

FIELD INVESTIGATION REPORT

PHILLIPPI CREEK MAINTENANCE DREDGING FEASIBILITY PROJECT UPSTREAM EXTENSION AREA WEST FLORIDA INLAND NAVIGATION DISTRICT SARASOTA COUNTY, FLORIDA

August 2025

Prepared for:

Cummins Cederberg, Inc.
888 South Andrews Avenue, Suite 206
Ft. Lauderdale, FL 33316

Prepared by:

Athena Technologies, Inc.
1293 Graham Farm Road
McClellanville, SC 29458



1293 Graham Farm Road, PO Box 68
McClellanville, South Carolina 29458
(843) 887-3800
www.athenatechnologies.com



FIELD INVESTIGATION REPORT

PHILLIPPI CREEK MAINTENANCE DREDGING FEASIBILITY PROJECT UPSTREAM EXTENSION AREA WEST FLORIDA INLAND NAVIGATION DISTRICT SARASOTA COUNTY, FLORIDA

TABLE OF CONTENTS

Section 1:	Introduction
Section 2:	Methodology
Section 3:	Discussion
Section 4:	References

FIGURES

Figure 1:	Study Area Location Map
Figure 2:	Vibracore Location Map
Figure 3:	Grab Sample Location Map

TABLES

Table 1:	Vibracore Summary
Table 2:	Grain Size Data Summary

APPENDICES

Appendix A:	AEL Laboratory Report and Data Summary Tables
Appendix B:	Core Photographs and Logs
Appendix C:	Grain Size Distribution Data

Section 1: Introduction

In June 2025, Athena Technologies, Inc. (Athena) was contracted by Cummins Cederberg, Inc. to collect environmental and geotechnical vibracore samples and surface sediment grab samples, and then prepare a corresponding report in support of the following project: *Phillippi Creek Maintenance Dredging Feasibility Study Project, Upstream Extension Area, Sarasota County, Florida*. The scope of work included the collection of vibracore samples from 10 locations, and the collection of surface grab samples from 10 separate locations within Phillippi Creek in Sarasota, Florida (**Figure 1**). Two vibracores were collected from each vibracore sample location. The first vibracore was collected to a depth of -4 feet relative to Mean Low Water (MLW) and sediment from the core was containerized to allow for chemical analyses. The second vibracore was collected to a depth of -5 feet MLW and was retained by Athena to allow for geological logging, core photography, and geotechnical analysis. The samples were required to facilitate proposed dredging activities in Phillippi Creek and were intended to supplement data obtained during vibracore sampling activities conducted by Athena in the downstream portion of Phillippi Creek in 2024. The vibracore and grab samples were collected in June 2025, and a summary of the sample collection methodology and findings of the field investigation are presented below.

Section 2: Methodology

Athena utilized the 24-foot research vessel, *Good Vibrations*, as the sampling platform for this project. *Good Vibrations* was equipped with all required United States Coast Guard (USCG) safety gear and was operated by a USCG-certified 100 Ton Master Captain. A Trimble Differential Global Positioning System (capable of sub-meter accuracy) interfaced with HYPACK was utilized for primary navigation. Horizontal coordinates were recorded in North American Datum of 1983, State Plane Coordinate System, Florida West (Zone 0902), U.S. Survey Feet. Real-time tide elevation data were obtained using a Trimble R12i Global Navigation Satellite System receiver interfaced with the Trimble RTX Network, which served as the base station.

During field operations, *Good Vibration* was immobilized over the desired sample locations using spuds. Once on station, the coordinates at the vessel location were compared with the coordinates for the desired sample location to ensure accurate vessel positioning. Upon satisfactory positioning, a water depth was collected via lead line or fathometer and final horizontal coordinates were recorded at each station. Tide elevation data were also recorded in the field and were referenced to North American Vertical Datum of 1988 (NAVD 88). The tide elevation was then converted to MLW in the field using the National Oceanic and Atmospheric Administration's (NOAA) VDatum software (version 4.6.1), to determine the sediment surface elevation at each sample location.

FIGURE 1: Study Area Location Map
Phillippi Creek Maintenance Dredging Feasibility Study Project
Upstream Extension Area
Sarasota County, Florida



June 2025

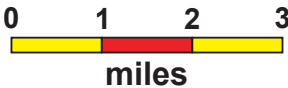


IMAGE SOURCE:
Sentinel 2
ESA
December 2023

Athena Technologies, Inc.
PO Box 68
McClellanville, SC 29458
843-887-3800

Vibracore Collection

Once the vessel was immobilized over the vibracore sample locations, Athena's custom-designed and specially fabricated vibracore system was deployed. The vibracore system consists of a generator with a mechanical vibrator attached via cable to a 3-inch diameter, decontaminated, stainless-steel sample barrel with a cellulose acetate butyrate (CAB) liner insert. The sample barrel was lowered to the sediment surface through a moon pool in the deck of the vessel by attaching lengths of drill stem. The vibracore machine was then turned on and the sample barrel was allowed to penetrate until it reached the project depth of -4 feet MLW. The sample barrel was then retrieved using an electric winch. Once the sample barrel was on deck, the CAB liner was removed from the stainless-steel sample barrel, capped on both ends and labeled.

Geotechnical vibracores were collected using the same vibracore system discussed above. The vibracore machine was turned on and the sample barrel was allowed to penetrate until the bottom of the sample barrel reached a project depth of -5 feet relative to MLW. Once the sample barrel reached project depth, the machine was turned off and the sample barrel was retrieved using an electric winch. The cores were then measured, capped and labeled. A summary table containing final vibracore location coordinates, elevation data, and penetration and recovery data has been included as **Table 1**. A vibracore location map has been included as **Figure 2**.

Surface Grab Sample Collection

The portion of Phillippi Creek north of the South Tuttle Avenue bridge is characterized by shallow water depths, and low-clearance roadway bridges are located at Webber Street and Bahia Vista Street. Furthermore, a weir is present equidistant between the South Tuttle Avenue and the Webber Street bridges. As a result, we could not access the proposed grab sample locations using the vessel *Good Vibrations*. In response, Athena deployed a 12-foot Jon boat from the vessel *Good Vibrations* to collect the surface grab samples. The vessel was equipped with an electric trolling motor and the field electronics outlined above for navigation and elevation data acquisition. Upon reaching the coordinates for a proposed grab sample location, Athena utilized a decontaminated, modified Peterson grab sampler to collect sediment volume from the sediment surface. Sufficient sediment volume was collected from each grab sample location to allow for environmental and geotechnical laboratory analyses. Grab sample station coordinates and elevation data have also been included in **Table 1**, and a grab sample location map has been included as **Figure 3**.

FIGURE 2: Vibracore Location Map

Phillippi Creek Maintenance Dredging Feasibility Study Project
Upstream Extension Area, Sarasota County, Florida

- Vibracores were
collected in
June 2025

 **Vibracore
Location**

0 1000 2000

Feet



IMAGE SOURCE:
GoogleEarth
2025

Athena Technologies, Inc.
PO Box 68
McClellanville, SC 29458
843-887-3800

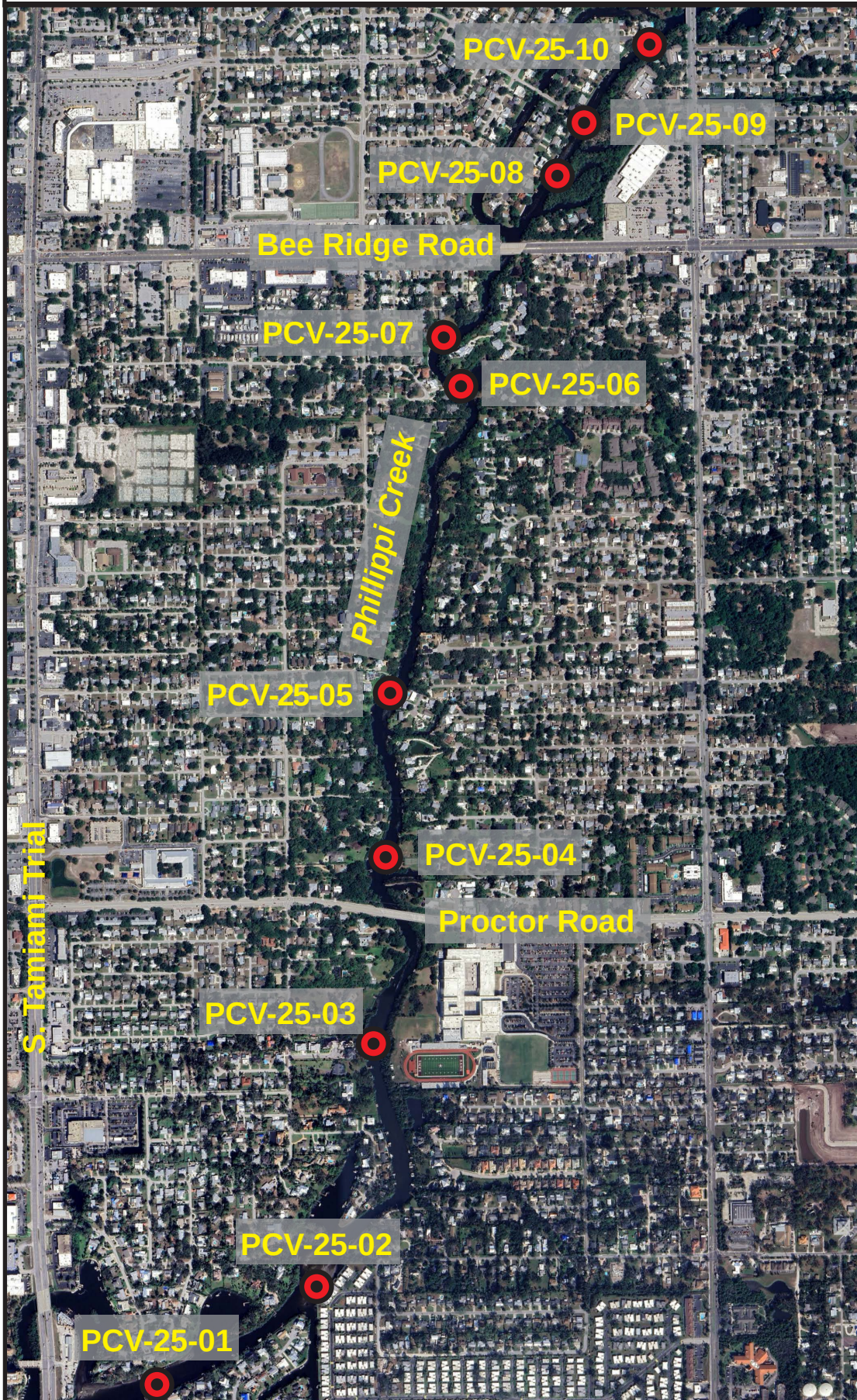


FIGURE 3: Grab Sample Location Map

Phillippi Creek Maintenance Dredging Feasibility Study Project
Upstream Extension Area, Sarasota County, Florida

- Grab samples were collected in June 2025



 Surface Grab Sample Location

 Vibracore Location

0 1000 2000
Feet



IMAGE SOURCE:
GoogleEarth
2025

Athena Technologies, Inc.
PO Box 68
McClellanville, SC 29458
843-887-3800

Environmental and Geotechnical Sample Analyses

Following collection of the environmental vibracores, Athena's scientist opened the cores on the deck of *Good Vibrations* and collected 1 composite sample to a depth of -4 feet MLW from each core. The sediment from the core was homogenized and placed in laboratory containers, and the samples were preserved on ice in coolers. Similarly, sediment volume from the grab sample locations were placed in laboratory containers and preserved on ice with the vibracore environmental samples. A chain of custody was maintained for each sample and the samples were delivered by Athena's scientist to Advanced Environmental Laboratories, Inc. (AEL) in Jacksonville, Florida. The environmental samples were analyzed for the following: metals (Al, As, Ba Cd, Cr, Cu, Pb, Ni, Se, Ag, Zn) (EPA 6010), mercury (EPA 7471A), pesticides (EPA 8081), polyaromatic hydrocarbons (PAHs) (EPA 8270C), polychlorinated biphenyls (PCBs) (EPA 8082A), and total petroleum hydrocarbons (TPH) (FL-PRO). A copy of the AEL analytical report (to include summary tables) has been included as **Appendix A**.

