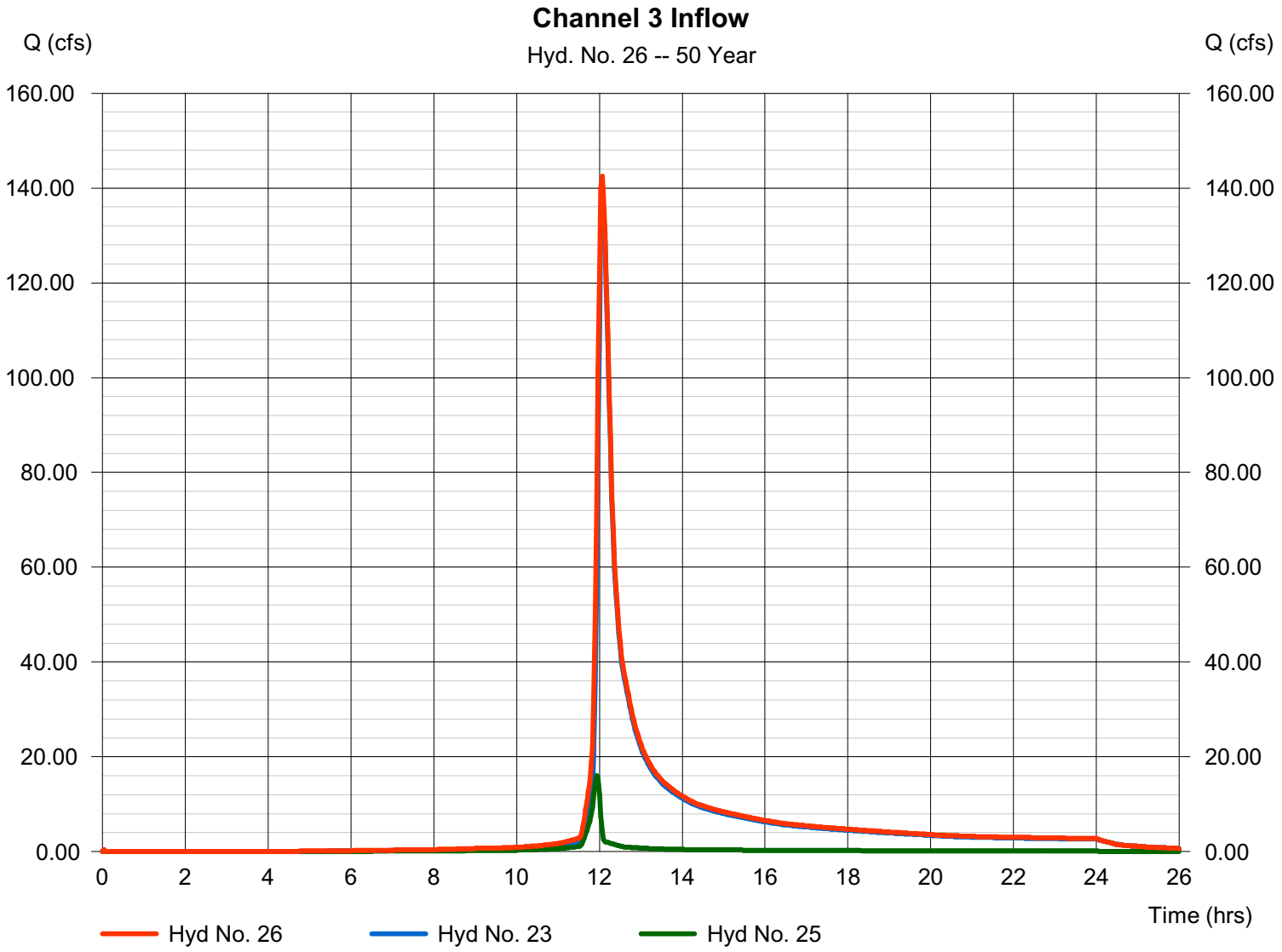
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024 Friday, 04 / 18 / 2025

Hyd. No. 26

Channel 3 Inflow

Hydrograph type	= Combine	Peak discharge	= 142.53 cfs
Storm frequency	= 50 yrs	Time to peak	= 12.07 hrs
Time interval	= 2 min	Hyd. volume	= 634,505 cuft
Inflow hyds.	= 23, 25	Contrib. drain. area	= 1.920 ac



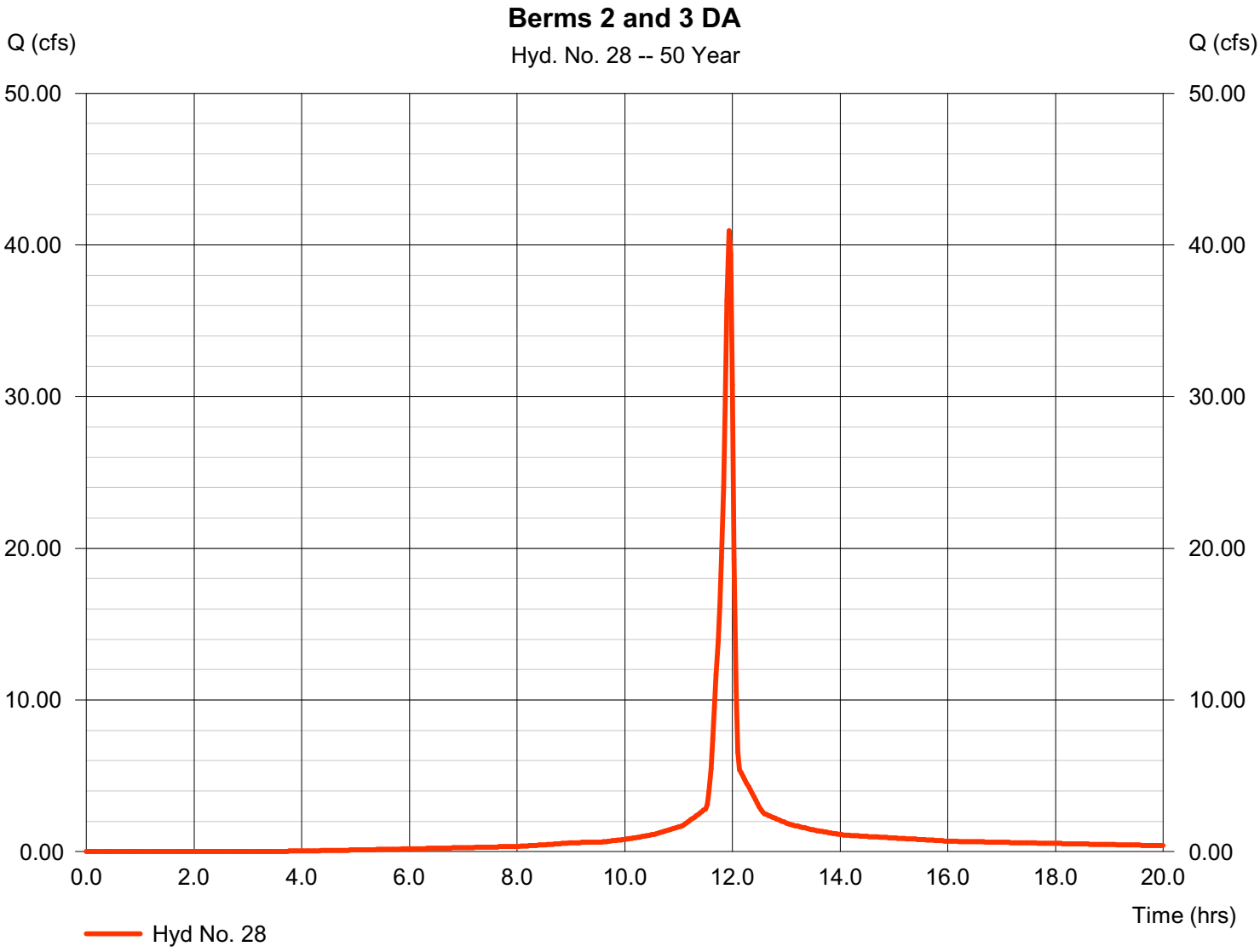
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024 Friday, 04 / 18 / 2025

Hyd. No. 28

Berms 2 and 3 DA

Hydrograph type	= SCS Runoff	Peak discharge	= 40.94 cfs
Storm frequency	= 50 yrs	Time to peak	= 11.93 hrs
Time interval	= 2 min	Hyd. volume	= 89,025 cuft
Drainage area	= 4.910 ac	Curve number	= 89
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 5.00 min
Total precip.	= 6.61 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484



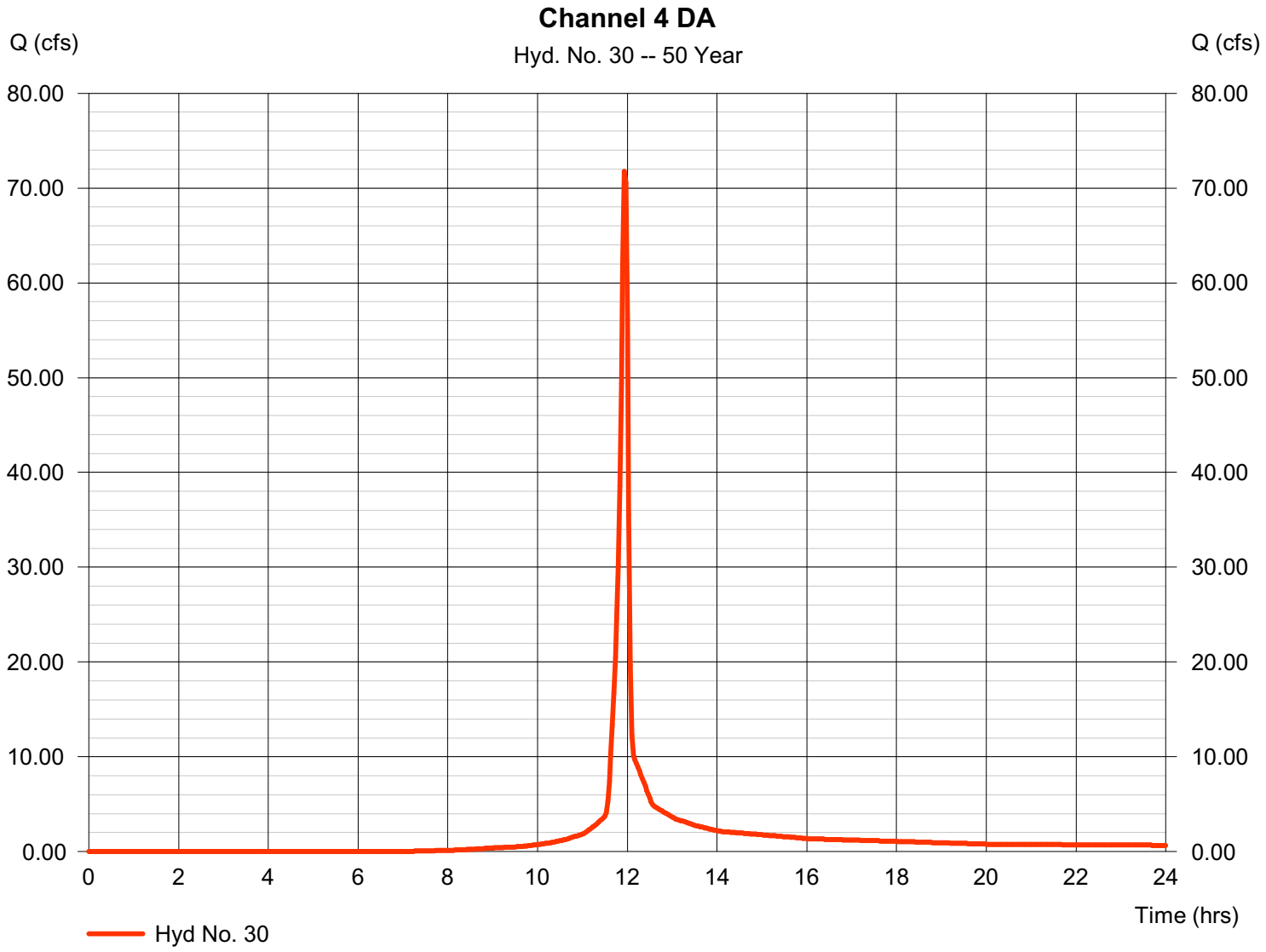
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024 Friday, 04 / 18 / 2025

Hyd. No. 30

Channel 4 DA

Hydrograph type	=	SCS Runoff	Peak discharge	=	71.79 cfs
Storm frequency	=	50 yrs	Time to peak	=	11.93 hrs
Time interval	=	2 min	Hyd. volume	=	146,311 cuft
Drainage area	=	10.990 ac	Curve number	=	76
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	TR55	Time of conc. (Tc)	=	6.00 min
Total precip.	=	6.61 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484



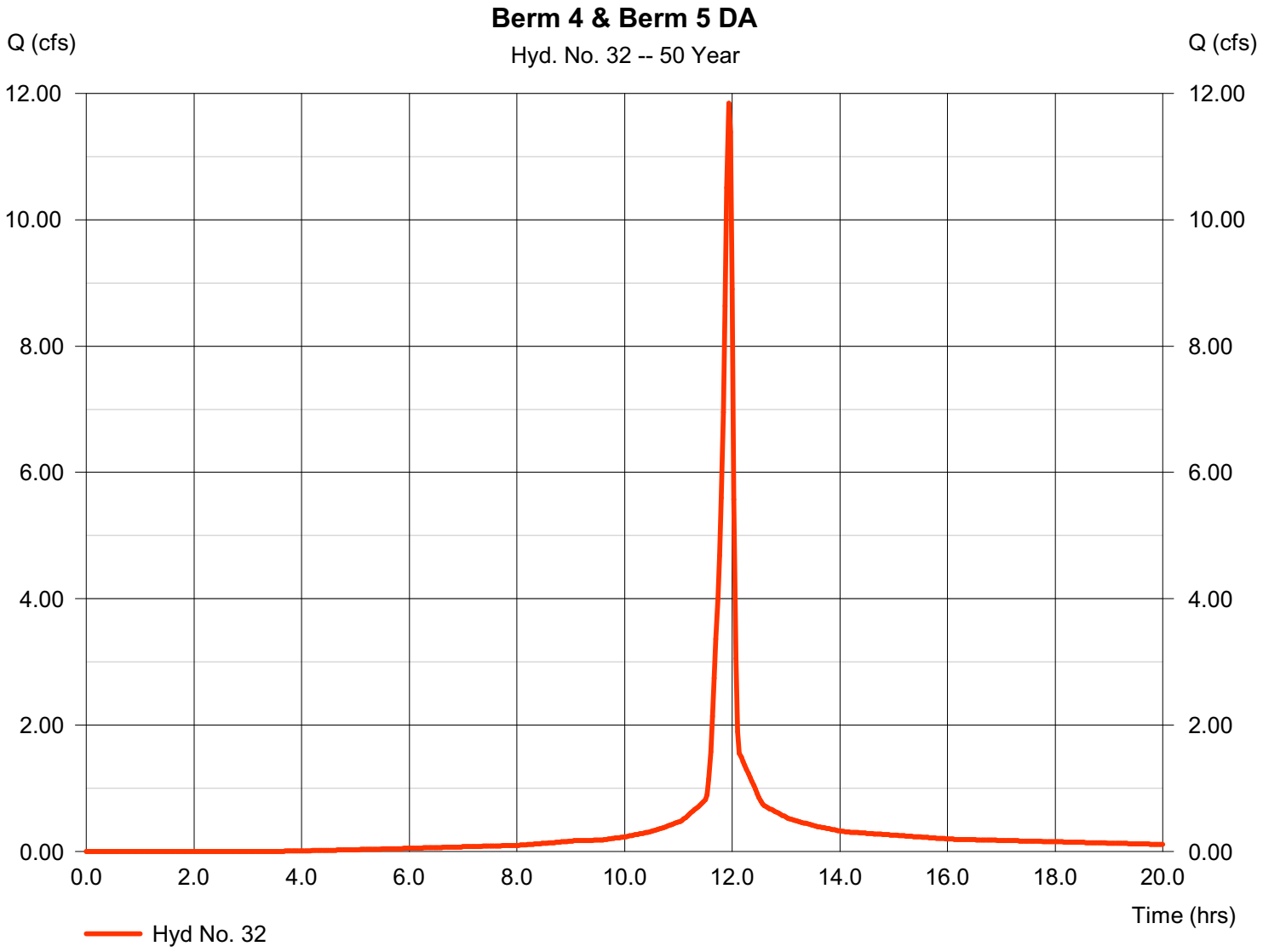
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024 Friday, 04 / 18 / 2025

Hyd. No. 32

Berm 4 & Berm 5 DA

Hydrograph type	= SCS Runoff	Peak discharge	= 11.84 cfs
Storm frequency	= 50 yrs	Time to peak	= 11.93 hrs
Time interval	= 2 min	Hyd. volume	= 25,747 cuft
Drainage area	= 1.420 ac	Curve number	= 89
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 5.00 min
Total precip.	= 6.61 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484



Hydrograph Summary Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024

Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	Manual	0.368	2	2	44	------	------	------	Clarifying Pond Discharge
3	SCS Runoff	90.46	2	722	269,076	------	------	------	Culvert 2 & Berm 1 DA
4	SCS Runoff	21.96	2	716	48,234	------	------	------	Basin 1 DA
5	Combine	104.49	2	720	317,310	3, 4	------	------	Basin 1 Inflow
6	Reservoir	86.79	2	726	289,198	5	535.31	191,434	Basin 1 Routing
8	SCS Runoff	5.200	2	716	11,424	------	------	------	Channel 1 DA
9	Combine	87.62	2	726	300,666	1, 6, 8	------	------	Channel 1 & Culvert 6 Inflow
11	SCS Runoff	9.534	2	716	20,944	------	------	------	Channel 5 & Culvert 7 DA
12	SCS Runoff	21.96	2	716	48,234	------	------	------	Culvert 3 DA
13	SCS Runoff	35.63	2	716	78,274	------	------	------	Culvert 4 DA
14	SCS Runoff	44.49	2	716	97,737	------	------	------	Basin 2 DA
15	SCS Runoff	93.80	2	716	206,051	------	------	------	Upslope Pad Area
16	Combine	195.88	2	716	430,295	12, 13, 14, 15	------	------	Basin 2 Inflow
17	Reservoir	105.36	2	722	373,783	16	531.92	249,514	Basin 2 Routing
19	SCS Runoff	10.02	2	716	22,001	------	------	------	Channel 2 Section 1 DA
20	Combine	191.84	2	722	696,450	9, 17, 19	------	------	Channel 2 Section 1 & Culvert 8 Inflo
22	SCS Runoff	7.839	2	716	17,220	------	------	------	Channel 2 Section 2 DA
23	Combine	195.52	2	722	713,671	20, 22	------	------	Channel 2 Section 2 & Culvert 5 Inflo
25	SCS Runoff	18.49	2	716	40,618	------	------	------	Channel 3 DA
26	Combine	204.20	2	722	754,288	23, 25	------	------	Channel 3 Inflow
28	SCS Runoff	47.28	2	716	103,872	------	------	------	Berms 2 and 3 DA
30	SCS Runoff	86.10	2	716	176,648	------	------	------	Channel 4 DA
32	SCS Runoff	13.68	2	716	30,040	------	------	------	Berm 4 & Berm 5 DA

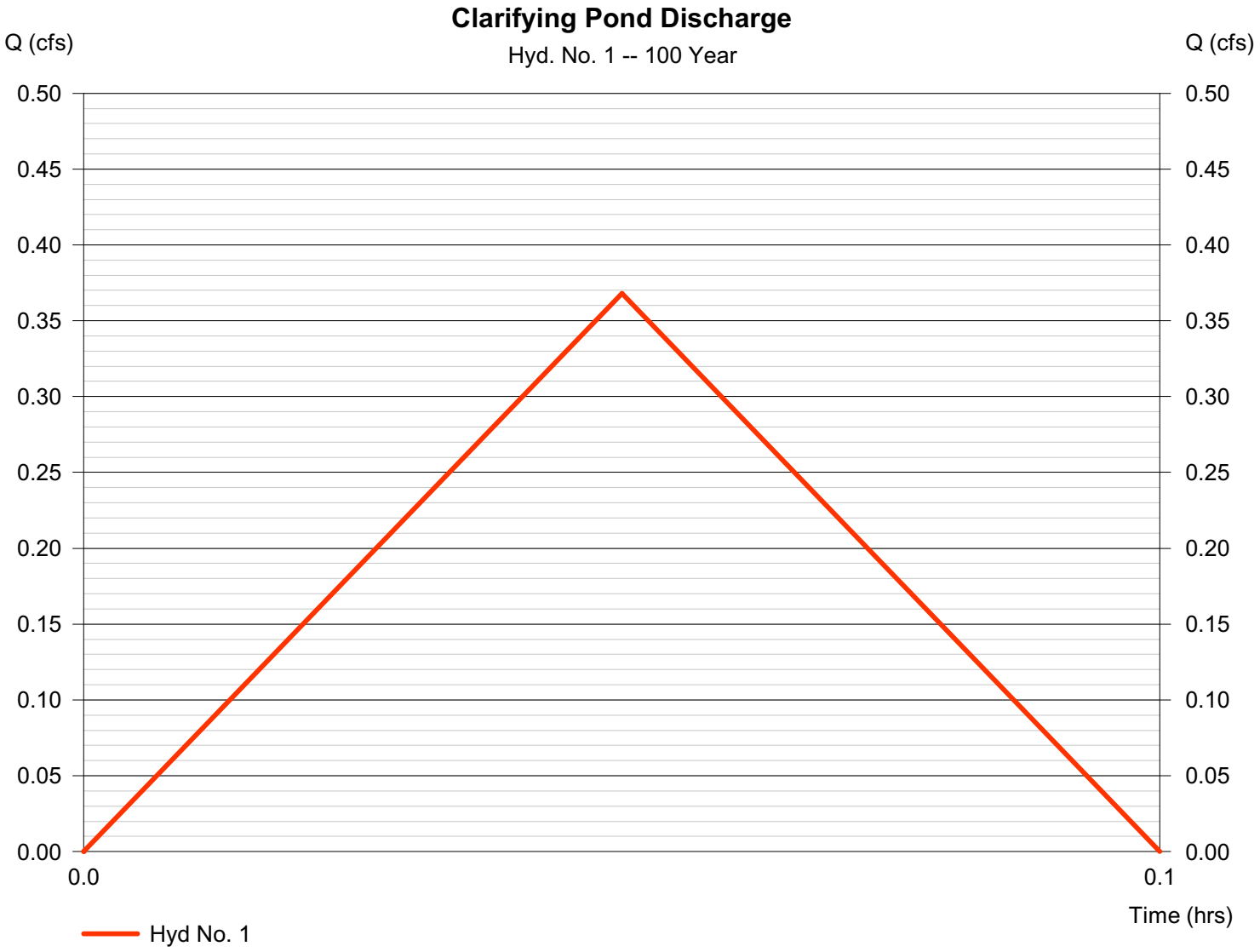
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024 Friday, 04 / 18 / 2025

Hyd. No. 1

Clarifying Pond Discharge

Hydrograph type	= Manual	Peak discharge	= 0.368 cfs
Storm frequency	= 100 yrs	Time to peak	= 0.03 hrs
Time interval	= 2 min	Hyd. volume	= 44 cuft



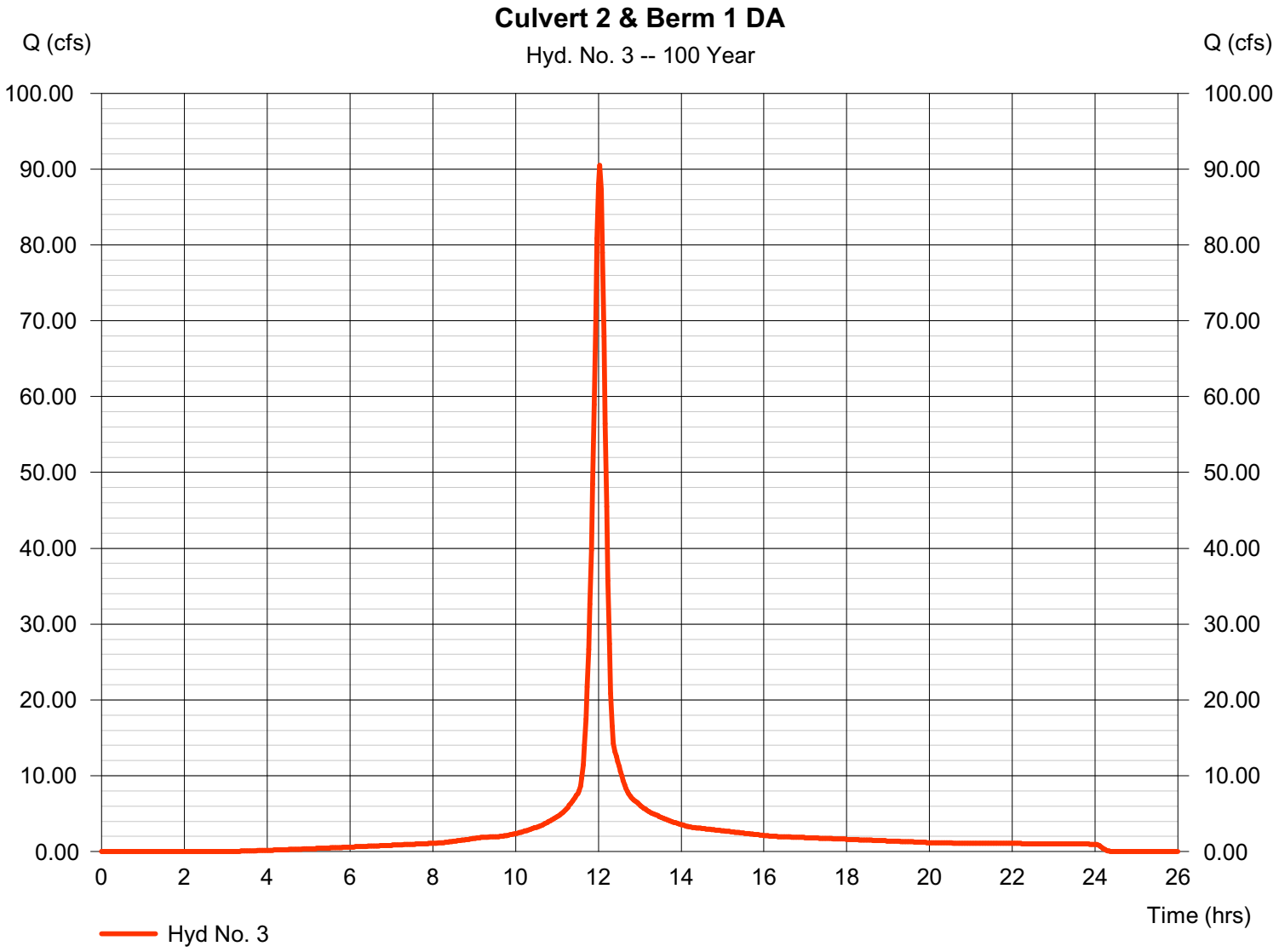
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024 Friday, 04 / 18 / 2025

Hyd. No. 3

Culvert 2 & Berm 1 DA

Hydrograph type	= SCS Runoff	Peak discharge	= 90.46 cfs
Storm frequency	= 100 yrs	Time to peak	= 12.03 hrs
Time interval	= 2 min	Hyd. volume	= 269,076 cuft
Drainage area	= 12.230 ac	Curve number	= 89
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 15.00 min
Total precip.	= 7.52 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484



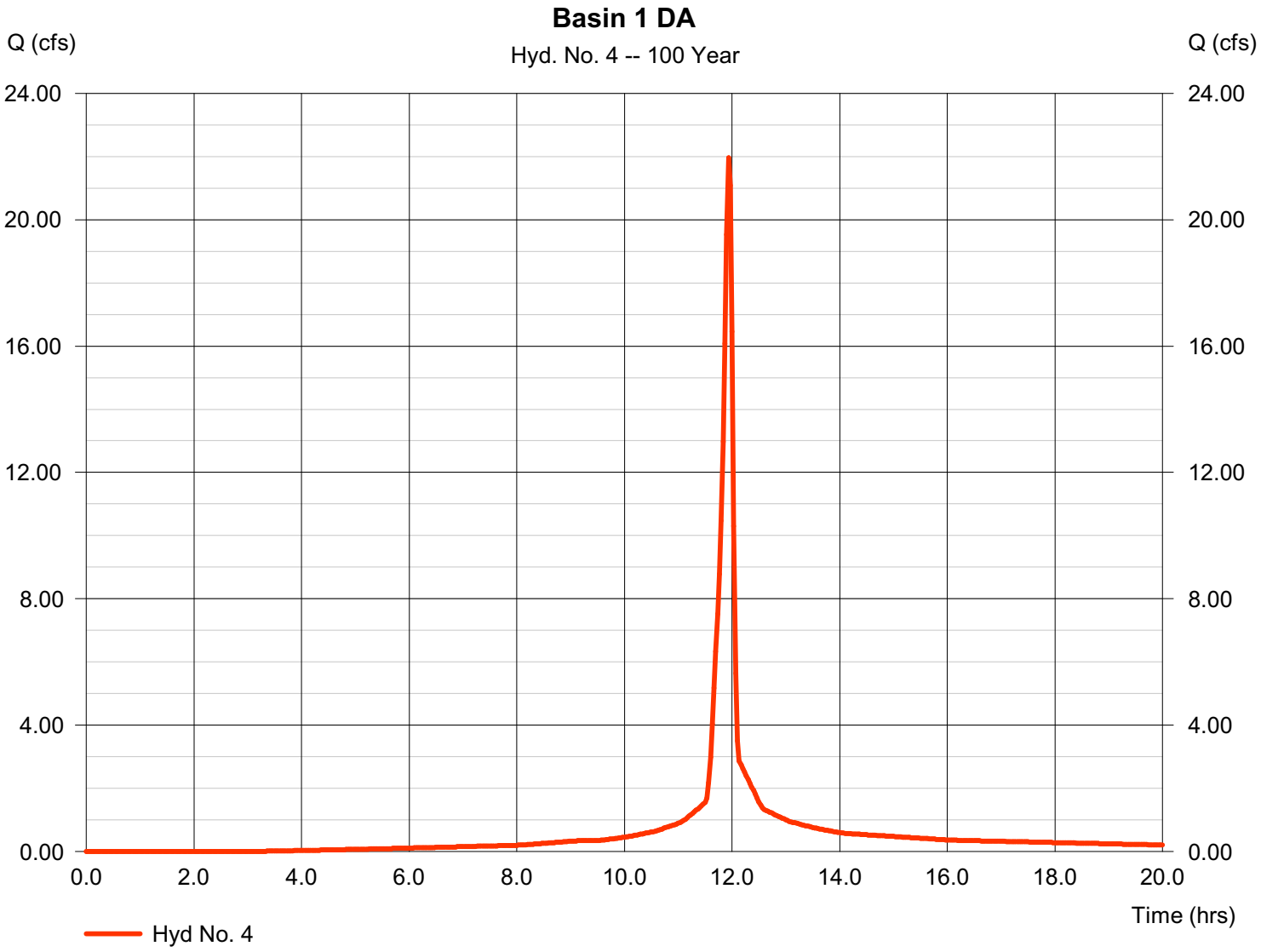
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024 Friday, 04 / 18 / 2025

Hyd. No. 4

Basin 1 DA

Hydrograph type	= SCS Runoff	Peak discharge	= 21.96 cfs
Storm frequency	= 100 yrs	Time to peak	= 11.93 hrs
Time interval	= 2 min	Hyd. volume	= 48,234 cuft
Drainage area	= 2.280 ac	Curve number	= 89
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 5.00 min
Total precip.	= 7.52 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484



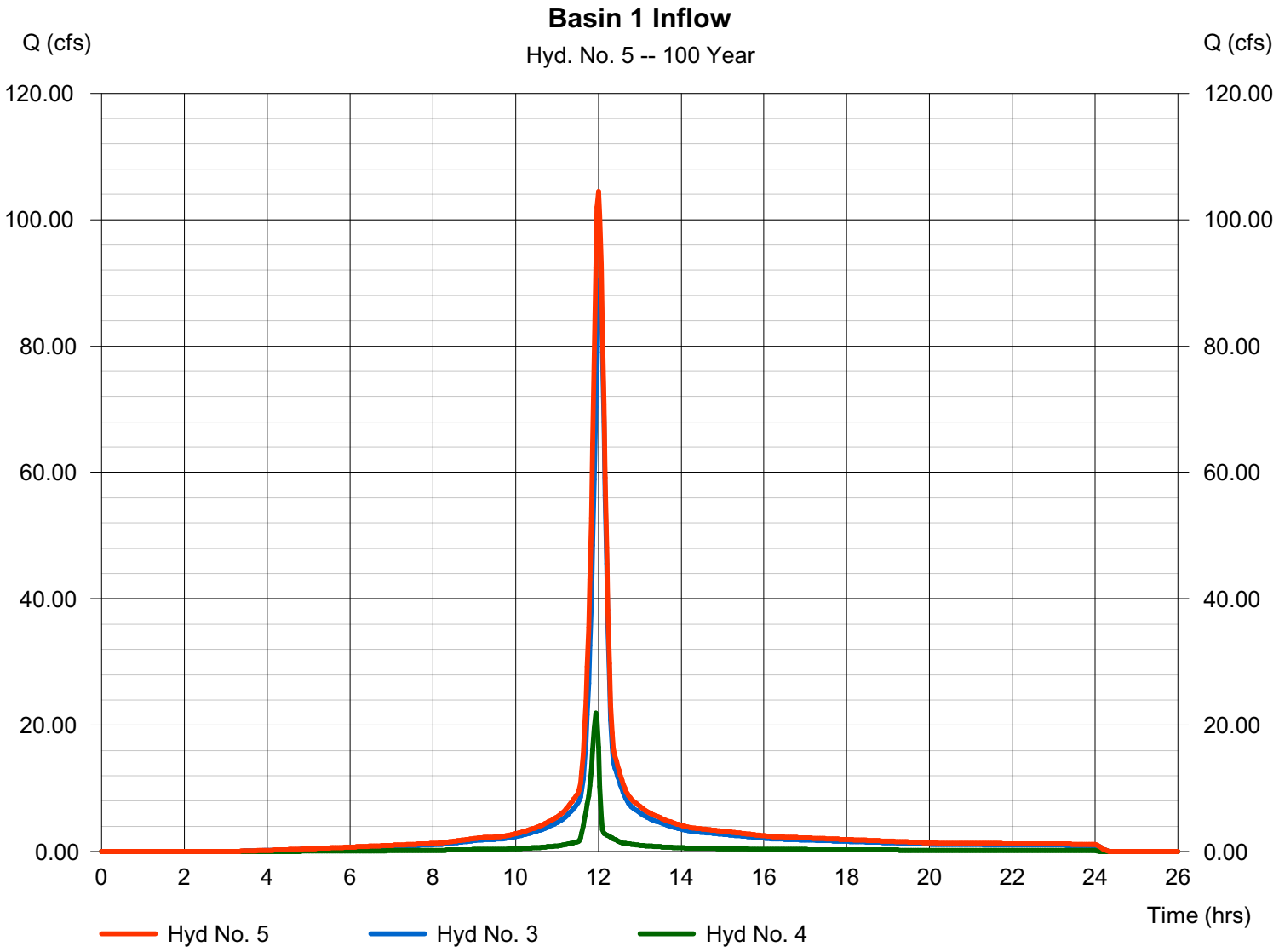
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024 Friday, 04 / 18 / 2025

Hyd. No. 5

Basin 1 Inflow

Hydrograph type	= Combine	Peak discharge	= 104.49 cfs
Storm frequency	= 100 yrs	Time to peak	= 12.00 hrs
Time interval	= 2 min	Hyd. volume	= 317,310 cuft
Inflow hyds.	= 3, 4	Contrib. drain. area	= 14.510 ac



Hydrograph Report

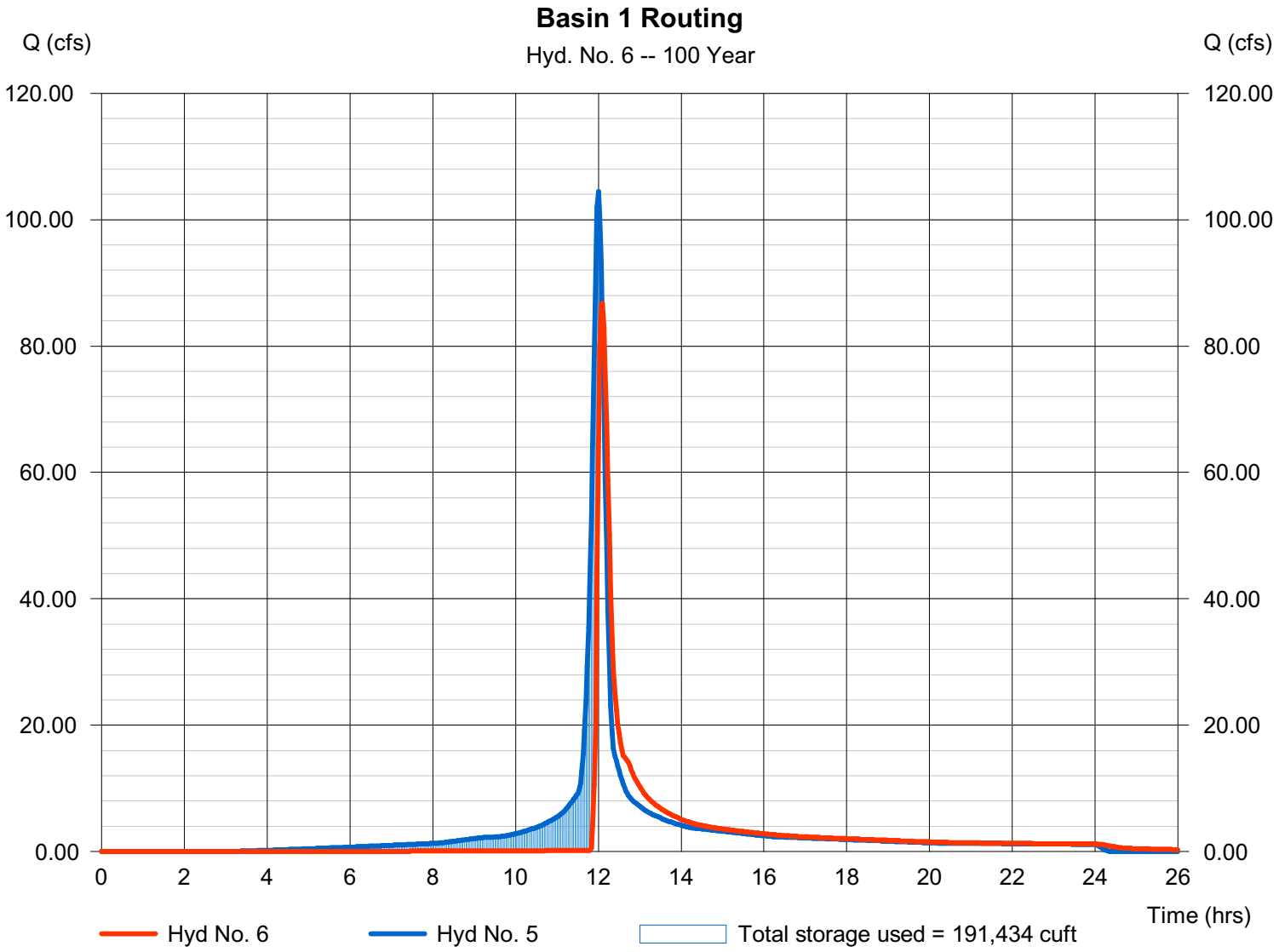
Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024 Friday, 04 / 18 / 2025

Hyd. No. 6

Basin 1 Routing

Hydrograph type	= Reservoir	Peak discharge	= 86.79 cfs
Storm frequency	= 100 yrs	Time to peak	= 12.10 hrs
Time interval	= 2 min	Hyd. volume	= 289,198 cuft
Inflow hyd. No.	= 5 - Basin 1 Inflow	Max. Elevation	= 535.31 ft
Reservoir name	= Sediment Basin 1	Max. Storage	= 191,434 cuft

Storage Indication method used. Wet pond routing start elevation = 530.30 ft.