The completed geotechnical vibracores were transported to Athena's core processing facility in McClellanville, South Carolina. The cores were opened longitudinally and were subsequently photographed and logged by Athena's geologist in accordance with protocol outlined in ASTM D 2488. Lithologic intervals in each core were also assigned a Unified Soil Classification System (USCS) designation, in accordance with protocol outlined in ASTM D 2487. Core logs and photo-mosaic images of the cores were provided to Cummins Cederberg, Inc. to allow for confirmation of proposed sediment sub-sample intervals. Upon confirmation of sub-sample intervals from Cummins Cederberg, Inc., Athena extracted and shipped the sub-samples to Terracon Consultants, Inc. (Terracon) in Jacksonville, Florida. Terracon is a USACE-certified geotechnical laboratory. Sub-sample intervals were determined based on lithologic breaks within each core and were collected at a frequency of 1 to 3 composite sub-samples per core. The laboratory described the sub-samples in accordance with ASTM D 2487 and each sub-sample was analyzed for grain size distribution in accordance with ASTM D 6913 using the following sieve sizes: 3/4-inch, 5/8-inch, No. 3.5, No. 4, No. 5, No 7, No. 10, No.14, No. 18, No. 25, No. 35, No. 45, No. 60, No. 80, No. 120, No. 170, No. 200, and No. 230. Munsell color designations (wet and dry) were also assigned for each sub-sample. A laboratory grain size data summary has been included as **Table 2**. Core photographs and logs have been included as **Appendix B**, and grain size distribution curves and granulometric reports have been included as **Appendix C**.

Section 3: Discussion

Phillippi Creek is a tidal channel situated to the east of Siesta Key and the Gulf Intracoastal Waterway (GIWW) in Sarasota, Florida. The general area along this portion of the Florida coastline experiences a mean tidal range of approximately 1 to 2 feet (NOAA). Sample collection for this effort was focused on the portion of Phillippi Creek which spans from just east of the South Tamiami Trail bridge to just west of the South Beneva Road bridge (approximately 4.5 river-miles). As alluded to above, water depths within Phillippi Creek were navigable with our vessel *Good Vibrations* up to the South Tuttle Avenue bridge. Shallow water depths, a relic weir, and low-clearance bridges were prevalent to the north of the South Tuttle Avenue bridge, which necessitated the use of a shallow-draft Jon boat in order to access the proposed grab sample locations. Additional discussion regarding vibracore characteristics and site conditions is presented below.

- Sediment surface elevations among the various sample locations ranged from 0.0 feet to -3.3 feet MLW. Refusal was not encountered at any of the vibracore locations.
- Vibracores PCV-25-01 through PCV-25-06 were dominated by the presence of a surficial, fine to medium-grained quartz sand (USCS = SP) with a sediment thickness ranging from 2.2 feet at PCV-25-06 to 4.5 feet at PCV-25-02. Sand to fine gravel-sized shells were commonly observed in this surficial sand layer, with shell percentages generally below 10%. Organic debris and wood fragments were also routinely observed in the surficial unit.
 - The surficial sand layer was commonly underlain by either a sand with silt interval (USCS = SP-SM) or a silty sand interval (USCS = SM). In the case of core PCV-25-06, an organic peat was encountered prior to reaching the basal SP-SM/SM intervals.
- Vibracores PCV-25-07 through PCV-25-10 were characterized by the presence of organic debris and wood fragments, and slightly higher percentages of fine-grained constituents (i.e., silt/clay). Vibracore PCV-25-08 shows characteristic tidal interbedding, indicating that tidal exchange is still occurring at this location despite the increased distance from the GIWW. However, it should be noted that shell content is generally absent from these cores. The lack of shell content and increased percentages of fine-grained and organic constituents suggest that these vibracores may be positioned at a point within Phillippi Creek where salinity drops and the water becomes more brackish.
- The fine-grained fraction in each of the cores was primarily comprised of organic silt/clay. Roots, organic fibers, and wood fragments were routinely observed in the vibracores.

- A total of 21 sub-samples were analyzed from the vibracores. The average percentage of fine-grained constituents for all sub-samples was approximately 3.4%, while the average gravel-sized component (which was primarily comprised of shells) was 1.6%. The average mean grain size for all sub-samples was 0.37 millimeters (mm).
- The average percentage of fine-grained and gravel-sized constituents in the grab samples was less than 1%. The average mean grain size for all sub-samples was 0.35 millimeters (mm), which is very similar to the mean grain size in the sub-samples from the vibracores.

Discussion Regarding Penetration and Recovery

It should be noted that it is common for sediment within a core to compact while the vibracore machine is operating. The degree of compaction depends on sediment characteristics and can vary significantly. For example, a poorly graded, fine-grained quartz sand may have a compaction ratio of 10-20%, while a well graded, fine to coarse-grained quartz/shell sand may have a compaction ratio of greater than 30%. Additionally, if denser sediments overly softer sediments, the sediments at depth do not have enough density to “push” the denser material up the sample barrel as the barrel advances. In this scenario, the sample barrel typically rods or bypasses the softer material at depth. As a result, it is common to have a discrepancy between the penetration depths and recovery lengths for vibracores. The cores collected from Phillippi Creek averaged approximately 81% recovery, which, based on our experience, is common for the types of sediments observed in the geotechnical vibracores from the study area.

Note Regarding Laboratory Analyses and USCS Designations

It should also be noted that hydrometer analysis was not conducted on the fine-grained fraction of the sub-samples and, as a result, the relative percentages of silt- and clay-sized particles in each sub-sample was not established. In response, the laboratory assigned a default designation of “silt” and a liquid limit of greater than 50% to all material passing the No. 230 sieve. Additionally, organic content analysis was not conducted on the sub-samples. As a result, the laboratory assigned a default designation of “inorganic” to the fine-grained fraction. Lacking sufficient laboratory data to differentiate between silt- and clay-sized particles, or organic and inorganic content, the USCS classification assigned by Athena’s geologist took precedence on the core logs, when a discrepancy was noted between the laboratory USCS designation and the USCS designation in the associated core log.

Section 4: References

ASTM D 2487-11, Standard Practice for Classification of Soils for Engineering Purposes (Unified Soil Classification System), ASTM International, West Conshohocken, PA. 2011.

ASTM D 2488-00, Standard Practice for Description and Identification of Soils (Visual-Manual Procedure), ASTM International, West Conshohocken, PA. 2000.

ASTM D 6913-04, Standard Test Methods for Particle-Size Distribution (Gradation) of Soils Using Sieve Analysis, ASTM International, West Conshohocken, PA. 2004.

Environmental Protection Agency (EPA), Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, EPA publication SW-846, Third Edition, Final Updates I (1993), II (1995), IIA (1994), IIB (1995), III (1997), IIIA (1999), IIIB (2005), IV (2008), and V (2015).

National Oceanic and Atmospheric Administration, National Ocean Service, Center for Operational Oceanographic Products and Services, Tides & Currents, Station ID: 8726083 (Sarasota, FL); accessed August 11, 2025. <https://tidesandcurrents.noaa.gov/stationhome.html?id=8726083>

TABLES

TABLE 1 - Vibracore and Grab Sample Summary Table
Phillippi Creek Maintenance Dredging Feasibility Study Project
Upstream Extension Area
Sarasota County, Florida
June 2025

Station ID	Collection Date	Time	East ^[1] (x)	North ^[1] (y)	Water Depth (ft)	Tide Elevation ^[2] (ft MLW)	Sediment Surface Elevation (ft MLW)	Bottom of Boring Elevation (ft MLW)	Sample Type	Penetration (ft)	Recovery (ft)	Notes
Vibracore Samples												
PCV-25-01	6/10/2025	13:44	484700.06	1069174.32	4	1.9	-2.1	-4.0	Environmental Vibracore	2.0	1.8	
								-6.4	Geotechnical Vibracore	4.3	3.6	
PCV-25-02	6/10/2025	12:23	485988.70	1069940.06	2.4	2.2	-0.2	-4.1	Environmental Vibracore	4.0	3.0	
								-5.4	Geotechnical Vibracore	5.2	4.3	
PCV-25-03	6/10/2025	12:07	486492.71	1071835.30	4	2.2	-1.8	-4.0	Environmental Vibracore	2.1	2.1	
								-6.3	Geotechnical Vibracore	4.5	3.7	
PCV-25-04	6/10/2025	11:40	486606.48	1073343.94	5.5	2.5	-3.0	-4.0	Environmental Vibracore	1.0	1.0	
								-6.8	Geotechnical Vibracore	3.8	3.2	
PCV-25-05	6/10/2025	11:03	486677.54	1074615.20	5.5	2.5	-3.0	-4.0	Environmental Vibracore	1.0	1.0	
								-8.0	Geotechnical Vibracore	5.0	4.1	
PCV-25-06	6/10/2025	14:50	487269.14	1077072.62	5.5	2.2	-3.3	-4.2	Environmental Vibracore	1.0	1.0	
								-7.2	Geotechnical Vibracore	3.9	3.2	
PCV-25-07	6/10/2025	10:35	487161.63	1077456.89	5.9	2.6	-3.3	-4.0	Environmental Vibracore	0.7	0.7	
								-5.6	Geotechnical Vibracore	2.3	1.8	
PCV-25-08	6/10/2025	10:05	488054.31	1078715.39	3.9	2.9	-1.0	-4.0	Environmental Vibracore	3.0	2.8	
								-6.2	Geotechnical Vibracore	5.2	4.3	
PCV-25-09	6/10/2025	9:47	488328.28	1079120.76	2.1	2.1	0.0	-4.0	Environmental Vibracore	4.0	3.3	
								-5.0	Geotechnical Vibracore	5.0	3.7	
PCV-25-10	6/10/2025	9:18	488906.62	1079792.30	2.3	2.1	-0.2	-4.2	Environmental Vibracore	4.1	2.8	
								-5.2	Geotechnical Vibracore	5.0	3.9	

TABLE 1 - Vibracore and Grab Sample Summary Table
Phillippi Creek Maintenance Dredging Feasibility Study Project
Upstream Extension Area
Sarasota County, Florida
June 2025

Station ID	Collection Date	Time	East ^[1] (x)	North ^[1] (y)	Water Depth (ft)	Tide Elevation ^[2] (ft MLW)	Sediment Surface Elevation (ft MLW)	Bottom of Boring Elevation (ft MLW)	Sample Type	Penetration (ft)	Recovery (ft)	Notes
Surface Grab Samples												
PCG-25-11	6/10/2025	17:36	489354.69	1080112.59	2.2	0.4	-1.8	N/A	Surface Grab	N/A	N/A	
PCG-25-12	6/10/2025	15:27	490013.39	1080793.55	2.5	1.2	-1.3	N/A	Surface Grab	N/A	N/A	
PCG-25-13	6/10/2025	15:41	490612.54	1081694.55	2	1.2	-0.8	N/A	Surface Grab	N/A	N/A	
PCG-25-14	6/10/2025	15:50	490818.75	1082415.83	2	1.3	-0.7	N/A	Surface Grab	N/A	N/A	
PCG-25-15	6/10/2025	15:58	491035.65	1083439.23	2.2	1.1	-1.1	N/A	Surface Grab	N/A	N/A	
PCG-25-16	6/10/2025	16:12	491786.72	1084708.85	2.3	1.0	-1.3	N/A	Surface Grab	N/A	N/A	
PCG-25-17	6/10/2025	16:22	492200.08	1086129.53	3.3	1.0	-2.3	N/A	Surface Grab	N/A	N/A	
PCG-25-18	6/10/2025	16:32	492243.38	1087098.92	2.5	0.5	-2.0	N/A	Surface Grab	N/A	N/A	
PCG-25-19	6/10/2025	16:38	492793.52	1087589.73	3.5	0.7	-2.8	N/A	Surface Grab	N/A	N/A	
PCG-25-20	6/10/2025	16:51	493827.66	1088018.12	3.1	0.4	-2.7	N/A	Surface Grab	N/A	N/A	
Notes	ft = feet											
	MLW = Mean Low Water											
	[1] = State Plane Coordinates, Florida West, Zone 0902, U.S. Survey Feet											
	Elevation data obtained using a Trimble R12i Global Navigation Satellite System receiver interfaced with the Trimble RTX network.											
	N/A = not applicable											

TABLE 2 - Grain Size Data Summary
Phillippi Creek Maintenance Dredging Feasibility Study Project
Upstream Extension Area
Sarasota County, Florida
June 2025

Station ID	Sample ID	Sample Interval (ft BSS)	Sample Interval (ft MLW)	Laboratory USCS Classification	Total Percent Gravel-Sized Fraction ^[1]	Percent Sand-Sized Fraction ^[2]	Percent Fine-Grained Fraction ^[3]	Mean Grain Size ^[4] (mm)	Sorting ^[4] (phi)	D10 Grain Size (mm)	D30 Grain Size (mm)	D50 Grain Size (mm)	D60 Grain Size (mm)
<i>Vibracore Sub-samples</i>													
PCV-25-01	S-1	0 to 2.3	-2.1 to -4.4	SP	2.49	96.12	1.39	0.54	1.14	0.26	0.33	0.48	0.60
	S-2	2.3 to 2.9	-4.4 to -5	SP	6.97	91.74	1.29	0.71	1.32	0.30	0.44	0.64	0.77
PCV-25-02	S-1	0 to 2	-0.2 to -2.2	SP	0.62	98.24	1.14	0.50	0.86	0.28	0.36	0.48	0.56
	S-2	2 to 3	-2.2 to -3.2	SP	0.45	97.63	1.92	0.35	0.83	0.20	0.26	0.33	0.38
	S-3	3 to 4.3	-3.2 to -4.5	SP	0.55	98.17	1.28	0.56	0.90	0.30	0.40	0.55	0.65
PCV-25-03	S-1	0 to 3.2	-1.8 to -5	SP	5.48	93.58	0.93	0.54	1.28	0.26	0.33	0.45	0.54
PCV-25-04	S-1	0 to 1.5	-3 to -4.5	SP	4.17	94.69	1.14	0.57	1.23	0.28	0.34	0.48	0.60
	S-2	1.5 to 2	-4.5 to -5	SP	6.45	92.66	0.89	0.58	1.47	0.25	0.31	0.45	0.59
PCV-25-05	S-1	0 to 0.7	-3 to -3.7	SP	0.20	98.57	1.23	0.49	0.78	0.29	0.37	0.46	0.52
	S-2	0.7 to 2	-3.7 to -5	SP	1.34	97.96	0.70	0.56	0.94	0.31	0.40	0.52	0.61
PCV-25-06	S-1	0 to 1.7	-3.3 to -5	SP	3.04	95.87	1.08	0.35	1.14	0.19	0.24	0.30	0.34
PCV-25-07	S-1	0 to 1.5	-3.3 to -4.8	SP-SM	0.33	92.28	7.39	0.19	1.01	0.10	0.13	0.17	0.20
	S-2	1.5 to 1.8	-4.8 to -5.1	SP	0.00	97.06	2.94	0.21	0.54	0.14	0.18	0.21	0.23
PCV-25-08	S-1	0 to 1.6	-1 to -2.6	SP	0.69	98.59	0.72	0.20	0.72	0.14	0.17	0.20	0.21
	S-2	1.6 to 4	-2.6 to -5	SP	0.18	96.88	2.94	0.16	0.76	0.11	0.14	0.16	0.18
PCV-25-09	S-1	0 to 1.7	0 to -1.7	SP	0.02	97.61	2.37	0.19	0.59	0.13	0.16	0.20	0.22
	S-2	1.7 to 2.6	-1.7 to -2.6	SM	0.00	83.49	16.51	0.11	0.87	0.07	0.09	0.13	0.15
	S-3	2.6 to 3.7	-2.6 to -3.7	SP	0.00	98.88	1.12	0.29	0.84	0.17	0.22	0.28	0.31
PCV-25-10	S-1	0 to 2	-0.2 to -2.2	SM	1.33	79.57	19.10	0.15	1.39	0.06	0.09	0.13	0.16
	S-2	2 to 2.4	-2.2 to -2.6	SP	0.05	95.88	4.06	0.16	0.58	0.11	0.14	0.17	0.19
	S-3	2.4 to 3.9	-2.6 to -4.1	SP	0.01	98.87	1.12	0.33	0.72	0.19	0.24	0.32	0.37

TABLE 2 - Grain Size Data Summary
Phillippi Creek Maintenance Dredging Feasibility Study Project
Upstream Extension Area
Sarasota County, Florida
June 2025

Station ID	Sample ID	Sample Interval (ft BSS)	Sample Interval (ft MLW)	Laboratory USCS Classification	Total Percent Gravel-Sized Fraction ^[1]	Percent Sand-Sized Fraction ^[2]	Percent Fine-Grained Fraction ^[3]	Mean Grain Size ^[4] (mm)	Sorting ^[4] (phi)	D10 Grain Size (mm)	D30 Grain Size (mm)	D50 Grain Size (mm)	D60 Grain Size (mm)
Surface Grab Samples													
PCG-25-11	S-1	0 to 0.3	-1.8 to -2.1	SP	0.00	99.95	0.05	0.25	0.49	0.19	0.22	0.25	0.28
PCG-25-12	S-1	0 to 0.3	-1.3 to -1.6	SP	0.17	99.04	0.80	0.27	0.59	0.18	0.22	0.27	0.30
PCG-25-13	S-1	0 to 0.3	-0.8 to -1.1	SP	0.00	97.11	2.89	0.30	0.53	0.21	0.26	0.30	0.32
PCG-25-14	S-1	0 to 0.3	-0.7 to -1.0	SP	0.17	98.83	1.00	0.26	0.64	0.18	0.21	0.25	0.28
PCG-25-15	S-1	0 to 0.3	-1.1 to -1.4	SP	0.10	99.60	0.30	0.30	0.58	0.20	0.25	0.29	0.32
PCG-25-16	S-1	0 to 0.3	-1.3 to -1.6	SP	0.51	98.61	0.89	0.43	0.81	0.26	0.31	0.39	0.45
PCG-25-17	S-1	0 to 0.3	-2.3 to -2.6	SP	0.09	99.26	0.66	0.36	0.66	0.24	0.29	0.35	0.40
PCG-25-18	S-1	0 to 0.3	-2.0 to -2.3	SP	1.64	97.56	0.80	0.48	0.96	0.27	0.34	0.44	0.50
PCG-25-19	S-1	0 to 0.3	-2.8 to -3.1	SP	0.86	98.34	0.81	0.58	0.88	0.33	0.42	0.54	0.63
PCG-25-20	S-1	0 to 0.3	-2.7 to -3.0	SP	0.31	98.15	1.53	0.29	0.83	0.16	0.22	0.29	0.32
Notes	ft BSS = feet below sediment surface												
	ft MLW = feet relative to Mean Low Water												
	USCS = Unified Soil Classification System												
	mm = millimeters												
	N/A = Value not available because sample volume at the specified diameter could not be determined using the chosen sieve set.												
	[1] = Defined as the sample fraction which is greater than or equal to 4.76 millimeters (i.e., retained on sieve sizes greater than or equal to the Number 4 sieve).												
	[2] = Defined as the sample fraction which is greater than or equal to 0.076 millimeters and less than 4.75 millimeters (i.e., retained on sieve sizes between the Number 4 and Number 200 sieves).												
	[3] = Defined as the sample fraction which is less than 0.075 millimeters (i.e., passes the Number 200 sieve).												
	[4] = Value was calculated in gINT using the Moment Method (Folk, 1974) and applies to the portion of sample which did not pass the #230 sieve.												

APPENDIX A

AEL Laboratory Report and Data Summary Tables



Advanced Environmental Laboratories, Inc
6681 Southpoint Pkwy Jacksonville, FL 32216
Payments: P.O. Box 551580 Jacksonville, FL 32255-1580
Phone: (904) 363-9350
Fax: (904) 363-9354

FINAL

Workorder: Phillipi Creek (J2508890)

June 26, 2025

Neil Wicker
Athena Technologies, Inc.
1293 Graham Farm Road
PO Box 68
Mc Clellanville, SC 29458

RE: Workorder: J2508890 Phillipi Creek

Dear Neil Wicker:

Enclosed are the analytical results for sample(s) received by the laboratory on Wednesday June 11, 2025. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report. The analytical results for the samples contained in this report were submitted for analysis as outlined by the Chain of Custody and results pertain only to these samples.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Jerry Allen, Client Services Manager
JAllen@aellab.com

Certificate of Analysis

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.