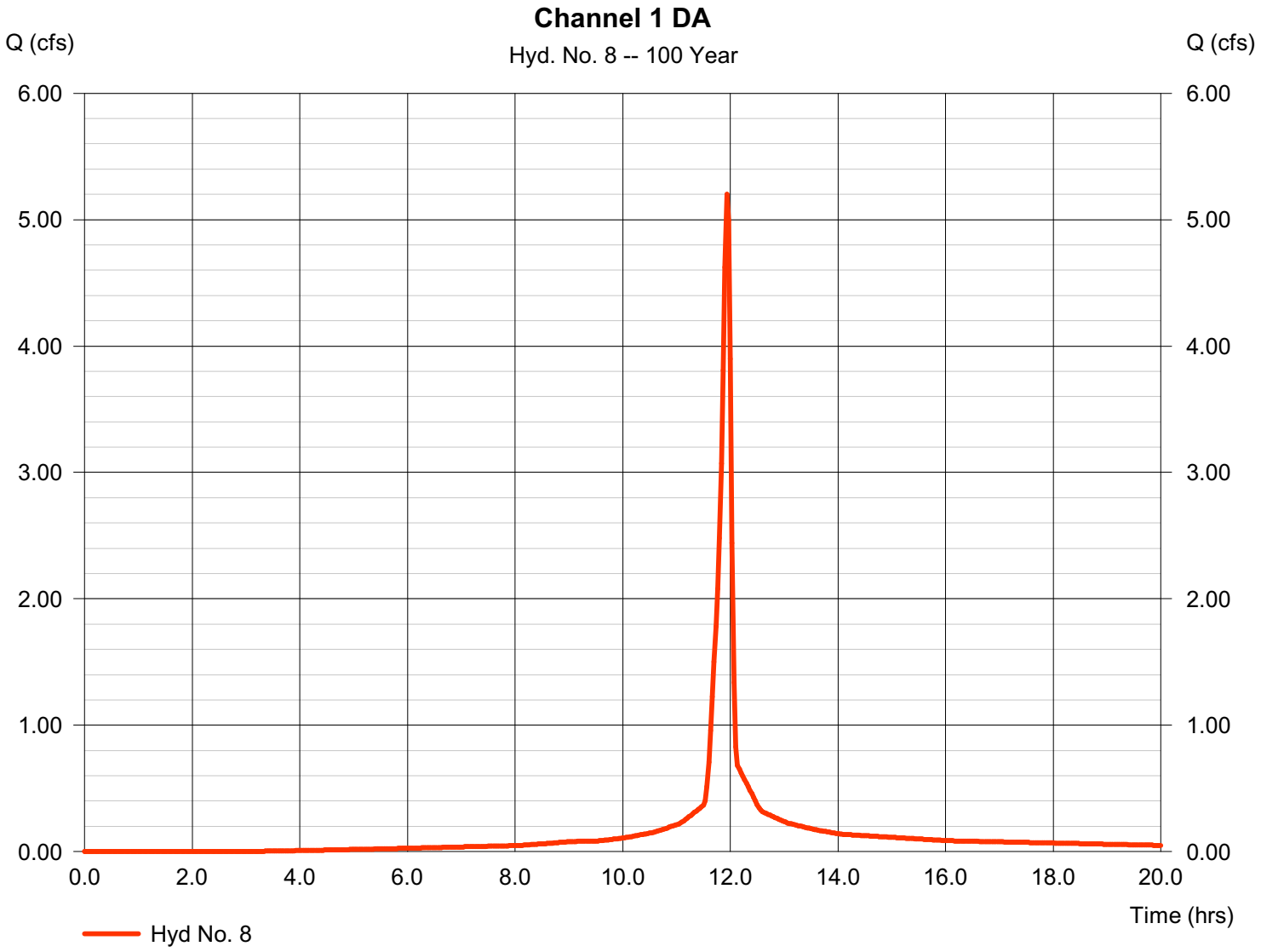
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024 Friday, 04 / 18 / 2025

Hyd. No. 8

Channel 1 DA

Hydrograph type	=	SCS Runoff	Peak discharge	=	5.200 cfs
Storm frequency	=	100 yrs	Time to peak	=	11.93 hrs
Time interval	=	2 min	Hyd. volume	=	11,424 cuft
Drainage area	=	0.540 ac	Curve number	=	89
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	5.00 min
Total precip.	=	7.52 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484



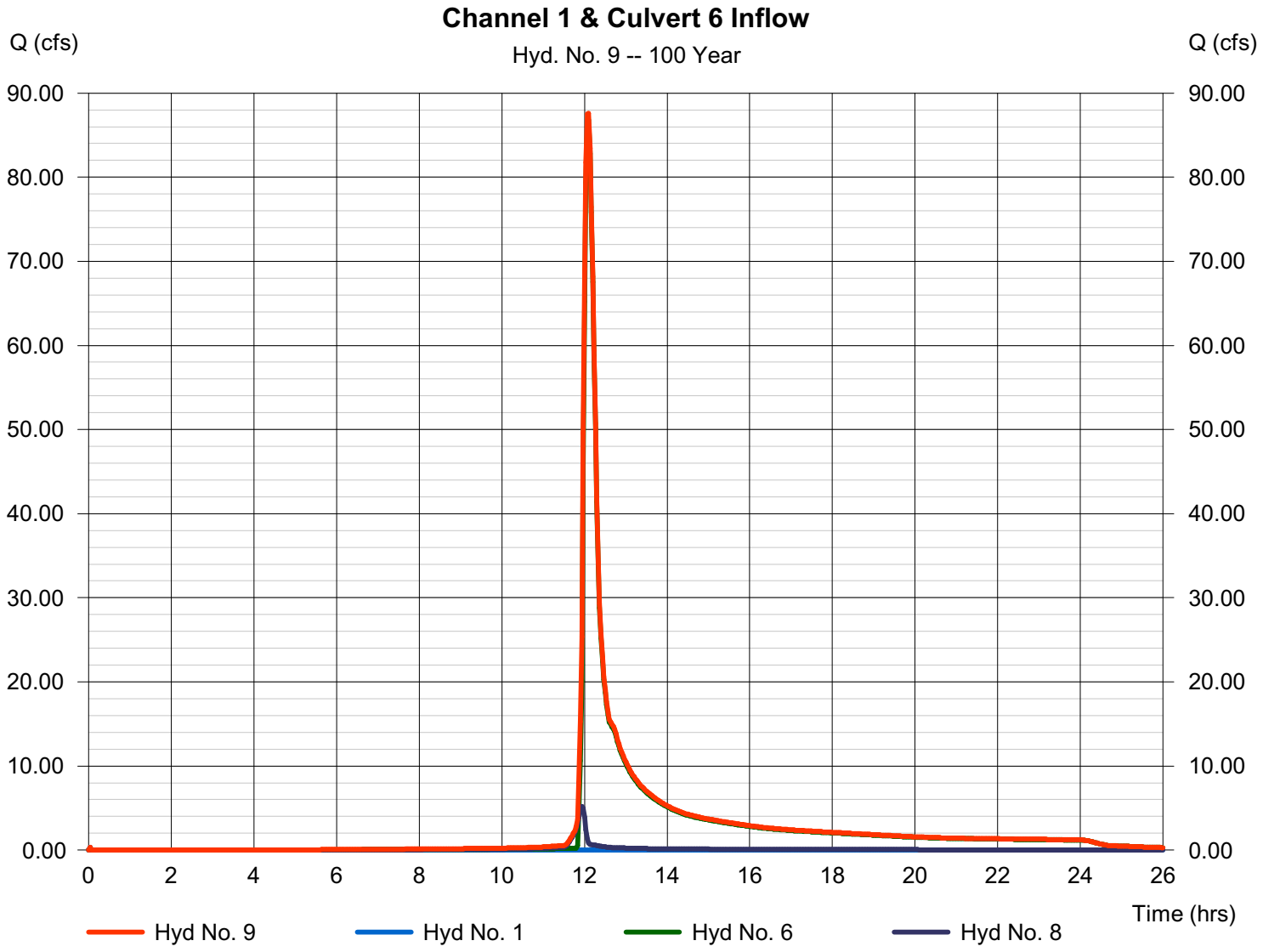
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024 Friday, 04 / 18 / 2025

Hyd. No. 9

Channel 1 & Culvert 6 Inflow

Hydrograph type	=	Combine	Peak discharge	=	87.62 cfs
Storm frequency	=	100 yrs	Time to peak	=	12.10 hrs
Time interval	=	2 min	Hyd. volume	=	300,666 cuft
Inflow hyds.	=	1, 6, 8	Contrib. drain. area	=	0.540 ac



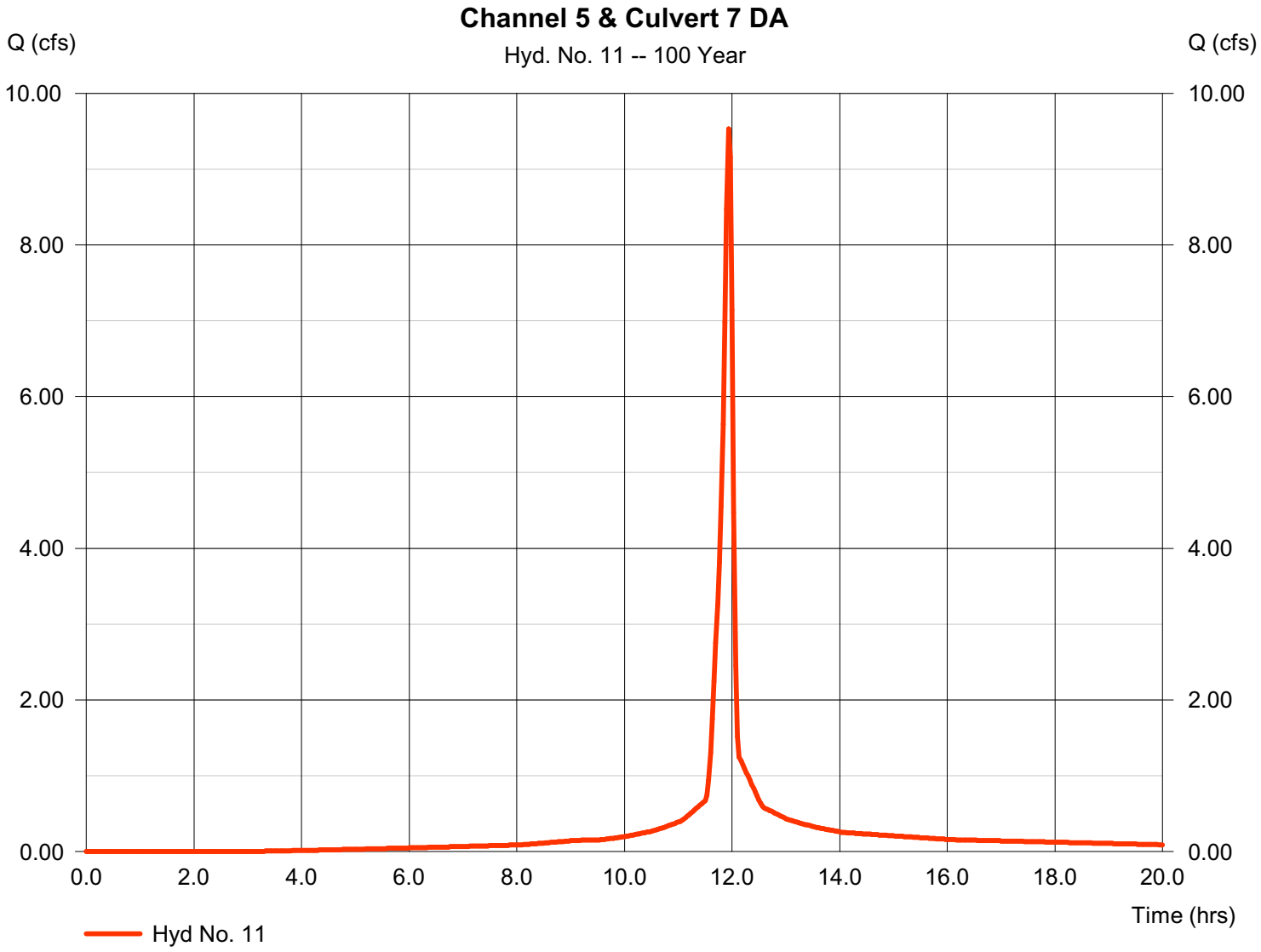
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024 Friday, 04 / 18 / 2025

Hyd. No. 11

Channel 5 & Culvert 7 DA

Hydrograph type	= SCS Runoff	Peak discharge	= 9.534 cfs
Storm frequency	= 100 yrs	Time to peak	= 11.93 hrs
Time interval	= 2 min	Hyd. volume	= 20,944 cuft
Drainage area	= 0.990 ac	Curve number	= 89
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 5.00 min
Total precip.	= 7.52 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484



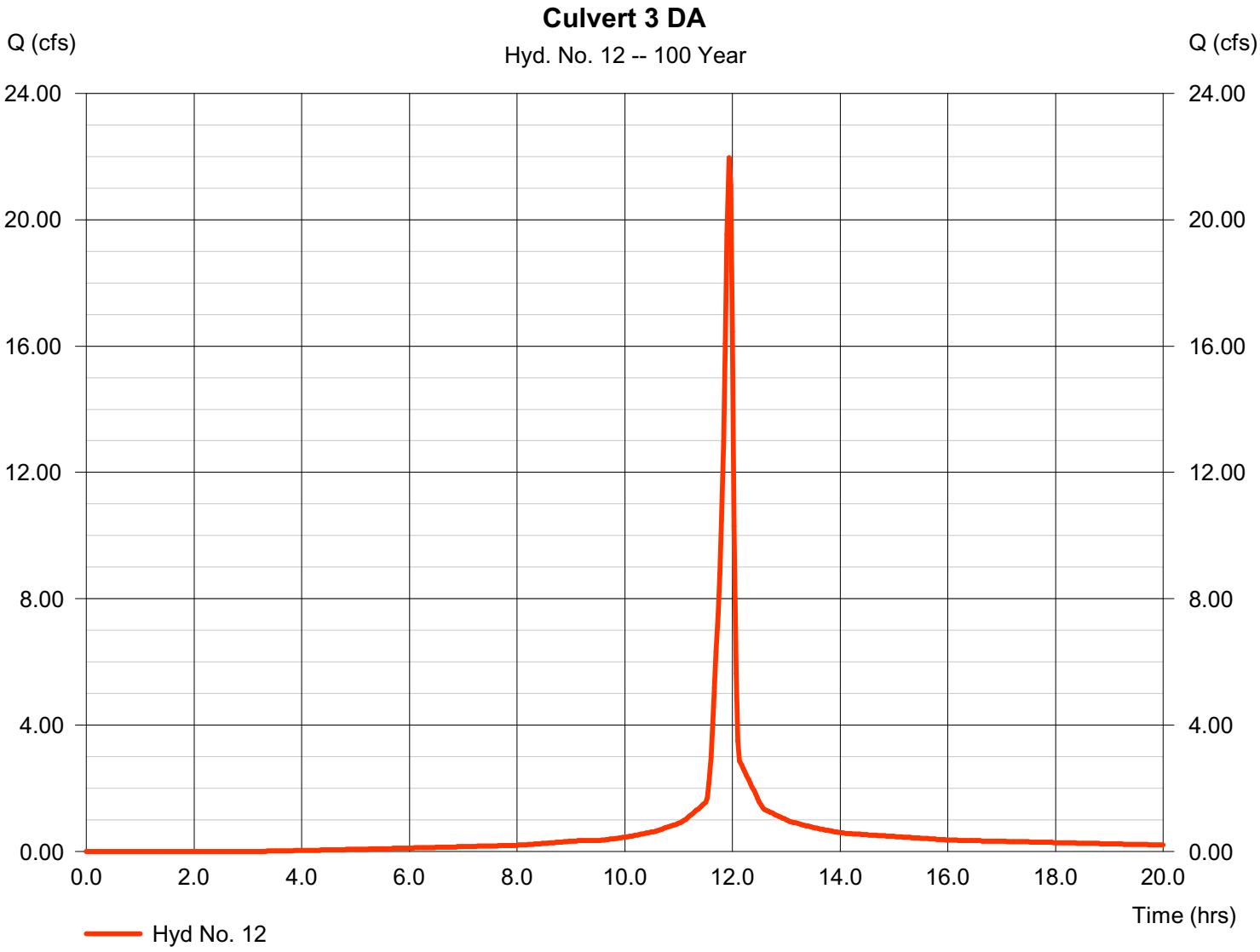
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024 Friday, 04 / 18 / 2025

Hyd. No. 12

Culvert 3 DA

Hydrograph type	=	SCS Runoff	Peak discharge	=	21.96 cfs
Storm frequency	=	100 yrs	Time to peak	=	11.93 hrs
Time interval	=	2 min	Hyd. volume	=	48,234 cuft
Drainage area	=	2.280 ac	Curve number	=	89
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	5.00 min
Total precip.	=	7.52 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484



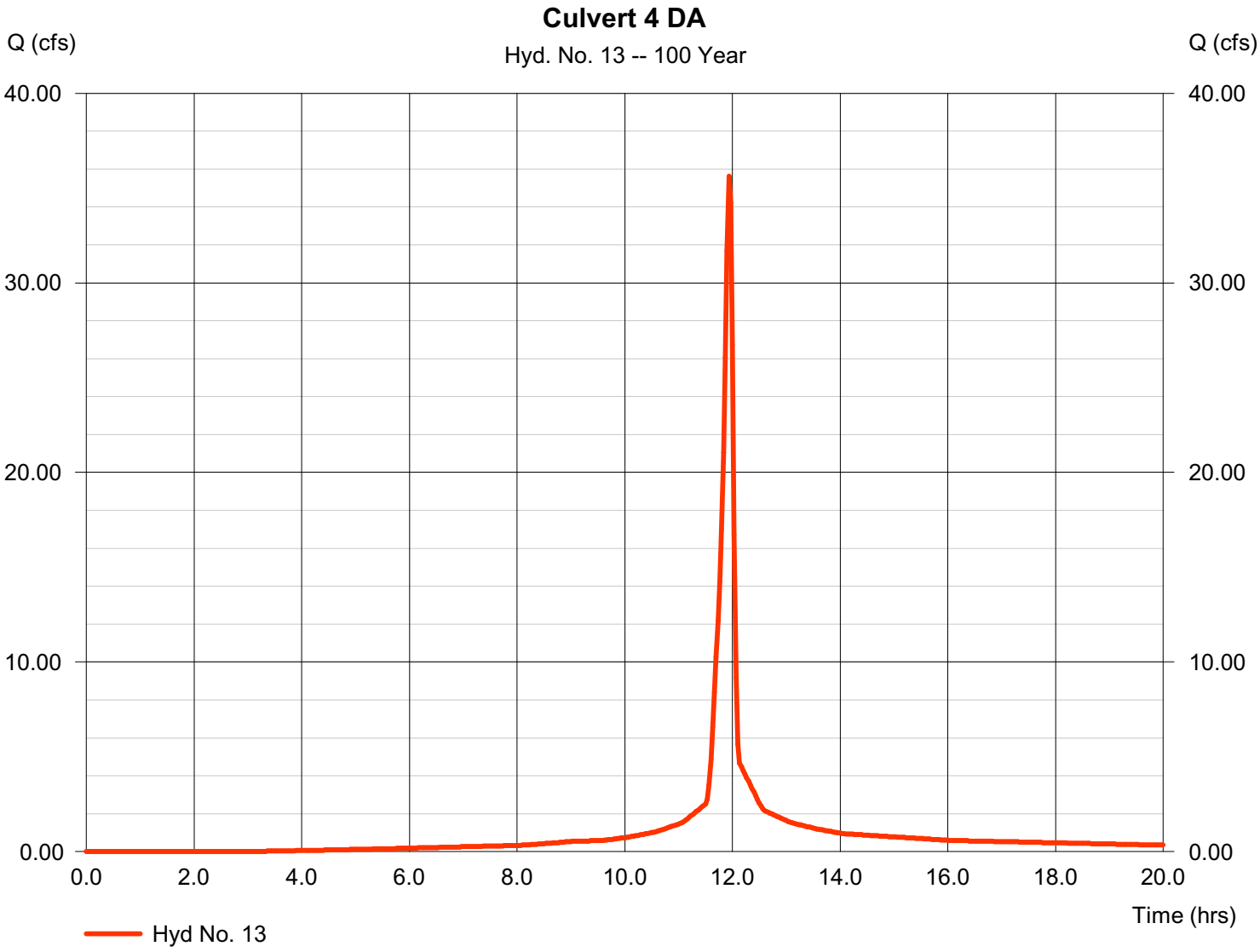
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024 Friday, 04 / 18 / 2025

Hyd. No. 13

Culvert 4 DA

Hydrograph type	=	SCS Runoff	Peak discharge	=	35.63 cfs
Storm frequency	=	100 yrs	Time to peak	=	11.93 hrs
Time interval	=	2 min	Hyd. volume	=	78,274 cuft
Drainage area	=	3.700 ac	Curve number	=	89
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	5.00 min
Total precip.	=	7.52 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484



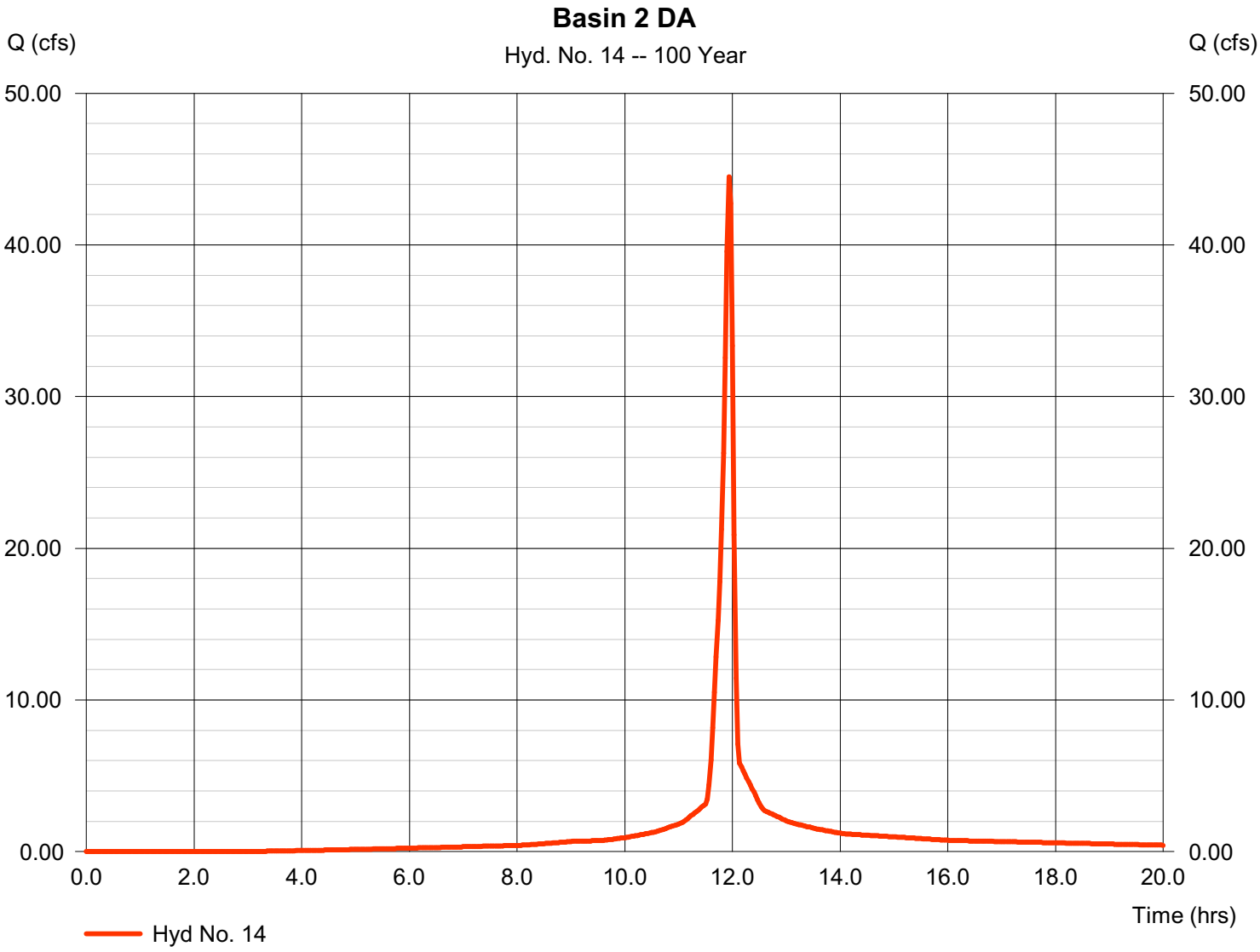
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024 Friday, 04 / 18 / 2025

Hyd. No. 14

Basin 2 DA

Hydrograph type	= SCS Runoff	Peak discharge	= 44.49 cfs
Storm frequency	= 100 yrs	Time to peak	= 11.93 hrs
Time interval	= 2 min	Hyd. volume	= 97,737 cuft
Drainage area	= 4.620 ac	Curve number	= 89
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 5.00 min
Total precip.	= 7.52 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484



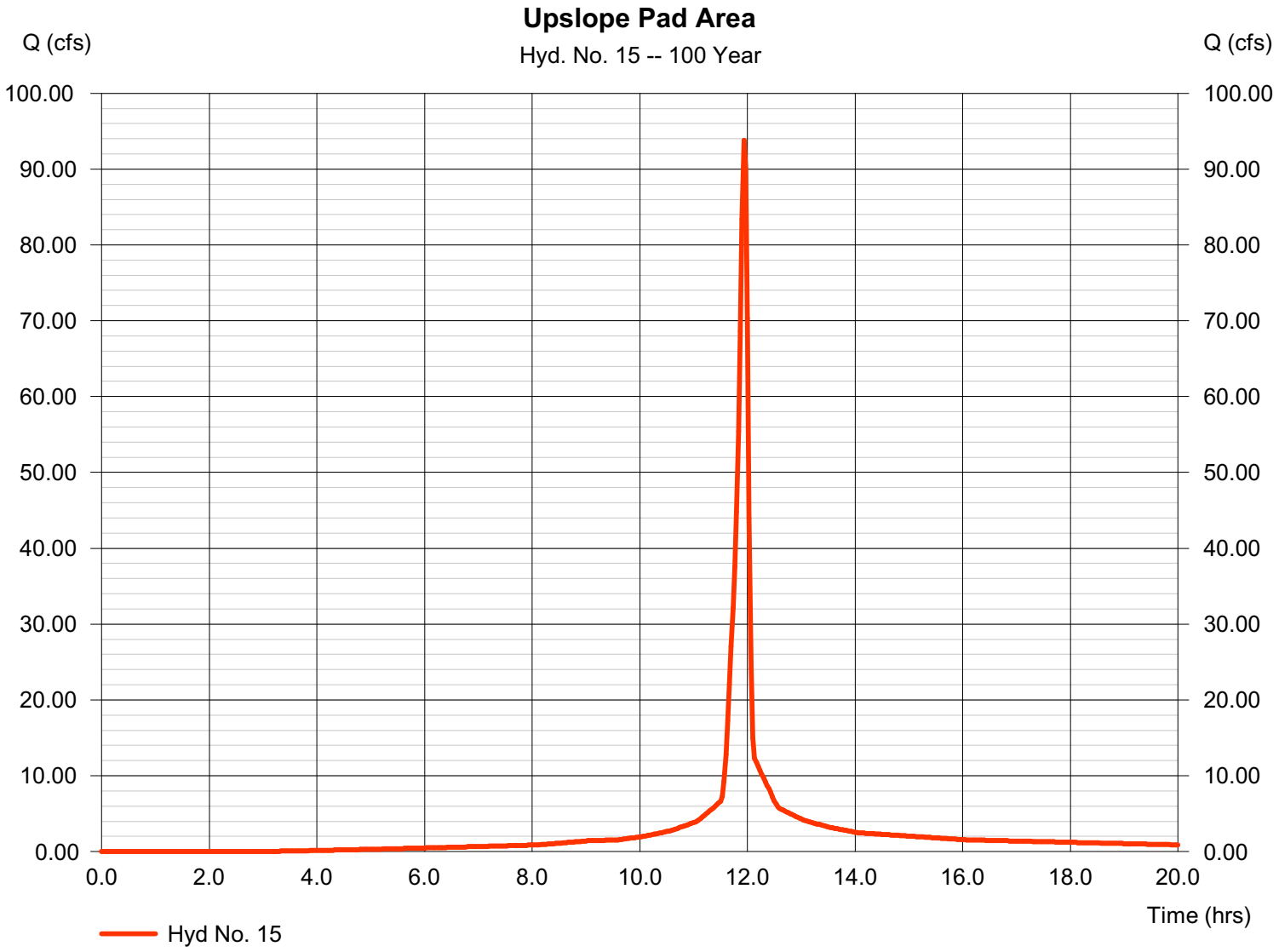
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024 Friday, 04 / 18 / 2025

Hyd. No. 15

Upslope Pad Area

Hydrograph type	=	SCS Runoff	Peak discharge	=	93.80 cfs
Storm frequency	=	100 yrs	Time to peak	=	11.93 hrs
Time interval	=	2 min	Hyd. volume	=	206,051 cuft
Drainage area	=	9.740 ac	Curve number	=	89
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	5.00 min
Total precip.	=	7.52 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484



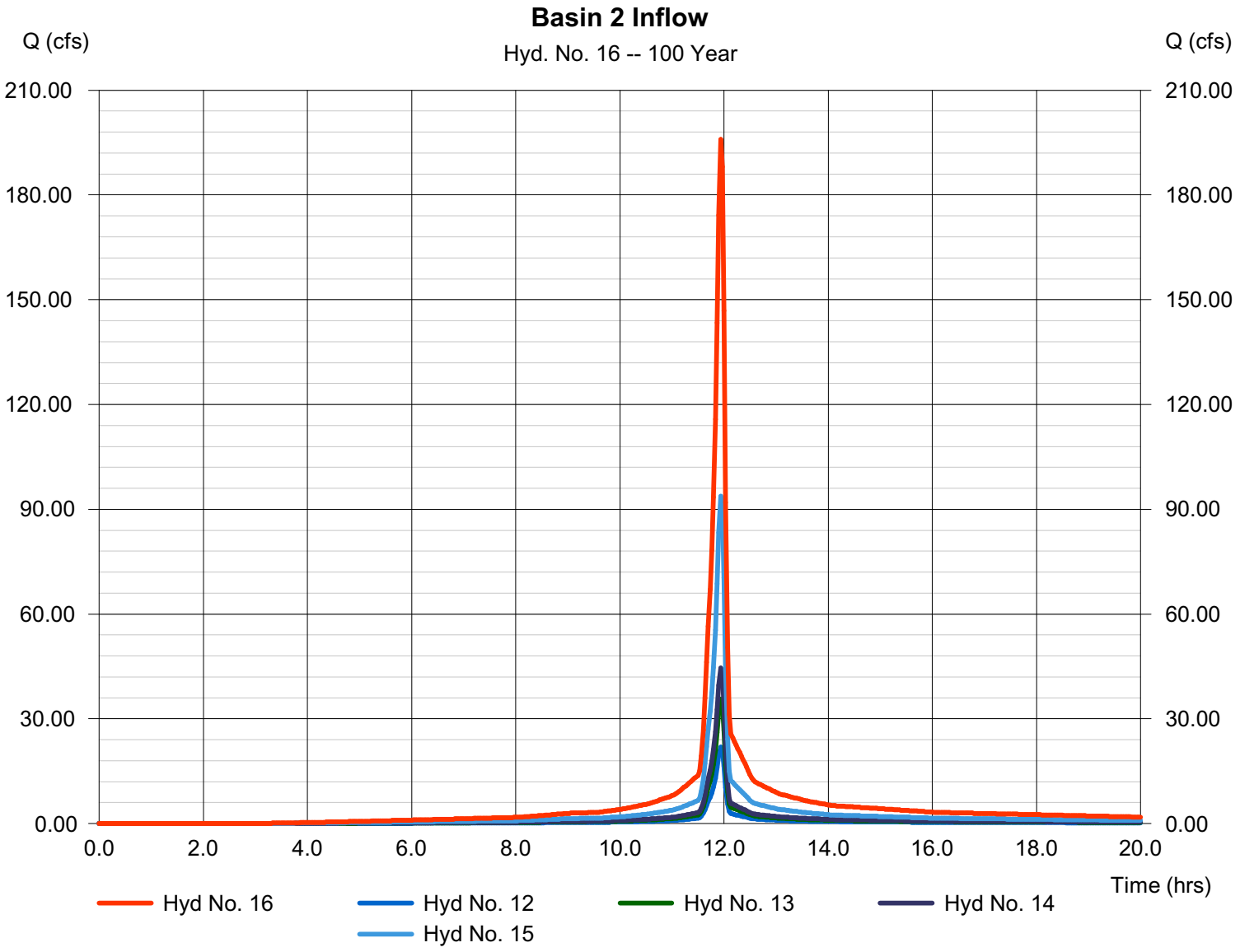
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024 Friday, 04 / 18 / 2025

Hyd. No. 16

Basin 2 Inflow

Hydrograph type	= Combine	Peak discharge	= 195.88 cfs
Storm frequency	= 100 yrs	Time to peak	= 11.93 hrs
Time interval	= 2 min	Hyd. volume	= 430,295 cuft
Inflow hyds.	= 12, 13, 14, 15	Contrib. drain. area	= 20.340 ac



Hydrograph Report

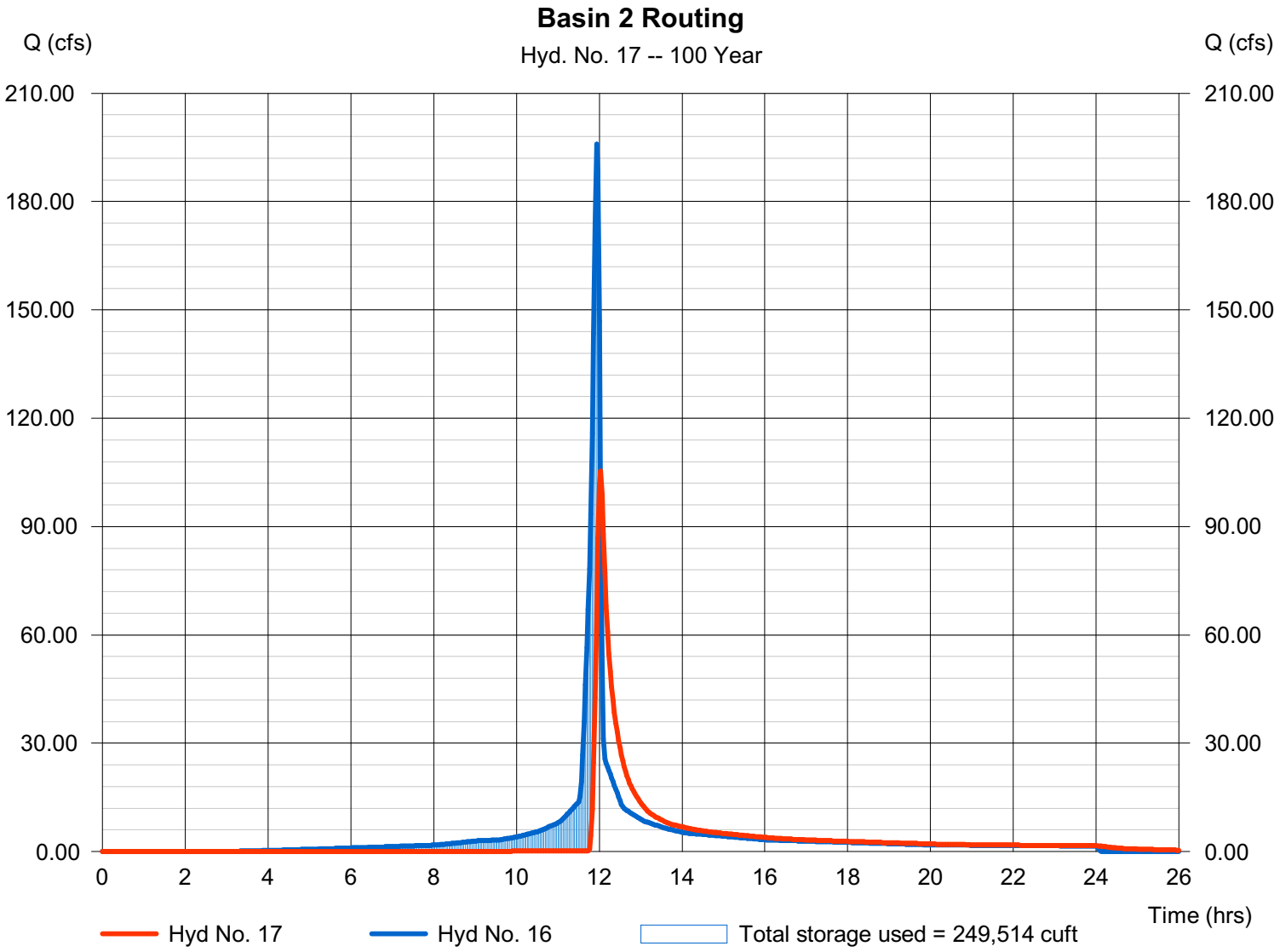
Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024 Friday, 04 / 18 / 2025

Hyd. No. 17

Basin 2 Routing

Hydrograph type	= Reservoir	Peak discharge	= 105.36 cfs
Storm frequency	= 100 yrs	Time to peak	= 12.03 hrs
Time interval	= 2 min	Hyd. volume	= 373,783 cuft
Inflow hyd. No.	= 16 - Basin 2 Inflow	Max. Elevation	= 531.92 ft
Reservoir name	= Sediment Basin 2	Max. Storage	= 249,514 cuft

Storage Indication method used. Wet pond routing start elevation = 526.80 ft.



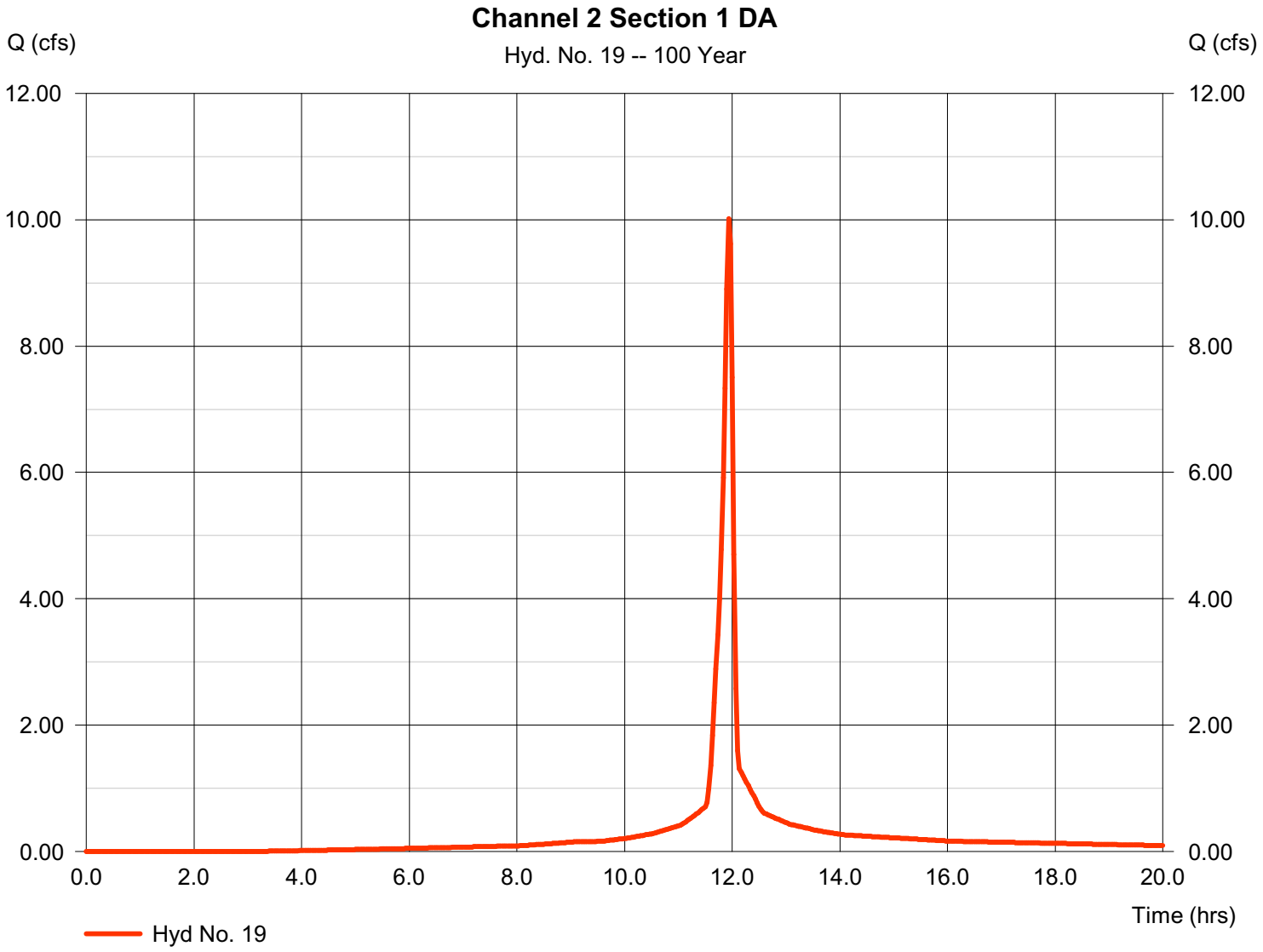
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024 Friday, 04 / 18 / 2025

Hyd. No. 19

Channel 2 Section 1 DA

Hydrograph type	= SCS Runoff	Peak discharge	= 10.02 cfs
Storm frequency	= 100 yrs	Time to peak	= 11.93 hrs
Time interval	= 2 min	Hyd. volume	= 22,001 cuft
Drainage area	= 1.040 ac	Curve number	= 89
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 5.00 min
Total precip.	= 7.52 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484



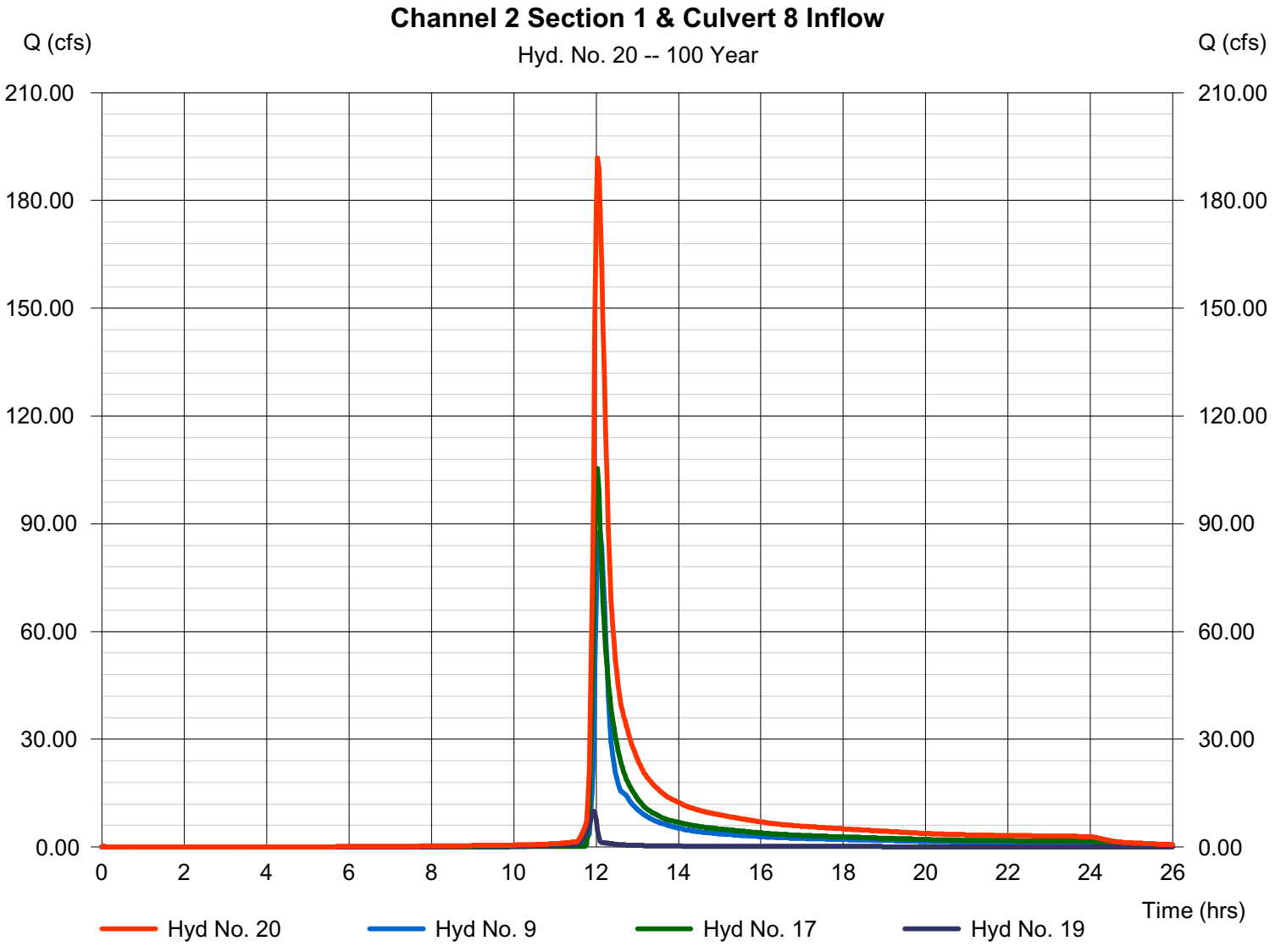
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024 Friday, 04 / 18 / 2025

Hyd. No. 20

Channel 2 Section 1 & Culvert 8 Inflow

Hydrograph type	= Combine	Peak discharge	= 191.84 cfs
Storm frequency	= 100 yrs	Time to peak	= 12.03 hrs
Time interval	= 2 min	Hyd. volume	= 696,450 cuft
Inflow hyds.	= 9, 17, 19	Contrib. drain. area	= 1.040 ac



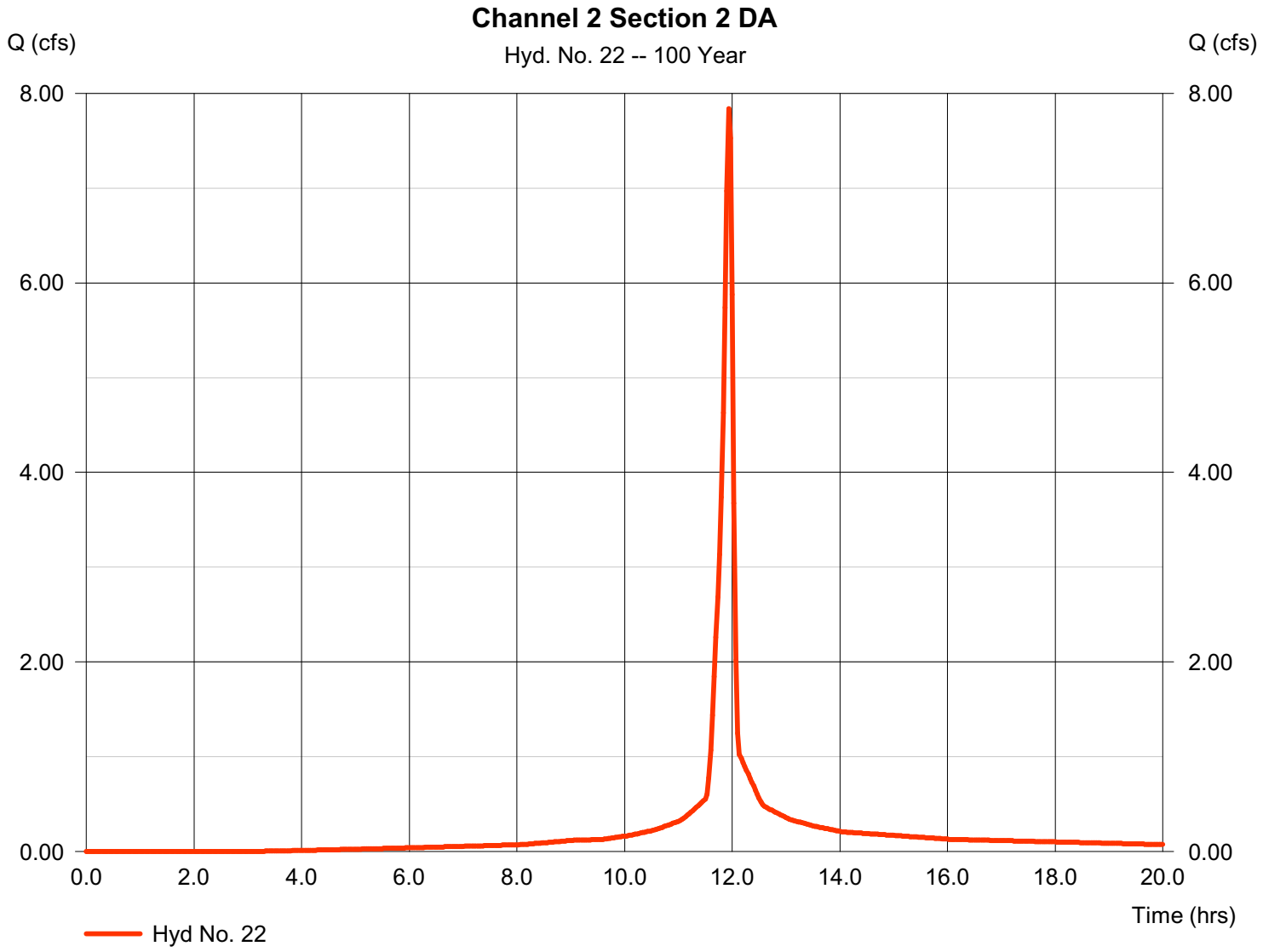
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024 Friday, 04 / 18 / 2025

Hyd. No. 22

Channel 2 Section 2 DA

Hydrograph type	= SCS Runoff	Peak discharge	= 7.839 cfs
Storm frequency	= 100 yrs	Time to peak	= 11.93 hrs
Time interval	= 2 min	Hyd. volume	= 17,220 cuft
Drainage area	= 0.814 ac	Curve number	= 89
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 5.00 min
Total precip.	= 7.52 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484



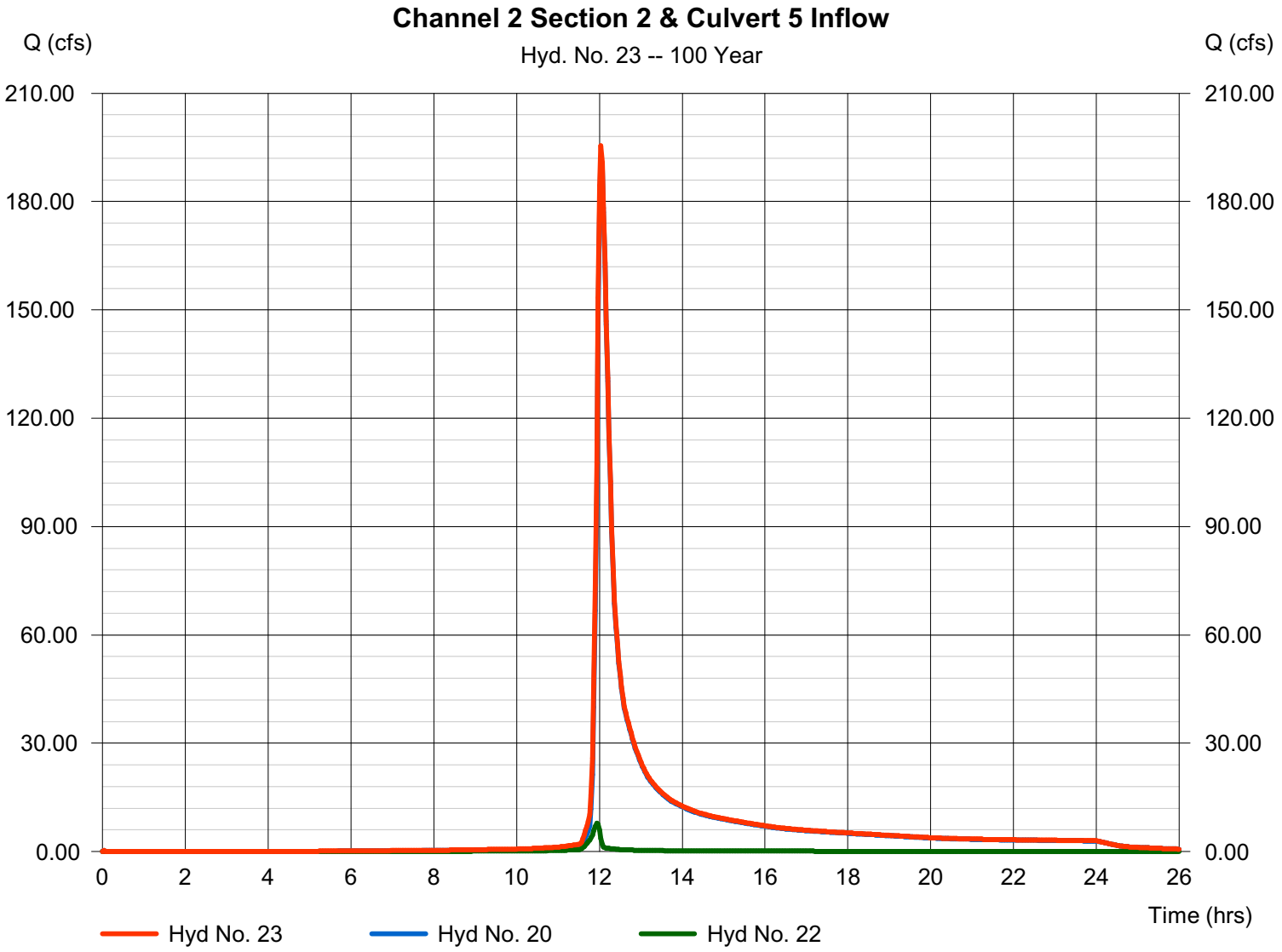
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024 Friday, 04 / 18 / 2025

Hyd. No. 23

Channel 2 Section 2 & Culvert 5 Inflow

Hydrograph type	= Combine	Peak discharge	= 195.52 cfs
Storm frequency	= 100 yrs	Time to peak	= 12.03 hrs
Time interval	= 2 min	Hyd. volume	= 713,671 cuft
Inflow hyds.	= 20, 22	Contrib. drain. area	= 0.814 ac



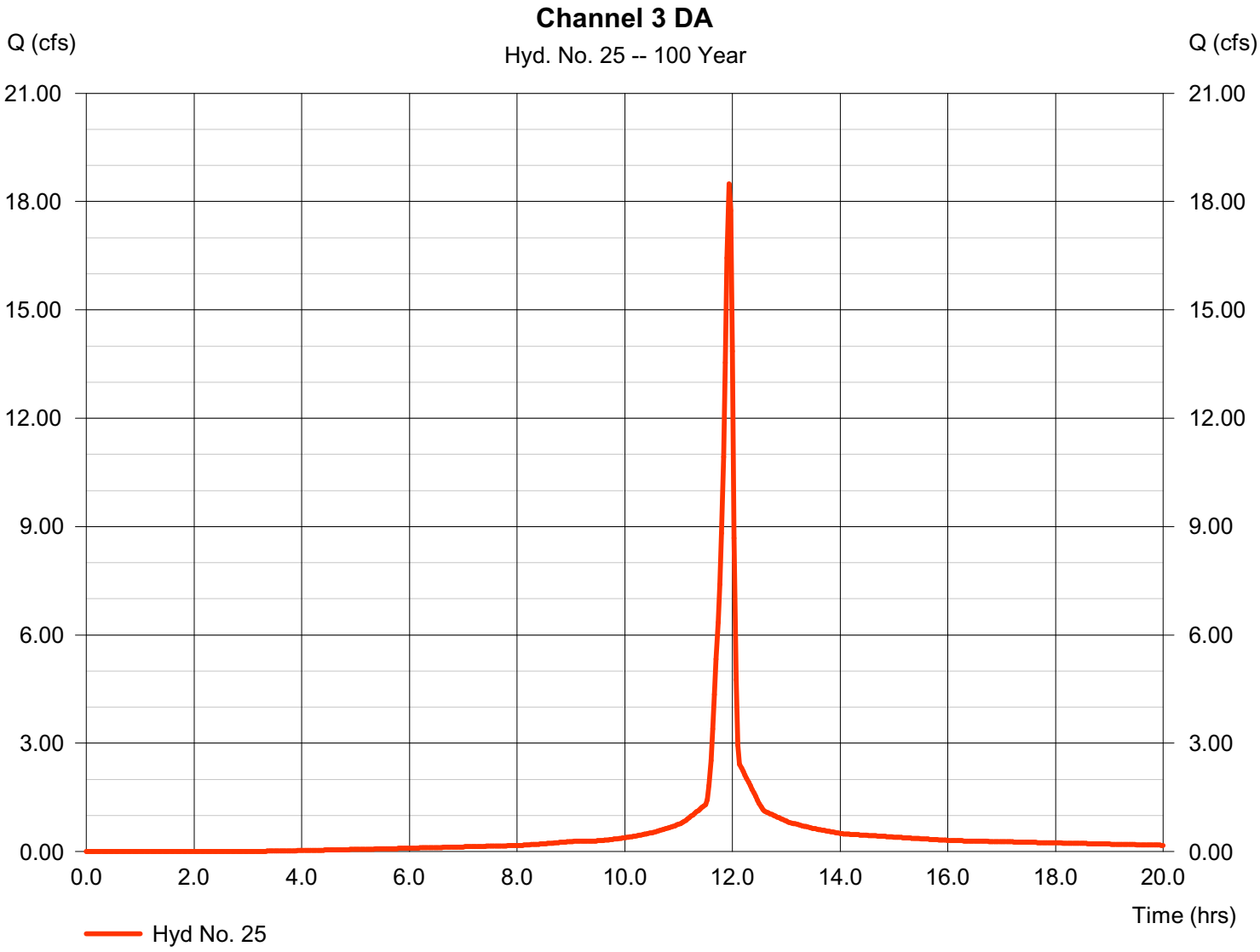
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024 Friday, 04 / 18 / 2025

Hyd. No. 25

Channel 3 DA

Hydrograph type	= SCS Runoff	Peak discharge	= 18.49 cfs
Storm frequency	= 100 yrs	Time to peak	= 11.93 hrs
Time interval	= 2 min	Hyd. volume	= 40,618 cuft
Drainage area	= 1.920 ac	Curve number	= 89
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 5.00 min
Total precip.	= 7.52 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484



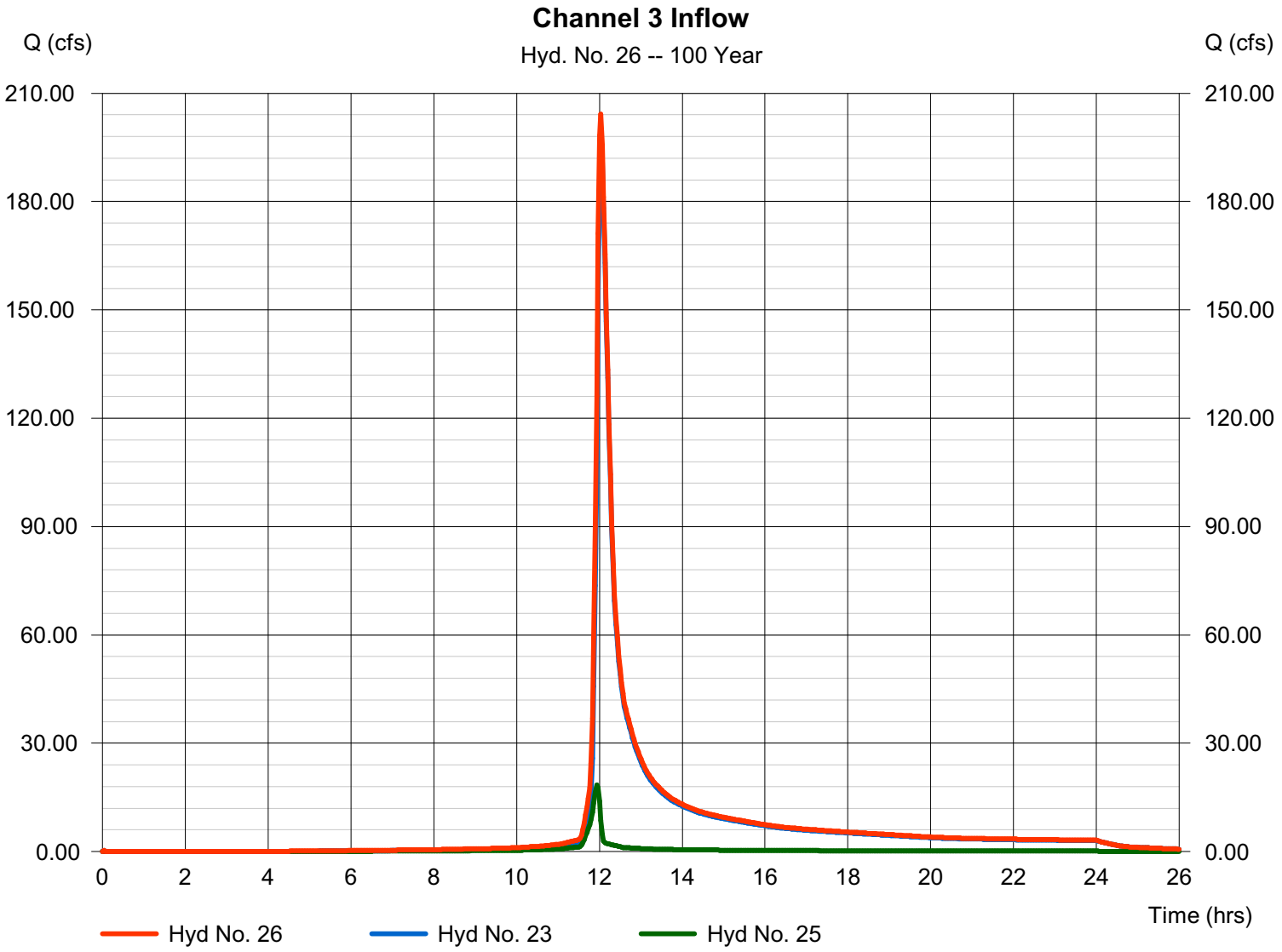
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024 Friday, 04 / 18 / 2025

Hyd. No. 26

Channel 3 Inflow

Hydrograph type	= Combine	Peak discharge	= 204.20 cfs
Storm frequency	= 100 yrs	Time to peak	= 12.03 hrs
Time interval	= 2 min	Hyd. volume	= 754,288 cuft
Inflow hyds.	= 23, 25	Contrib. drain. area	= 1.920 ac



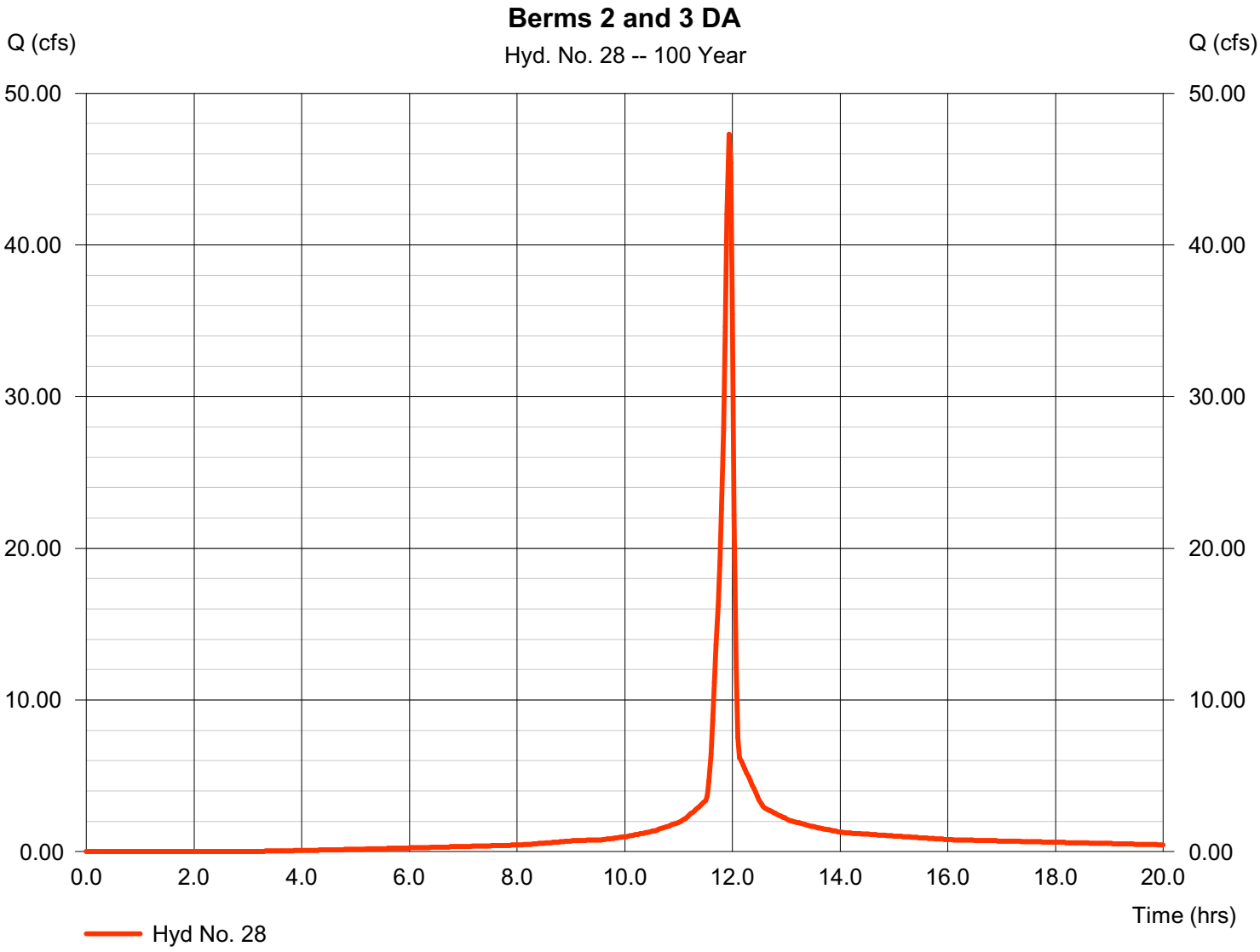
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024 Friday, 04 / 18 / 2025

Hyd. No. 28

Berms 2 and 3 DA

Hydrograph type	= SCS Runoff	Peak discharge	= 47.28 cfs
Storm frequency	= 100 yrs	Time to peak	= 11.93 hrs
Time interval	= 2 min	Hyd. volume	= 103,872 cuft
Drainage area	= 4.910 ac	Curve number	= 89
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 5.00 min
Total precip.	= 7.52 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484



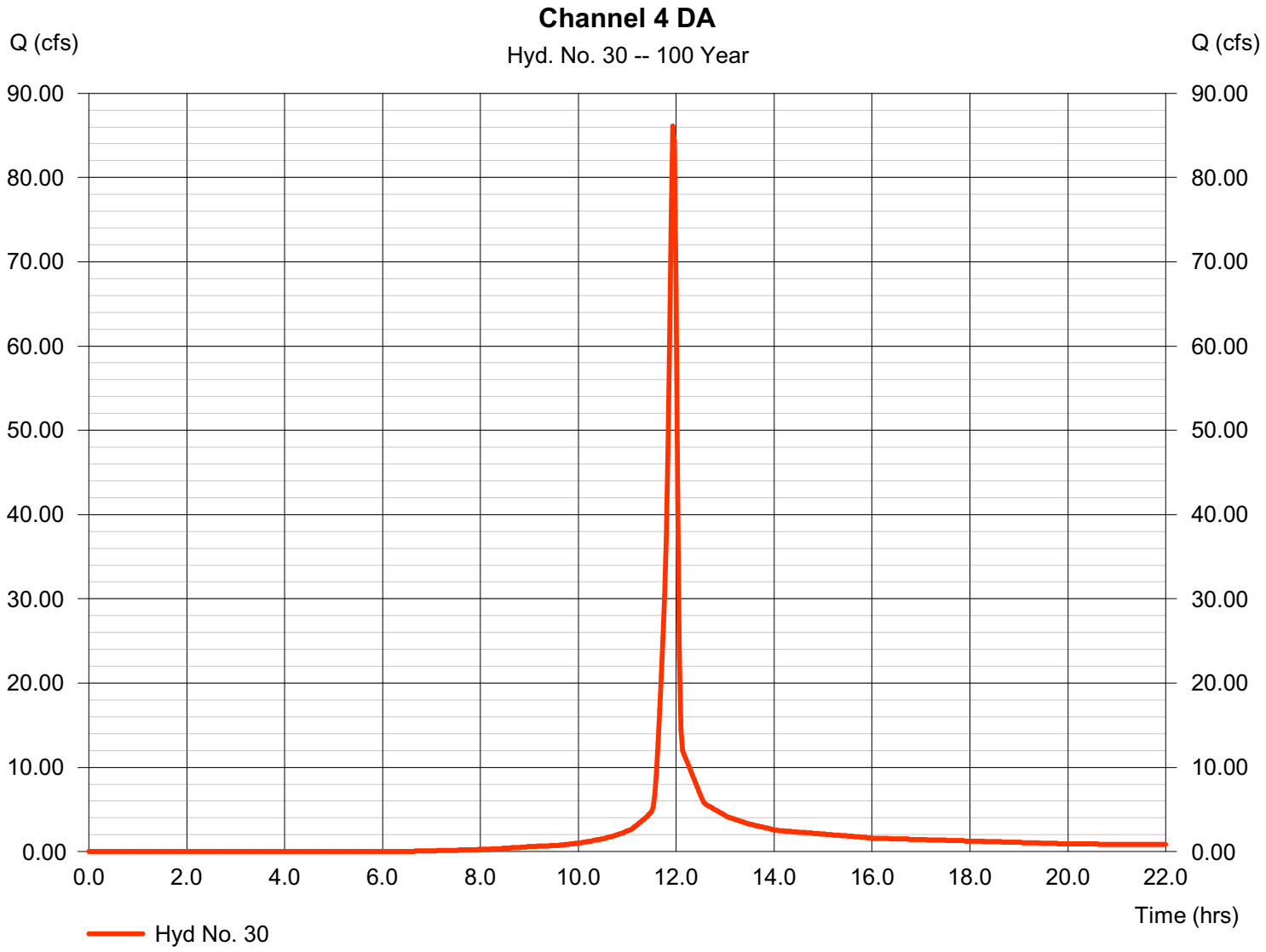
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024 Friday, 04 / 18 / 2025

Hyd. No. 30

Channel 4 DA

Hydrograph type	= SCS Runoff	Peak discharge	= 86.10 cfs
Storm frequency	= 100 yrs	Time to peak	= 11.93 hrs
Time interval	= 2 min	Hyd. volume	= 176,648 cuft
Drainage area	= 10.990 ac	Curve number	= 76
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= TR55	Time of conc. (Tc)	= 6.00 min
Total precip.	= 7.52 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484



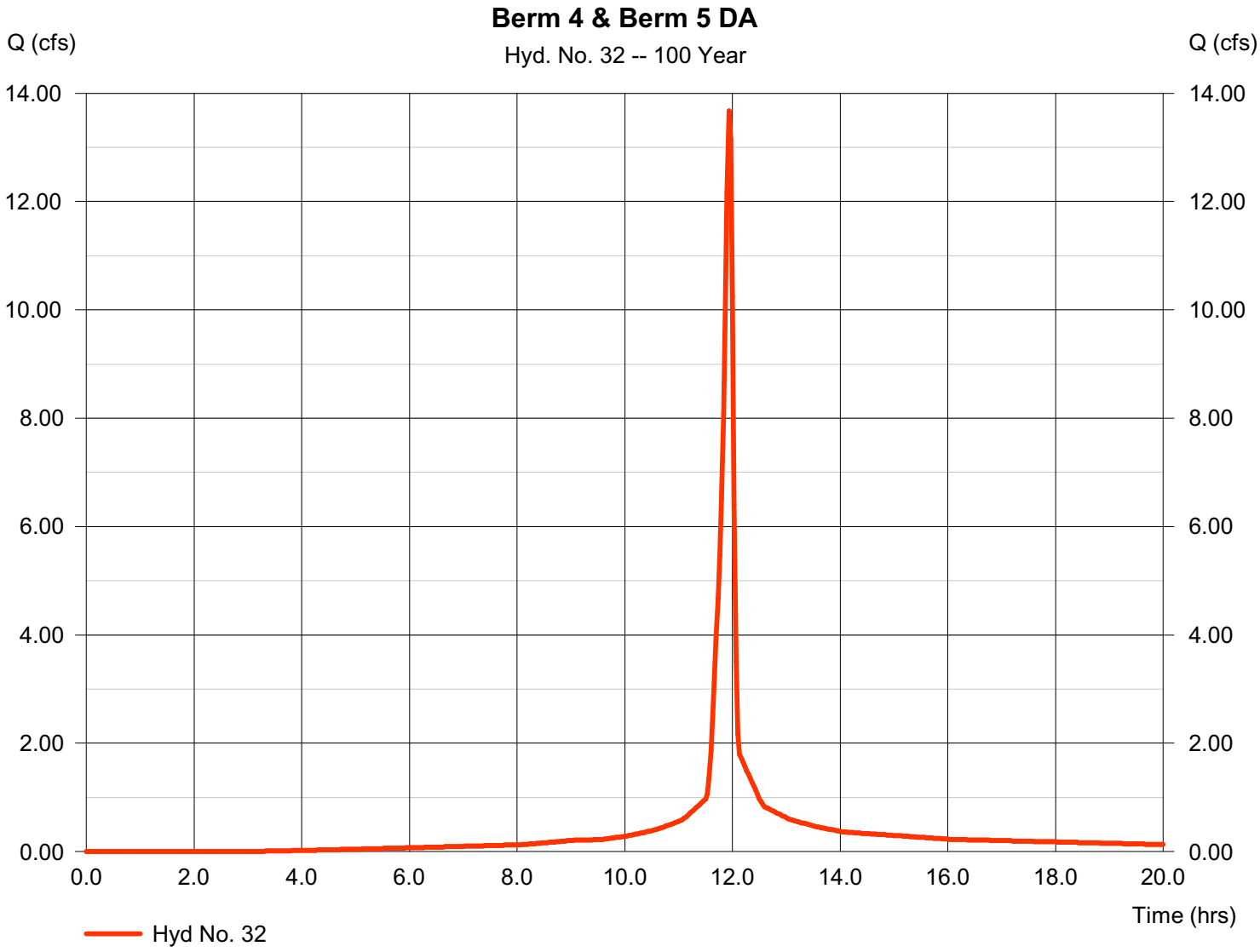
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024 Friday, 04 / 18 / 2025