NELAP Accredited E82574



FINAL

Workorder: Phillipi Creek (J2508890)

Sample Summary

Lab ID	Sample ID	Matrix	Method	Date Collected	Date Received	Analytes Reported	Basis
J2508890001	PCV-10	SO	EPA 8081	06/10/2025 10:18	06/11/2025 14:00	19	Dry
J2508890001	PCV-10	SO	FL-PRO	06/10/2025 10:18	06/11/2025 14:00	1	Dry
J2508890001	PCV-10	SO	SM 2540G	06/10/2025 10:18	06/11/2025 14:00	1	Dry
J2508890001	PCV-10	SO	SW-846 6010	06/10/2025 10:18	06/11/2025 14:00	11	Dry
J2508890001	PCV-10	SO	SW-846 7471A	06/10/2025 10:18	06/11/2025 14:00	1	Dry
J2508890001	PCV-10	SO	SW-846 8082A	06/10/2025 10:18	06/11/2025 14:00	7	Dry
J2508890001	PCV-10	SO	SW-846 8270E (SIM)	06/10/2025 10:18	06/11/2025 14:00	18	Dry
J2508890002	PCV-09	SO	EPA 8081	06/10/2025 10:47	06/11/2025 14:00	19	Dry
J2508890002	PCV-09	SO	FL-PRO	06/10/2025 10:47	06/11/2025 14:00	1	Dry
J2508890002	PCV-09	SO	SM 2540G	06/10/2025 10:47	06/11/2025 14:00	1	Dry
J2508890002	PCV-09	SO	SW-846 6010	06/10/2025 10:47	06/11/2025 14:00	11	Dry
J2508890002	PCV-09	SO	SW-846 7471A	06/10/2025 10:47	06/11/2025 14:00	1	Dry
J2508890002	PCV-09	SO	SW-846 8082A	06/10/2025 10:47	06/11/2025 14:00	7	Dry
J2508890002	PCV-09	SO	SW-846 8270E (SIM)	06/10/2025 10:47	06/11/2025 14:00	18	Dry
J2508890003	PCV-08	SO	EPA 8081	06/10/2025 11:05	06/11/2025 14:00	19	Dry
J2508890003	PCV-08	SO	FL-PRO	06/10/2025 11:05	06/11/2025 14:00	1	Dry
J2508890003	PCV-08	SO	SM 2540G	06/10/2025 11:05	06/11/2025 14:00	1	Dry
J2508890003	PCV-08	SO	SW-846 6010	06/10/2025 11:05	06/11/2025 14:00	11	Dry
J2508890003	PCV-08	SO	SW-846 7471A	06/10/2025 11:05	06/11/2025 14:00	1	Dry
J2508890003	PCV-08	SO	SW-846 8082A	06/10/2025 11:05	06/11/2025 14:00	7	Dry
J2508890003	PCV-08	SO	SW-846 8270E (SIM)	06/10/2025 11:05	06/11/2025 14:00	18	Dry
J2508890004	PCV-07	SO	EPA 8081	06/10/2025 11:35	06/11/2025 14:00	19	Dry
J2508890004	PCV-07	SO	FL-PRO	06/10/2025 11:35	06/11/2025 14:00	1	Dry
J2508890004	PCV-07	SO	SM 2540G	06/10/2025 11:35	06/11/2025 14:00	1	Dry
J2508890004	PCV-07	SO	SW-846 6010	06/10/2025 11:35	06/11/2025 14:00	11	Dry
J2508890004	PCV-07	SO	SW-846 7471A	06/10/2025 11:35	06/11/2025 14:00	1	Dry
J2508890004	PCV-07	SO	SW-846 8082A	06/10/2025 11:35	06/11/2025 14:00	7	Dry
J2508890004	PCV-07	SO	SW-846 8270E (SIM)	06/10/2025 11:35	06/11/2025 14:00	18	Dry
J2508890005	PCV-05	SO	EPA 8081	06/10/2025 12:05	06/11/2025 14:00	19	Dry
J2508890005	PCV-05	SO	FL-PRO	06/10/2025 12:05	06/11/2025 14:00	1	Dry
J2508890005	PCV-05	SO	SM 2540G	06/10/2025 12:05	06/11/2025 14:00	1	Dry
J2508890005	PCV-05	SO	SW-846 6010	06/10/2025 12:05	06/11/2025 14:00	11	Dry
J2508890005	PCV-05	SO	SW-846 7471A	06/10/2025 12:05	06/11/2025 14:00	1	Dry
J2508890005	PCV-05	SO	SW-846 8082A	06/10/2025 12:05	06/11/2025 14:00	7	Dry
J2508890005	PCV-05	SO	SW-846 8270E (SIM)	06/10/2025 12:05	06/11/2025 14:00	18	Dry

Thursday, June 26, 2025 3:50:29 PM
Dates and times are displayed using (-04:00)
Page 2 of 117

Certificate of Analysis

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.

POWERED BY
HORIZON
v.13.1.0



NELAP Accredited E82574



FINAL

Workorder: Phillipi Creek (J2508890)

Sample Summary

Lab ID	Sample ID	Matrix	Method	Date Collected	Date Received	Analytes Reported	Basis
J2508890006	PCV-04	SO	EPA 8081	06/10/2025 12:40	06/11/2025 14:00	19	Dry
J2508890006	PCV-04	SO	FL-PRO	06/10/2025 12:40	06/11/2025 14:00	1	Dry
J2508890006	PCV-04	SO	SM 2540G	06/10/2025 12:40	06/11/2025 14:00	1	Dry
J2508890006	PCV-04	SO	SW-846 6010	06/10/2025 12:40	06/11/2025 14:00	11	Dry
J2508890006	PCV-04	SO	SW-846 7471A	06/10/2025 12:40	06/11/2025 14:00	1	Dry
J2508890006	PCV-04	SO	SW-846 8082A	06/10/2025 12:40	06/11/2025 14:00	7	Dry
J2508890006	PCV-04	SO	SW-846 8270E (SIM)	06/10/2025 12:40	06/11/2025 14:00	18	Dry
J2508890007	PCV-03	SO	EPA 8081	06/10/2025 13:07	06/11/2025 14:00	19	Dry
J2508890007	PCV-03	SO	FL-PRO	06/10/2025 13:07	06/11/2025 14:00	1	Dry
J2508890007	PCV-03	SO	SM 2540G	06/10/2025 13:07	06/11/2025 14:00	1	Dry
J2508890007	PCV-03	SO	SW-846 6010	06/10/2025 13:07	06/11/2025 14:00	11	Dry
J2508890007	PCV-03	SO	SW-846 7471A	06/10/2025 13:07	06/11/2025 14:00	1	Dry
J2508890007	PCV-03	SO	SW-846 8082A	06/10/2025 13:07	06/11/2025 14:00	7	Dry
J2508890007	PCV-03	SO	SW-846 8270E (SIM)	06/10/2025 13:07	06/11/2025 14:00	18	Dry
J2508890008	PCV-02	SO	EPA 8081	06/10/2025 13:23	06/11/2025 14:00	19	Dry
J2508890008	PCV-02	SO	FL-PRO	06/10/2025 13:23	06/11/2025 14:00	1	Dry
J2508890008	PCV-02	SO	SM 2540G	06/10/2025 13:23	06/11/2025 14:00	1	Dry
J2508890008	PCV-02	SO	SW-846 6010	06/10/2025 13:23	06/11/2025 14:00	11	Dry
J2508890008	PCV-02	SO	SW-846 7471A	06/10/2025 13:23	06/11/2025 14:00	1	Dry
J2508890008	PCV-02	SO	SW-846 8082A	06/10/2025 13:23	06/11/2025 14:00	7	Dry
J2508890008	PCV-02	SO	SW-846 8270E (SIM)	06/10/2025 13:23	06/11/2025 14:00	18	Dry
J2508890009	PCV-01	SO	EPA 8081	06/10/2025 13:45	06/11/2025 14:00	19	Dry
J2508890009	PCV-01	SO	FL-PRO	06/10/2025 13:45	06/11/2025 14:00	1	Dry
J2508890009	PCV-01	SO	SM 2540G	06/10/2025 13:45	06/11/2025 14:00	1	Dry
J2508890009	PCV-01	SO	SW-846 6010	06/10/2025 13:45	06/11/2025 14:00	11	Dry
J2508890009	PCV-01	SO	SW-846 7471A	06/10/2025 13:45	06/11/2025 14:00	1	Dry
J2508890009	PCV-01	SO	SW-846 8082A	06/10/2025 13:45	06/11/2025 14:00	7	Dry
J2508890009	PCV-01	SO	SW-846 8270E (SIM)	06/10/2025 13:45	06/11/2025 14:00	18	Dry
J2508890010	PCV-06	SO	EPA 8081	06/10/2025 14:50	06/11/2025 14:00	19	Dry
J2508890010	PCV-06	SO	FL-PRO	06/10/2025 14:50	06/11/2025 14:00	1	Dry
J2508890010	PCV-06	SO	SM 2540G	06/10/2025 14:50	06/11/2025 14:00	1	Dry
J2508890010	PCV-06	SO	SW-846 6010	06/10/2025 14:50	06/11/2025 14:00	11	Dry
J2508890010	PCV-06	SO	SW-846 7471A	06/10/2025 14:50	06/11/2025 14:00	1	Dry
J2508890010	PCV-06	SO	SW-846 8082A	06/10/2025 14:50	06/11/2025 14:00	7	Dry
J2508890010	PCV-06	SO	SW-846 8270E (SIM)	06/10/2025 14:50	06/11/2025 14:00	18	Dry

Thursday, June 26, 2025 3:50:29 PM
Dates and times are displayed using (-04:00)
Page 3 of 117

Certificate of Analysis

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.

POWERED BY
HORIZON
v.13.1.0



NELAP Accredited E82574



FINAL

Workorder: Phillipi Creek (J2508890)

Sample Summary

Lab ID	Sample ID	Matrix	Method	Date Collected	Date Received	Analytes Reported	Basis
J2508890011	PCG-12	SO	EPA 8081	06/10/2025 15:27	06/11/2025 14:00	19	Dry
J2508890011	PCG-12	SO	FL-PRO	06/10/2025 15:27	06/11/2025 14:00	1	Dry
J2508890011	PCG-12	SO	SM 2540G	06/10/2025 15:27	06/11/2025 14:00	1	Dry
J2508890011	PCG-12	SO	SW-846 6010	06/10/2025 15:27	06/11/2025 14:00	11	Dry
J2508890011	PCG-12	SO	SW-846 7471A	06/10/2025 15:27	06/11/2025 14:00	1	Dry
J2508890011	PCG-12	SO	SW-846 8082A	06/10/2025 15:27	06/11/2025 14:00	7	Dry
J2508890011	PCG-12	SO	SW-846 8270E (SIM)	06/10/2025 15:27	06/11/2025 14:00	18	Dry
J2508890012	PCG-13	SO	EPA 8081	06/10/2025 15:41	06/11/2025 14:00	19	Dry
J2508890012	PCG-13	SO	FL-PRO	06/10/2025 15:41	06/11/2025 14:00	1	Dry
J2508890012	PCG-13	SO	SM 2540G	06/10/2025 15:41	06/11/2025 14:00	1	Dry
J2508890012	PCG-13	SO	SW-846 6010	06/10/2025 15:41	06/11/2025 14:00	11	Dry
J2508890012	PCG-13	SO	SW-846 7471A	06/10/2025 15:41	06/11/2025 14:00	1	Dry
J2508890012	PCG-13	SO	SW-846 8082A	06/10/2025 15:41	06/11/2025 14:00	7	Dry
J2508890012	PCG-13	SO	SW-846 8270E (SIM)	06/10/2025 15:41	06/11/2025 14:00	18	Dry
J2508890013	PCG-14	SO	EPA 8081	06/10/2025 15:53	06/11/2025 14:00	19	Dry
J2508890013	PCG-14	SO	FL-PRO	06/10/2025 15:53	06/11/2025 14:00	1	Dry
J2508890013	PCG-14	SO	SM 2540G	06/10/2025 15:53	06/11/2025 14:00	1	Dry
J2508890013	PCG-14	SO	SW-846 6010	06/10/2025 15:53	06/11/2025 14:00	11	Dry
J2508890013	PCG-14	SO	SW-846 7471A	06/10/2025 15:53	06/11/2025 14:00	1	Dry
J2508890013	PCG-14	SO	SW-846 8082A	06/10/2025 15:53	06/11/2025 14:00	7	Dry
J2508890013	PCG-14	SO	SW-846 8270E (SIM)	06/10/2025 15:53	06/11/2025 14:00	18	Dry
J2508890014	PCG-15	SO	EPA 8081	06/10/2025 15:58	06/11/2025 14:00	19	Dry
J2508890014	PCG-15	SO	FL-PRO	06/10/2025 15:58	06/11/2025 14:00	1	Dry
J2508890014	PCG-15	SO	SM 2540G	06/10/2025 15:58	06/11/2025 14:00	1	Dry
J2508890014	PCG-15	SO	SW-846 6010	06/10/2025 15:58	06/11/2025 14:00	11	Dry
J2508890014	PCG-15	SO	SW-846 7471A	06/10/2025 15:58	06/11/2025 14:00	1	Dry
J2508890014	PCG-15	SO	SW-846 8082A	06/10/2025 15:58	06/11/2025 14:00	7	Dry
J2508890014	PCG-15	SO	SW-846 8270E (SIM)	06/10/2025 15:58	06/11/2025 14:00	18	Dry
J2508890015	PCG-16	SO	EPA 8081	06/10/2025 16:12	06/11/2025 14:00	19	Dry
J2508890015	PCG-16	SO	FL-PRO	06/10/2025 16:12	06/11/2025 14:00	1	Dry
J2508890015	PCG-16	SO	SM 2540G	06/10/2025 16:12	06/11/2025 14:00	1	Dry
J2508890015	PCG-16	SO	SW-846 6010	06/10/2025 16:12	06/11/2025 14:00	11	Dry
J2508890015	PCG-16	SO	SW-846 7471A	06/10/2025 16:12	06/11/2025 14:00	1	Dry
J2508890015	PCG-16	SO	SW-846 8082A	06/10/2025 16:12	06/11/2025 14:00	7	Dry
J2508890015	PCG-16	SO	SW-846 8270E (SIM)	06/10/2025 16:12	06/11/2025 14:00	18	Dry

Thursday, June 26, 2025 3:50:29 PM
Dates and times are displayed using (-04:00)
Page 4 of 117

Certificate of Analysis

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.

POWERED BY
HORIZON
v.13.1.0



NELAP Accredited E82574



FINAL

Workorder: Phillipi Creek (J2508890)

Sample Summary

Lab ID	Sample ID	Matrix	Method	Date Collected	Date Received	Analytes Reported	Basis
J2508890016	PCG-17	SO	EPA 8081	06/10/2025 16:22	06/11/2025 14:00	19	Dry
J2508890016	PCG-17	SO	FL-PRO	06/10/2025 16:22	06/11/2025 14:00	1	Dry
J2508890016	PCG-17	SO	SM 2540G	06/10/2025 16:22	06/11/2025 14:00	1	Dry
J2508890016	PCG-17	SO	SW-846 6010	06/10/2025 16:22	06/11/2025 14:00	11	Dry
J2508890016	PCG-17	SO	SW-846 7471A	06/10/2025 16:22	06/11/2025 14:00	1	Dry
J2508890016	PCG-17	SO	SW-846 8082A	06/10/2025 16:22	06/11/2025 14:00	7	Dry
J2508890016	PCG-17	SO	SW-846 8270E (SIM)	06/10/2025 16:22	06/11/2025 14:00	18	Dry
J2508890017	PCG-18	SO	EPA 8081	06/10/2025 16:32	06/11/2025 14:00	19	Dry
J2508890017	PCG-18	SO	FL-PRO	06/10/2025 16:32	06/11/2025 14:00	1	Dry
J2508890017	PCG-18	SO	SM 2540G	06/10/2025 16:32	06/11/2025 14:00	1	Dry
J2508890017	PCG-18	SO	SW-846 6010	06/10/2025 16:32	06/11/2025 14:00	11	Dry
J2508890017	PCG-18	SO	SW-846 7471A	06/10/2025 16:32	06/11/2025 14:00	1	Dry
J2508890017	PCG-18	SO	SW-846 8082A	06/10/2025 16:32	06/11/2025 14:00	7	Dry
J2508890017	PCG-18	SO	SW-846 8270E (SIM)	06/10/2025 16:32	06/11/2025 14:00	18	Dry
J2508890018	PCG-19	SO	EPA 8081	06/10/2025 16:38	06/11/2025 14:00	19	Dry
J2508890018	PCG-19	SO	FL-PRO	06/10/2025 16:38	06/11/2025 14:00	1	Dry
J2508890018	PCG-19	SO	SM 2540G	06/10/2025 16:38	06/11/2025 14:00	1	Dry
J2508890018	PCG-19	SO	SW-846 6010	06/10/2025 16:38	06/11/2025 14:00	11	Dry
J2508890018	PCG-19	SO	SW-846 7471A	06/10/2025 16:38	06/11/2025 14:00	1	Dry
J2508890018	PCG-19	SO	SW-846 8082A	06/10/2025 16:38	06/11/2025 14:00	7	Dry
J2508890018	PCG-19	SO	SW-846 8270E (SIM)	06/10/2025 16:38	06/11/2025 14:00	18	Dry
J2508890019	PCG-20	SO	EPA 8081	06/10/2025 16:51	06/11/2025 14:00	19	Dry
J2508890019	PCG-20	SO	FL-PRO	06/10/2025 16:51	06/11/2025 14:00	1	Dry
J2508890019	PCG-20	SO	SM 2540G	06/10/2025 16:51	06/11/2025 14:00	1	Dry
J2508890019	PCG-20	SO	SW-846 6010	06/10/2025 16:51	06/11/2025 14:00	11	Dry
J2508890019	PCG-20	SO	SW-846 7471A	06/10/2025 16:51	06/11/2025 14:00	1	Dry
J2508890019	PCG-20	SO	SW-846 8082A	06/10/2025 16:51	06/11/2025 14:00	7	Dry
J2508890019	PCG-20	SO	SW-846 8270E (SIM)	06/10/2025 16:51	06/11/2025 14:00	18	Dry
J2508890020	PCG-11	SO	EPA 8081	06/10/2025 17:37	06/11/2025 14:00	19	Dry
J2508890020	PCG-11	SO	FL-PRO	06/10/2025 17:37	06/11/2025 14:00	1	Dry
J2508890020	PCG-11	SO	SM 2540G	06/10/2025 17:37	06/11/2025 14:00	1	Dry
J2508890020	PCG-11	SO	SW-846 6010	06/10/2025 17:37	06/11/2025 14:00	11	Dry
J2508890020	PCG-11	SO	SW-846 7471A	06/10/2025 17:37	06/11/2025 14:00	1	Dry
J2508890020	PCG-11	SO	SW-846 8082A	06/10/2025 17:37	06/11/2025 14:00	7	Dry
J2508890020	PCG-11	SO	SW-846 8270E (SIM)	06/10/2025 17:37	06/11/2025 14:00	18	Dry

Thursday, June 26, 2025 3:50:29 PM
Dates and times are displayed using (-04:00)
Page 5 of 117

Certificate of Analysis

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.

POWERED BY
HORIZON
v.13.1.0



NELAP Accredited E82574



FINAL

Workorder: Phillipi Creek (J2508890)

Workorder Summary

Batch Comments

GCSj/8051 - FL-PRO Analysis,Soil

The control criteria were exceeded for the following surrogate in the Method Blank (MB): o-Terphenyl. Surrogate recoveries in QC samples (LCS/MS/MSD) met criteria, indicating the analysis was in control. The surrogate outlier is qualified accordingly. No further corrective action was required.

GCSj/8072 - 8081/8082/608 Analysis,Soil

All samples and associated MS/MSD in the analytical batch GCSj: 8072 were diluted prior to instrumental analysis. The samples were highly colored which indicated the need to perform a dilution prior to injection into the instrument.

The surrogates in samples and associated MS/MSD of the following batch are not applicable: GCSj: 8072. Sample analysis required a dilution greater than 4X, which resulted in undetected surrogate concentrations. The data has been qualified accordingly.

GCSj/8073 - 8081/8082/608 Analysis,Soil

The upper control criterion was exceeded for several target analytes in closing Continuing Calibration Verification (CCV) standards, indicating increased sensitivity. The client samples reported in this batch did not contain the analytes in question. Since the apparent problem equates to a potential high bias, the data quality is not affected. No further corrective action was required.

Task Comments

J2508890001 (PCV-10) - GCSj/8066 - 8081/8082/608 Analysis,Soil

The sample J2508890001 was diluted prior to instrumental analysis. The sample was highly colored which indicated the need to perform a dilution prior to injection into the instrument.

The surrogates in the following samples are not applicable: J2508890001. Sample analysis required a dilution greater than 4X, which resulted in undetected surrogate concentrations. The data has been qualified accordingly.

J2508890001 (PCV-10) - GCSj/8067 - 8081/8082/608 Analysis,Soil

The control criteria for surrogate Tetrachloro-m-xylene in J2508890001 are not applicable. The chromatogram indicated the presence of high background components that masked the surrogate, which prevented adequate resolution for quantitation. The affected surrogates are qualified to indicate matrix interference.

J2508890002 (PCV-09) - GCSj/8066 - 8081/8082/608 Analysis,Soil

The sample J2508890002 was diluted prior to instrumental analysis. The sample was highly colored which indicated the need to perform a dilution prior to injection into the instrument.

The surrogates in the following samples are not applicable: J2508890002. Sample analysis required a dilution greater than 4X, which resulted in undetected surrogate concentrations. The data has been qualified accordingly.

J2508890002 (PCV-09) - GCSj/8067 - 8081/8082/608 Analysis,Soil

The control criteria for surrogate Tetrachloro-m-xylene in J2508890002 are not applicable. The chromatogram indicated the presence of high background components that masked the surrogate, which prevented adequate resolution for quantitation. The affected surrogates are qualified to indicate matrix interference.

J2508890003 (PCV-08) - GCSj/8066 - 8081/8082/608 Analysis,Soil

The sample J2508890003 was diluted prior to instrumental analysis. The sample was highly colored which indicated the need to perform a dilution prior to injection into the instrument.

The surrogates in the following samples are not applicable: J2508890003. Sample analysis required a dilution greater than 4X, which resulted in undetected surrogate concentrations. The data has been qualified accordingly.

J2508890003 (PCV-08) - GCSj/8067 - 8081/8082/608 Analysis,Soil

The control criteria for surrogate Tetrachloro-m-xylene in J2508890003 are not applicable. The chromatogram indicated the presence of high background components that masked the surrogate, which prevented adequate resolution for quantitation. The affected surrogates are qualified to indicate matrix interference.

Certificate of Analysis

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.





FINAL

Workorder: Phillipi Creek (J2508890)

Workorder Summary

Task Comments

J2508890004 (PCV-07) - GCSj/8066 - 8081/8082/608 Analysis,Soil

The sample J2508890004 was diluted prior to instrumental analysis. The sample was highly colored which indicated the need to perform a dilution prior to injection into the instrument.

The surrogates in the following samples are not applicable: J2508890004. Sample analysis required a dilution greater than 4X, which resulted in undetected surrogate concentrations. The data has been qualified accordingly.

J2508890004 (PCV-07) - GCSj/8067 - 8081/8082/608 Analysis,Soil

The control criteria for surrogate Tetrachloro-m-xylene in J2508890004 are not applicable. The chromatogram indicated the presence of high background components that masked the surrogate, which prevented adequate resolution for quantitation. The affected surrogates are qualified to indicate matrix interference.