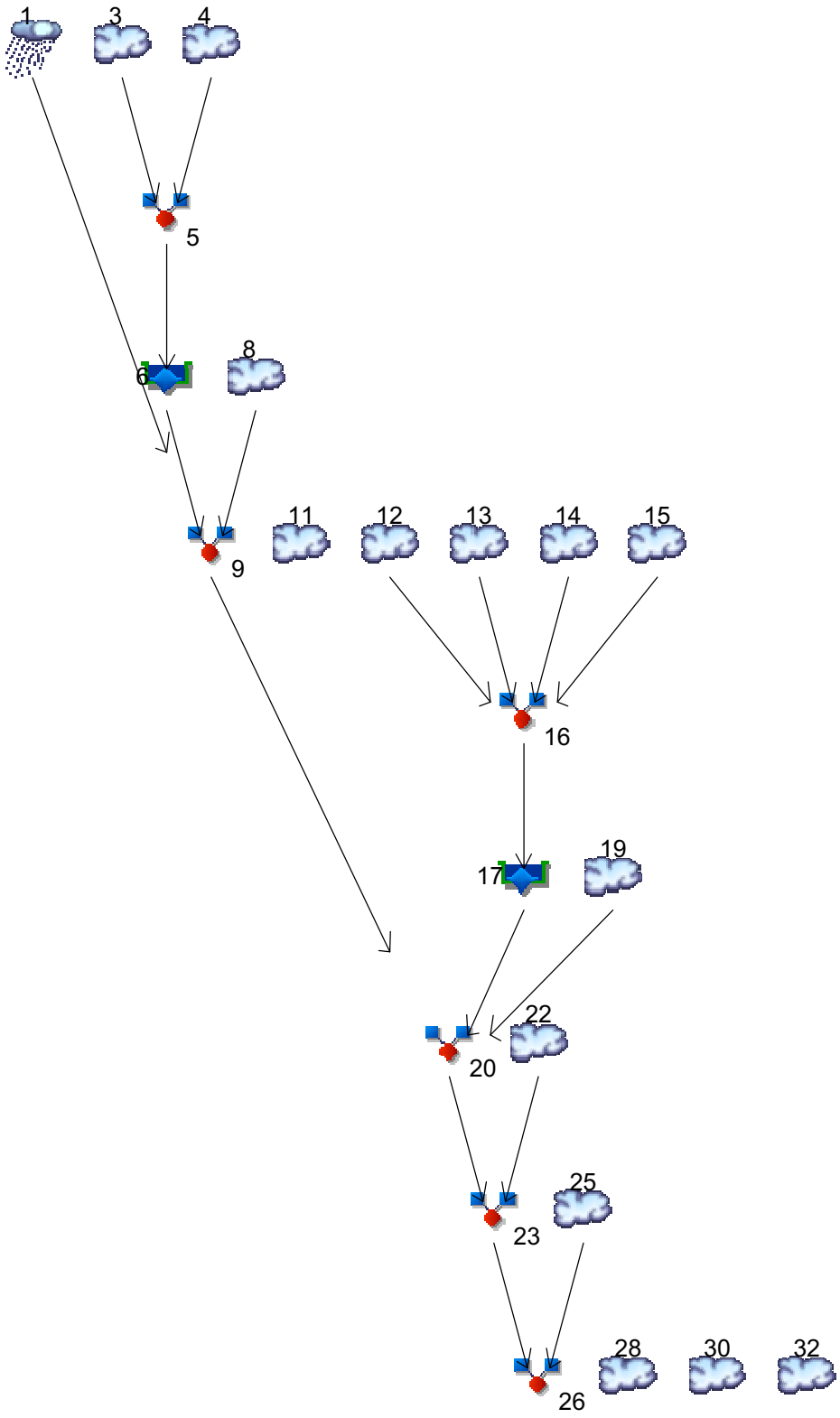
Hyd. No. 32

Berm 4 & Berm 5 DA

Hydrograph type	= SCS Runoff	Peak discharge	= 13.68 cfs
Storm frequency	= 100 yrs	Time to peak	= 11.93 hrs
Time interval	= 2 min	Hyd. volume	= 30,040 cuft
Drainage area	= 1.420 ac	Curve number	= 89
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 5.00 min
Total precip.	= 7.52 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484



Watershed Model Schematic



Hydrograph Summary Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024

Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	Manual	0.368	2	2	44	------	------	------	Clarifying Pond Discharge
3	SCS Runoff	90.46	2	722	269,076	------	------	------	Culvert 2 & Berm 1 DA
4	SCS Runoff	21.96	2	716	48,234	------	------	------	Basin 1 DA
5	Combine	104.49	2	720	317,310	3, 4	------	------	Basin 1 Inflow
6	Reservoir	86.79	2	726	289,198	5	535.31	191,434	Basin 1 Routing
8	SCS Runoff	5.200	2	716	11,424	------	------	------	Channel 1 DA
9	Combine	87.62	2	726	300,666	1, 6, 8	------	------	Channel 1 & Culvert 6 Inflow
11	SCS Runoff	9.534	2	716	20,944	------	------	------	Channel 5 & Culvert 7 DA
12	SCS Runoff	21.96	2	716	48,234	------	------	------	Culvert 3 DA
13	SCS Runoff	35.63	2	716	78,274	------	------	------	Culvert 4 DA
14	SCS Runoff	44.49	2	716	97,737	------	------	------	Basin 2 DA
15	SCS Runoff	93.80	2	716	206,051	------	------	------	Upslope Pad Area
16	Combine	195.88	2	716	430,295	12, 13, 14, 15	------	------	Basin 2 Inflow
17	Reservoir	105.36	2	722	373,783	16	531.92	249,514	Basin 2 Routing
19	SCS Runoff	10.02	2	716	22,001	------	------	------	Channel 2 Section 1 DA
20	Combine	191.84	2	722	696,450	9, 17, 19	------	------	Channel 2 Section 1 & Culvert 8 Inflo
22	SCS Runoff	7.839	2	716	17,220	------	------	------	Channel 2 Section 2 DA
23	Combine	195.52	2	722	713,671	20, 22	------	------	Channel 2 Section 2 & Culvert 5 Inflo
25	SCS Runoff	18.49	2	716	40,618	------	------	------	Channel 3 DA
26	Combine	204.20	2	722	754,288	23, 25	------	------	Channel 3 Inflow
28	SCS Runoff	47.28	2	716	103,872	------	------	------	Berms 2 and 3 DA
30	SCS Runoff	86.10	2	716	176,648	------	------	------	Channel 4 DA
32	SCS Runoff	13.68	2	716	30,040	------	------	------	Berm 4 & Berm 5 DA

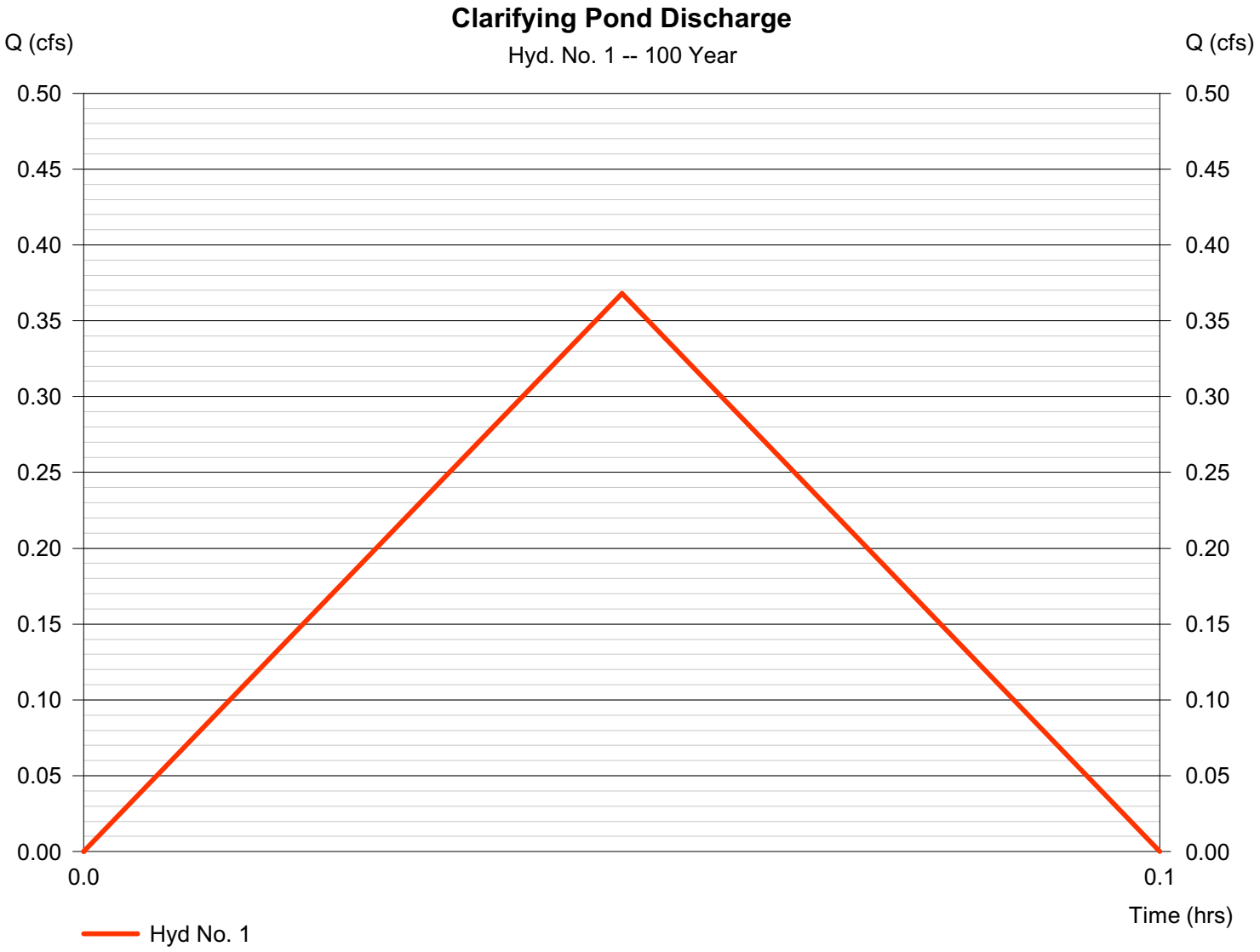
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024 Friday, 04 / 18 / 2025

Hyd. No. 1

Clarifying Pond Discharge

Hydrograph type	= Manual	Peak discharge	= 0.368 cfs
Storm frequency	= 100 yrs	Time to peak	= 0.03 hrs
Time interval	= 2 min	Hyd. volume	= 44 cuft



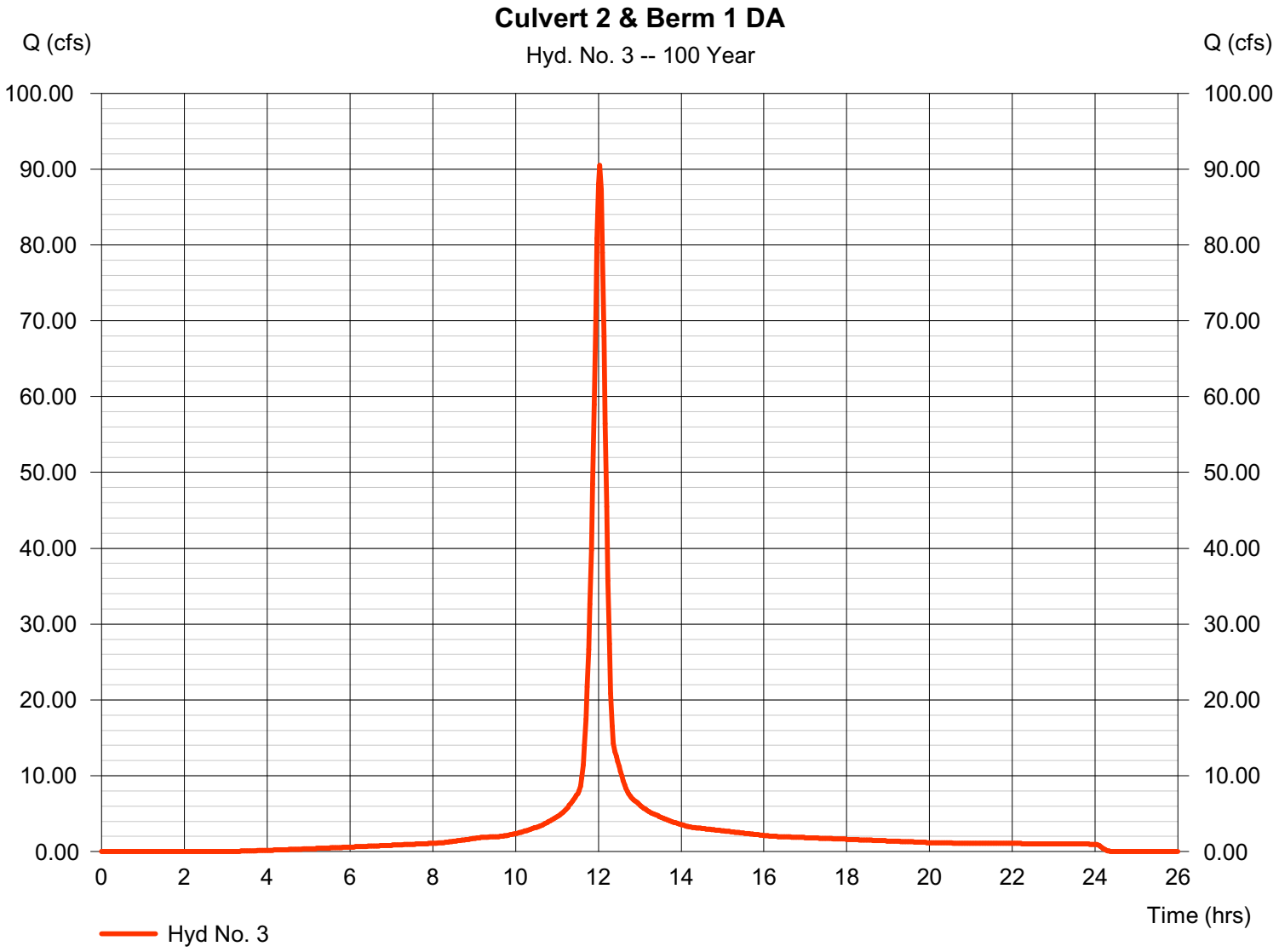
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024 Friday, 04 / 18 / 2025

Hyd. No. 3

Culvert 2 & Berm 1 DA

Hydrograph type	= SCS Runoff	Peak discharge	= 90.46 cfs
Storm frequency	= 100 yrs	Time to peak	= 12.03 hrs
Time interval	= 2 min	Hyd. volume	= 269,076 cuft
Drainage area	= 12.230 ac	Curve number	= 89
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 15.00 min
Total precip.	= 7.52 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484



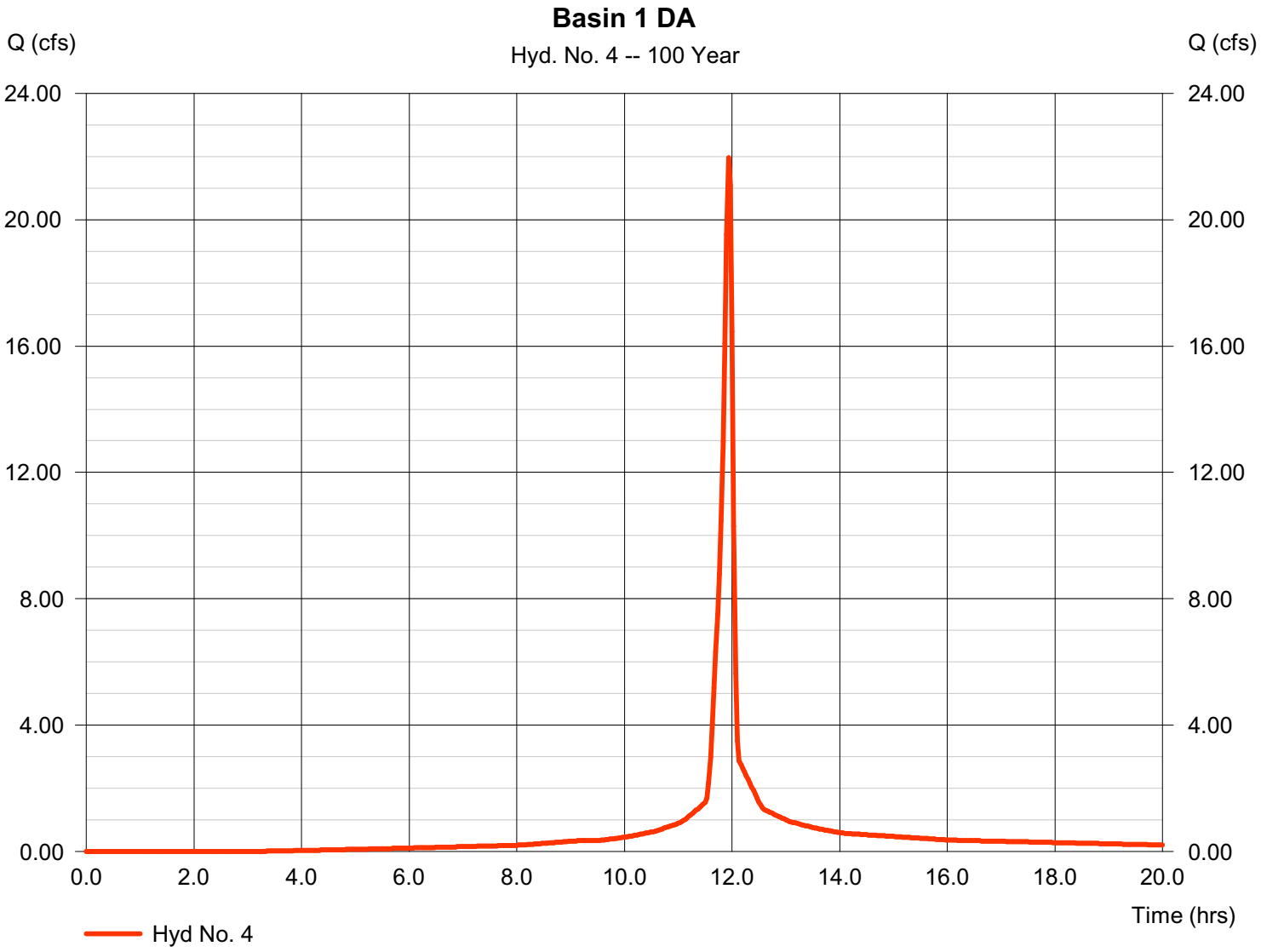
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024 Friday, 04 / 18 / 2025

Hyd. No. 4

Basin 1 DA

Hydrograph type	= SCS Runoff	Peak discharge	= 21.96 cfs
Storm frequency	= 100 yrs	Time to peak	= 11.93 hrs
Time interval	= 2 min	Hyd. volume	= 48,234 cuft
Drainage area	= 2.280 ac	Curve number	= 89
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 5.00 min
Total precip.	= 7.52 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484



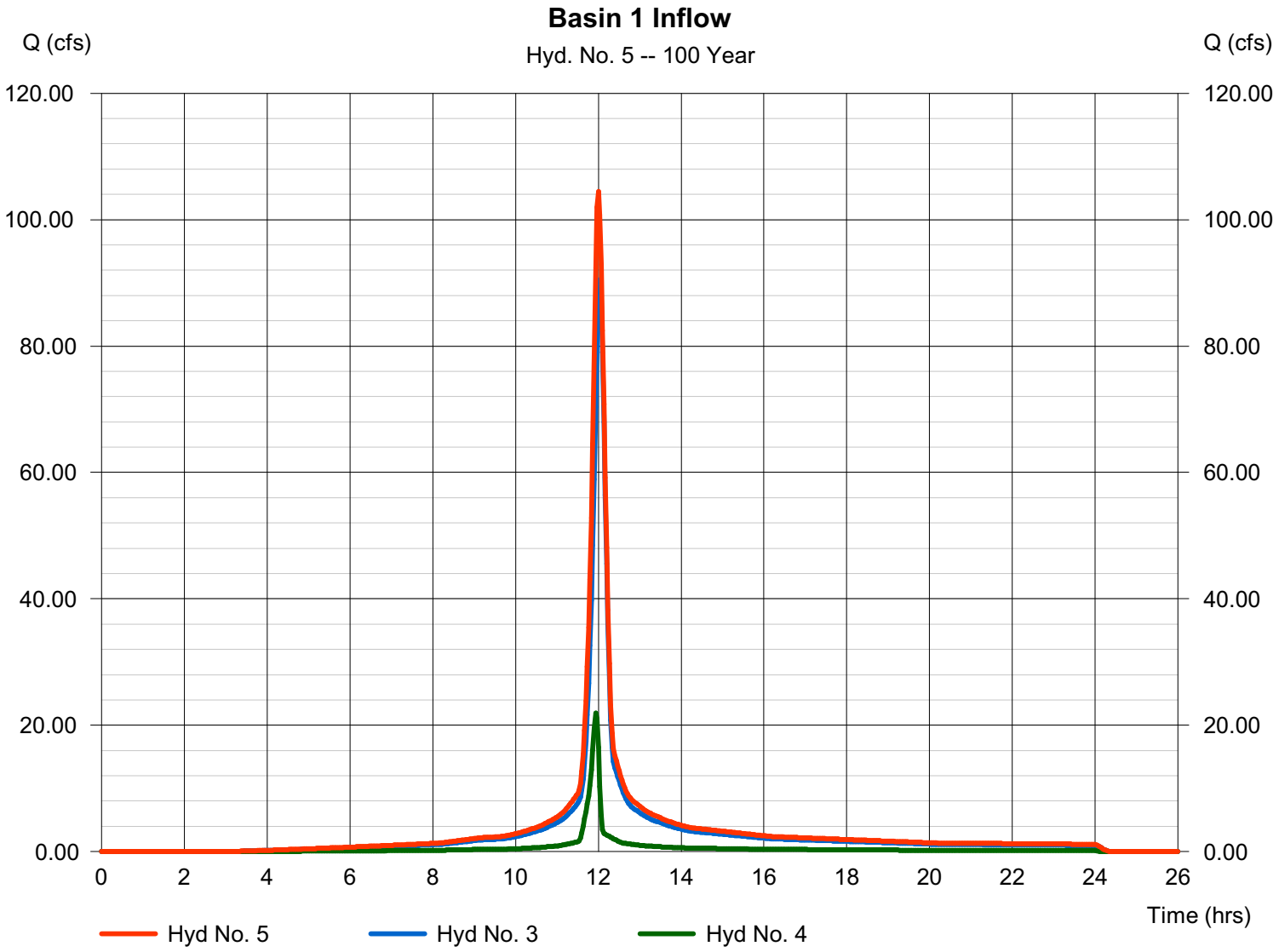
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024 Friday, 04 / 18 / 2025

Hyd. No. 5

Basin 1 Inflow

Hydrograph type	= Combine	Peak discharge	= 104.49 cfs
Storm frequency	= 100 yrs	Time to peak	= 12.00 hrs
Time interval	= 2 min	Hyd. volume	= 317,310 cuft
Inflow hyds.	= 3, 4	Contrib. drain. area	= 14.510 ac



Hydrograph Report

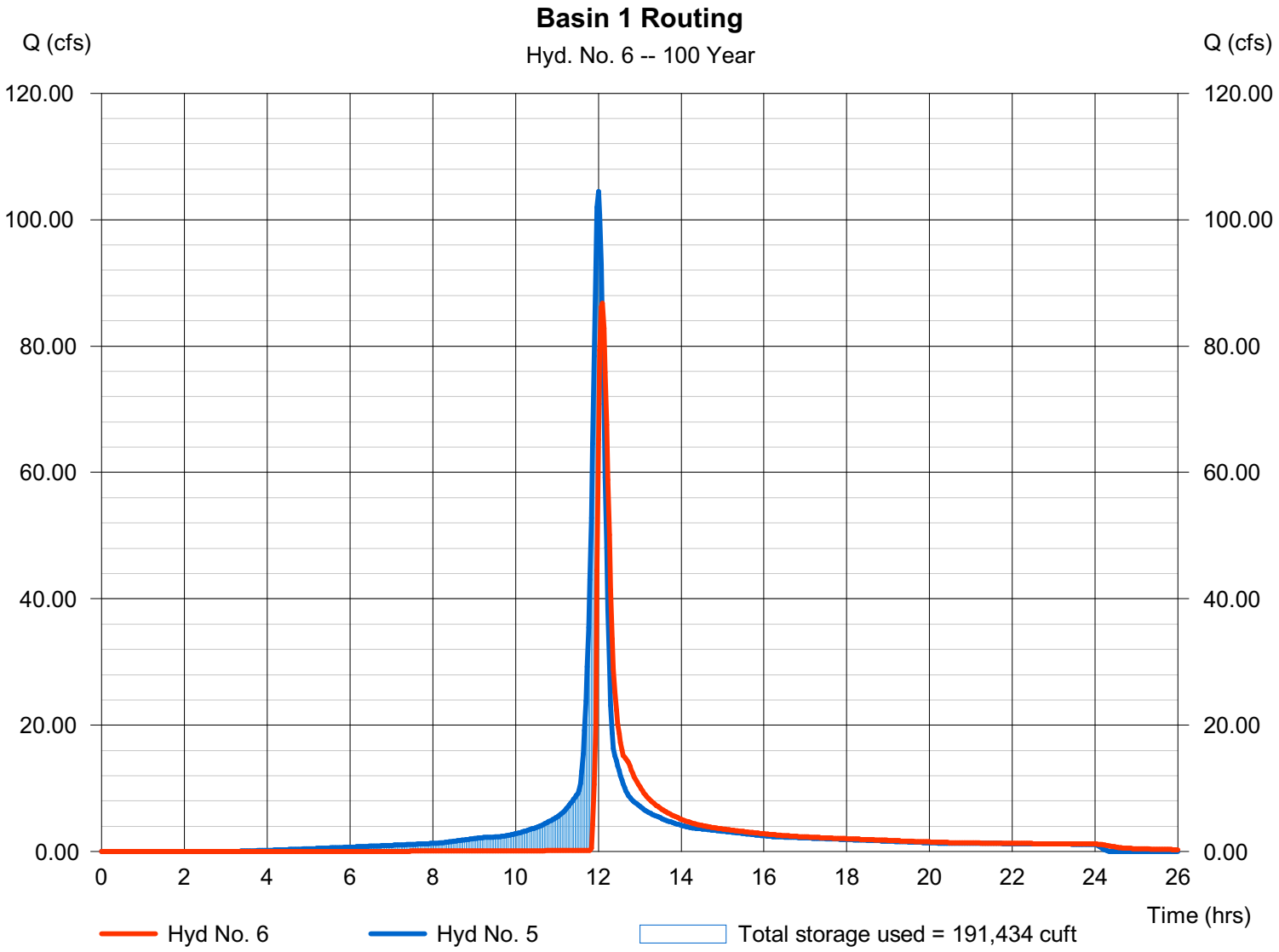
Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024 Friday, 04 / 18 / 2025

Hyd. No. 6

Basin 1 Routing

Hydrograph type	= Reservoir	Peak discharge	= 86.79 cfs
Storm frequency	= 100 yrs	Time to peak	= 12.10 hrs
Time interval	= 2 min	Hyd. volume	= 289,198 cuft
Inflow hyd. No.	= 5 - Basin 1 Inflow	Max. Elevation	= 535.31 ft
Reservoir name	= Sediment Basin 1	Max. Storage	= 191,434 cuft

Storage Indication method used. Wet pond routing start elevation = 530.30 ft.



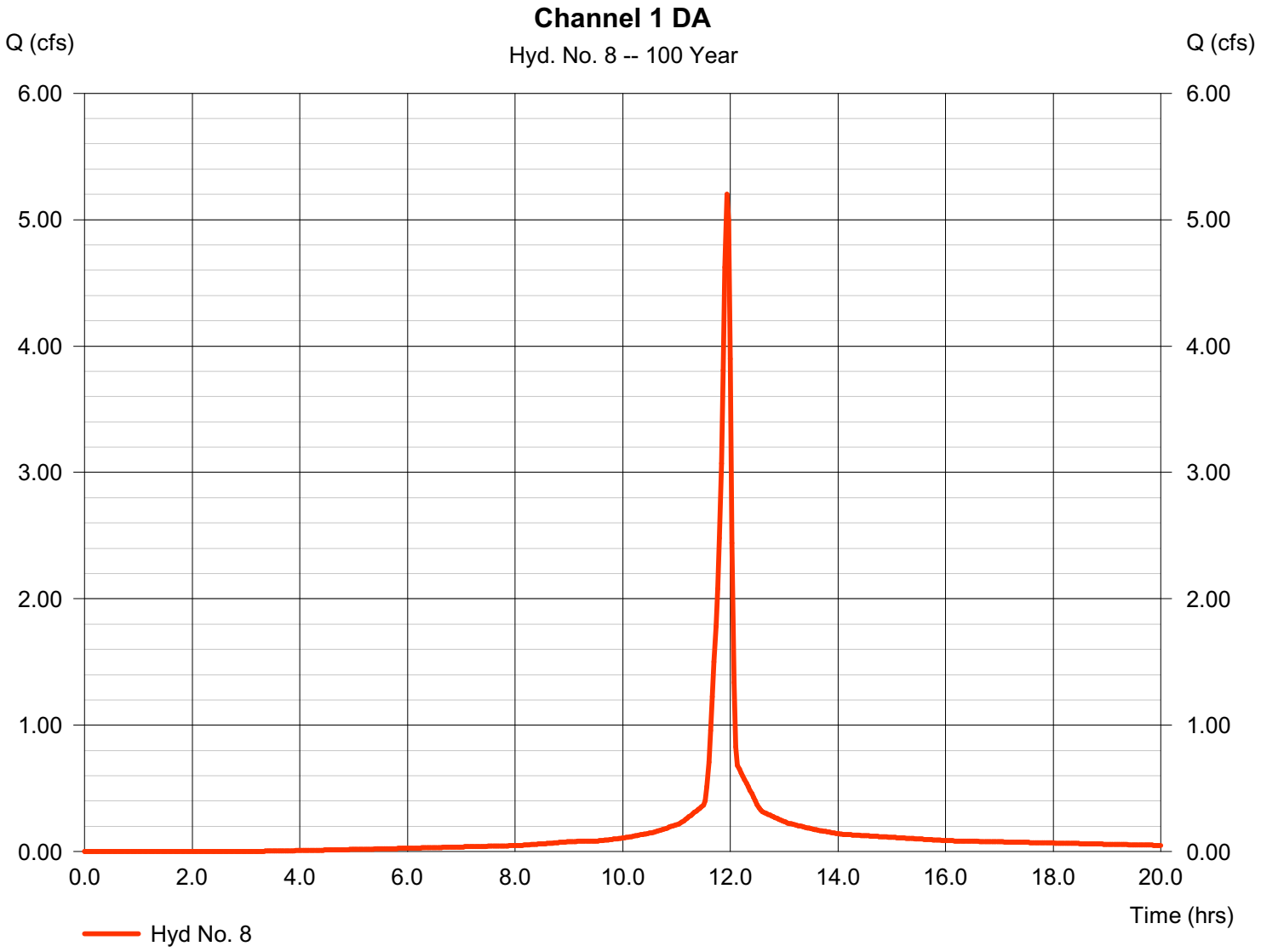
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024 Friday, 04 / 18 / 2025

Hyd. No. 8

Channel 1 DA

Hydrograph type	=	SCS Runoff	Peak discharge	=	5.200 cfs
Storm frequency	=	100 yrs	Time to peak	=	11.93 hrs
Time interval	=	2 min	Hyd. volume	=	11,424 cuft
Drainage area	=	0.540 ac	Curve number	=	89
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	5.00 min
Total precip.	=	7.52 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484



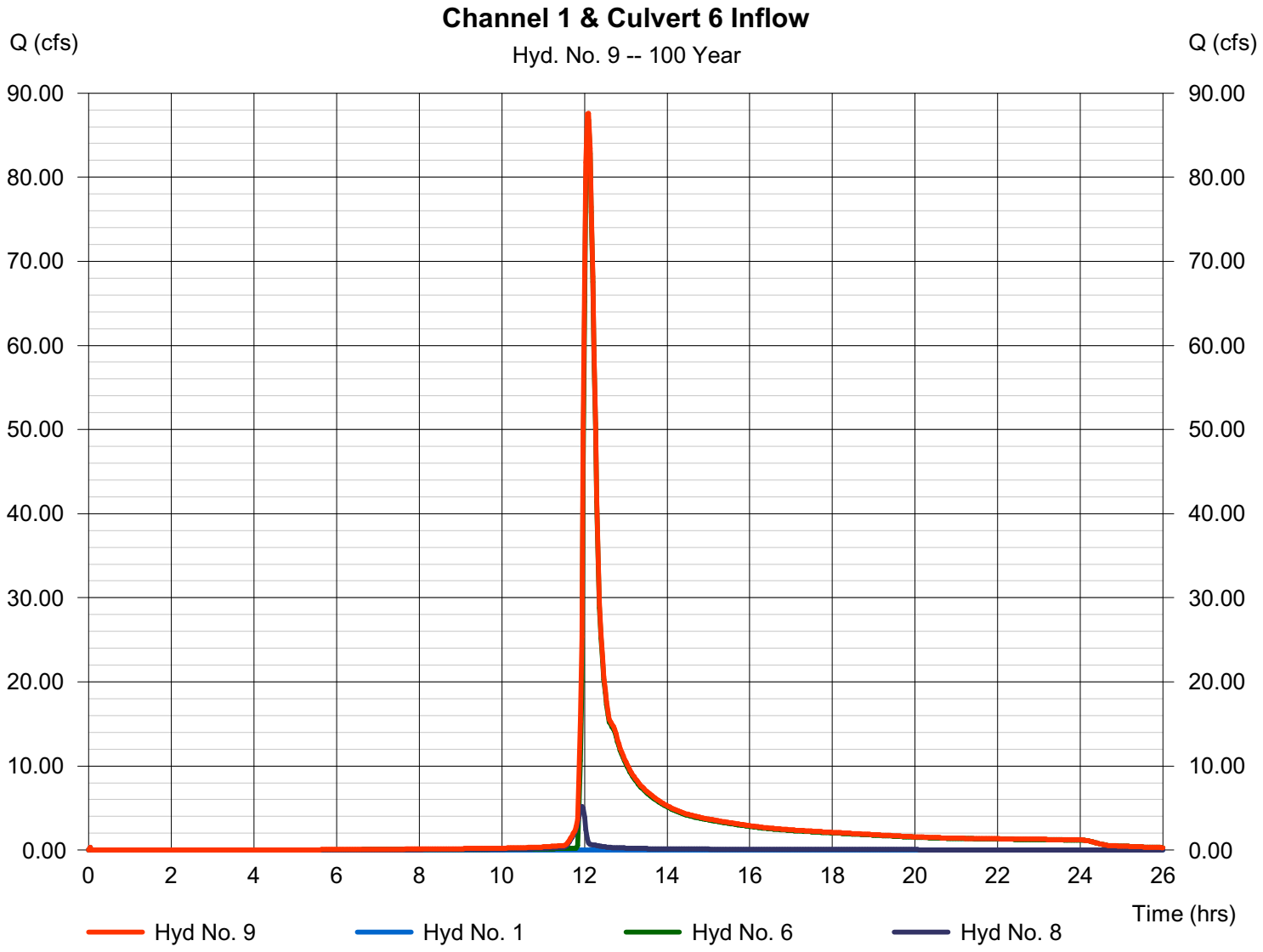
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024 Friday, 04 / 18 / 2025

Hyd. No. 9

Channel 1 & Culvert 6 Inflow

Hydrograph type	=	Combine	Peak discharge	=	87.62 cfs
Storm frequency	=	100 yrs	Time to peak	=	12.10 hrs
Time interval	=	2 min	Hyd. volume	=	300,666 cuft
Inflow hyds.	=	1, 6, 8	Contrib. drain. area	=	0.540 ac



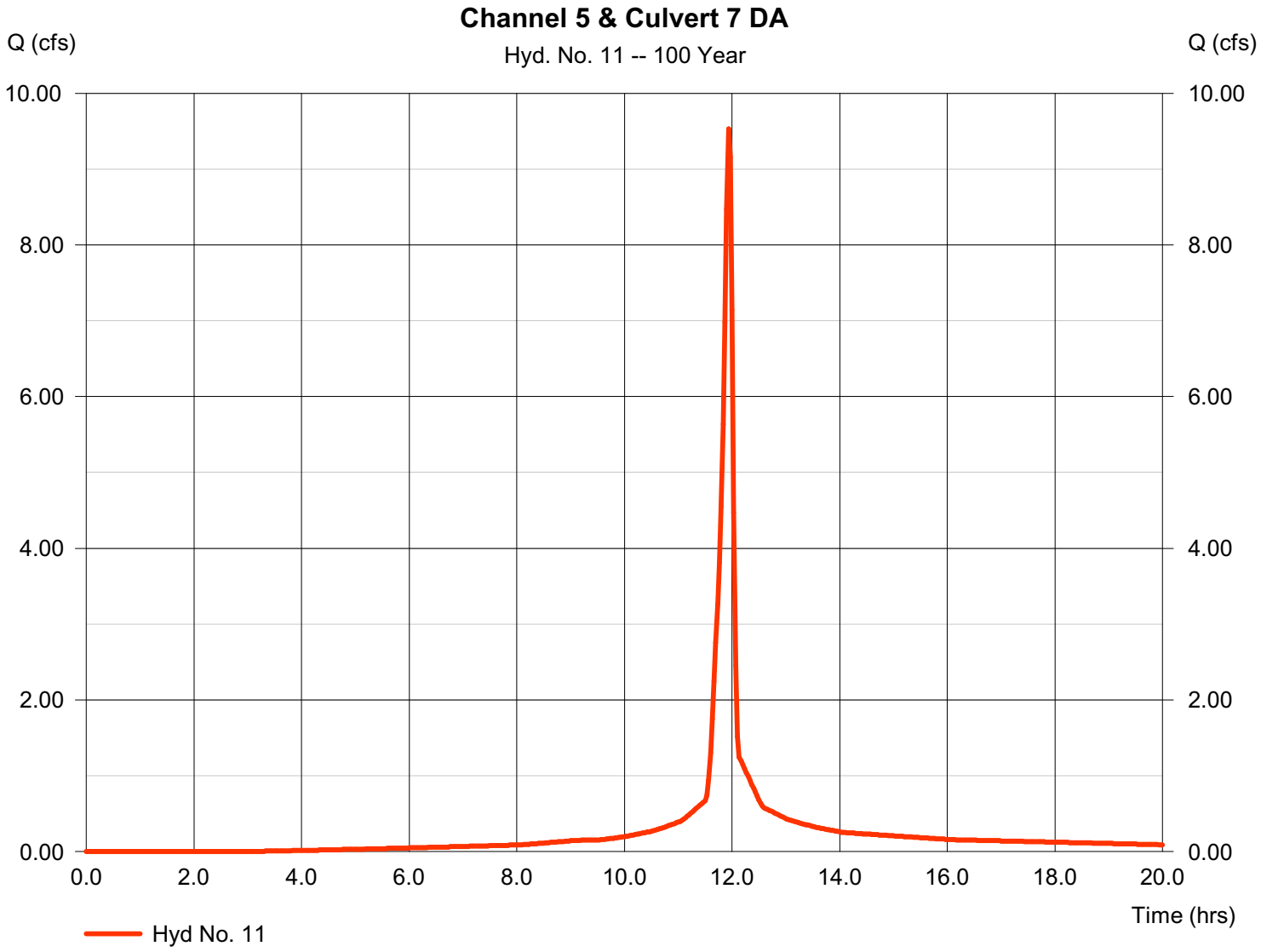
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024 Friday, 04 / 18 / 2025

Hyd. No. 11

Channel 5 & Culvert 7 DA

Hydrograph type	= SCS Runoff	Peak discharge	= 9.534 cfs
Storm frequency	= 100 yrs	Time to peak	= 11.93 hrs
Time interval	= 2 min	Hyd. volume	= 20,944 cuft
Drainage area	= 0.990 ac	Curve number	= 89
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 5.00 min
Total precip.	= 7.52 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484



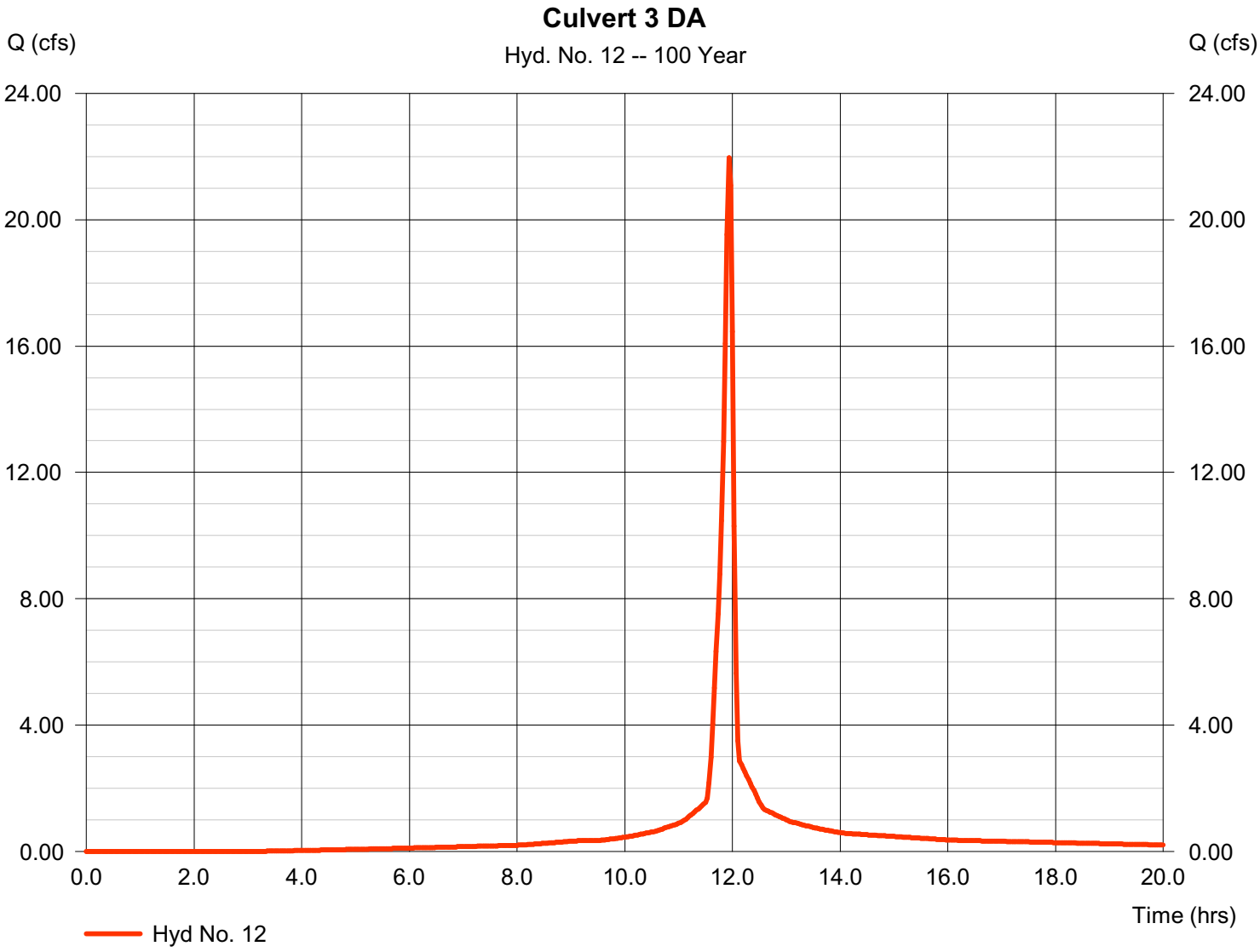
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024 Friday, 04 / 18 / 2025

Hyd. No. 12

Culvert 3 DA

Hydrograph type	=	SCS Runoff	Peak discharge	=	21.96 cfs
Storm frequency	=	100 yrs	Time to peak	=	11.93 hrs
Time interval	=	2 min	Hyd. volume	=	48,234 cuft
Drainage area	=	2.280 ac	Curve number	=	89
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	5.00 min
Total precip.	=	7.52 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484



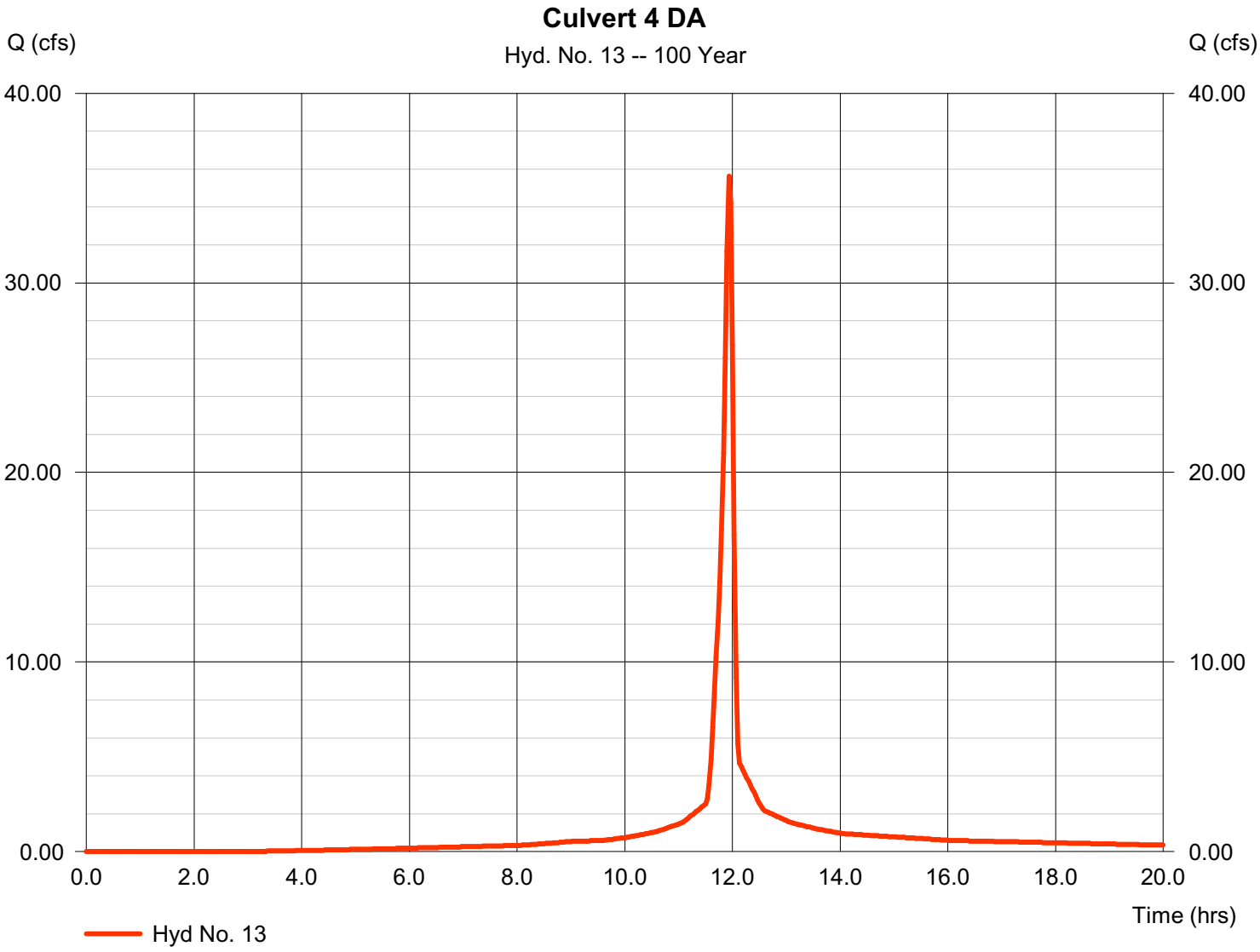
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024 Friday, 04 / 18 / 2025

Hyd. No. 13

Culvert 4 DA

Hydrograph type	=	SCS Runoff	Peak discharge	=	35.63 cfs
Storm frequency	=	100 yrs	Time to peak	=	11.93 hrs
Time interval	=	2 min	Hyd. volume	=	78,274 cuft
Drainage area	=	3.700 ac	Curve number	=	89
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	5.00 min
Total precip.	=	7.52 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484



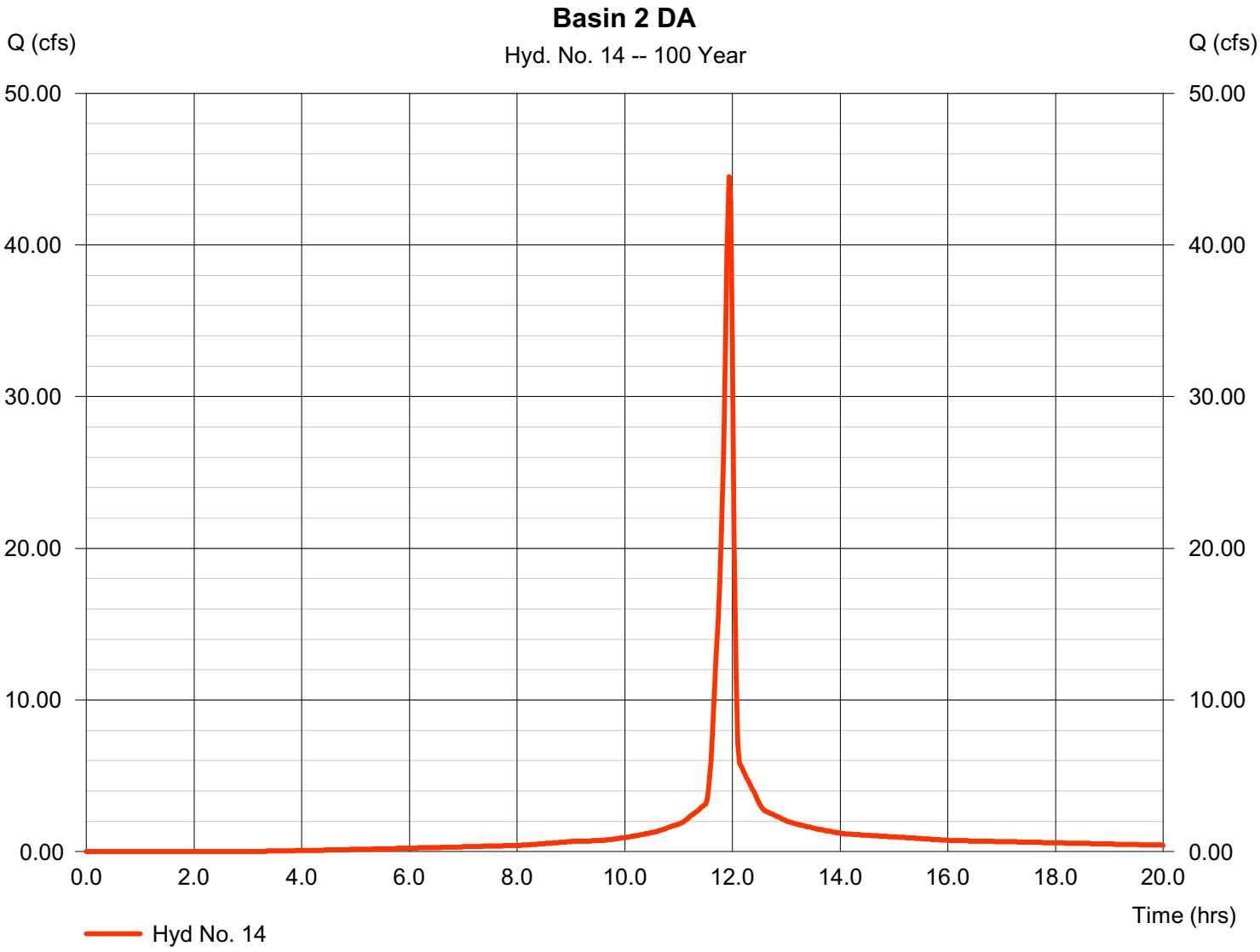
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024 Friday, 04 / 18 / 2025

Hyd. No. 14

Basin 2 DA

Hydrograph type	= SCS Runoff	Peak discharge	= 44.49 cfs
Storm frequency	= 100 yrs	Time to peak	= 11.93 hrs
Time interval	= 2 min	Hyd. volume	= 97,737 cuft
Drainage area	= 4.620 ac	Curve number	= 89
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 5.00 min
Total precip.	= 7.52 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484



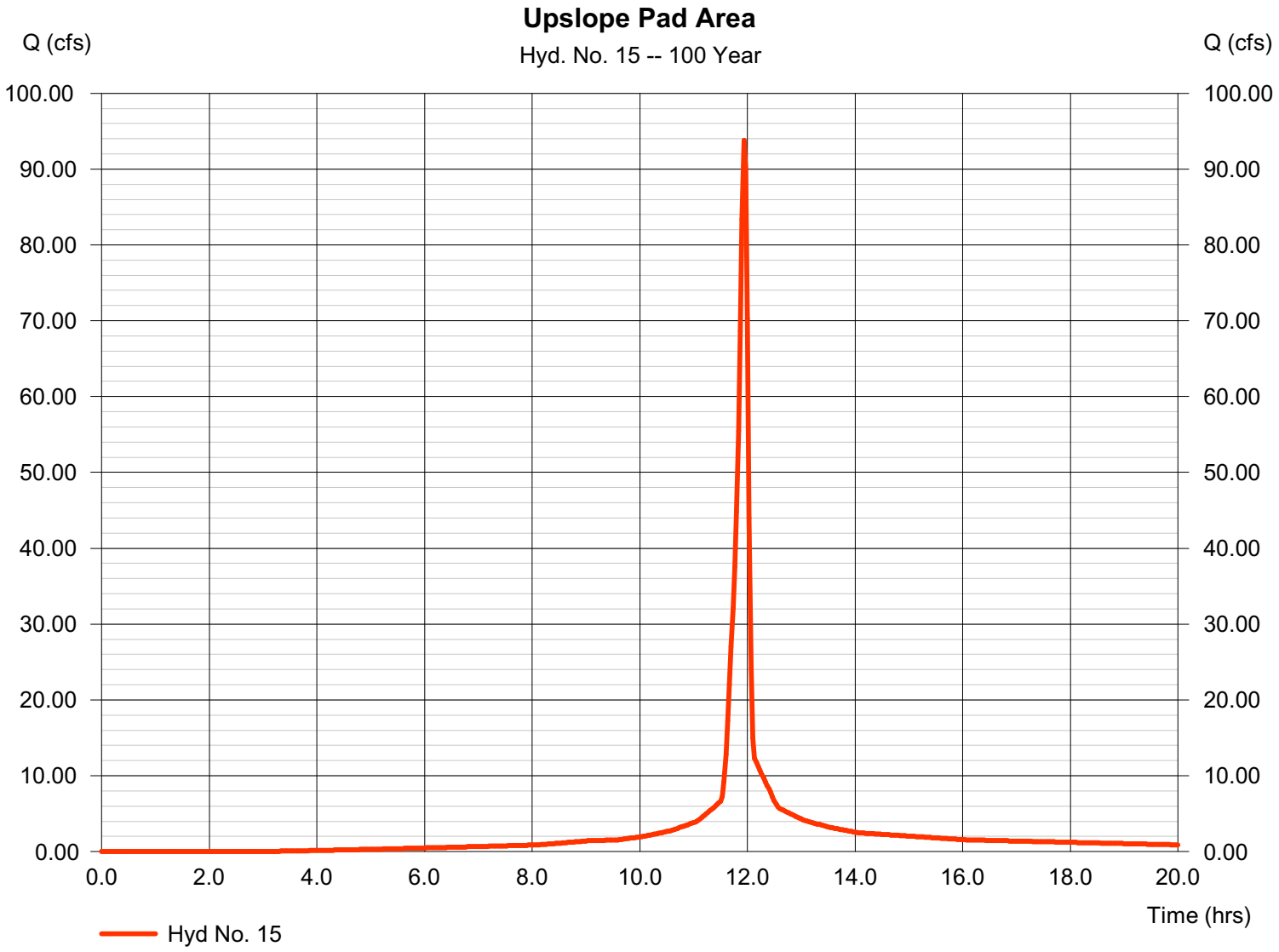
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024 Friday, 04 / 18 / 2025

Hyd. No. 15

Upslope Pad Area

Hydrograph type	=	SCS Runoff	Peak discharge	=	93.80 cfs
Storm frequency	=	100 yrs	Time to peak	=	11.93 hrs
Time interval	=	2 min	Hyd. volume	=	206,051 cuft
Drainage area	=	9.740 ac	Curve number	=	89
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	5.00 min
Total precip.	=	7.52 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484



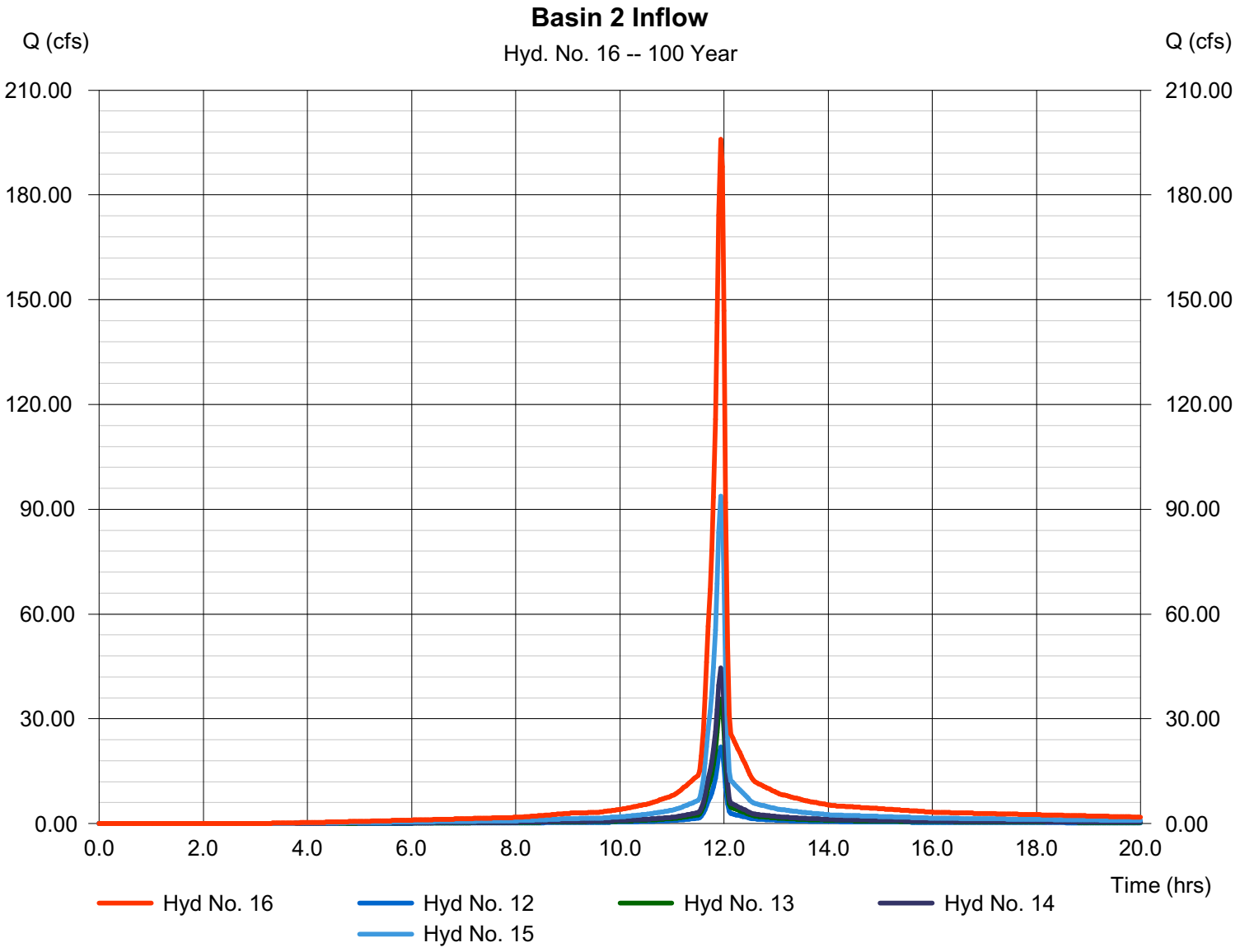
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024 Friday, 04 / 18 / 2025

Hyd. No. 16

Basin 2 Inflow

Hydrograph type	= Combine	Peak discharge	= 195.88 cfs
Storm frequency	= 100 yrs	Time to peak	= 11.93 hrs
Time interval	= 2 min	Hyd. volume	= 430,295 cuft
Inflow hyds.	= 12, 13, 14, 15	Contrib. drain. area	= 20.340 ac



Hydrograph Report

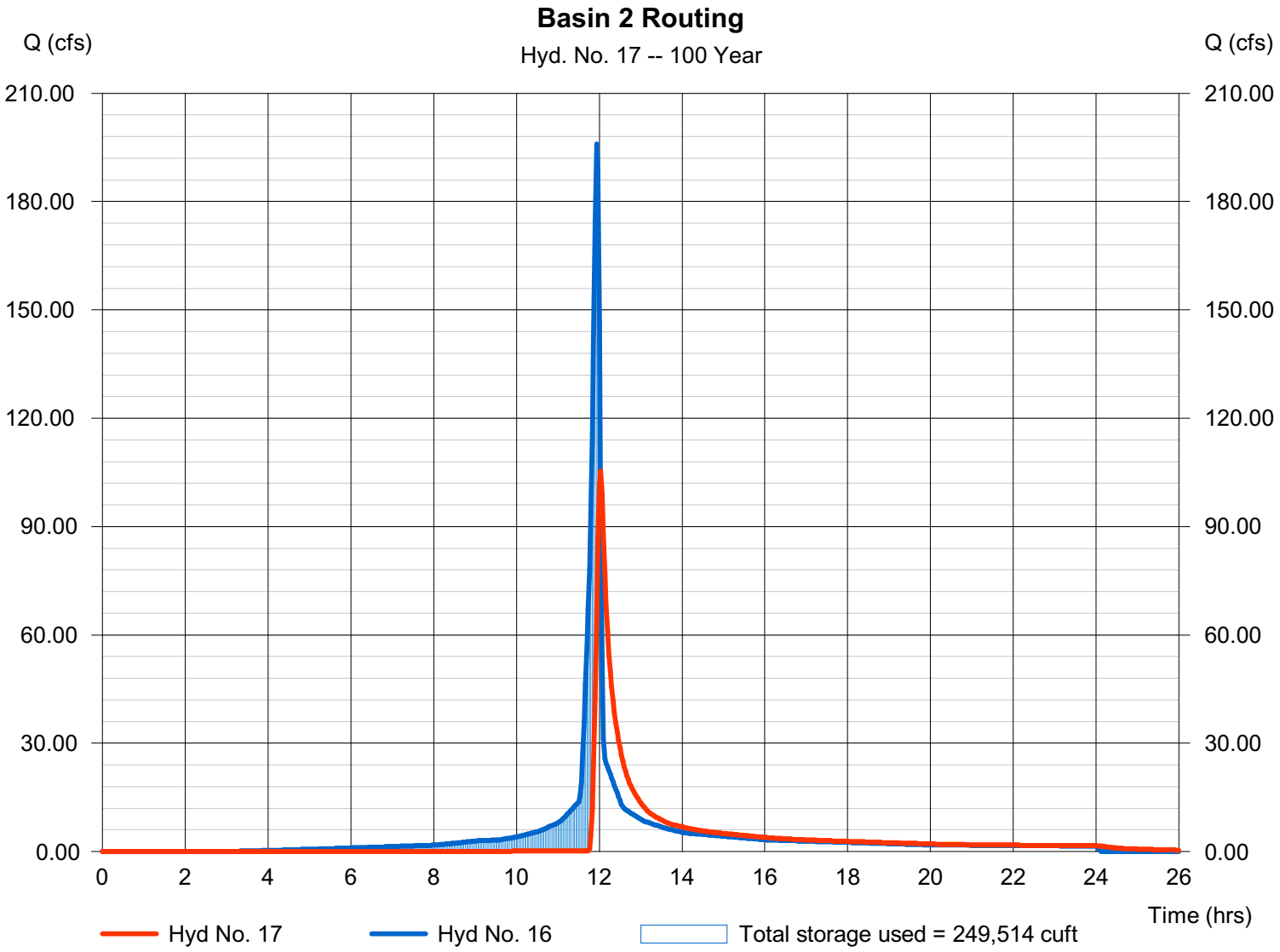
Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024 Friday, 04 / 18 / 2025

Hyd. No. 17

Basin 2 Routing

Hydrograph type	= Reservoir	Peak discharge	= 105.36 cfs
Storm frequency	= 100 yrs	Time to peak	= 12.03 hrs
Time interval	= 2 min	Hyd. volume	= 373,783 cuft
Inflow hyd. No.	= 16 - Basin 2 Inflow	Max. Elevation	= 531.92 ft
Reservoir name	= Sediment Basin 2	Max. Storage	= 249,514 cuft

Storage Indication method used. Wet pond routing start elevation = 526.80 ft.



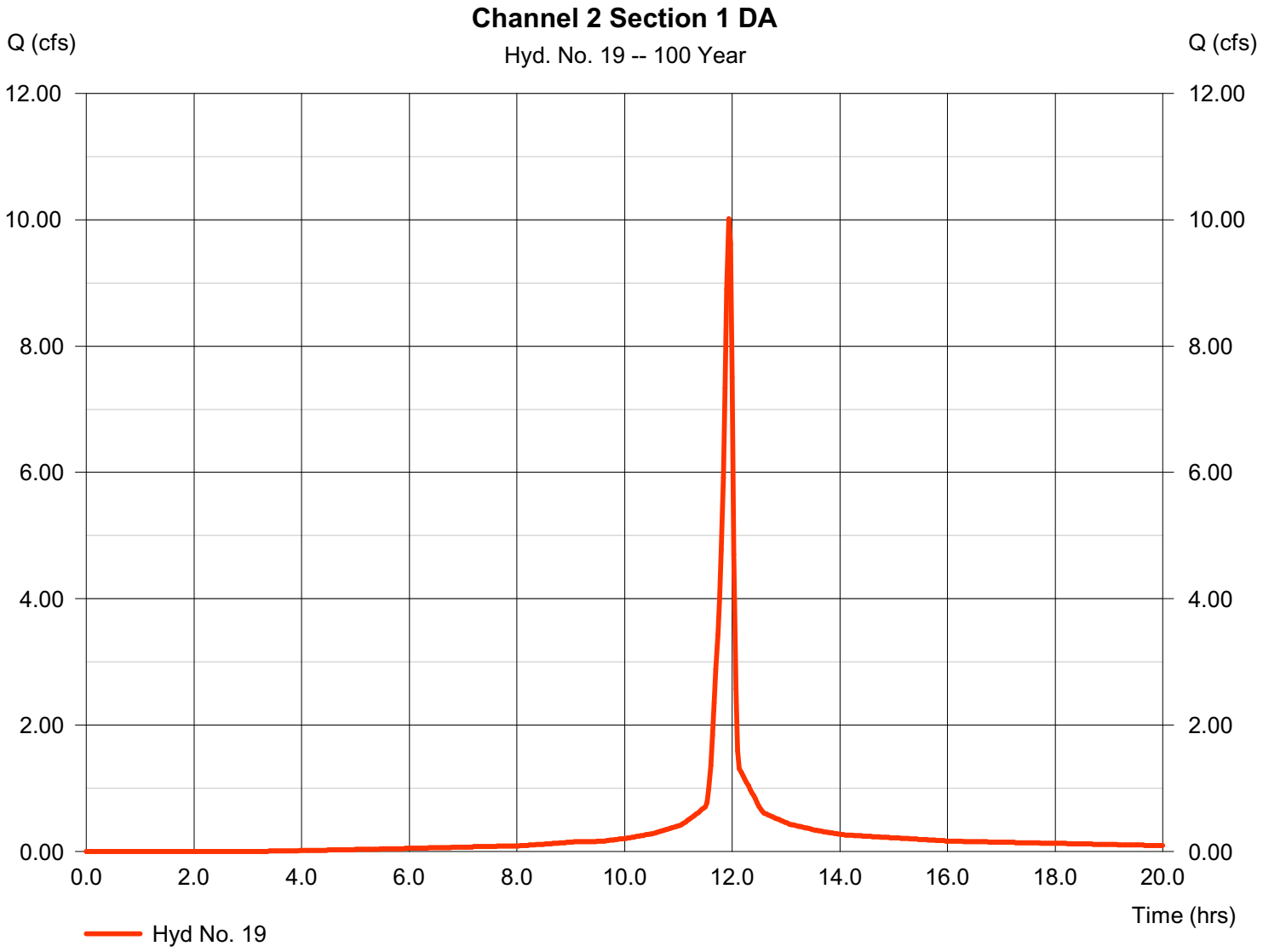
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024 Friday, 04 / 18 / 2025

Hyd. No. 19

Channel 2 Section 1 DA

Hydrograph type	= SCS Runoff	Peak discharge	= 10.02 cfs
Storm frequency	= 100 yrs	Time to peak	= 11.93 hrs
Time interval	= 2 min	Hyd. volume	= 22,001 cuft
Drainage area	= 1.040 ac	Curve number	= 89
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 5.00 min
Total precip.	= 7.52 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484



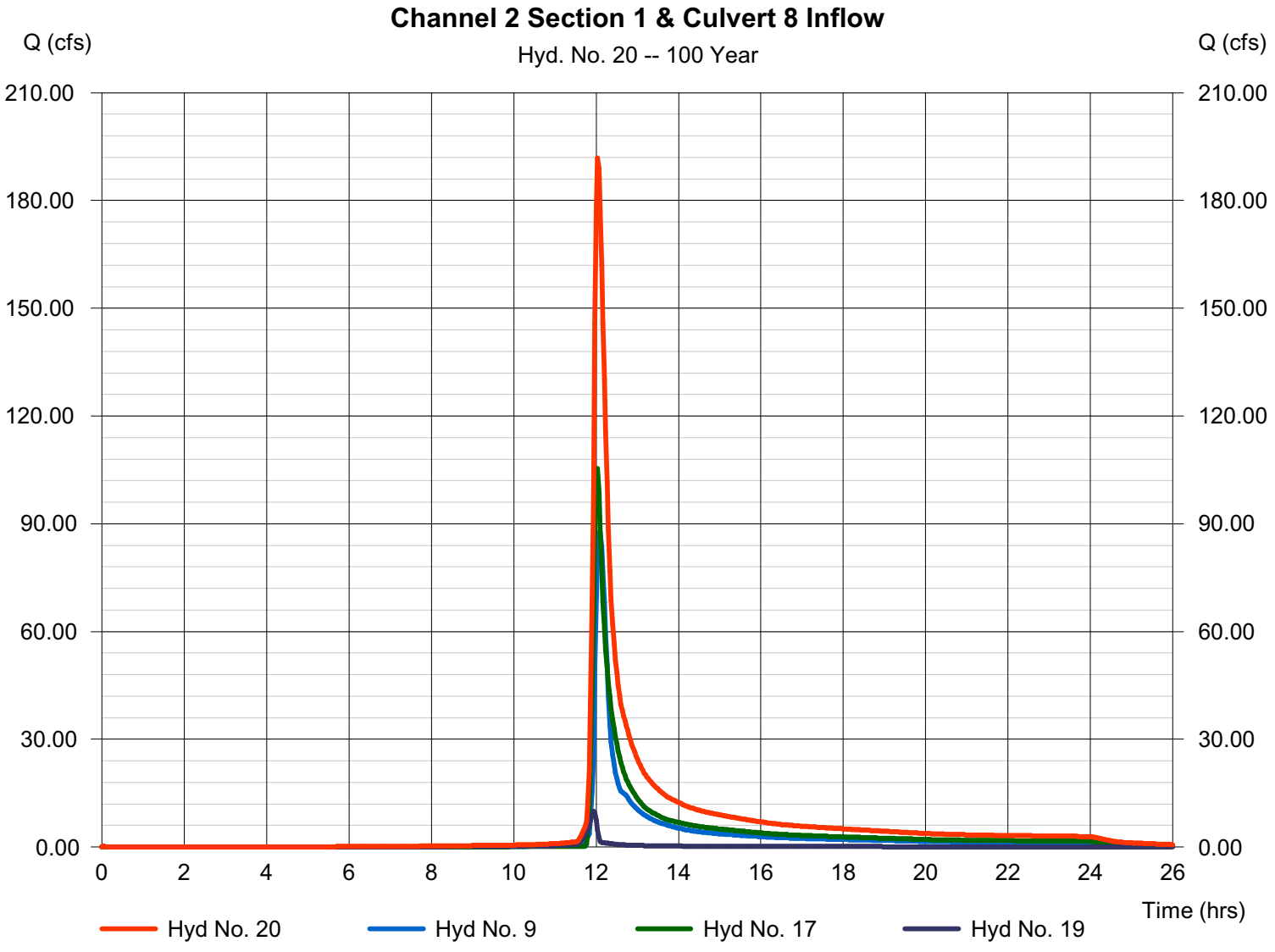
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024 Friday, 04 / 18 / 2025

Hyd. No. 20

Channel 2 Section 1 & Culvert 8 Inflow

Hydrograph type	= Combine	Peak discharge	= 191.84 cfs
Storm frequency	= 100 yrs	Time to peak	= 12.03 hrs
Time interval	= 2 min	Hyd. volume	= 696,450 cuft
Inflow hyds.	= 9, 17, 19	Contrib. drain. area	= 1.040 ac



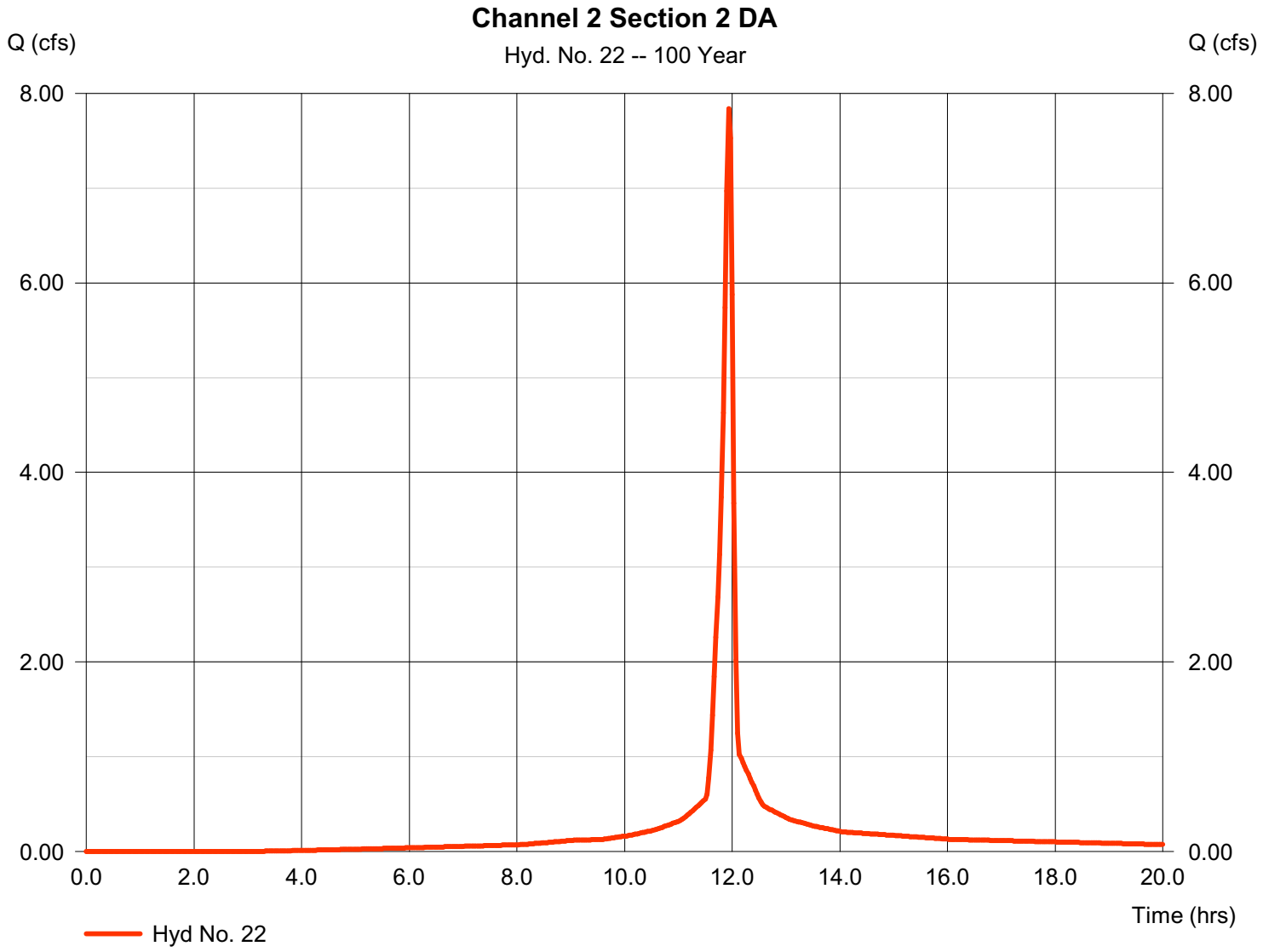
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024 Friday, 04 / 18 / 2025

Hyd. No. 22

Channel 2 Section 2 DA

Hydrograph type	= SCS Runoff	Peak discharge	= 7.839 cfs
Storm frequency	= 100 yrs	Time to peak	= 11.93 hrs
Time interval	= 2 min	Hyd. volume	= 17,220 cuft
Drainage area	= 0.814 ac	Curve number	= 89
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 5.00 min
Total precip.	= 7.52 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484