J2508890005 (PCV-05) - GCSj/8066 - 8081/8082/608 Analysis,Soil

The sample J2508890005 was diluted prior to instrumental analysis. The sample was highly colored which indicated the need to perform a dilution prior to injection into the instrument.

The surrogates in the following samples are not applicable: J2508890005. Sample analysis required a dilution greater than 4X, which resulted in undetected surrogate concentrations. The data has been qualified accordingly.

J2508890006 (PCV-04) - GCSj/8066 - 8081/8082/608 Analysis,Soil

The sample J2508890006 was diluted prior to instrumental analysis. The sample was highly colored which indicated the need to perform a dilution prior to injection into the instrument.

The surrogates in the following samples are not applicable: J2508890006. Sample analysis required a dilution greater than 4X, which resulted in undetected surrogate concentrations. The data has been qualified accordingly.

J2508890007 (PCV-03) - GCSj/8066 - 8081/8082/608 Analysis,Soil

The sample J2508890007 was diluted prior to instrumental analysis. The sample was highly colored which indicated the need to perform a dilution prior to injection into the instrument.

The surrogates in the following samples are not applicable: J2508890007. Sample analysis required a dilution greater than 4X, which resulted in undetected surrogate concentrations. The data has been qualified accordingly.

J2508890008 (PCV-02) - GCSj/8066 - 8081/8082/608 Analysis,Soil

The sample J2508890008 was diluted prior to instrumental analysis. The sample was highly colored which indicated the need to perform a dilution prior to injection into the instrument.

The surrogates in the following samples are not applicable: J2508890008. Sample analysis required a dilution greater than 4X, which resulted in undetected surrogate concentrations. The data has been qualified accordingly.

J2508890010 (PCV-06) - GCSj/8066 - 8081/8082/608 Analysis,Soil

The sample J2508890010 was diluted prior to instrumental analysis. The sample was highly colored which indicated the need to perform a dilution prior to injection into the instrument.

The surrogates in the following samples are not applicable: J2508890010. Sample analysis required a dilution greater than 4X, which resulted in undetected surrogate concentrations. The data has been qualified accordingly.

J2508890010 (PCV-06) - GCSj/8067 - 8081/8082/608 Analysis,Soil

The control criteria for surrogate Tetrachloro-m-xylene in J2508890010 are not applicable. The chromatogram indicated the presence of high background components that masked the surrogate, which prevented adequate resolution for quantitation. The affected surrogates are qualified to indicate matrix interference.

J2508890011 (PCG-12) - GCSj/8072 - 8081/8082/608 Analysis,Soil

The surrogates in the following samples are not applicable: J2508890011, associated Matrix Spike (5886241MS), and Matrix Spike Duplicate (5886242MSD). Sample analysis required a dilution greater than 4X, which resulted in undetected surrogate concentrations. The data has been qualified accordingly.

The sample J2508890011, associated Matrix Spike (5886241MS), and Matrix Spike Duplicate (5886242MSD) were diluted prior to instrumental analysis. The samples were highly colored which indicated the need to perform a dilution prior to injection into the instrument.

The control criteria for the matrix spike and matrix spike duplicate for sample J2508890011 are not applicable. The analysis of the samples required a dilution, which results in a spike concentrations below the Practical Quantitation Limit (PQL). The LCS recoveries are acceptable indicating the batch is in control.

Certificate of Analysis

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.





FINAL

Workorder: Phillipi Creek (J2508890)

Workorder Summary

Task Comments

J2508890011 (PCG-12) - GCSj/8073 - 8081/8082/608 Analysis, Soil

The upper control criterion was exceeded for the following surrogates in J2508890018 and associated Matrix Spike Duplicate (5886246MSD): Tetrachloro-m-xylene. Target analytes associated with the surrogate in question were not detected in the samples. The error associated with an elevated recovery equates to a high bias. The quality of the sample data is not significantly affected. No further corrective action was required.

J2508890011 (PCG-12) - ICPj/4480 - ICP 6010B Analysis

The upper control criterion was exceeded for the following analytes in the closing Continuing Calibration Verification (CCV): multiple analytes. The client samples analyzed in this batch did not contain the analytes in question. Since the apparent problem equates to a potential high bias, the data quality is not affected. No further corrective action was required.

J2508890011 (PCG-12) - GCSj/8072 - 8081/8082/608 Analysis, Soil

The control criteria for the matrix spike and matrix spike duplicate for sample J2508890011 are not applicable. The analysis of the samples required a dilution, which results in a spike concentrations below the Practical Quantitation Limit (PQL). The LCS recoveries are acceptable indicating the batch is in control.

J2508890012 (PCG-13) - GCSj/8072 - 8081/8082/608 Analysis, Soil

The surrogates in the following samples are not applicable: J2508890012. Sample analysis required a dilution greater than 4X, which resulted in undetected surrogate concentrations. The data has been qualified accordingly.

The sample J2508890012 was diluted prior to instrumental analysis. The sample was highly colored which indicated the need to perform a dilution prior to injection into the instrument.

J2508890012 (PCG-13) - ICPj/4480 - ICP 6010B Analysis

The upper control criterion was exceeded for the following analytes in the closing Continuing Calibration Verification (CCV): multiple analytes. The client samples analyzed in this batch did not contain the analytes in question. Since the apparent problem equates to a potential high bias, the data quality is not affected. No further corrective action was required.

J2508890013 (PCG-14) - GCSj/8072 - 8081/8082/608 Analysis, Soil

The surrogates in the following samples are not applicable: J2508890013. Sample analysis required a dilution greater than 4X, which resulted in undetected surrogate concentrations. The data has been qualified accordingly.

The sample J2508890013 was diluted prior to instrumental analysis. The sample was highly colored which indicated the need to perform a dilution prior to injection into the instrument.

J2508890013 (PCG-14) - ICPj/4480 - ICP 6010B Analysis

The upper control criterion was exceeded for the following analytes in the closing Continuing Calibration Verification (CCV): multiple analytes. The client samples analyzed in this batch did not contain the analytes in question. Since the apparent problem equates to a potential high bias, the data quality is not affected. No further corrective action was required.

J2508890013 (PCG-14) - GCSj/8072 - 8081/8082/608 Analysis, Soil

The upper control criterion was exceeded for several analytes in closing Continuing Calibration Verification (CCV) standards for sample J2508890013, indicating increased sensitivity. The affected client sample did not contain the analytes in question. Since the apparent problem equates to a potential high bias, the data quality is not affected. No further corrective action was required.

J2508890014 (PCG-15) - GCSj/8072 - 8081/8082/608 Analysis, Soil

The sample J2508890014 was diluted prior to instrumental analysis. The sample was highly colored which indicated the need to perform a dilution prior to injection into the instrument.

J2508890014 (PCG-15) - ICPj/4480 - ICP 6010B Analysis

The upper control criterion was exceeded for the following analytes in the closing Continuing Calibration Verification (CCV): multiple analytes. The client samples analyzed in this batch did not contain the analytes in question. Since the apparent problem equates to a potential high bias, the data quality is not affected. No further corrective action was required.

J2508890015 (PCG-16) - GCSj/8072 - 8081/8082/608 Analysis, Soil

The surrogates in the following samples are not applicable: J2508890015. Sample analysis required a dilution greater than 4X, which resulted in undetected surrogate concentrations. The data has been qualified accordingly.

The sample J2508890015 was diluted prior to instrumental analysis. The sample was highly colored which indicated the need to perform a dilution prior to injection into the instrument.

Certificate of Analysis

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.





FINAL

Workorder: Phillipi Creek (J2508890)

Workorder Summary

Task Comments

J2508890015 (PCG-16) - ICPj/4480 - ICP 6010B Analysis

The upper control criterion was exceeded for the following analytes in the closing Continuing Calibration Verification (CCV): multiple analytes. The client samples analyzed in this batch did not contain the analytes in question. Since the apparent problem equates to a potential high bias, the data quality is not affected. No further corrective action was required.

J2508890016 (PCG-17) - GCSj/8072 - 8081/8082/608 Analysis, Soil

The surrogates in the following samples are not applicable: J2508890016. Sample analysis required a dilution greater than 4X, which resulted in undetected surrogate concentrations. The data has been qualified accordingly.

The sample J2508890016 was diluted prior to instrumental analysis. The sample was highly colored which indicated the need to perform a dilution prior to injection into the instrument.

J2508890016 (PCG-17) - ICPj/4480 - ICP 6010B Analysis

The upper control criterion was exceeded for the following analytes in the closing Continuing Calibration Verification (CCV): multiple analytes. The client samples analyzed in this batch did not contain the analytes in question. Since the apparent problem equates to a potential high bias, the data quality is not affected. No further corrective action was required.

J2508890017 (PCG-18) - GCSj/8072 - 8081/8082/608 Analysis, Soil

The surrogates in the following samples are not applicable: J2508890017. Sample analysis required a dilution greater than 4X, which resulted in undetected surrogate concentrations. The data has been qualified accordingly.

The sample J2508890017 was diluted prior to instrumental analysis. The sample was highly colored which indicated the need to perform a dilution prior to injection into the instrument.

J2508890017 (PCG-18) - ICPj/4480 - ICP 6010B Analysis

The upper control criterion was exceeded for the following analytes in the closing Continuing Calibration Verification (CCV): multiple analytes. The client samples analyzed in this batch did not contain the analytes in question. Since the apparent problem equates to a potential high bias, the data quality is not affected. No further corrective action was required.

J2508890018 (PCG-19) - GCSj/8072 - 8081/8082/608 Analysis, Soil

The surrogates in the following samples are not applicable: J2508890018. Sample analysis required a dilution greater than 4X, which resulted in undetected surrogate concentrations. The data has been qualified accordingly.

The sample J2508890018 was diluted prior to instrumental analysis. The sample was highly colored which indicated the need to perform a dilution prior to injection into the instrument.

J2508890018 (PCG-19) - GCSj/8073 - 8081/8082/608 Analysis, Soil

The upper control criterion was exceeded for the following surrogates in J2508890018: Tetrachloro-m-xylene. Target analytes associated with the surrogate in question were not detected in the samples. The error associated with an elevated recovery equates to a high bias. The quality of the sample data is not significantly affected. No further corrective action was required.

J2508890018 (PCG-19) - ICPj/4480 - ICP 6010B Analysis

The upper control criterion was exceeded for the following analytes in the closing Continuing Calibration Verification (CCV): multiple analytes. The client samples analyzed in this batch did not contain the analytes in question. Since the apparent problem equates to a potential high bias, the data quality is not affected. No further corrective action was required.

J2508890019 (PCG-20) - GCSj/8074 - FL-PRO Analysis, Soil

The control criteria were exceeded for surrogate o-Terphenyl in J2508890019. The associated QC analysis recoveries of target compounds were in control, indicating the analysis was in control. The surrogate outlier was flagged accordingly. No further corrective action was required.

J2508890019 (PCG-20) - GCSj/8072 - 8081/8082/608 Analysis, Soil

The surrogates in the following samples are not applicable: J2508890019. Sample analysis required a dilution greater than 4X, which resulted in undetected surrogate concentrations. The data has been qualified accordingly.

The sample J2508890019 was diluted prior to instrumental analysis. The sample was highly colored which indicated the need to perform a dilution prior to injection into the instrument.

J2508890019 (PCG-20) - ICPj/4480 - ICP 6010B Analysis

The upper control criterion was exceeded for the following analytes in the closing Continuing Calibration Verification (CCV): multiple analytes. The client samples analyzed in this batch did not contain the analytes in question. Since the apparent problem equates to a potential high bias, the data quality is not affected. No further corrective action was required.

Certificate of Analysis

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.





FINAL

Workorder: Phillipi Creek (J2508890)

Workorder Summary

Task Comments

J2508890020 (PCG-11) - GCSj/8074 - FL-PRO Analysis, Soil

The control criteria were exceeded for surrogate o-Terphenyl in J2508890020. The associated QC analysis recoveries of target compounds were in control, indicating the analysis was in control. The surrogate outlier was flagged accordingly. No further corrective action was required.

J2508890020 (PCG-11) - GCSj/8072 - 8081/8082/608 Analysis, Soil

The surrogates in the following samples are not applicable: J2508890020. Sample analysis required a dilution greater than 4X, which resulted in undetected surrogate concentrations. The data has been qualified accordingly.

The sample J2508890020 was diluted prior to instrumental analysis. The sample was highly colored which indicated the need to perform a dilution prior to injection into the instrument.

J2508890020 (PCG-11) - ICPj/4480 - ICP 6010B Analysis

The upper control criterion was exceeded for the following analytes in the closing Continuing Calibration Verification (CCV): multiple analytes. The client samples analyzed in this batch did not contain the analytes in question. Since the apparent problem equates to a potential high bias, the data quality is not affected. No further corrective action was required.

J2508890020 (PCG-11) - GCSj/8072 - 8081/8082/608 Analysis, Soil

The upper control criterion was exceeded for several analytes in closing Continuing Calibration Verification (CCV) standards for sample J2508890020, indicating increased sensitivity. The affected client sample did not contain the analytes in question. Since the apparent problem equates to a potential high bias, the data quality is not affected. No further corrective action was required.

Certificate of Analysis

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.



NELAP Accredited E82574



FINAL

Workorder: Phillipi Creek (J2508890)

Analytical Results Qualifiers

Parameter Qualifiers

- U The compound was analyzed for but not detected.
- I The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.

Lab Qualifiers

- J DOH Certification #E82574 (FL NELAC) AEL-Jacksonville
DOD-ELAP Certification #L23-514 (ISO/IEC 17025:2017) AEL-Jacksonville

Certificate of Analysis

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.



NELAP Accredited E82574



FINAL

Workorder: Phillipi Creek (J2508890)

Analytical Results

Lab ID:	J2508890001	Date Collected:				06/10/2025 10:18		Matrix:	Soil
Sample ID:	PCV-10	Date Received:				06/11/2025 14:00			
Parameter	Results	Units	PQL	MDL	DF	Prepared	Analyzed	Lab	
METALS (SW-846 3050B/SW-846 6010)									
Aluminum	4700	mg/Kg	330	84	5	06/13/2025 10:55	06/16/2025 15:57	J	
Arsenic	1.6 I	mg/Kg	3.3	0.84	1	06/13/2025 10:55	06/13/2025 20:39	J	
Barium	14	mg/Kg	3.3	0.84	1	06/13/2025 10:55	06/13/2025 20:39	J	
Cadmium	0.31 I	mg/Kg	0.33	0.084	1	06/13/2025 10:55	06/13/2025 20:39	J	
Chromium	11	mg/Kg	1.3	0.33	1	06/13/2025 10:55	06/13/2025 20:39	J	
Copper	16	mg/Kg	3.3	0.84	1	06/13/2025 10:55	06/13/2025 20:39	J	
Lead	11	mg/Kg	3.3	0.84	1	06/13/2025 10:55	06/13/2025 20:39	J	
Nickel	1.4 I	mg/Kg	3.3	0.84	1	06/13/2025 10:55	06/13/2025 20:39	J	
Selenium	1.7 U	mg/Kg	6.7	1.7	1	06/13/2025 10:55	06/13/2025 20:39	J	
Silver	0.33 U	mg/Kg	1.3	0.33	1	06/13/2025 10:55	06/13/2025 20:39	J	
Zinc	41 I	mg/Kg	67	17	1	06/13/2025 10:55	06/13/2025 20:39	J	
METALS (SW-846 7471A)									
Mercury	0.036	mg/Kg	0.0078	0.0020	1	06/13/2025 09:54	06/13/2025 12:08	J	
SEMIVOLATILES (EPA 3546/EPA 8081)									
4,4`-DDD	0.014 U	mg/Kg	0.056	0.014	10	06/16/2025 08:00	06/18/2025 14:30	J	
4,4`-DDE	0.014 U	mg/Kg	0.056	0.014	10	06/16/2025 08:00	06/18/2025 14:30	J	
4,4`-DDT	0.028 U	mg/Kg	0.11	0.028	10	06/16/2025 08:00	06/18/2025 14:30	J	
Aldrin	0.014 U	mg/Kg	0.056	0.014	10	06/16/2025 08:00	06/18/2025 14:30	J	
Chlordane (technical)	0.25 U	mg/Kg	1.0	0.25	10	06/16/2025 08:00	06/18/2025 14:30	J	
Dieldrin	0.014 U	mg/Kg	0.056	0.014	10	06/16/2025 08:00	06/18/2025 14:30	J	
Endosulfan I	0.014 U	mg/Kg	0.056	0.014	10	06/16/2025 08:00	06/18/2025 14:30	J	
Endosulfan II	0.014 U	mg/Kg	0.056	0.014	10	06/16/2025 08:00	06/18/2025 14:30	J	
Endosulfan Sulfate	0.014 U	mg/Kg	0.056	0.014	10	06/16/2025 08:00	06/18/2025 14:30	J	
Endrin	0.028 U	mg/Kg	0.11	0.028	10	06/16/2025 08:00	06/18/2025 14:30	J	
Endrin Aldehyde	0.014 U	mg/Kg	0.056	0.014	10	06/16/2025 08:00	06/18/2025 14:30	J	
Heptachlor	0.014 U	mg/Kg	0.056	0.014	10	06/16/2025 08:00	06/18/2025 14:30	J	
Heptachlor Epoxide	0.014 U	mg/Kg	0.056	0.014	10	06/16/2025 08:00	06/18/2025 14:30	J	

Thursday, June 26, 2025 3:50:29 PM
Dates and times are displayed using (-04:00)
Page 12 of 117

Certificate of Analysis

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.

POWERED BY
HORIZON
v.13.1.0



NELAP Accredited E82574



FINAL

Workorder: Phillipi Creek (J2508890)

Analytical Results

Lab ID: J2508890001
Sample ID: PCV-10

Date Collected: 06/10/2025 10:18
Date Received: 06/11/2025 14:00

Matrix: Soil

Parameter	Results	Units	PQL	MDL	DF	Prepared	Analyzed	Lab
Methoxychlor	0.014 U	mg/Kg	0.056	0.014	10	06/16/2025 08:00	06/18/2025 14:30	J
Toxaphene	0.42 U	mg/Kg	1.7	0.42	10	06/16/2025 08:00	06/18/2025 14:30	J
alpha-BHC	0.014 U	mg/Kg	0.056	0.014	10	06/16/2025 08:00	06/18/2025 14:30	J
beta-BHC	0.014 U	mg/Kg	0.056	0.014	10	06/16/2025 08:00	06/18/2025 14:30	J
delta-BHC	0.014 U	mg/Kg	0.056	0.014	10	06/16/2025 08:00	06/18/2025 14:30	J
gamma-BHC (Lindane)	0.014 U	mg/Kg	0.056	0.014	10	06/16/2025 08:00	06/18/2025 14:30	J
SEMIVOLATILES (EPA 3546/SW-846 8082A)								
Aroclor 1016 (PCB-1016)	0.042 U	mg/Kg	0.17	0.042	1	06/16/2025 08:00	06/17/2025 23:57	J
Aroclor 1221 (PCB-1221)	0.042 U	mg/Kg	0.17	0.042	1	06/16/2025 08:00	06/17/2025 23:57	J
Aroclor 1232 (PCB-1232)	0.042 U	mg/Kg	0.17	0.042	1	06/16/2025 08:00	06/17/2025 23:57	J
Aroclor 1242 (PCB-1242)	0.042 U	mg/Kg	0.17	0.042	1	06/16/2025 08:00	06/17/2025 23:57	J
Aroclor 1248 (PCB-1248)	0.042 U	mg/Kg	0.17	0.042	1	06/16/2025 08:00	06/17/2025 23:57	J
Aroclor 1254 (PCB-1254)	0.042 U	mg/Kg	0.17	0.042	1	06/16/2025 08:00	06/17/2025 23:57	J
Aroclor 1260 (PCB-1260)	0.042 U	mg/Kg	0.17	0.042	1	06/16/2025 08:00	06/17/2025 23:57	J
SEMIVOLATILES (EPA 3546/SW-846 8270E (SIM))								
1-Methylnaphthalene	0.0068 U	mg/Kg	0.014	0.0068	1	06/12/2025 08:00	06/13/2025 00:16	J
2-Methylnaphthalene	0.0068 U	mg/Kg	0.014	0.0068	1	06/12/2025 08:00	06/13/2025 00:16	J
Acenaphthene	0.0068 U	mg/Kg	0.014	0.0068	1	06/12/2025 08:00	06/13/2025 00:16	J
Acenaphthylene	0.0068 U	mg/Kg	0.014	0.0068	1	06/12/2025 08:00	06/13/2025 00:16	J
Anthracene	0.0068 U	mg/Kg	0.014	0.0068	1	06/12/2025 08:00	06/13/2025 00:16	J
Benzo[a]anthracene	0.0068 U	mg/Kg	0.014	0.0068	1	06/12/2025 08:00	06/13/2025 00:16	J
Benzo[a]pyrene	0.0083 I	mg/Kg	0.014	0.0068	1	06/12/2025 08:00	06/13/2025 00:16	J
Benzo[b]fluoranthene	0.015	mg/Kg	0.014	0.0068	1	06/12/2025 08:00	06/13/2025 00:16	J
Benzo[g,h,i]perylene	0.0076 I	mg/Kg	0.014	0.0068	1	06/12/2025 08:00	06/13/2025 00:16	J
Benzo[k]fluoranthene	0.0068 U	mg/Kg	0.014	0.0068	1	06/12/2025 08:00	06/13/2025 00:16	J
Chrysene	0.0099 I	mg/Kg	0.014	0.0068	1	06/12/2025 08:00	06/13/2025 00:16	J
Dibenzo[a,h]anthracene	0.0068 U	mg/Kg	0.014	0.0068	1	06/12/2025 08:00	06/13/2025 00:16	J

Thursday, June 26, 2025 3:50:29 PM
Dates and times are displayed using (-04:00)
Page 13 of 117

Certificate of Analysis

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.