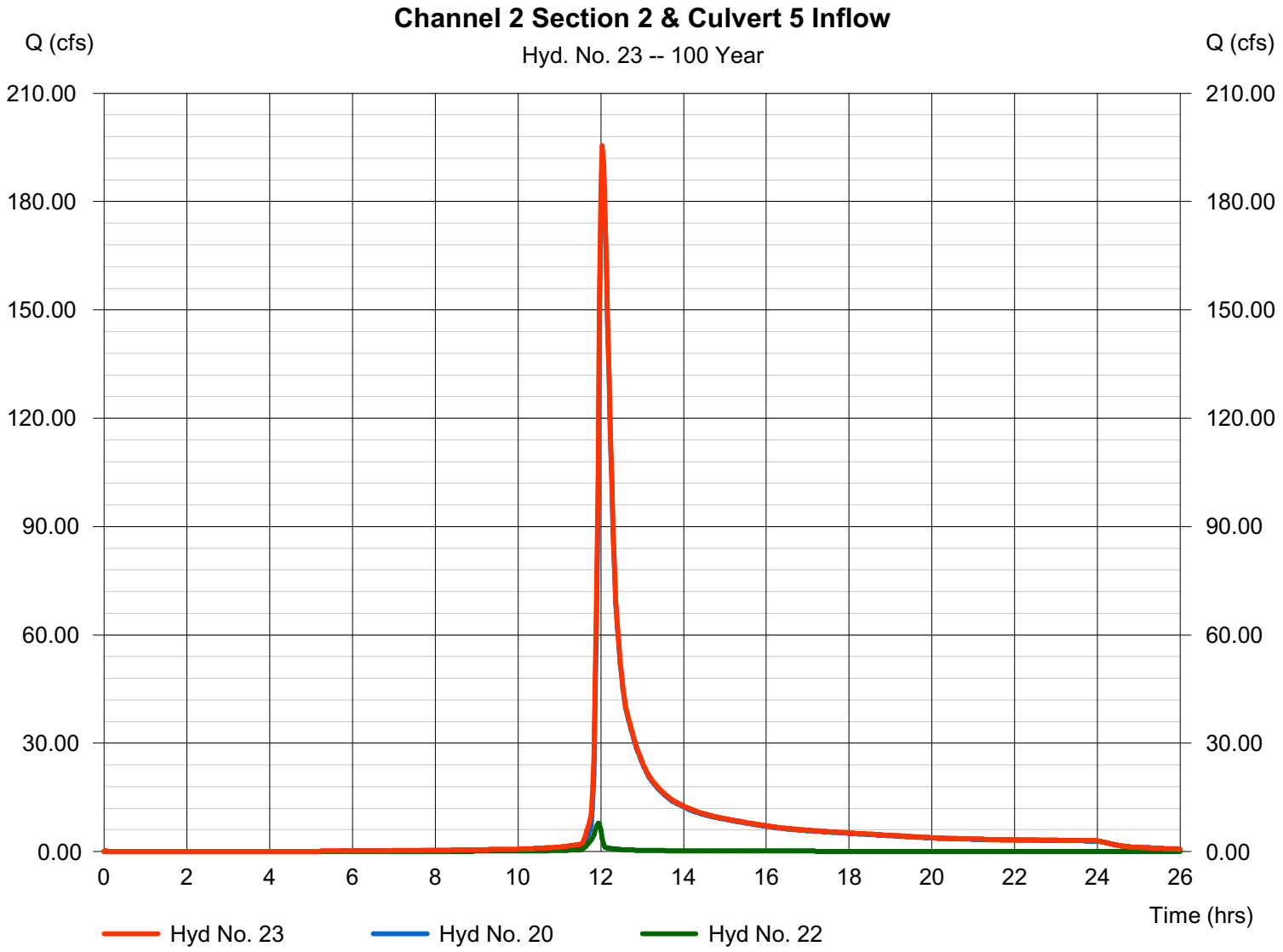
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024 Friday, 04 / 18 / 2025

Hyd. No. 23

Channel 2 Section 2 & Culvert 5 Inflow

Hydrograph type	= Combine	Peak discharge	= 195.52 cfs
Storm frequency	= 100 yrs	Time to peak	= 12.03 hrs
Time interval	= 2 min	Hyd. volume	= 713,671 cuft
Inflow hyds.	= 20, 22	Contrib. drain. area	= 0.814 ac



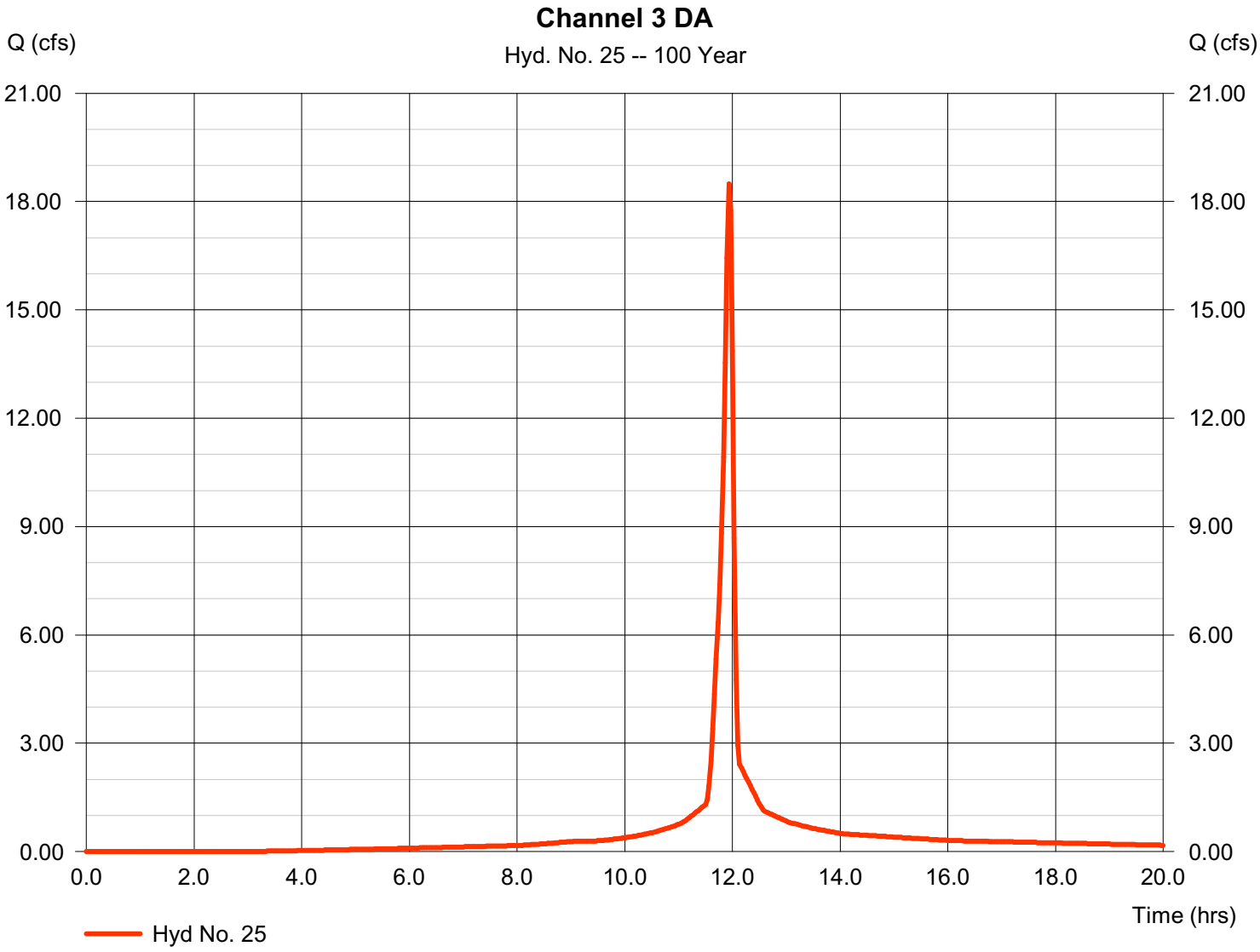
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024 Friday, 04 / 18 / 2025

Hyd. No. 25

Channel 3 DA

Hydrograph type	= SCS Runoff	Peak discharge	= 18.49 cfs
Storm frequency	= 100 yrs	Time to peak	= 11.93 hrs
Time interval	= 2 min	Hyd. volume	= 40,618 cuft
Drainage area	= 1.920 ac	Curve number	= 89
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 5.00 min
Total precip.	= 7.52 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484



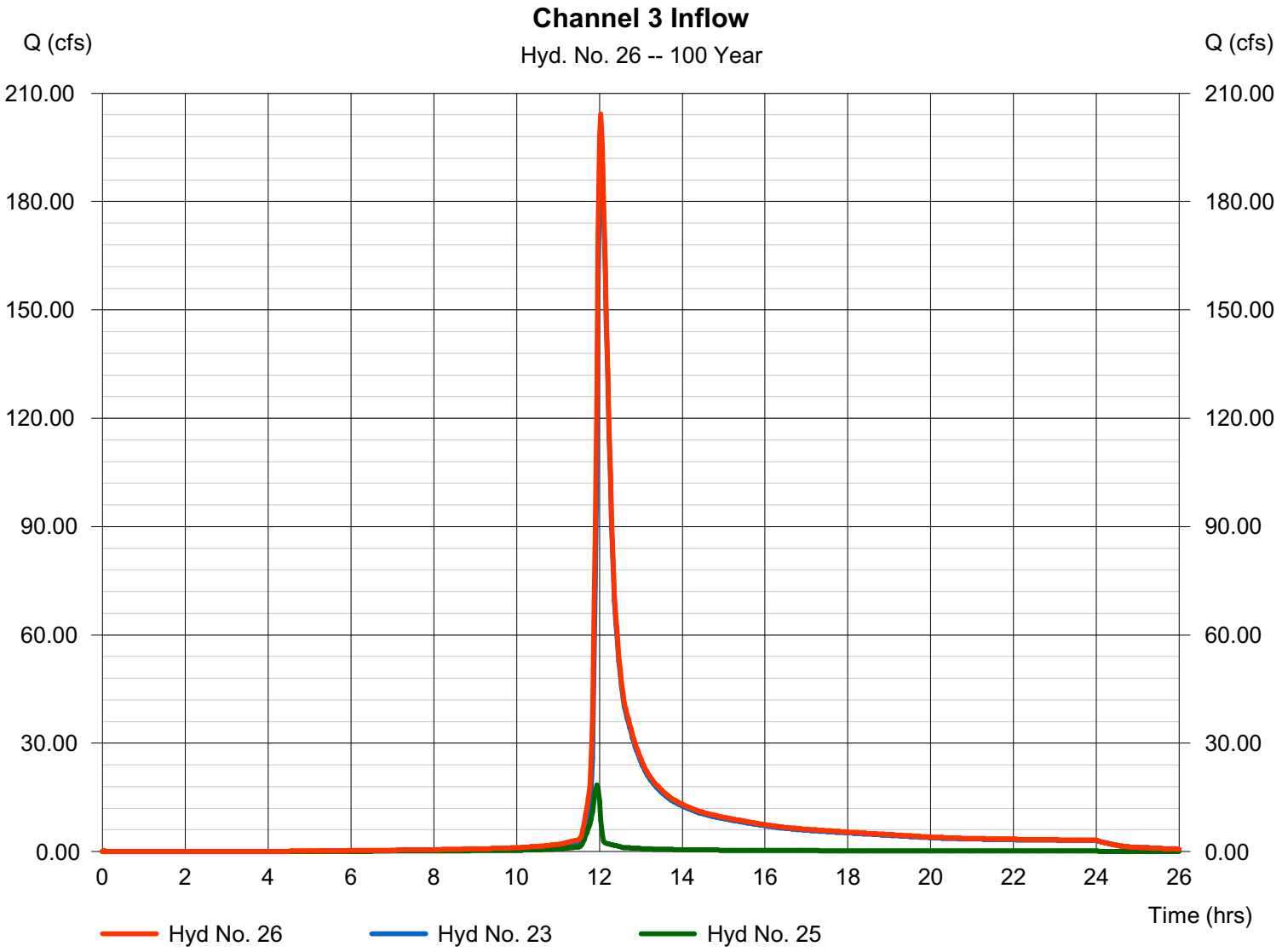
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024 Friday, 04 / 18 / 2025

Hyd. No. 26

Channel 3 Inflow

Hydrograph type	= Combine	Peak discharge	= 204.20 cfs
Storm frequency	= 100 yrs	Time to peak	= 12.03 hrs
Time interval	= 2 min	Hyd. volume	= 754,288 cuft
Inflow hyds.	= 23, 25	Contrib. drain. area	= 1.920 ac



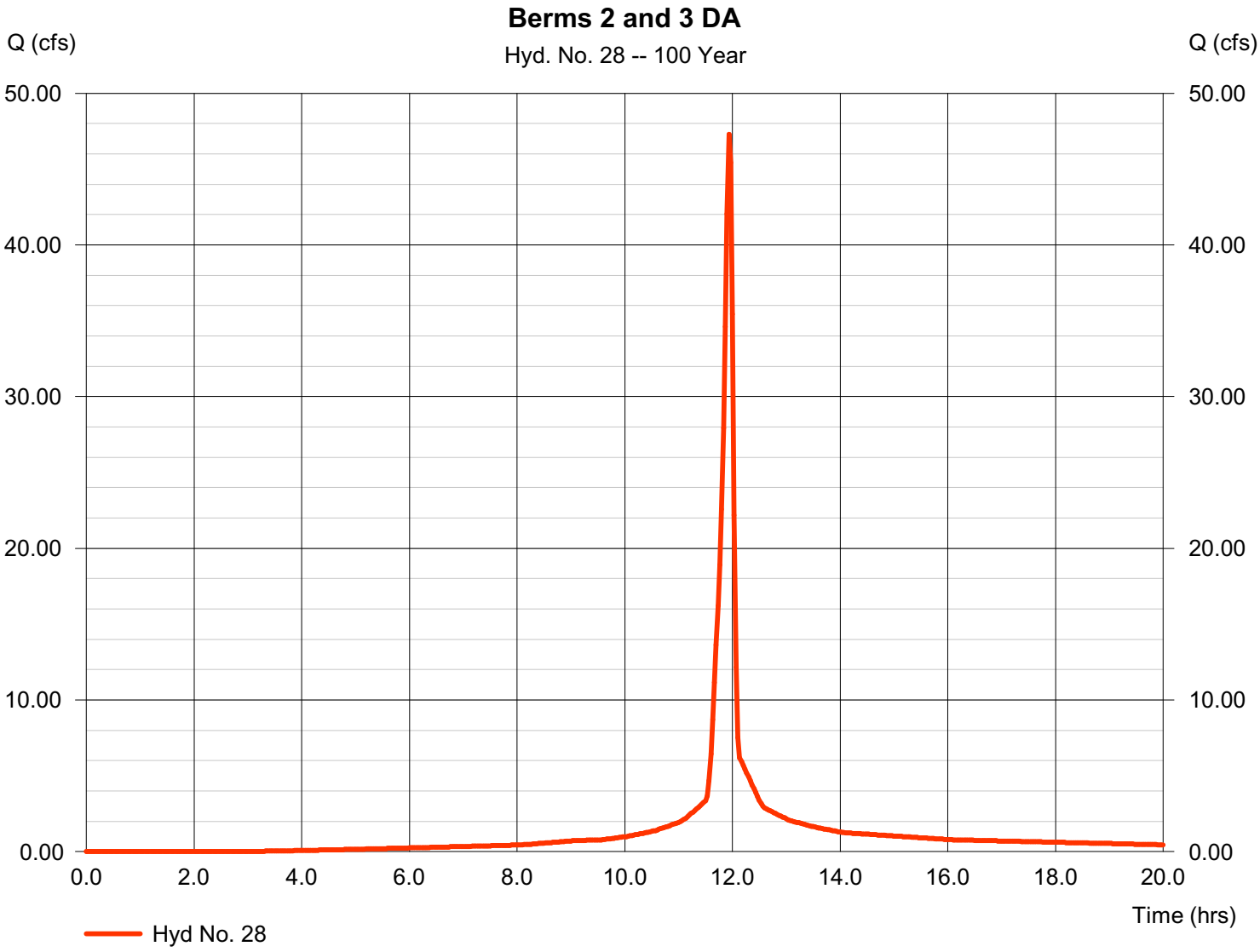
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024 Friday, 04 / 18 / 2025

Hyd. No. 28

Berms 2 and 3 DA

Hydrograph type	= SCS Runoff	Peak discharge	= 47.28 cfs
Storm frequency	= 100 yrs	Time to peak	= 11.93 hrs
Time interval	= 2 min	Hyd. volume	= 103,872 cuft
Drainage area	= 4.910 ac	Curve number	= 89
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 5.00 min
Total precip.	= 7.52 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484



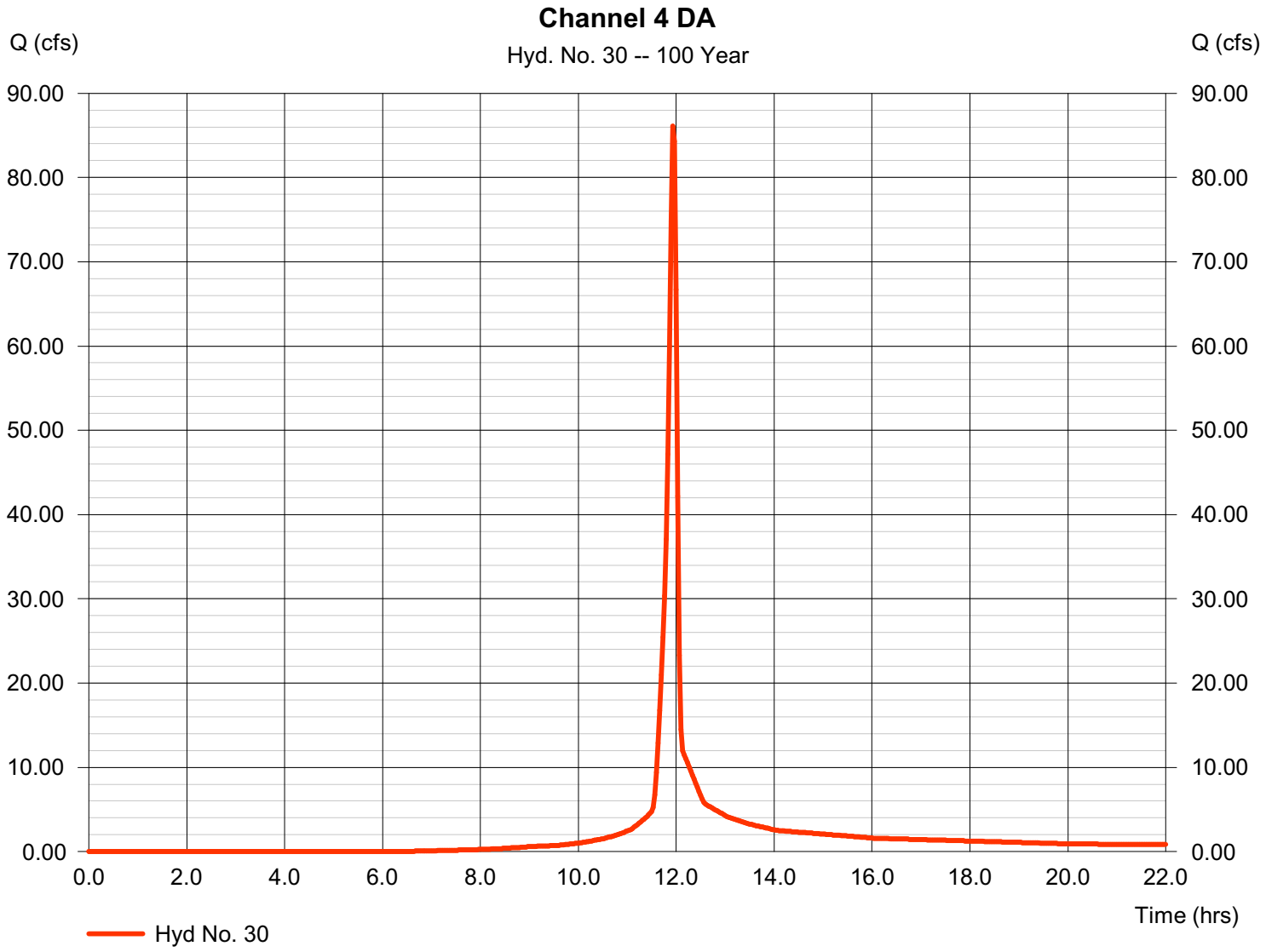
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024 Friday, 04 / 18 / 2025

Hyd. No. 30

Channel 4 DA

Hydrograph type	= SCS Runoff	Peak discharge	= 86.10 cfs
Storm frequency	= 100 yrs	Time to peak	= 11.93 hrs
Time interval	= 2 min	Hyd. volume	= 176,648 cuft
Drainage area	= 10.990 ac	Curve number	= 76
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= TR55	Time of conc. (Tc)	= 6.00 min
Total precip.	= 7.52 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484



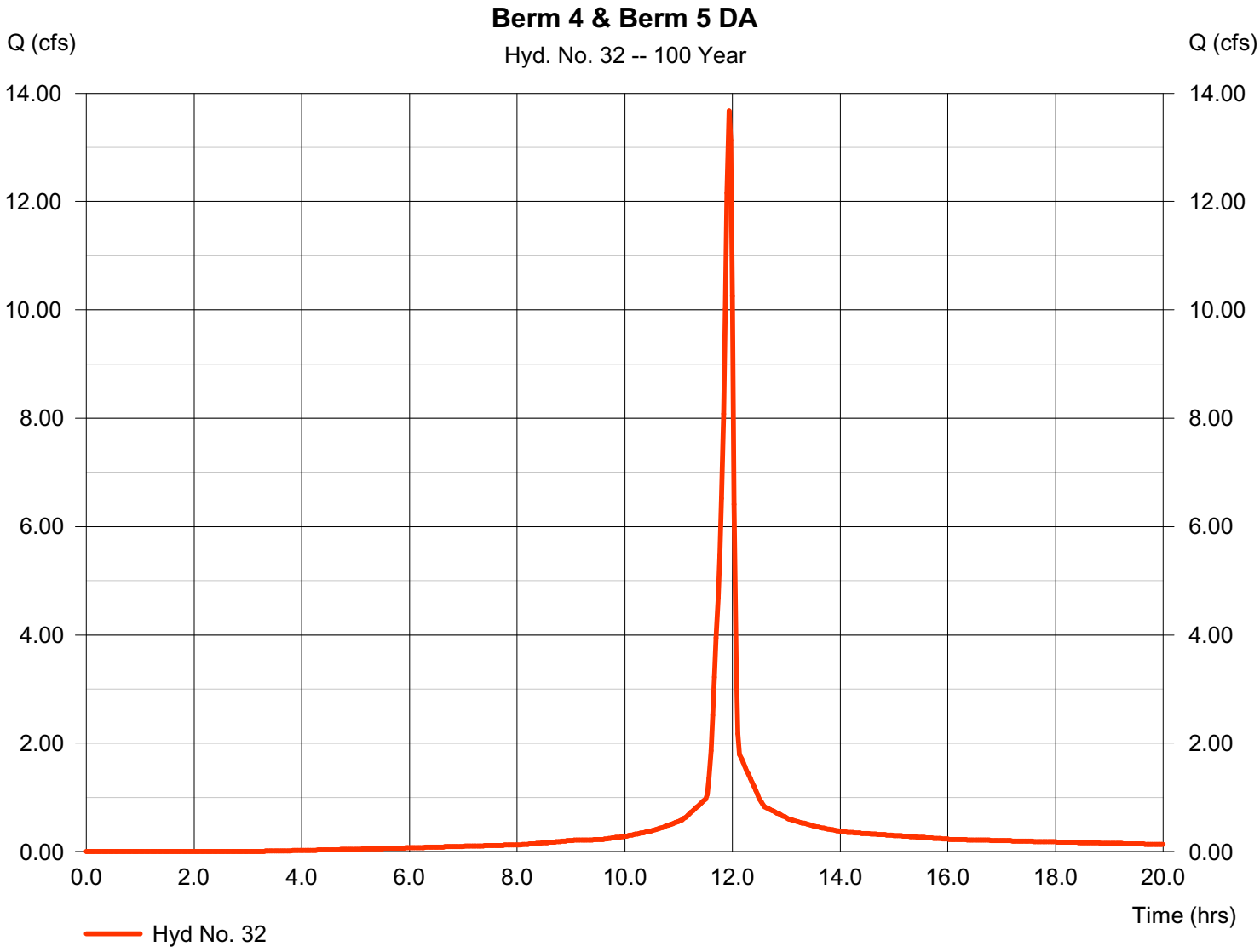
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024 Friday, 04 / 18 / 2025

Hyd. No. 32

Berm 4 & Berm 5 DA

Hydrograph type	= SCS Runoff	Peak discharge	= 13.68 cfs
Storm frequency	= 100 yrs	Time to peak	= 11.93 hrs
Time interval	= 2 min	Hyd. volume	= 30,040 cuft
Drainage area	= 1.420 ac	Curve number	= 89
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 5.00 min
Total precip.	= 7.52 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484



MODULE 6

ENVIRONMENTAL RESOURECES MAPS

Module 6: Environmental Resources Maps

6.1 U.S.G.S. Map. [§77.104]

Provide a 7 1/2 minute U.S.G.S. topographic map (latest edition) delineating the proposed surface mine permit area and NPDES discharge points. Identify the map as Exhibit 6.1. (Note: Reproductions or maps obscured by identification keys will not be accepted.) **See Exhibit 6.1: Site Location Map.**

6.2 Environmental Resource *Map. [§77.410]*

Provide a map or plan that includes the permit area and the area within 1000 feet of the permit area. The map or plan shall be clear, accurate, easily read and on a scale of no smaller than 1 inch 400 feet. Maps on the scale of 1 inch = 200 feet for permit areas of 100 acres or less and 1 inch = 400 feet for permit areas larger than 100 acres are preferred. Use the same scale as used for Modules 9 and 18. Identify the map plan as Exhibit 6.2 Environmental Resources Map. Each map or plan must bear the seal or facsimile imprint of a registered professional engineer; or the seal or facsimile imprint of a registered professional land surveyor. A registered professional geologist must certify the geology-related information of items m), n), o), and p). Show all the following information within the permit area and for a distance of 1000 feet from the permit area, unless specified otherwise. Include an appropriate legend on the map. Indicate which items are present by placing a check mark in the box before this item. Please provide the permit number (if it has been assigned) or a space for it in the title block.

☒ a) topographic contours (contour intervals of 20 feet or less)

☒ b) proposed permit area

☒ c) surface water bodies such as streams, lakes, ponds, springs, wetlands, mine discharges and constructed or natural drains (include restricted and variance areas, and names of streams and lakes/use a unique label for each unnamed tributary)

☒ d) property lines (key ownership to Module 5)

☒ e) buildings (include names of the owners and present occupants, and the current use. Show restricted or variance areas)

☒ f) man-made features such as public highways, railroads, utility lines including right-of-ways or easements and other surface and subsurface manmade features (include the name of the highway, railroad and utility and the restricted or variance areas)

☐ g) oil and gas wells in and within 125 feet of the proposed permit area (include the name of the well owner/operator and well permit number. Show restricted or variance areas.) **N/A**

☐ h) public or private cemeteries or Indian burial grounds (include restricted areas)

☒ i) existing or previously surface-mined areas, and existing areas of spoil, waste, and processing waste disposal (key to Module 7.4 and show permit name on map)

☐ j) areal extent of active and abandoned underground mines and entries (Key to Module 7.4) **N/A**

☐ k) solid waste disposal areas **N/A**

☐ l) test hole locations (key to 7.1 b data) **N/A**

☒ m) strata strike and dip or structure contours

☐ n) geologic faults **N/A**

☒ o) formation contacts and coal croplines (when applicable)

☒ p) direction(s) of groundwater flow (local and regional)

☒ q) public and private water supplies (include type, elevation of all springs, and key to Module 8.2(a)(8))

☒ r) public water supplies within ½ mile of the permit area and those with Wellhead Protection Zone extending to the permit area. Show on Exhibit 6.1 if outside limits of Exhibit 6.2.

☒ s) background and proposed monitoring points (key to Module 8. 1A)

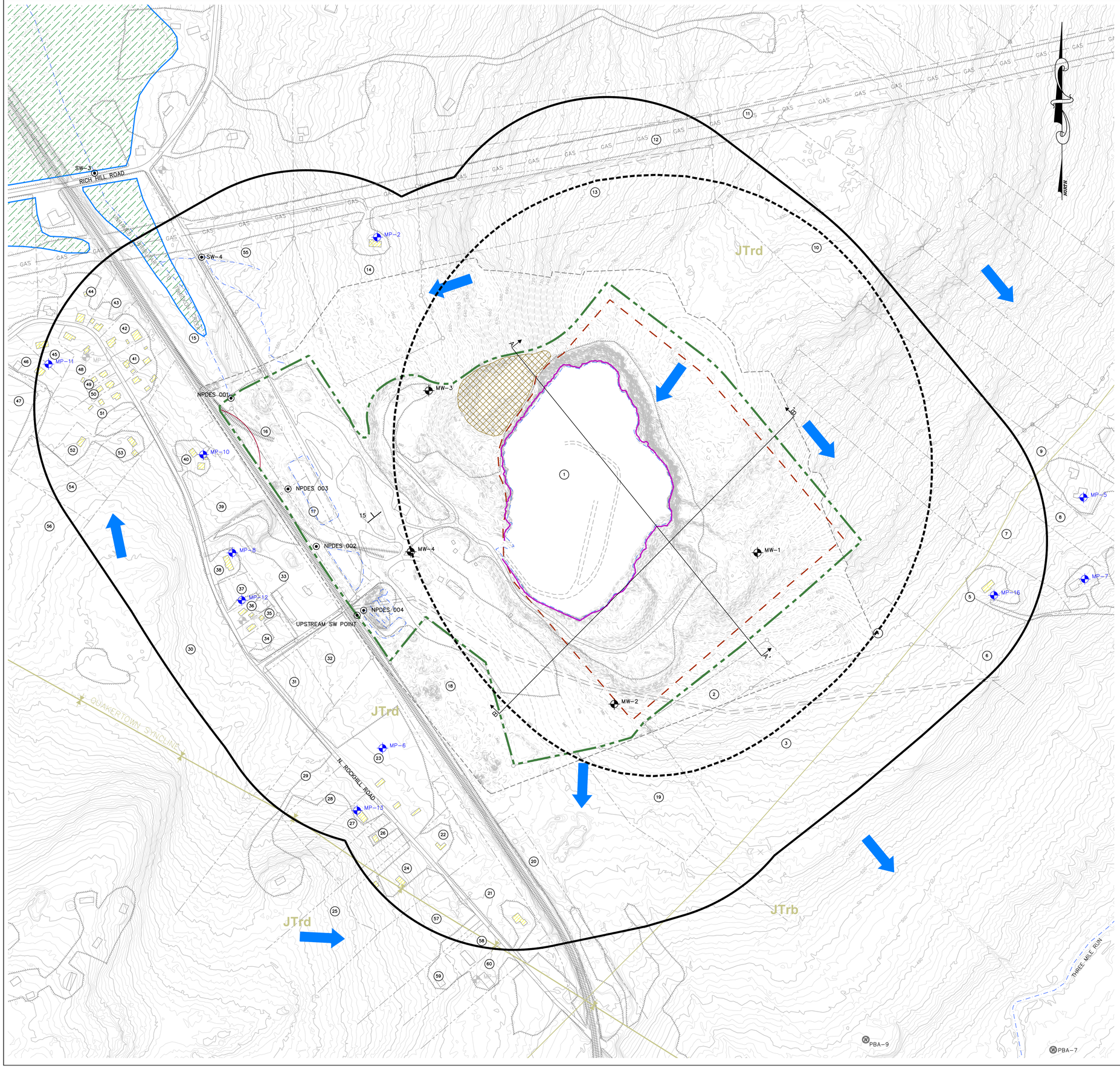
☒ t) NPDES discharge points

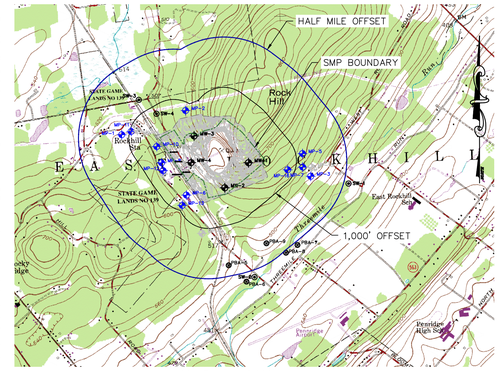
☐ u) landslide prone areas **N/A**

☐ v) sinkhole development and known cave systems **N/A**

EXHIBIT 6.2

EVIRONMENTAL RESOURCES MAP





SCALE: 1" = 2,000'

LEGEND

- EXISTING GRADE CONTOUR (2-FT INTERVAL)
- PARCEL BOUNDARY
- SMP BOUNDARY (109.8 ACRES)
- EXISTING LIMIT OF MINING (55.0 ACRES)
- 1,000' SMP OFFSET
- PRE-ACT HIGHWALL
- 300' DWELLING SETBACK
- LIMIT OF HEIDELBERG DRONE SURVEY
- EXISTING EDGE OF ROAD (PAVED)
- EXISTING EDGE OF ROAD (UNPAVED)
- EXISTING SURFACE WATER
- EXISTING RAILROAD
- TREELINE
- GAS PIPELINE
- ZONE OF INFLUENCE (10 FT. DRAWDOWN)
- BUILDING – RESIDENTIAL DWELLING
- NPDES 001 — NPDES DISCHARGE POINT
- OVERBURDEN STOCKPILE
- WETLAND (NATIONAL WETLANDS INVENTORY)
- 15 — STRIKE AND DIP OF BEDS (SEE NOTE 11)
- MW-1 — MONITORING WELL
- MP-1 — RESIDENTIAL WELL (INCLUDED IN BACKGROUND MONITORING)
- MP-1 — RESIDENTIAL WELL (NOT MONITORED)
- SW-3 — SURFACE WATER MONITORING POINT
- W — PUBLIC WATER SUPPLY WELL
- 21 — PROPERTY ID (SEE NOTE 8)
- GROUNDWATER FLOW DIRECTION

GEOLOGIC LEGEND

- GEOLOGIC CONTACT
- QUAKERTOWN SYNCLINE
- JTrb — BRUNSWICK FORMATION
- JTrd — DIABASE

NOTES:
1. EXISTING GRADE TOPOGRAPHY COMPILED BY PAMAP PROGRAM, PA DEPARTMENT OF CONSERVATION AND NATURAL RESOURCES, BUREAU OF TOPOGRAPHIC AND GEOLOGIC SURVEY, DATED JUNE 2010.
2. TOPOGRAPHY WITHIN HEIDELBERG SURVEY AREA WAS SURVEYED BY HEIDELBERG PERSONNEL ON DECEMBER 7, 2020.
3. BASEMAP FEATURES INCLUDING BUILDINGS, ROADS, UTILITIES, WATER FEATURES, AND TREELINES RETRACED FROM AERIAL PHOTOGRAPHY DATED 2015, PUBLISHED BY THE DELAWARE VALLEY REGIONAL PLANNING COMMISSION.
4. EXISTING PERMIT INFORMATION INCLUDING PERMIT BOUNDARY, MINING LIMIT, DEPTH OF MINING, AND PRE-ACT HIGHWALLS ARE REFERENCED TO THE PERMIT DRAWING "MINING PLAN, SHEET 3 OF 6" PREPARED BY SKELLY AND LOY, DATED MARCH 18, 1980.
5. HEIDELBERG PROPERTY BOUNDARY PROVIDED BY VAN CLEEF ENGINEERING ASSOCIATES VIA MAP TITLED "PLAT OF SURVEY OF LANDS OF GENERAL CRUSHED STONE", ORIGINALLY PREPARED BY ORANGEVILLE SURVEYING CONSULTANTS, INC., DATED MAY 7, 2001.
6. ADJACENT PARCEL BOUNDARIES ARE REFERENCED TO THE BUCKS COUNTY GIS RECORDS.
7. WETLANDS REFLECT THOSE DEPICTED IN THE NATIONAL WETLANDS INVENTORY FWS WETLANDS MAPPER.
8. PROPERTY OWNERSHIP INFORMATION REFERENCED TO MODULE 5 OF THE PERMIT APPLICATION.
9. STREAM INFORMATION IS REFERENCED TO THE PA DEP eMAPPA ONLINE RECORDS.
10. GEOLOGY OBTAINED FROM PAGEODE, PA GEOLOGIC DATA EXPLORATION, WWW.GIS.DCNR.STATE.PA.US/GEOLOGY/(2018).
11. STRIKE AND DIP OF BEDS WAS NOT SPECIFICALLY TAKEN ON DIABASE. THE MAPPED LOCATION OF THE SHOWN MEASUREMENT IS FROM "GEOLOGY MAP OF BUCKS COUNTY PENNSYLVANIA" BY B. WILLARD, D. B. MCLAUGHLIN, E. H. WATSON AND OTHERS DATED 1950, AND IS REPRESENTATIVE OF REGIONAL STRIKE AND DIP OF TRIASSIC SEDIMENTARY FORMATIONS.
12. PUBLIC SUPPLY WELL LOCATIONS BASED ON "HYDROGEOLOGIC ANALYSIS OF PERKASIE WATER SUPPLY WELLS AND CONSULTANT'S REPORT FOR THE YEAR 2017" PREPARED BY MERCURI AND ASSOCIATES, INC., DATED JUNE 2018.

GRAPHIC SCALE

200 0 100 200 400 800

(IN FEET)
1 inch = 200 ft.

NO.	DATE	BY	REVISIONS
3	4/30/25	JTK	REVISED PER DEP COMMENTS
2	10/16/18	JTK	REVISED PER DEP COMMENTS
1			

TERRY W. SCHMIDT, P.E. — COMMONWEALTH OF PENNSYLVANIA — ENGINEER — LICENSE NO. PE044535E

MATTHEW S. WEIKEL, P.G. — COMMONWEALTH OF PENNSYLVANIA — GEOLOGIST — LICENSE NO. PG004630

PROJECT SITE:
HEIDELBERG MATERIALS NORTHEAST LLC
ROCK HILL QUARRY OPERATION
EAST ROCKHILL TOWNSHIP, BUCKS COUNTY
PENNSYLVANIA

PREPARED FOR: Heidelberg Materials

HEADQUARTERS
PHILADELPHIA REGION
P.O. Box 465
6912 Old Easton Road
Pipersville, PA 18947

APPALACHIAN
REGIONAL OFFICE
P.O. Box 794
8006 Corporate Center Drive
Morgantown, WV 26505

PREPARED BY: EARTHRES — a Division of RESPEC
www.earthres.com

EXHIBIT 6.2
ENVIRONMENTAL RESOURCES MAP

HEIDELBERG MATERIALS NORTHEAST LLC
ROCK HILL QUARRY OPERATION

DRAWN BY:	CHECKED BY:
JJB	MDP
DATE: 7/19/18	PROJECT NO: 061003.052
DRAWING NUMBER: R-002	SHEET 2 OF 6

MODULE 8

HYDROLOGY

Module 8: Hydrology
[§§77.405/77.406/77.407]

8.1 Chemical Analysis.

Provide the following data, in accordance with 8.2 for each point in the background sampling and monitoring program and report on Module 8.1(A).

a) pH (field & laboratory) **See Attachment 8.1(A)**

b) Total Suspended Solids (mg/l) **See Attachment 8.1(A)**

c) Total Dissolved Solids (mg/l) or Specific Conductance ($\mu S/_{cm}$ at 25°C) **See Attachment 8.1(A)**

d) Field temperature at sample source (°C).

See Attachment 8.1(A)

e) Provide the following in addition to a) through d) above, if requested by the Department. *

Total Alkalinity (mg/l)
Total Acidity (mg/l)
Total Iron (Fe) (mg/l)
Total Manganese (Mn) (mg/l)
Sulfates ($S0_4$) (mg/l)

*If the proposed noncoal minerals to be mined are located within the coal fields or other known acid producing areas or a watershed sensitive to mining impacts, additional parameters may be required by the Department. Contact the appropriate District Mining Office prior to beginning sampling to determine if these parameters are needed.

Additional sampling has been completed in support of the Anti-degradation Supplement prepared for the site. Please refer to the Water Quality Assessment Report included with Module 2.

f) Flows of perennial streams above and below the operation and surface and underground mine discharges must be measured by approved methods. In addition, other flows from springs, streams, seeps or other discharge points in the representative monitoring program should be measured to reflect seasonal variations. (The Department may waive sampling points if there is a representative sampling of the requested points.) The elevations and flows of springs, seeps, and mine discharges are required.

See Attachment 8.1(A) (Note, additional flow data is provided in the Water Quality Assessment Report included with Module 2)

g) Provide a description of the type of sample point (e.g. well, spring, etc.) and its relationship to the mine site (e.g. up-gradient, perched aquifer, down-gradient).

See Attachment 8.1(A)

h) Provide the name(s), address(es) and telephone number(s) of the individual(s) responsible for the collection and analysis of this data.

EarthRes Group, Inc.
6912 Old Easton Road
Pipersville, PA 18947
(215) 766 - 1211

Test America Laboratories, Inc.
1010 W. Ninth Avenue, Suite 50
King of Prussia, PA 198406
(484) 685 - 0871

i) Provide a description of the methodology used to collect and analyze this data.

Disposable bailers were used to collect samples from monitoring wells, MW-1, MW-2, and MW-3. Residential well samples were collected by running an interal faucet or external spigot until the sample was visibly clear. If possible, sample locations installed before any filtration or treatment equipment were chosen. The static depth to water was measured using an electronic water level meter prior to sampling. The static water level of MW-4 was moniored with a sonic water level meter.

Stream samples SW-1, SW-2, SW-3, and SW-4 were collected directly as grab samples. Surface water flows were measured using a Global Flow Probe to record flow velocity and flow depth at several stations across the channel using the USGS "6 tens method". In instances where the flow was too low to register on the probe, flow was estimated.

Field parameters consisting of temperature, pH, total dissolved solids, specific conductivity, and oxidation reduction potential were measured during sampling using a calibrated Myron II ultrameter.

Water samples were packed on ice and transported under chain of custody to Test America Laboratories, Inc. for water quality analysis.

8.2 Background Sampling and Monitoring.

a) Background Sampling

Provide the results of the chemical analyses, as required by the Department, that characterize the water quality of sample points listed in 1) through 8). Background sampling points must have at least two (2) complete chemical analyses, at monthly intervals. All sampling points must be keyed to Exhibit 6.2 and identified in Module 8.1(A).

Note: *Include sample(s) from a low flow period.*

1) each stream that receives discharge, runoff or drainage from the operation.

Three Mile Run: SW-1 and SW-2; and
Unnamed Tributary to Tohickon Creek: SW-3 and SW-4

2) streams, springs or wetlands that are representative of the surface and groundwater system of the general area.

Three Mile Run: SW-1 and SW-2; and
Unnamed Tributary to Tohickon Creek: SW-3 and SW-4
Upstream Surface Water Point (Data included in Water Quality Assessment Report included in Module 2)

3) springs, seeps and wetlands within the permit area and springs, seeps and wetlands within 1,000 feet of the permit area.

N/A

4) impoundments within the permit area and impoundments within 1000 feet of the permit area.

Sump

5) impoundments, impoundment discharges, and discharges from backfilled areas associated with previous or current underground or surface coal mines within the permit area and within 1,000 feet of the permit area.

NPDES 001 (stormwater), 002 (stormwater), 003 (stormwater), 004 (pit overflow and pumped discharge) – Data are included within the Water Quality Assessment Report included in Module 2.

6) discharges within the permit area resulting from underground mines and discharges resulting from underground mines that are within the permit area but discharge outside the permit area.

N/A

7) any monitoring wells developed to determine the characteristics of the groundwater. (The Department may require additional monitoring wells.)

Monitoring Wells MW-1, MW-2, and MW-3 were installed during this investigation to determine the characteristics of groundwater. Monitoring well MW-4 has been in existence at the Site previous to the permit update and was used to collect groundwater levels during this monitoring period. Additional information regarding groundwater is found in the Groundwater Pumping Evaluation dated July, 2018 and the Groundwater Pumping Evaluation Addendum dated September, 2023.

8) private water supplies and water supplies abandoned because of degradation or pollution from mining, within the permit area and within 1,000 feet of the permit area. For each water supply sampled, provide the data required on the Private Water Supply Information Exhibit 8.2(A)(8) and indicate the source of the information (e.g. owner interview, survey by operator, P.E. etc.). (Provide driller logs if available.) (The Department may require additional water supply information on a case-by-case basis.)

MP-1, MP-2, MP-3, MP-5, MP-6, MP-7, MP-8, MP-10, MP-11, MP-12, MP-13, MP-16, and MP-17.

b) Monitoring Program

Describe the proposed surface and groundwater monitoring plan that will be conducted. The monitoring plan shall include quantity and quality measurements of discharges from the operation; points that will show any effect of the discharge on the receiving stream; and points that will show any effect on the groundwater system. Unless otherwise approved by the District Mining Office prior to permit application submittal, monitoring points must have a minimum series of six (6) complete chemical analyses collected at monthly intervals and should include the month of August, September or October to reflect low flow conditions.

Points to be included in the Monitoring Program are provided in the tables below. Static water elevations in monitoring wells (MW-1, MW-2, MW-3, and MW-4) will be recorded monthly. When pumping is initiated monitoring frequency will increase

to bi-monthly (at least 20 days apart). Surface water sampling of NPDES 001 (stormwater), 002 (stormwater), 003 (stormwater), & 004 (pit overflow and pumped discharge) will be conducted as required by the NPDES permit.

All monitoring points must be keyed to Exhibit 6.2. Monitoring plans must provide for collection and monitoring on a quarterly basis unless otherwise specified by the Department. All monitoring data must be compiled on Module 8.1(A) or equivalent facsimile. All monitoring points should be identified in the field with durable markers that can be maintained (wooden stakes, metal or plastic tags, etc.; not just plastic flagging).

If monitoring Points are added during the pre-application field meeting, the Department will accept the application with three (3) months of sampling results for those points only.

The following monitoring locations should be included in the monitoring program:

The permanent monitoring point locations for the Quarry are shown on Exhibit 6.2. Monitoring locations are summarized below and discussed in further detail in the Groundwater Pumping Evaluation.

		Monitoring Points (Key to Exhibit 6.2)
1)	receiving streams above proposed discharge points	**N/A**
2)	receiving streams below proposed discharge points	**N/A**
3)	abandoned underground or surface mine discharges that are hydrologically connected and may be impacted by the proposed mining	**N/A**
4)	representative springs and seeps within the permit area and within 1,000 feet of the permit area	**N/A**
5)	representative wetlands with **defined discharge points** within the permit area and wetlands within 1,000 feet of the permit area that may be impacted by the proposed mining,	**N/A**
6)	water supplies	**N/A**
7)	cased boreholes/piezometers	**N/A**
8)	point source discharges	**001 (Downgradient Permit Boundary)**
9)	treatment pond discharges	**004 (Clarifying Pond)**
10)	sedimentation pond discharges	**002, 003 (Stormwater only)**
11)	pit water during active mining (identify by mineral being mined)	**N/A**
12)	each monitoring well developed to determine the characteristics of the groundwater	**MW-1, MW-2, MW-3, MW-4 (Water Level Only)**

Note: In cases where cased boreholes/ piezometers or monitoring wells are not necessary, insert NA above and provide an explanation.

Module 8.1(A)
BACKGROUND (check appropriate block)

Operator: _____ Monitoring Point I.D.: _____ Description of Sample Point**: _____
Operation Name: _____ Latitude: ____° ____' ____."N and _____
Permit No.: _____ Longitude: ____° ____' ____."W _____
Township: _____ Surface Elevation (MSL): _____ _____
County: _____

Instructions: Use a separate sheet for each sample point and list results consecutively by date.

Date Sampled	Method of Flow Measurement	Flow (GPM) or Static Water Elevation	Field pH	Laboratory pH	Suspended Solids mg/l	Total Dissolved Solids mg/l or Specific Conductance µS/cm@25°C	Field Temp. °C	Alkalinity mg/l	Acidity mg/l	Iron Mg/l	Manganese mg/l	Aluminum mg/l	Sulfate mg/l		**Laboratory and Name of Sampler**
								Submit above as requested by the Department							

Signature of Permittee or Responsible Official or Authorized Representative Date _____

**Description should include type of sample point, relation to mine site, treatment and other comments (such as odor, color, etc.)

8.2(A)(8) PRIVATE WATER SUPPLY INFORMATION (key to Module 6.2)

Sample Point No	Owner	Type of Supply (Dug or Drilled Well, Spring)	Use	Surface Elevation (MSL)	Depth of Casing	Diameter of Well	Static Water Elevation (MSL) or Flow, Date of Measurement	Depth of Well	Type of Treatement If Any (iron filter, etc.)
MP-1	Salvatore and Janice Galluppi	Drilled	Domestic	543	Unknown	6”	535.08	150’	None
MP-2	Michael Wilder and Eileen Koolpe	Drilled	Domestic	592	Unknown	6”	580.58	400’	Filtered
MP-3	Robert Silber	Drilled	Domestic	511	Unknown	Unknown	469.50	Unknown	No
MP-4	Donald G. Thomas Sr.	Drilled	Domestic	548	Unknown	Unknown	Unknown	Unknown	No
MP-5	Steven and Deborah Conolly	Drilled	Domestic	585	65’	Unknown	535.70’	200’	No
MP-6	Terry DeGroot	Drilled	Domestic	538	Unknown	Unknown	Unknown	Unknown	No
MP-7	Bruce Costa	Drilled	Domestic	556	Unknown	Unknown	Unknown	Unknown	No
MP-8	David S. Fitzgerald	Drilled	Domestic	542	Unknown	Unknown	526.8’	Unknown	Unknown
MP-9	Howard F. Bryan Jr.	Drilled	Domestic	556	Unknown	Unknown	Unknown	79’	Filtered
MP-10	Ryan and Kimberly Gottshall	Drilled	Domestic	534	100’	6”	526.17	500’	No

8.2(A)(8) PRIVATE WATER SUPPLY INFORMATION (key to Module 6.2)

Sample Point No	Owner	Type of Supply (Dug or Drilled Well, Spring)	Use	Surface Elevation (MSL)	Depth of Casing	Diameter of Well	Static Water Elevation (MSL) or Flow, Date of Measurement	Depth of Well	Type of Treatement If Any (iron filter, etc.)
MP-11	Steven Benner	Drilled	Domestic	534	Unknown	Unknown	510.6	180’	Filtered
MP-12	Michael Maier	Dug	Domestic	544	Unknown	Unknown	531.6	Unknown	Filtered
MP-13	Gene and Donna Herdon	Drilled	Domestic	560	45’	6”	542.2	420’	Filtered
MP-14	M. Arthur Halllett	Drilled	Domestic	Unknown	Unknown	Unknown	Unknown	Unknown	Filtered
MP-15	William S. Seachrist	Drilled	Domestic	Unknown	40’ 4”	6”	Unknown	140’	No
MP-16	Andrew Wright and Sandra Lehrman	Drilled	Domestic	Unknown	Unknown	Unknown	Unknown	Unknown	No
MP-17	Gary and Beth Gotwals	Drilled	Domestic	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown

8.3 Groundwater Information.

a) State if and when groundwater will be intercepted (e.g., mining below the water table, installation of a production well for support or processing facilities) and describe the groundwater system that exists within the permit and adjacent area. If pumping of groundwater is planned, indicate the estimated gallons/day to be pumped. Include the depth to groundwater and the water table conditions present (artesian, regional, perched, etc.), the relationship to the mineral to be mined, known groundwater problems, and the data and references used to establish the description. Groundwater modeling may be required if the pumping has the potential to adversely impact water supplies, wetlands and other water resources and their affiliated uses. (Key groundwater elevations to cross-sections in 7.1 (c).)

Groundwater conditions at Rock Hill Quarry (Quarry) are described in detail within the Groundwater Pumping Evaluation (GPE) and Groundwater Pumping Evaluation Addendum (GPE Addendum) submitted as a supplement to this application in Attachment 8.6 (d). The groundwater potentiometric surface ranges from a high of 598.05 feet above mean sea level (amsl) on the east side of the quarry (MW-1) to a low of 524.5 feet amsl (MW-3). The water in the quarry sump is at a level of approximately 590 feet amsl. Some areas of the quarry are located above the water table and will not require dewatering for mining. Future pit dewatering will require approval and authorization from DEP prior to being initiated.

A numerical groundwater model was developed to evaluate future mining below the water table. The calibrated numerical model for the Quarry indicated an average groundwater inflow of 0.039 MGD at the maximum extent of mining (See GPE Addendum Section 1). Precipitation that falls over the permit area is estimated to collect an additional 0.035 MGD. At the proposed final depth of 464 feet amsl, the total steady-state pumping rate is projected to be 0.074 MGD (refer to the GPE Addendum). During wet weather and periods of above average recharge, quarry discharge will exceed steady state predictions. The proposed NPDES discharge rate of 0.238 MGD accounts for these variable seasonal and climatic conditions.

When mining first proceeds below the water table, the existing water-filled pit will be dewatered at an approximate rate of 2.88 MGD (Please refer to the Discharge Modification Report included with Module 2). This dewatering of surface storage is further considered in the GPE Addendum. The data collected for the GPE and GPE Addendum indicates that potential hydrologic impacts due to the continued mining of the Quarry are minimal. The hydrologic balance will continue to be assessed through the implementation of the monitoring plan in conjunction with the Quarry's pumping records.

b) Describe the groundwater movement of the area and the conditions that control and influence the movement and infiltration. Include the influence of any underground mines, cave systems or other karst features.

Groundwater movement in the area is described within the GPE and GPE Addendum. Most groundwater movement in the local area occurs in the interconnected fracture network that includes joints and faults. Fracture networks within the diabase are often discontinuous over moderate to large distances, resulting in development of local groundwater flow systems. The water table is generally a subdued reflection of topography, and groundwater typically flows downhill discharging to local streams. A simulated groundwater map for the current unconfined aquifer is included as Figure 2 of the GPE. No underground mines or cave systems were identified in or adjacent to the quarry.

c) Identify all aquifers above the lowest mineral to be mined and the first aquifer below the lowest mineral to be mined and the presence of any underground mine or cave system. Include stratigraphic units, depths, and any current use.

The Quarry is located within the Haycock/Rockhill Diabase. The diabase intrudes into native sedimentary rock of the Brunswick and Lockatong Formations (See Greenman, D., 1955 Plate 1). The Brunswick Formation is a sequence of sedimentary rock from shale to siltstone with interbedded sandstone. The Locatong Formation is also a sedimentary sequence with laminated beds of siltstone and shale or argillite. The intrusion of diabase has created a metamorphosed zone of baked Brunswick Formation surrounding the diabase. Mining will occur solely within the diabase. Groundwater within the diabase is stored exclusively in fractures because the crystalline rock has no primary porosity (see GPE for additional information).

There are no known underground mines or cave systems in the vicinity of the Quarry.

d) Identify the effects which any previous mining has had on the quantity and quality of the groundwater in the area, including impacts from increased turbidity, suspended solids or settleable solids. Include the source, rock unit involved and the reasons for the effect.

There are no known effects from previous mining on the quantity or quality of groundwater in the vicinity of the Quarry.

e) Identify any other (i.e. non-mining) existing effects on the quantity and quality of the groundwater in the area. Include the source, involved and the reasons for the effect.

☒ Not Applicable

8.4 Surface Water Information.

a) Identify each stream receiving drainage from the proposed operation and the 25 Pa Code Chapter 93 projected water use classification.

Stream	***Classification***
Unnamed Tributary to Tohickon Creek	**TSF, MF (Per §93.9e Drainage List E)** **EV, MF (Per Existing Use Table, PA DEP)**

b) Identify the effects which previous mining has had on the quantity and quality of the surface waters in this area, including impacts from increased turbidity, suspended solids or settleable solids. Include the source, rock unit involved, and reasons for the effect.

There are no known effects from previous mining on the quantity or quality of groundwater in the vicinity of the Quarry.

8.5 Public Water Supply Information.

Provide the name, type, and location of all current public (community and non-community) surface water supplies that have intakes on the receiving stream within 10 miles downstream of the proposed permit area; public (community and non-community) water supplies (wells or springs) in or within one half mile of the proposed permit area; and public water supply wells for which any part of the permit area is within the Wellhead Protection Zone. Show the location of these supplies on Exhibit 6.1 or 6.2.

Based on the information obtained from Hydrogeologic Analysis of Perkasie Water Supply Wells and Consultants Report for the Year 2017, prepared by Mercuri and Associates. Inc. June 2018, there are two wells (PBA-5 and PBA-9) within ½ mile of the Quarry. Three additional wells (PBA-6, PBA-7, and PBA-8) are located just outside of the ½ mile boundary. See additional information in Attachment 8.5. All of these wells are keyed to Exhibit 6.2.

There are no known surface water intakes for a Public Water Supply ("PWS") within 10 miles downstream of the Quarry discharge. Two (2) groundwater withdrawals within one half mile of the permit area were located through a a search of the Department's eMapPA website, and the results are provided in Attachment 8.5.

8.6 Hydrologic Assessment

a) Describe the groundwater hydrology in relation to the proposed mining operation (at maximum depth and lateral development) - i.e. - intercept regional water table, above regional water table, intercept perched water table, etc.

The Quarry has already intercepted the water table within the diabase rock. Progressive dewatering of the Quarry will result in a limited cone of depression surrounding the Quarry.

8.6 Hydrologic Assessment (continued)

Identify water supply sources that may be contaminated, diminished or interrupted by the mining operation and the means to restore or replace the affected supply. Include a demonstration that the quantity of the water supply will be sufficient to meet the needs of the water supply use. Note why other water supplies will not be affected. Provide a specific capacity, step-drawdown, or other approved yield test for all water supplies that may be impacted by mining and for each proposed replacement supply source. Yield tests on other wells are at the discretion of the applicant or as requested by the Department. Provide specific capacity data on Module 8.6(A). Please refer to the guidance document, " Procedures for Establishing the Quantity of Water in Low-Yield Wells" for methods.

There are no water supply sources that are anticipated to be contaminated, diminished or interrupted by the mining operation. A numerical groundwater model of the continued mining of the Quarry was developed and the results are provided in the Groundwater Pumping Evaluation (GPE) and Groundwater Pumping Evaluation Addendum (GPE Addendum) (Attachment 8.6d). The results of the model indicate that the aquifer has low hydraulic conductivity, resulting in a steep cone of depression with limited aerial extent. There are no wells located within the modeled 10-foot drawdown contour zone of influence for the quarry area at the proposed final depth and areal extent of mining.

1) Provide the existing operation and maintenance costs for each water supply that may be contaminated, diminished or interrupted by the mining operation and the projected operation and maintenance costs for the proposed replacement supply.

N/A - there are no water supplies that are anticipated to be affected by mining.

aa) If the operation and maintenance costs for the proposed replacement water supply will be more than for the existing water supply, identify the provisions for compensating the water supply owner for the increased costs or provide the consent to Lesser Water Supply Agreement Form 5600-FM-BMP0110 for the increased operation/maintenance costs.

N/A - there are no water supplies that are anticipated to be affected by mining.

b) Describe the probable hydrologic consequences of the proposed noncoal surface mining activities on the hydrologic system of the permit area and adjacent area both during and after the operation. Describe the impact, during and after mining, on existing quantity and quality of the surface and groundwater.

A numerical groundwater model of the Quarry was developed to assess mining below the water table and the results are provided in the Groundwater Pumping Evaluation and Groundwater Pumping Evaluation Addendum (Attachment 8.6d). The investigation results indicate that the aquifer has low hydraulic conductivity, which will result in a steep cone of depression with limited aerial extent. No private or public water supplies are located within the predicted zone of influence. During mining, minor drawdown may occur as a result of groundwater discharge to the quarry. The volumetric discharge and drawdown are expected to be minimal. The zone of influence extends a limited extend beyond the property boundary as shown on Figure 1 of the GPE Addendum and Exhibit 6.2. Based on the background sampling conducted for Module 8 and sampling completed for the Water Quality Assesment Report included with Module 2, the water quality is not expected to be impacted as a result of quarry development. After conclusion of mining activities the water levels in the pit will recover to an approximate level of 590 amsl and the water table will return to pre-pumping levels.

There are no anticipated impacts to the quantity or quality of surface water in the vicinity of the Quarry.

c) Is there evidence of sinkhole or cavern development in or within 1,000 feet of the proposed permit area? ☐ Yes ☒ No

If "yes" is checked, describe the effects mining will have on sinkhole or cavern development and the steps that will be taken to repair or alleviate sinkholes.

N/A

d) Has groundwater modeling been conducted? ☒ Yes ☐ No

If "yes" is checked provide documentation for the modeling and the results.

See Groundwater Pumping Evaluation provided as Attachment 8.6d.

References for Module 8 are provided in the Groundwater Pumping Evaluation and Groundwater Pumping Evaluation Addendum.

MODULE 9

OPERATIONS MAP

Module 9: Operations Map

[§77.454]

Provide a map or plan that includes the permit area and the area within 1,000 feet of the permit area. The map or plan shall be clear, accurate, easily read and on a scale of no smaller than 1 inch = 400 feet. Maps on the scale of 1 inch = 200 feet for permit areas of 100 acres or less and 1 inch = 400 feet for permit areas larger than 100 acres are preferred. Use the same scale as used for Exhibits 6.2 and 18. Identify the map or plan as Exhibit 9 Operations Map. Each map or plan must bear the seal or facsimile imprint of a registered professional engineer; or the seal or facsimile imprint of a registered professional land surveyor. Show all the following information within the permit area and for a distance of 1000 feet from the permit area, unless specified otherwise. Include an appropriate legend on the map. Indicate which items are present by placing a check mark in the box before the item. Please provide the permit number (if is has been assigned) or a space for it in the title block. Please also include the acreage of the total permit area.

☒ a) topographic contours (contour intervals of 20 feet or less);

☒ b) proposed surface mine permit area, and initial bond increment;

☒ c) surface water bodies such as streams, lakes, ponds, springs, wetlands, mine discharges and constructed or natural drains (include restricted or variance areas, and names of streams and lakes/use a unique label for each unnamed tributary);

☒ d) property lines (key ownership to Module 5);

☒ e) buildings (include current use and restricted or variance areas);

☒ f) man-made features such as public highways, railroads, utility lines including right-of-ways or easements, and other man-made features (include the name of the highway, railroad and utility and the restricted or variance areas);

☐ g) oil and gas wells in and within 125 feet of the permit area (include restricted or variance areas);

☐ h) public or private cemeteries or Indian burial grounds (include restricted areas); **N/A**

☒ i) existing or previously surface-mined areas, preact highwalls, existing structures and existing areas of refuse, spoil, waste, and processing waste disposal;

☐ j) areal extent of active and abandoned underground mines if mining above or through; **N/A**

☐ k) solid waste disposal areas; **N/A**

☒ l) final working face limit for mineral to be mined (i.e., maximum lateral extent of mineral extraction prior to final postmining slope development);

☒ m) phases of mining (indicate initial phase, sequence, and direction of mining);

☒ n) water treatment facilities;

☒ o) surface water diversions;

☒ p) erosion and sedimentation control facilities, including location and size of existing structures, road culverts and drainage ways;

☒ q) dams and impoundments;

☒ r) berms and spoil storage areas;

☒ s) topsoil storage areas;

☒ t) haul roads (outside of area being mined);

☐ u) refuse disposal areas (indicate any material in the refuse which may be acid forming); **N/A**

☒ v) processing facilities and stockpile areas;

☐ w) air pollution control facilities; **N/A – contained within equipment**

☐ x) explosives storage areas; **N/A**

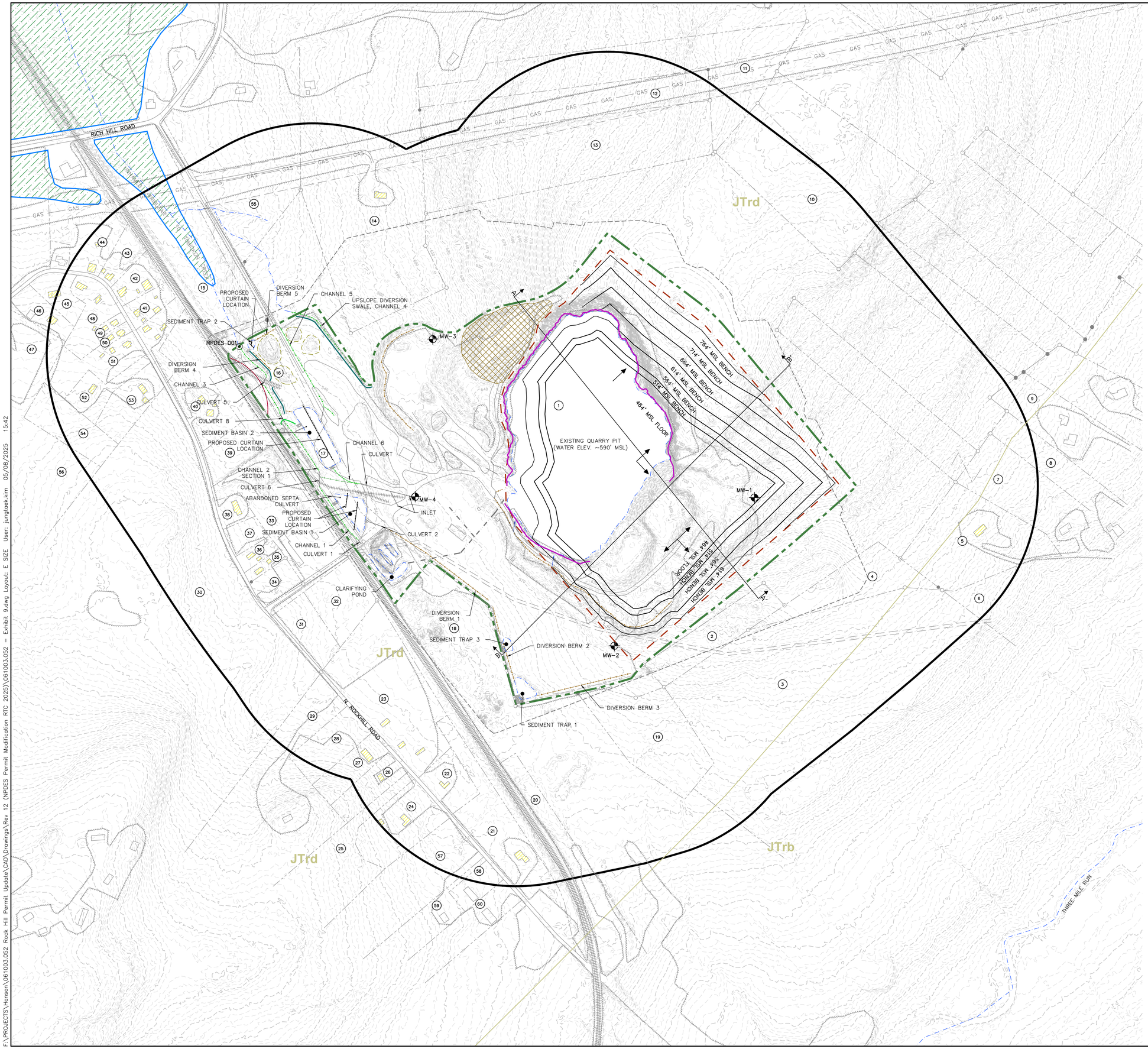
☒ y) formation contacts and coal croplines (where applicable);

☒ z) test hole locations (key to 7.1 b data).

☐ aa) incidental coal extraction areas **N/A**

EXHIBIT 9

OPERATIONS MAP



NORTH

LEGEND

- EXISTING GRADE CONTOUR (2' INTERVAL)
- EXISTING SMP BOUNDARY
- LIMIT OF MINING
- 1,000' SMP OFFSET
- PRE-ACT HIGHWALL
- PROPOSED BENCHING
- 300' BUILDING SETBACK
- LIMIT OF HANSON DRONE SURVEY
- EXISTING RIGHT OF WAY
- PROPERTY BOUNDARY
- EXISTING QUARRY PIT DEWATERING/INTERCEPTOR PIPE
- EXISTING SURFACE WATER
- EXISTING RAILROAD
- EXISTING TREELINE
- EXISTING GAS PIPELINE
- EXISTING DRAINAGE CHANNEL
- EXISTING DIVERSION BERM
- EXISTING PERIMETER BERM (PRECAST CONCRETE BLOCKS)
- EXISTING FILTER BERM
- TEMPORARY COMPOST FILTER SOCK
- AGGREGATE PILES FOR REMOVAL
- EXISTING BUILDING - RESIDENTIAL
- NPDES 001 NPDES DISCHARGE POINT
- OVERBURDEN/TOPSOIL STORAGE
- NWI WETLANDS
- DIRECTION OF MINING
- 21 PROPERTY ID
- MW-1 MONITORING WELL (TEST HOLE)

GEOLOGIC LEGEND

- GEOLOGIC CONTACT
- JTrb BRUNSWICK FORMATION
- JTrd DIABASE

NOTES:
1. EXISTING GRADE TOPOGRAPHY COMPILED BY PAMAP PROGRAM, PA DEPARTMENT OF CONSERVATION AND NATURAL RESOURCES, BUREAU OF TOPOGRAPHIC AND GEOLOGIC SURVEY, DATED JUNE 2010.
2. TOPOGRAPHY WITHIN HANSON SURVEY AREA WAS SURVEYED BY HANSON PERSONNEL ON DECEMBER 7, 2020.
3. EXISTING PERMIT INFORMATION INCLUDING PERMIT BOUNDARY, MINING LIMIT, DEPTH OF MINING, AND PRE-ACT HIGHWALLS ARE REFERENCED TO THE PERMIT DRAWING "MINING PLAN, SHEET 3 OF 6" PREPARED BY SKELLY AND LOY, DATED MARCH 18, 1980.
4. HANSON PROPERTY BOUNDARY PROVIDED BY VAN CLEEF ENGINEERING ASSOCIATES VIA MAP TITLED "PLAT OF SURVEY OF LANDS OF GENERAL CRUSHED STONE", PREPARED BY ORANGEVILLE SURVEYING CONSULTANTS, INC., DATED MAY 7, 2001.
5. ADJACENT PARCEL BOUNDARIES ARE REFERENCED TO THE BUCKS COUNTY GIS RECORDS.
6. WETLANDS REFLECT THOSE DEPICTED IN THE NATIONAL WETLANDS INVENTORY FWS WETLANDS MAPPER.
7. PROPERTY OWNERSHIP INFORMATION IS REFERENCED TO MODULE 5 OF THE PERMIT APPLICATION.
8. STREAM INFORMATION IS REFERENCED TO THE PA DEP eMAPPA ONLINE RECORDS.
9. REFER TO THE E&S PLAN DRAWINGS FOR LOCATION OF ALL EROSION AND SEDIMENTATION CONTROL STRUCTURES.
10. GEOLOGY OBTAINED FROM PAGEODE, PA GEOLOGIC DATA EXPLORATION, WWW.GIS.DCNR.STATE.PA.US/GEOLOGY/(2018).

GRAPHIC SCALE

200 0 100 200 400 800

(IN FEET)
1 inch = 200 ft.

NO.	DATE	BY	REVISIONS

TERRY W. SCHMIDT, P.E.
LICENSE NO. PE044535E

PROJECT SITE:
HEIDELGERG MATERIALS NORTHEAST LLC
SMP NO 7974SM1
EAST ROCKHILL TOWNSHIP, BUCKS COUNTY
PENNSYLVANIA

PREPARED FOR:

HEADQUARTERS
PHILADELPHIA REGION
P.O Box 468
6912 Oak Hall Lane
Pipersville, PA 18947

APPALACHIAN
REGIONAL OFFICE
P.O Box 704
6000 Collins Ferry Road
Morgantown, WV 26505

PREPARED BY:
EARTHRES
ENGINEERING FOR SUCCESS™
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EXHIBIT 9
OPERATIONS MAP

HANSON AGGREGATES PENNSYLVANIA LLC
ROCKHILL QUARRY

DRAWN BY:	CHECKED BY:	PROJECT NO:	SHEET
JVK	JWS	061003.052	3 OF 6
DATE: 9/11/2023		DRAWING NUMBER: R-003	

F:\PROJECTS\Hanson\061003.052 Rock Hill Permit Update\CAD\Drawings\Rev 12 (NPDES Permit Modification RTC 2025)\061003.052 - Exhibit 9.dwg Layout: E SIZE User: jungtaek.kim 05/08/2025 15:42

MODULE 12

EROSION AND SEDIMENTATION CONTROL

Module 12: Erosion and Sedimentation Controls
[§§77.458/77.461/77.466/77.525/77.527/77.531/Chapter 102]

12.1 Diversion Controls

Provide a plan for the collection and conveyance to a natural drainageway of the runoff from upslope undisturbed areas. Provide a separate general design for a temporary highwall diversion which limits the amount of runoff which can enter the pit (where applicable). Include design criteria, capacity calculations, profile of proposed channel slopes, typical cross-sections, required channel linings and applicable details on 12.1 Data Sheet.

Runoff is to be diverted through the use of diversion swales and diversion berms at the Site. Upslope diversions are proposed along the upslope limits of the Quarry to divert surface water from unaffected areas around the Site and to existing drainage networks.

Runoff from the affected area will be collected by diversion controls, rock lined channels and diversion berms, and directed to sediment basins for settlement of solids prior to discharge through permitted outfalls. Design calculations, cross sections and details for each proposed device are included in the attachments to this Module.

12.2 Erosion and Sediment Control

Provide a plan for the control of erosion and sedimentation for lands within the permit area to be disturbed by mining activities. Include a narrative describing the implementation of the plan, and detailed design and construction plans and specifications for structures or facilities used in the plan. The plan must include each phase or phases of mining. Include design criteria, capacity calculations, profile of proposed channel slopes, typical cross-sections, required channel linings and applicable details on 12.1 Diversion/Collection Ditch Data Sheet for collection and interceptor ditches. Provide documentation of the capacity of the existing drainage system and the effect proposed mining activities will have on the drainage. Show discharge points to natural drainageways and culverts that intercept upslope drainage or carry drainage away from the site. Show facilities to scale on Modules 9 and 16 as appropriate.

12.2.1 Site Location and Permit Area Description

The Rock Hill Quarry is located along the east of North Rockhill Road in East Rockhill Township, Bucks County, PA. The Site is situated within the Tohickon Creek Watershed. Per Title 25, Chapter 93, the Tohickon Creek has a designated use of Trout Stocking, Migratory Fishes (TSF, MF) but is classified as Exceptional Value, Migratory Fish (EV, MF) on PA DEP's Existing Use Table. Topography rises from a low of approximately 525' MSL in the northwest to a high of 815' MSL along the eastern boundary. A quarry pit has been established onsite and encompasses a large portion of the eastern permit area. Support area to include a future processing plant, stockpile area as well as the maintenance shop, scalehouse and scales are located within the western portion of the permit. Topography drops from east to west; therefore, the erosion and sedimentation controls, including sediment basins, sediment traps, rock-lined channels, diversion berms and perimeter controls (filter sock), are to be located along the Site's western boundary. A diversion channel runs along the western boundary from south to north and directs drainage from the proposed controls to the Site's existing NPDES discharge point, Outfall 001, along the northwesterly limit of the permit. Discharge flows to the north offsite and enters an Unnamed Tributary to the Tohickon Creek.

12.2.2 Erosion and Sediment Control Facilities

Proposed controls include: sediment basins, diversion channels, diversion berms, culverts, sediment traps, and compost filter socks.

In addition groundwater seep interceptors, a clarifying pond, and pit dewatering pipe are proposed during initial site operations to collect and divert shallow groundwater flow away from the surface controls and into a separate collection and discharge system.

DESIGN CRITERIA

The following criteria have been used as a basis for the design of the erosion and sedimentation control facilities.

Sediment Ponds:

- **The impoundment capacity shall be based on a minimum of 7,000 cf/acre of storage.**
- **The settling storage portion of the impoundment volume shall be 5,000 cf/acre, and the sediment storage portion shall be 2,000 cf/acre.**
- **The impoundment shall be designed with a pipe outlet with perforations at the sediment storage elevation to provide controlled release of detained water (settling storage portion).**
- **The primary spillway shall be capable of dewatering the impoundment's settling storage volume to the sediment storage**

level within 2 to 7 days.

- **The discharge from the impoundment shall be designed with outlet into a proposed rock-lined channel to protect against excessive erosion.**
- **The impoundment shall be constructed with an emergency spillway set 0.5 feet above the settling storage capacity elevation.**
- **The emergency spillway shall be designed to safely pass the peak flow from 2 cfs/acre of contributing drainage area. The emergency spillway shall be constructed in original ground wherever possible and protected with an appropriate channel lining.**
- **The impoundment shall be cleaned when the storage capacity is reduced to 5,000 cf/acre. The cleanout elevation shall be clearly marked via a cleanout marker to be set in each impoundment.**
- **The impoundment shall be provided with 2 feet of freeboard above the maximum water level elevation at the emergency spillway required to safely pass the peak flow of the design storm event.**
- **Drainage channel and culvert outfalls entering impoundments shall be protected against excessive erosion by the use of rip-rap lining.**
- **Impoundments shall be designed with a minimum embankment top width of 10 feet and a minimum combined embankment side slope of 5:1.**
- **Impoundments shall have a minimum length to width ratio of 4:1 with the use of baffles.**
- **Impoundment slopes and floor shall be stabilized with vegetation.**

Sediment Trap:

- **The trap capacity shall be based on a minimum of 2,000 cf/acre of storage.**
- **The contributing drainage area shall be no larger than 5 acres.**
- **The dewatering zone portion of the impoundment volume shall be 1,300 cf/acre, and the sediment storage portion shall be 700 cf/acre.**
- **The trap shall be constructed with a spillway width 3 times the contributing drainage area.**
- **The spillway shall be constructed in original ground wherever possible and protected with an appropriate channel lining.**
- **The trap shall be cleaned when the storage capacity is reduced to 1,300 cf/acre. The cleanout elevation shall be clearly marked via a cleanout marker to be set in each impoundment.**
- **Trap shall be designed with a minimum embankment top width of 5 feet.**
- **Trap shall have a minimum length to width ratio of 2:1.**
- **An infiltration trench shall be installed at the constructed spillway.**

Channels (Diversion and Collection):

- **All channels shall be designed to convey the peak flow from the 10-year/24-hour storm with a minimum 0.5 feet of freeboard.**

Diversion Berms:

- **Berms shall be constructed of earthen materials and shall be compacted for stability during construction.**
- **The proposed berms will serve as a diversion or containment structure in the management of runoff.**
- **The upslope side of the berm shall be lined with the appropriate rock-lining to protect against excessive erosion.**
- **Perimeter berms shall be constructed from precast concrete blocks.**

Culverts:

- **Culverts shall be designed to convey the peak flow from the 10-year/24-hour storm from the contributing drainage area.**

Compost Filter Sock:

- **Compost filter sock will be used as a temporary erosion and sedimentation control measure as needed throughout the Site.**
- **Installation will be in accordance with standard E&S control requirements and accompanying standard details. Compost Filter Sock, Filtrexx Siltsoxx™ 12" barrier or equal, unless another size is specifically noted on plan.**

Clarifying Pond:

- **The pond shall be designed to provide a detention volume for groundwater diversions and quarry impoundment/sump discharge providing greater than 6 hours of detention time at the high flow design rate; however, it is anticipated that the long term average flow shall be below this rate, providing greater detention time. The Pond volume shall also include a sludge storage factor of 1.33 times the detention volume.**
- **The pond shall be outfitted with a v-notch weir overflow outlet designed to provide one-foot of freeboard at the maximum design flow rate. (Contractor may substitute a rectangular weir with Engineer's approval).**

Interceptor Pipe:

- **Pipes have been designed to provide capacity for high flow conditions from the contributing groundwater seeps to the clarifying pond. The long term average flow rate through the interceptor pipes is anticipated to be below the monthly NPDES rate.**

Quarry Pit Impoundment Dewatering Pipe:

- **A dewatering pipe shall be installed to allow for dewatering of the Quarry Pit. The pipe shall be outfitted with a manually controlled valve to control and/or prevent flow through the pipe. Initially dewatering shall be achieved by gravity flow and eventually be accomplished through pumping or via syphon. Flow through the dewatering pipe shall be monitored and adjusted so as to maintain site discharge rates consistent with the current approved NPDES discharge rate.**

The location of the proposed E&S controls is depicted on Exhibit 9: Operations Map and the Erosion and Sediment Control Plans. Design details are presented on the Erosion and Sediment Control Details drawing. The following sections address their operation and maintenance, the proposed schedule of implementation, and a description of the E&S structures.

12.2.3 Operation and Maintenance of Control Facilities

Operation, maintenance, inspection, and repair of all sedimentation control facilities will be the responsibility of the Site Operator. All erosion and sediment controls shall be inspected after each runoff event and on a weekly basis during dry periods. The permittee shall be responsible for the structural stability of the proposed facilities and their protection against unauthorized acts of third parties.

MAINTENANCE PROGRAM

The following long-term maintenance schedule and procedures are proposed with regard to erosion and sedimentation control features for this project (refer to Exhibit 9). During quarry operations at the Site, E&S control features shall be inspected at least once a week, or more frequently as may be required to comply with this Erosion and Sedimentation Control Plan. Long-term maintenance should not be required after cessation of mining operations and stabilization of the Site.

MAINTENANCE AND REPAIR OF E&SCP FACILITIES

- **Where dust or wind erosion is a problem, the unstable surface(s) shall be sprayed with water or other suitable dust suppressor.**
- **Operator shall employ measures during quarry operations to prevent spills of fuels or lubricants. If a spill occurs, it shall be controlled immediately to prevent its entry into nearby waterways.**
- **Any temporary erosion control measure applied to exposed soil surfaces shall remain functional until vegetative cover is sufficiently established.**
- **Permanent soil protection will be completed as early as practical.**
- **Any debris accumulated at filter sock shall be removed and properly disposed. These temporary barriers shall be checked daily and realigned or reset as required. Sediment shall be removed when it reaches one-half of the fence height.**
- **Until the Site is stabilized, all erosion and sediment Best Management Practices (BMPs) must be maintained properly. All preventive and remedial maintenance work, including clean-out, repair, replacement, regrading, reseeding, re-mulching, and renetting, must be performed immediately. If erosion and sediment control BMPs fail to perform as expected, replacement BMPs or modifications to what is installed will be required.**
- **Miscellaneous additions, adjustments or corrections shall be made to any erosion control structure as deemed necessary by the engineer, PA DEP, or County representative in order to correct problems unforeseen or problems caused by storms prior to stabilization.**
- **All E&SCP measures shall remain in place until the Site has been stabilized. The Site shall be considered stabilized when the entire disturbed area has a minimum, uniform 70% perennial vegetative cover or other non-vegetative cover with a density sufficient to resist accelerated surface erosion and subsurface characteristics sufficient to resist sliding and other movements. Only upon reaching stabilization and following PA DEP approval may the E&SCP features be removed.**
- **Sediment removed from BMPs shall be disposed of in landscaped areas outside of steep slopes, wetlands, floodplains or drainage channels, and shall be immediately stabilized or placed in topsoil stockpiles.**

12.2.4 Schedule of Implementation

The following sequence is proposed for installation of the E&S Controls measures at the Site.

Northwestern Support Areas

1. **Downslope perimeter controls, including compost filter sock, shall be installed below all areas to be affected prior to initiation of upslope disturbance;**
2. **The upslope diversion swale, Channel 4, shall be installed to divert drainage from upslope unaffected areas around the proposed limit of disturbance. The channel shall outlet to the existing ephemeral ditch along the northern boundary of the permit and directed along the northern access road. The channel shall be excavated working from downstream to upstream. Excavated material shall be hauled to and stored in the designated overburden storage area and stabilized with vegetation as soon as it is practical;**
3. **Following installation of downslope and upslope controls, construction/installation of the E&S Control Devices may commence. The initial control device to be installed is Channel 3, located immediately upstream of the NPDES Point. The channel shall be excavated working from the NPDES Point toward Culvert 5. Excavated materials shall be hauled to and stored in the designated overburden storage area and stabilized with vegetation as soon as it is practical;**
4. **Upon reaching the channel grade and geometry proposed in these plans, the rock channel lining shall be installed for stabilization;**
5. **Following installation of the channel, Culvert 5 shall be installed. Material shall be excavated from under the existing rail bed and hauled to and stored in the designated overburden storage area. Material shall be stabilized with vegetation as soon as it is practical;**
6. **Following excavation, Culvert 5 shall be installed and backfilled as proposed;**
7. **The next section of channel, Channel 2, Section 2, shall be installed working from Culvert 5 to Culvert 8. Excavated materials shall be hauled to and stored in the designated overburden storage area and stabilized with vegetation as soon as it is practical;**
8. **Upon reaching the channel grade and geometry proposed in these plans, the rock channel lining shall be installed for stabilization;**
9. **Following installation of the channel, Culvert 8 shall be installed. Material shall be excavated and hauled to and stored in the designated overburden storage area. Material shall be stabilized with vegetation as soon as it is practical;**
10. **Following excavation, Culvert 8 shall be installed and backfilled as proposed;**
11. **Following and/or in conjunction with the installation of Culvert 8, precast concrete block containment berms will be installed immediately upslope of Channel 3 and Channel 2, Section 2.**
12. **Sediment Trap 2 shall be installed just upslope of Channel 3. Material shall be excavated from the trap and utilized for construction of its downslope embankment. Excess material shall be hauled to and stored in the designated overburden storage area. Material shall be stabilized with vegetation as soon as it is practical. The sediment trap shall be outfitted with a filter berm at its base for dewatering into Channel 3. The trap slopes and floor shall be stabilized with vegetation;**
13. **Following trap installation, the diversion berms, Diversion Berms 4 and 5 shall be installed. Material shall be placed in the footprint of the berms to promote positive drainage to the trap. The base of the diversion berms shall be rock-lined to prevent erosion at the toe of the slope;**
14. **The next section of channel, Channel 2, Section 2, shall be installed working from Culvert 8 to Culvert 6. Prior to completing this channel work, the existing pond and channel shall be dewatered via pumping to the Quarry Pit Impoundment or Sediment Trap 1 to allow for access and inspection during construction. Once dewatered, channel excavation shall progress. Excavated materials shall be hauled to and stored in the designated overburden storage area and stabilized with vegetation as soon as it is practical;**
15. **Upon reaching the channel grade and geometry proposed in these plans, the rock channel lining shall be installed for stabilization;**
16. **Following installation of the channel, Culvert 6 shall be installed. Prior to completing the work, the existing upstream channel shall be dewatered via pumping to the Quarry Pit Impoundment or Sediment Trap 1 to allow for access and inspection during construction. Once dewatered, culvert installation shall progress. Material shall be excavated from under the existing rail bed and hauled to and stored in the designated overburden storage area. Material shall be stabilized with vegetation as soon as it is practical;**
17. **Following excavation, Culvert 6 shall be installed and backfilled as proposed;**
18. **The next section of channel, Channel 1, shall then be installed. Material shall be excavated from the channel and hauled to and stored in the designated overburden storage area. Material shall be stabilized with vegetation as soon as it is practical;**
19. **Upon reaching the channel grade and geometry proposed in these plans, the rock channel lining shall be installed for stabilization;**
20. **Following installation of the channel, Culvert 1 shall be replaced/installed. Material shall be excavated across the western access road to allow for installation of a replacement culvert. Excavated materials shall be hauled to and stored in the designated overburden storage area and stabilized with vegetation as soon as it is practical;**
21. **Following excavation, Culvert 1 shall be installed and backfilled as proposed;**
22. **Following installation of the culvert, the western conveyance system shall be completed allowing for installation of upslope detention and treatment controls;**

23. **Following and/or in conjunction with the installation of Sediment Basin 2 and 1, construction/installation of the Clarifying Pond shall commence. Prior to completing the construction work, the existing clarifying pond shall be dewatered via pumping to the Quarry Pit Impoundment, Sediment Trap 1 or the sediment basins to allow for access and inspection during construction. Once dewatered, construction of the Clarifying Pond shall progress. Material excavated from the pond shall be hauled to and stored in the designated overburden storage area and stabilized with vegetation as soon as it is practical. The primary spillway, consisting of a v-notch overflow weir, shall be installed in the northwestern edge of the Pond and connected to a channel leading to Culvert 1. The Pond slopes and floor shall be stabilized with vegetation;**
24. **Following the installation of the Clarifying Pond, Interceptor Pipe 1, 2 and Pit Impoundment Dewatering Pipe System shall be installed. Material shall be excavated along the pipe locations and hauled and stored in designated overburden storage area. Material shall be stabilized with vegetation as soon as it is practical;**
25. **Following the excavation, the interceptor pipes and dewatering pipe system shall be installed and backfilled as proposed.**
26. **Sediment Basin 2 shall be installed along with the associated primary and emergency spillways. Material excavated from the basin shall be hauled to and stored in the designated overburden storage area and stabilized with vegetation as soon as it is practical. The primary spillway, consisting of a 24" perforated riser pipe and 18" outlet barrel shall be installed in the northwest corner of the basin and connected directly into Channel 2, Section 1. The emergency spillway shall be installed along the basin's western embankment, lined with rip-rap and connected to Channel 2, Section 1. The basin slopes and floor shall be stabilized with vegetation;**
27. **Following the installation of Sediment Basin 2, Culvert 4 and Diversion Swale, Channel 5 shall be installed along the northern side of the existing access road. Concurrently, the existing 18" concrete culvert running under the access road (Culvert 3) will be extended and connected with two (2) inlets to provide stormwater conveyance from the area and Diversion Swale, Channel 6 will direct flow from Culvert 3 into Sediment Basin 2. Material shall be excavated along the culvert and channel location and hauled to and stored in the designated overburden storage area. Material shall be stabilized with vegetation as soon as it is practical. Channel 5 shall be rock-lined to prevent erosion;**
28. **Following and/or in conjunction with the installation of Sediment Basin 2, construction/installation of Sediment Basin 1 shall commence. Similar to above, material excavated from the basin shall be hauled to and stored in the designated overburden storage area and stabilized with vegetation as soon as it is practical. The primary spillway, consisting of a 24" perforated riser and 18" outlet barrel shall be installed in the northwest corner of the basin and connected directly to Channel 1. The emergency spillway shall be installed on the basin's western embankment, lined with rip-rap and connected to Channel 1. The basin slopes and floor shall be stabilized with vegetation;**
29. **Following installation of Basin 1, and/or in conjunction with the installation of the Clarifying Pond and associated interceptor pipes and dewatering pipe, Culvert 2 shall be installed under the site access road. Material shall be excavated along the culvert location and hauled to and stored in the designated overburden storage area. Material shall be stabilized with vegetation as soon as it is practical;**
30. **Following excavation, Culvert 2 shall be installed and backfilled as proposed. The upslope end of Culvert 2 shall be located in an excavated depression along the south of the access road. The upslope diversions shall direct runoff into the depressed inlet to allow for entry into the culvert;**
31. **The upslope diversion berm, Diversion Berm 1, Sections 1 and 2 shall be installed. Material shall be placed along the western boundary of the Processing Plant and Stockpile Area to promote positive drainage from south to north toward Culvert 2. The base of the diversion berm shall be rock-lined to prevent erosion at the toe of slope;**
32. **Installation of the above provides for downslope control and treatment of the Site's access, maintenance, processing, and support areas in the northwest of the Permit.**

Potential Processing Plant and Stockpile Area – South End

The following E&S Plan has been included for control and treatment of the five-acre area located at the southern end of the Plant/Stockpile Area:

1. **Downslope perimeter controls, including compost filter sock, shall be installed along the base of the area prior to affecting upslope areas;**
2. **Following installation of the perimeter controls, Sediment Trap 1 and 3 shall be installed in the southwest area. Material shall be excavated from the trap and utilized for construction of its downslope embankment. Excess material shall be hauled to and stored in the designated overburden storage area. Material shall be stabilized with vegetation as soon as it is practical. The sediment trap shall be outfitted with a filter berm and infiltration trench at its base for dewatering. The trap slopes and floor shall be stabilized with vegetation;**
3. **Following trap installation, the diversion berms, Diversion Berms 2 and 3 shall be installed. Material shall be placed in the footprint of the berms to promote positive drainage to the Trap. The base of the diversion berms shall be rock-lined to prevent erosion at the toe of slope;**
4. **Following installation of the berms, upslope areas may be affected during installation of a future Processing Plant and Stockpile Area.**

Quarry Pit

The following E&S Plan has been included for control and treatment of runoff within the Quarry Pit and upslope drainage areas:

1. **The Quarry Pit is self-contained with a large portion of the Site draining directly to the existing open water feature. The water impoundment maintains a water level at approximately elevation 590' MSL and the downslope highwall of the Pit**

is maintained at an elevation just above this point.

2. **Downslope diversions will be installed at the base of the Overburden Storage Areas and haul roads to direct surface water into the western edge of the pit at the downslope highwall. Cross slope diversions shall be installed along the haul road to divert water into the Pit at multiple locations and limit the amount of water draining to the base of the road;**
3. **Water levels will be monitored to review conditions at the downslope highwall to determine if modification of the crest elevation is needed. Modifications will be proposed if increased containment is needed.**
4. **Installation of the above diversions will allow for surface waters from the Mining and Overburden Storage Areas to be segregated from other Site waters to allow for increased settling within the Pit and eventually the Pit Sump;**
5. **In conjunction with the installation of the interceptor pipes outlined above, a Quarry Pit dewatering pipe shall be installed to allow for dewatering of the pit. The pipe will begin at the low point of the downslope highwall and travel to the west where it will be tied in with a fitting to connect with Interceptor Pipe 1. The dewatering pipe will be outfitted with a valve to provide for manual control of dewatering. Flow through the dewatering pipe shall initially be provided by gravity flow. Eventually a pump and/or syphon discharge will be utilized for dewatering. Dewatering flows shall be monitored and maintained at a level at or below the current permitted NPDES discharge rate for the site.**

Quarry Pit Expansion

1. **The Northeast portion of the proposed mining area naturally drains directly into the existing quarry pit and/or existing diversion structures. Refer to the figure Northeast Mining Area: E&S Plan for areas associated with this expansion area.**
2. **The Southeast portion of the proposed mining area has been broken into three stripping phases, each including perimeter diversion berms draining to a typical 5-acre sediment trap.**
3. **Typical expansion into each phase in the southeast mining area will occur as follows:**
4. **Downslope perimeter controls, including compost filter sock shall be installed.**
5. **Following installation of the perimeter controls a typical 5-acre sediment trap shall be installed at the base of the phase. Material shall be excavated from the trap and utilized for construction of its downslope embankment. Excess material shall be hauled to and stored in the designated overburden storage area. Material shall be stabilized with vegetation as soon as it is practical. The sediment trap shall be outfitted with a filter berm and infiltration trench at its base for dewatering.**
6. **Following trap installation, diversion berms shall be installed along the downslope perimeter of the phase to divert surface drainage into the trap.**
7. **Following installation of the berms, upslope areas may be cleared of vegetation, grubbed, and stripped of topsoil to prepare the area for mining.**

12.2.5 Plan for Reclamation

Upon completion of Site mining operations, reclamation grades will be achieved as depicted in Exhibit 18: Land Use and Reclamation Map. Topsoil (including subsoil) will be spread as needed across the reclaimed area to establish vegetation according to the approved Revegetation Plan.

12.2.6 Construction Specifications and Typical Facility Illustrations

Specifications and illustrations of the proposed facilities are presented in this Module and attachments, and on the Erosion and Sediment Control Plan and Details drawings, Sheets ES-001 through ES-004.

CONSTRUCTION SPECIFICATIONS

- **All erosion and sedimentation control measures shall meet the requirements set forth in DEP's Technical Guidance Document titled "DEP Engineering Manual for Mining Operations," Document No. 563-0300-101 and Chapter 77.**
- **For the duration of Site activities, the Site Operator is responsible for maintaining all erosion and sediment control measures until all disturbed areas have been permanently stabilized in accordance with the approved Reclamation Plan on file with the Department.**
- **All structures, including sediment ponds, channels, diversion berms, and stockpiles, shall be stabilized immediately upon completion.**
- **All areas where activities have or will cease for more than twenty (20) days shall be stabilized with temporary vegetative cover in accordance with the approved Revegetation Plan in Module 23.**

12.2.7 Supporting Design Computations and Data

Design calculations and construction details for the sediment basins, sediment trap, diversion channels, diversion berms, and culverts described in this Erosion and Sedimentation Control Plan are presented as attachments to this Module.

12.3 Haul Roads

Provide the following information for each haul road to be constructed, reconstructed or used in the operation:

Note: Activities proposed to be conducted under General permit for Temporary Road Crossings (BMR-GP-101) and General Permit for Access Road Crossings (BMR-GP-102) must include a completed Notification Form, with attachments, for the respective General Permit (i.e., Form 5600-FM-MR0054 for BMR-GP-101 and Form 5600-FM-MR0059 for BMR-GP-102). BMR-GP-102 may not be used for haul roads.

a) Location; show on Exhibit 9 (and Exhibit 18 if road will remain as part of postmining land use);

See Exhibit 9 for the location of haul roads.

b) Description and typical cross-sections showing the construction of the haul road including existing ground, grades, slopes, culvert locations, outlet protection and other drainage control;

Haul roads are to be installed and/or maintained as outlined in the cross section included on the E&S Details drawing.

c) Measures to control and prevent erosion and sedimentation; include proposed spacing of sediment traps, turnouts, culverts, check dams, etc.;

All haul roads are to drain to proposed E&S Controls as depicted on the Site Plans.

d) Plan for reclamation after mining is completed;

Haul roads are to be removed during the reclamation process. Roads will be regraded as needed and revegetated per the approved Revegetation Plan.

e) If the haul road involves the crossing of any intermittent or perennial stream or wetland include Module 14 Streams/Wetlands;

N/A

f) Will a PennDOT highway occupancy permit be needed? ☐ Yes ☒ No

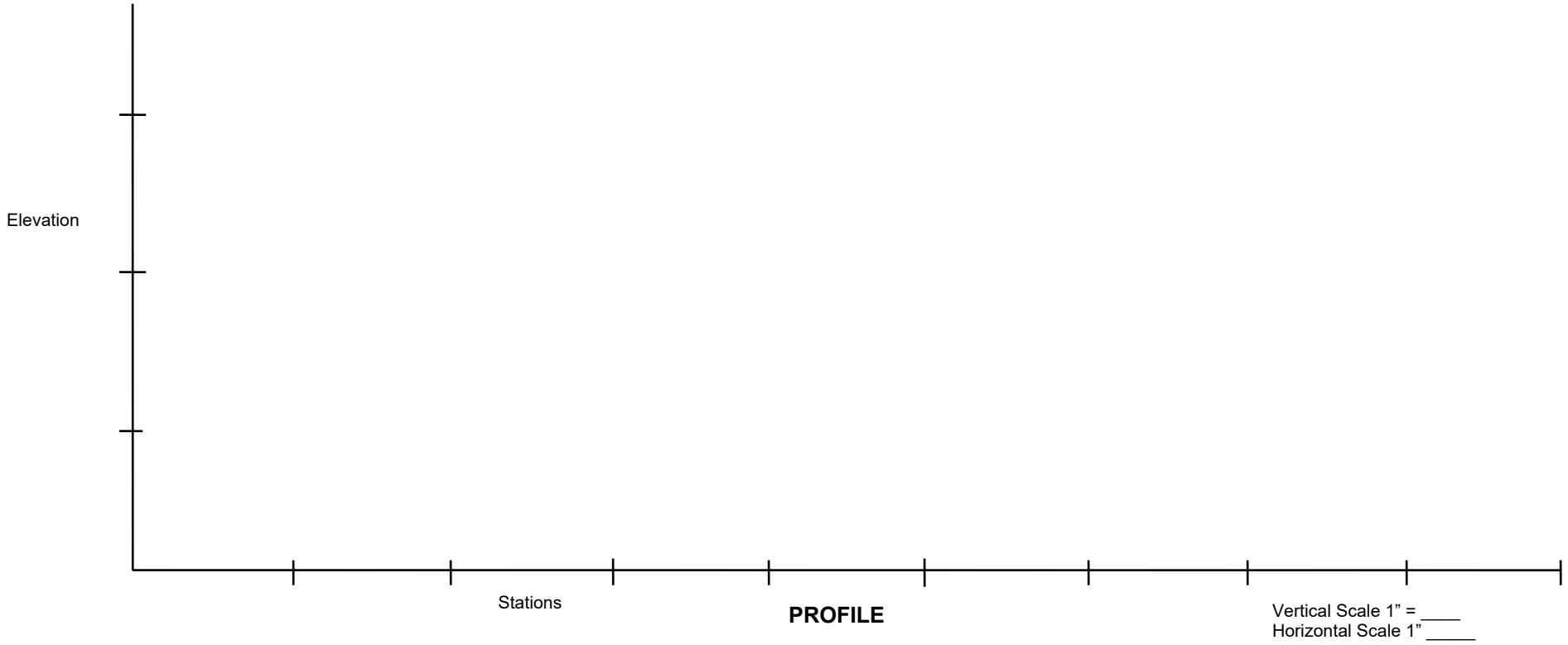
If yes, PennDOT Occupancy Permit number must be submitted prior to permit activation.

12.1 Diversion/Collection Ditch Data Sheet

Title:	Site:	Company:	Permit Number:
Prepared by:	Telephone Number:	Date:	Sheet _____ of _____

Design Calculations:

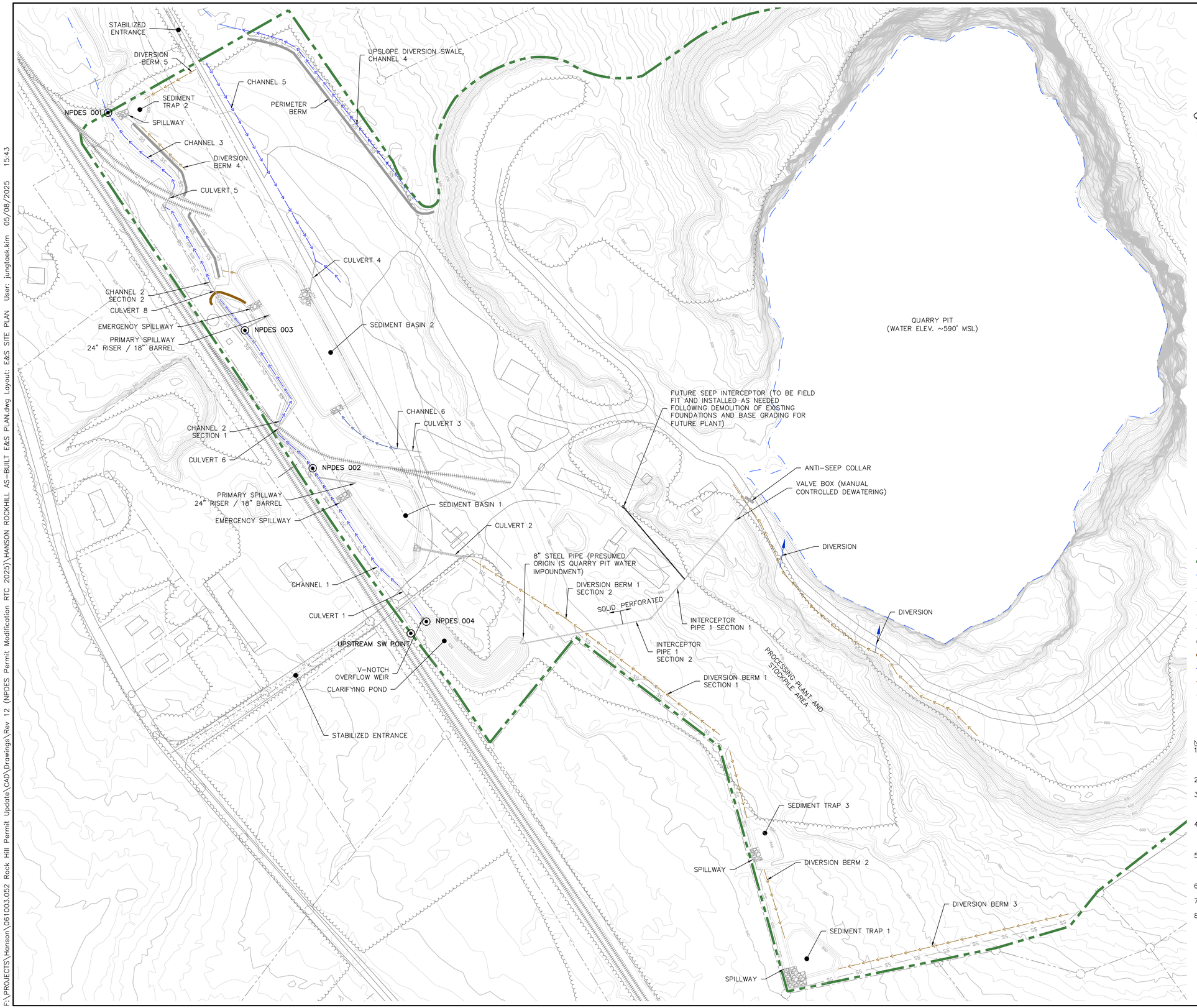
Station		Drainage Area acres	Design Storm (yrs.)	Average Watershed Slope (%)	Curve Number	Peak Discharge Q cfs	Channel Bed Slope (%)	Freeboafd (ft.)	Channel Lining	Manning's Coefficient (n)	Channel Bottom Width (ft)	Channel Side Slopes	Flow Area (sq.ft.)	Flow Depth (ft.)	Top Flow Width (ft.)	Flow Velocity (ft/sec)	Q Available cfs	With Freeboard		
Start / End	Elevation																	Channel Depth (ft.)	Top Channel Width (ft.)	Q Available cfs



PROFILE

Vertical Scale 1" = ____
Horizontal Scale 1" _____

E&S SITE PLAN



LEGEND

- EXISTING GRADE CONTOUR
- EXISTING SMP BOUNDARY
- EXISTING SURFACE WATER
- LIMIT OF EARTHRES SURVEY (1/2018)
- PROPERTY BOUNDARY
- EXISTING RAILROAD
- EXISTING TREELINE
- EXISTING PERIMETER BERM (PRECAST CONCRETE BLOCKS)
- EXISTING FILTER BERM
- EXISTING CHANNEL
- EXISTING DIVERSION BERM
- EXISTING COMPOST FILTER SOCK
- NPDES 001 NPDES DISCHARGE POINT

NOTES:

1. EXISTING GRADE TOPOGRAPHY COMPILED BY PAMAP PROGRAM, PA DEPARTMENT OF CONSERVATION AND NATURAL RESOURCES, BUREAU OF TOPOGRAPHIC AND GEOLOGIC SURVEY, DATED JUNE 2010.
2. TOPOGRAPHY WITHIN HEIDELBERG SURVEY AREA WAS SURVEYED BY HEIDELBERG PERSONNEL ON DECEMBER 7, 2020.
3. BASEMAP FEATURES INCLUDING BUILDINGS, ROADS, UTILITIES, WATER FEATURES, AND TREELINES RETRACED FROM AERIAL PHOTOGRAPHY DATED 2015, PUBLISHED BY THE DELAWARE VALLEY REGIONAL PLANNING COMMISSION.
4. EXISTING PERMIT INFORMATION INCLUDING PERMIT BOUNDARY, MINING LIMIT, DEPTH OF MINING, AND PRE-ACT HIGHWALLS ARE REFERENCED TO THE PERMIT DRAWING "MINING PLAN, SHEET 3 OF 6" PREPARED BY SKELLY AND LOY, DATED MARCH 18, 1980.
5. HEIDELBERG PROPERTY BOUNDARY PROVIDED BY MAP TITLED "PLAT OF SURVEY OF LANDS OF GENERAL CRUSHED STONE", PREPARED BY ORANGEVILLE SURVEYING CONSULTANTS, INC., DATED MAY 7, 2001.
6. ADJACENT PARCEL BOUNDARIES ARE REFERENCED TO THE BUCKS COUNTY GIS RECORDS.
7. STREAM INFORMATION IS REFERENCED TO THE PA DEP eMAPPA ONLINE RECORDS.
8. AS-BUILT SURVEY CONDUCTED ON MAY 17, 2018 AND JUNE 18, 2018 BY EARTHRES GROUP, INC. PERSONNEL.

GRAPHIC SCALE

100 0 50 100 200 400

(IN FEET)
1 inch = 100 ft.

NO.	DATE	BY	REVISIONS
2	4/30/25	JTK	REVISED PER DEP COMMENTS
1	6/19/18	JTK	REVISED PER DEP COMMENTS

COMMONWEALTH OF PENNSYLVANIA — TERRY W. SCHMIDT — REGISTERED PROFESSIONAL — No. PE048525E

TERRY W. SCHMIDT, P.E.
LICENSE NO. PE048525E

PREPARED FOR: Heidelberg Materials

PREPARED BY: EARTHRES — a Division of RESPEC — www.earthres.com

HEADQUARTERS
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6912 Old Easton Road
Pipersville, PA 18947

APPALACHIAN
REGIONAL OFFICE
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Morgantown, WV 26505

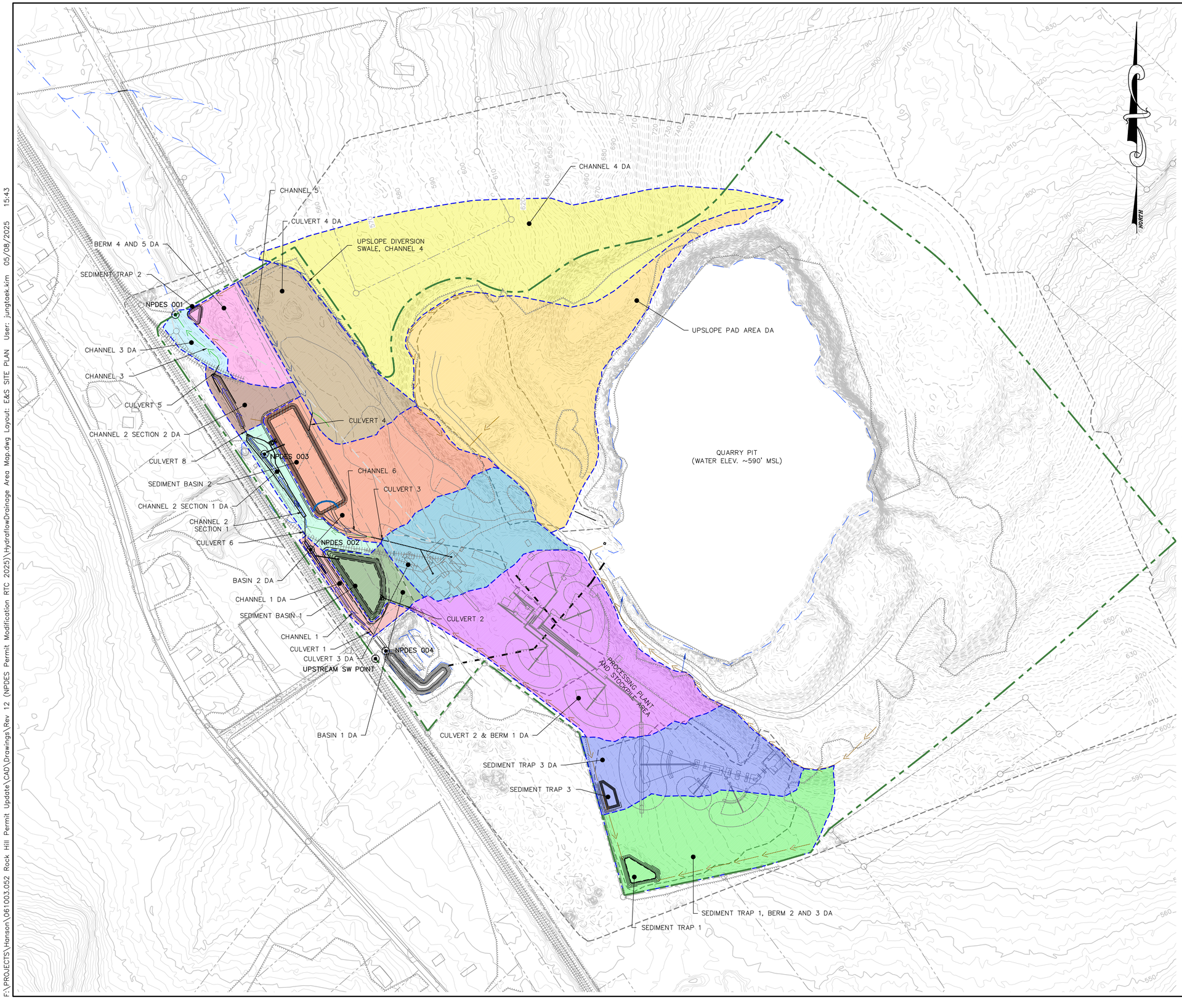
E&S SITE PLAN AS-BUILT

HEIDELBERG MATERIALS NORTHEAST LLC
ROCK HILL QUARRY OPERATION

DRAWN BY: JTK	CHECKED BY: MDF	DRAWING NUMBER: D-001	SHEET 1 OF 1
DATE: 6/7/18	PROJECT NO: 061003.052		

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HYDRAFLOW DRAINAGE AREA MAP



DRAINAGE AREAS KEY

- UPSLOPE PAD AREA DA (9.74 ACRES)
- CHANNEL 4 DA (10.99 ACRES)
- CULVERT 4 DA (3.70 ACRES)
- BERM 4 AND 5 DA (1.42 ACRES)
- CHANNEL 3 DA (1.92 ACRES)
- CHANNEL 2 SECTION 2 DA (0.81 ACRES)
- CHANNEL 2 SECTION 1 DA (1.04 ACRES)
- BASIN 2 DA (4.62 ACRES)
- CULVERT 3 DA (3.52 ACRES)
- BASIN 1 DA (0.99 ACRES)
- CHANNEL 1 DA (0.54 ACRES)
- CULVERT 2 & BERM 1 DA (7.30 ACRES)
- BERM 2 AND 3 DA (4.67 ACRES)
- SEDIMENT TRAP 3 DA (3.73 ACRES)

LEGEND

- EXISTING SMP BOUNDARY
- EXISTING SURFACE WATER
- LIMIT OF HEIDELBERG DRONE SURVEY
- EXISTING RAILROAD
- EXISTING TREELINE
- PROPERTY BOUNDARY
- DRAINAGE AREA BOUNDARIES
- EXISTING DRAINAGE CHANNEL
- PROPOSED DRAINAGE CHANNEL
- PROPOSED DIVERSION BERM
- NPDES 001 NPDES DISCHARGE POINT

NOTES:

1. EXISTING GRADE TOPOGRAPHY COMPILED BY PAMAP PROGRAM, PA DEPARTMENT OF CONSERVATION AND NATURAL RESOURCES, BUREAU OF TOPOGRAPHIC AND GEOLOGIC SURVEY, DATED JUNE 2010.
2. TOPOGRAPHY WITHIN HEIDELBERG SURVEY AREA WAS SURVEYED BY HEIDELBERG PERSONNEL ON DECEMBER 7, 2020
3. BASEMAP FEATURES INCLUDING BUILDINGS, ROADS, UTILITIES, WATER FEATURES, AND TREELINES RETRACED FROM AERIAL PHOTOGRAPHY DATED 2015, PUBLISHED BY THE DELAWARE VALLEY REGIONAL PLANNING COMMISSION.
4. EXISTING PERMIT INFORMATION INCLUDING PERMIT BOUNDARY, MINING LIMIT, DEPTH OF MINING, AND PRE-ACT HIGHWALLS ARE REFERENCED TO THE PERMIT DRAWING "MINING PLAN, SHEET 3 OF 6" PREPARED BY SKELLY AND LOY, DATED MARCH 18, 1980.
5. HEIDELBERG PROPERTY BOUNDARY PROVIDED BY MAP TITLED "PLAT OF SURVEY OF LANDS OF GENERAL CRUSHED STONE", PREPARED BY ORANGEVILLE SURVEYING CONSULTANTS, INC., DATED MAY 7, 2001.
6. ADJACENT PARCEL BOUNDARIES ARE REFERENCED TO THE BUCKS COUNTY GIS RECORDS.
7. STREAM INFORMATION IS REFERENCED TO THE PA DEP eMAPPA ONLINE RECORDS.

GRAPHIC SCALE

100 0 50 100 200 400

(IN FEET)
1 inch = 100 ft.

NO.	DATE	BY	REVISIONS
1	4/30/25	JTK	REVISED PER DEP COMMENTS
2	10/16/18	JTK	REVISED PER DEP COMMENTS

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PREPARED BY:

HYDRAFLOW DRAINAGE AREA MAP

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DRAWING NUMBER: FIGURE 1

SHEET 1 OF 1

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