POWERED BY
HORIZON
v.13.1.0



NELAP Accredited E82574



FINAL

Workorder: Phillipi Creek (J2508890)

Analytical Results

Lab ID: J2508890001	Date Collected: 06/10/2025 10:18					Matrix: Soil		
Sample ID: PCV-10	Date Received: 06/11/2025 14:00							
Parameter	Results	Units	PQL	MDL	DF	Prepared	Analyzed	Lab
Fluoranthene	0.016	mg/Kg	0.014	0.0068	1	06/12/2025 08:00	06/13/2025 00:16	J
Fluorene	0.0068 U	mg/Kg	0.014	0.0068	1	06/12/2025 08:00	06/13/2025 00:16	J
Indeno(1,2,3-cd)pyrene	0.0077 I	mg/Kg	0.014	0.0068	1	06/12/2025 08:00	06/13/2025 00:16	J
Naphthalene	0.0068 U	mg/Kg	0.014	0.0068	1	06/12/2025 08:00	06/13/2025 00:16	J
Phenanthrene	0.0068 U	mg/Kg	0.014	0.0068	1	06/12/2025 08:00	06/13/2025 00:16	J
Pyrene	0.013 I	mg/Kg	0.014	0.0068	1	06/12/2025 08:00	06/13/2025 00:16	J
SEMIVOLATILES (FL-PRO)								
TPH	17 U	mg/Kg	29	17	1	06/12/2025 08:00	06/12/2025 15:52	J
(SM 2540G)								
Percent Moisture	41	%	0.0010	0.0010	1	06/18/2025 15:11	06/18/2025 15:11	J

Analysis Results Comments

Decachlorobiphenyl

SD|Surrogate diluted out.

J4|Estimated Result

Tetrachloro-m-xylene

J4|Estimated Result

SD|Surrogate diluted out.

Surrogates

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Lab
Nonatricontane-C39 (S)	mg/Kg	6	3.70	61	36 - 132	J
Tetrachloro-m-xylene (S)	ug/Kg	170	360	218	44 - 130	J
o-Terphenyl (S)	mg/Kg	2	1.30	66	66 - 136	J
Tetrachloro-m-xylene (S)	ug/Kg	170	0	0	42 - 129	J
Decachlorobiphenyl (S)	ug/Kg	83	80	97	61 - 147	J
2-Fluorobiphenyl (S)	mg/Kg	0.40	0.20	51	46 - 115	J
Nitrobenzene-d5 (S)	mg/Kg	0.40	0.20	51	34 - 117	J





Advanced Environmental Laboratories, Inc
6681 Southpoint Pkwy Jacksonville, FL 32216
Payments: P.O. Box 551580 Jacksonville, FL 32255-1580
Phone: (904) 363-9350
Fax: (904) 363-9354

FINAL

Workorder: Phillipi Creek (J2508890)

Analytical Results

Surrogates

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Lab
p-Terphenyl-d14 (S)	mg/Kg	0.40	0.25	62	51 - 132	J
Decachlorobiphenyl (S)	ug/Kg	83	0	0	63 - 130	J

Thursday, June 26, 2025 3:50:29 PM
Dates and times are displayed using (-04:00)
Page 15 of 117

Certificate of Analysis

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.

POWERED BY
HORIZON
v.13.1.0



NELAP Accredited E82574



FINAL

Workorder: Phillipi Creek (J2508890)

Analytical Results

Lab ID:	J2508890002	Date Collected:	06/10/2025 10:47			Matrix:	Soil		
Sample ID:	PCV-09	Date Received:	06/11/2025 14:00						
Parameter	Results	Units	PQL	MDL	DF	Prepared	Analyzed	Lab	
METALS (SW-846 3050B/SW-846 6010)									
Aluminum	2200	mg/Kg	270	67	5	06/13/2025 10:55	06/16/2025 16:00	J	
Arsenic	1.1 I	mg/Kg	2.7	0.67	1	06/13/2025 10:55	06/13/2025 20:43	J	
Barium	6.9	mg/Kg	2.7	0.67	1	06/13/2025 10:55	06/13/2025 20:43	J	
Cadmium	0.16 I	mg/Kg	0.27	0.067	1	06/13/2025 10:55	06/13/2025 20:43	J	
Chromium	5.9	mg/Kg	1.1	0.27	1	06/13/2025 10:55	06/13/2025 20:43	J	
Copper	7.4	mg/Kg	2.7	0.67	1	06/13/2025 10:55	06/13/2025 20:43	J	
Lead	4.8	mg/Kg	2.7	0.67	1	06/13/2025 10:55	06/13/2025 20:43	J	
Nickel	0.67 U	mg/Kg	2.7	0.67	1	06/13/2025 10:55	06/13/2025 20:43	J	
Selenium	1.3 U	mg/Kg	5.3	1.3	1	06/13/2025 10:55	06/13/2025 20:43	J	
Silver	0.27 U	mg/Kg	1.1	0.27	1	06/13/2025 10:55	06/13/2025 20:43	J	
Zinc	16 I	mg/Kg	53	13	1	06/13/2025 10:55	06/13/2025 20:43	J	
METALS (SW-846 7471A)									
Mercury	0.0064 I	mg/Kg	0.0067	0.0017	1	06/13/2025 09:54	06/13/2025 12:20	J	
SEMIVOLATILES (EPA 3546/EPA 8081)									
4,4' -DDD	0.011 U	mg/Kg	0.046	0.011	10	06/16/2025 08:00	06/18/2025 14:51	J	
4,4' -DDE	0.011 U	mg/Kg	0.046	0.011	10	06/16/2025 08:00	06/18/2025 14:51	J	
4,4' -DDT	0.023 U	mg/Kg	0.091	0.023	10	06/16/2025 08:00	06/18/2025 14:51	J	
Aldrin	0.011 U	mg/Kg	0.046	0.011	10	06/16/2025 08:00	06/18/2025 14:51	J	
Chlordane (technical)	0.20 U	mg/Kg	0.82	0.20	10	06/16/2025 08:00	06/18/2025 14:51	J	
Dieldrin	0.011 U	mg/Kg	0.046	0.011	10	06/16/2025 08:00	06/18/2025 14:51	J	
Endosulfan I	0.011 U	mg/Kg	0.046	0.011	10	06/16/2025 08:00	06/18/2025 14:51	J	
Endosulfan II	0.011 U	mg/Kg	0.046	0.011	10	06/16/2025 08:00	06/18/2025 14:51	J	
Endosulfan Sulfate	0.011 U	mg/Kg	0.046	0.011	10	06/16/2025 08:00	06/18/2025 14:51	J	
Endrin	0.023 U	mg/Kg	0.091	0.023	10	06/16/2025 08:00	06/18/2025 14:51	J	
Endrin Aldehyde	0.011 U	mg/Kg	0.046	0.011	10	06/16/2025 08:00	06/18/2025 14:51	J	
Heptachlor	0.011 U	mg/Kg	0.046	0.011	10	06/16/2025 08:00	06/18/2025 14:51	J	
Heptachlor Epoxide	0.011 U	mg/Kg	0.046	0.011	10	06/16/2025 08:00	06/18/2025 14:51	J	

Thursday, June 26, 2025 3:50:29 PM
Dates and times are displayed using (-04:00)
Page 16 of 117

Certificate of Analysis

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.

POWERED BY
HORIZON
v.13.1.0



NELAP Accredited E82574



FINAL

Workorder: Phillipi Creek (J2508890)

Analytical Results

Lab ID: J2508890002
Sample ID: PCV-09

Date Collected: 06/10/2025 10:47
Date Received: 06/11/2025 14:00

Matrix: Soil

Parameter	Results	Units	PQL	MDL	DF	Prepared	Analyzed	Lab
Methoxychlor	0.011 U	mg/Kg	0.046	0.011	10	06/16/2025 08:00	06/18/2025 14:51	J
Toxaphene	0.34 U	mg/Kg	1.4	0.34	10	06/16/2025 08:00	06/18/2025 14:51	J
alpha-BHC	0.011 U	mg/Kg	0.046	0.011	10	06/16/2025 08:00	06/18/2025 14:51	J
beta-BHC	0.011 U	mg/Kg	0.046	0.011	10	06/16/2025 08:00	06/18/2025 14:51	J
delta-BHC	0.011 U	mg/Kg	0.046	0.011	10	06/16/2025 08:00	06/18/2025 14:51	J
gamma-BHC (Lindane)	0.011 U	mg/Kg	0.046	0.011	10	06/16/2025 08:00	06/18/2025 14:51	J
SEMIVOLATILES (EPA 3546/SW-846 8082A)								
Aroclor 1016 (PCB-1016)	0.034 U	mg/Kg	0.14	0.034	1	06/16/2025 08:00	06/18/2025 00:17	J
Aroclor 1221 (PCB-1221)	0.034 U	mg/Kg	0.14	0.034	1	06/16/2025 08:00	06/18/2025 00:17	J
Aroclor 1232 (PCB-1232)	0.034 U	mg/Kg	0.14	0.034	1	06/16/2025 08:00	06/18/2025 00:17	J
Aroclor 1242 (PCB-1242)	0.034 U	mg/Kg	0.14	0.034	1	06/16/2025 08:00	06/18/2025 00:17	J
Aroclor 1248 (PCB-1248)	0.034 U	mg/Kg	0.14	0.034	1	06/16/2025 08:00	06/18/2025 00:17	J
Aroclor 1254 (PCB-1254)	0.034 U	mg/Kg	0.14	0.034	1	06/16/2025 08:00	06/18/2025 00:17	J
Aroclor 1260 (PCB-1260)	0.034 U	mg/Kg	0.14	0.034	1	06/16/2025 08:00	06/18/2025 00:17	J
SEMIVOLATILES (EPA 3546/SW-846 8270E (SIM))								
1-Methylnaphthalene	0.0055 U	mg/Kg	0.011	0.0055	1	06/12/2025 08:00	06/13/2025 01:37	J
2-Methylnaphthalene	0.0055 U	mg/Kg	0.011	0.0055	1	06/12/2025 08:00	06/13/2025 01:37	J
Acenaphthene	0.0055 U	mg/Kg	0.011	0.0055	1	06/12/2025 08:00	06/13/2025 01:37	J
Acenaphthylene	0.0055 U	mg/Kg	0.011	0.0055	1	06/12/2025 08:00	06/13/2025 01:37	J
Anthracene	0.0055 U	mg/Kg	0.011	0.0055	1	06/12/2025 08:00	06/13/2025 01:37	J
Benzo[a]anthracene	0.0055 U	mg/Kg	0.011	0.0055	1	06/12/2025 08:00	06/13/2025 01:37	J
Benzo[a]pyrene	0.0066 I	mg/Kg	0.011	0.0055	1	06/12/2025 08:00	06/13/2025 01:37	J
Benzo[b]fluoranthene	0.012	mg/Kg	0.011	0.0055	1	06/12/2025 08:00	06/13/2025 01:37	J
Benzo[g,h,i]perylene	0.0059 I	mg/Kg	0.011	0.0055	1	06/12/2025 08:00	06/13/2025 01:37	J
Benzo[k]fluoranthene	0.0055 U	mg/Kg	0.011	0.0055	1	06/12/2025 08:00	06/13/2025 01:37	J
Chrysene	0.0074 I	mg/Kg	0.011	0.0055	1	06/12/2025 08:00	06/13/2025 01:37	J
Dibenzo[a,h]anthracene	0.0055 U	mg/Kg	0.011	0.0055	1	06/12/2025 08:00	06/13/2025 01:37	J

Thursday, June 26, 2025 3:50:29 PM
Dates and times are displayed using (-04:00)
Page 17 of 117

Certificate of Analysis

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.

POWERED BY
HORIZON[®]
v.13.1.0



NELAP Accredited E82574



FINAL

Workorder: Phillipi Creek (J2508890)

Analytical Results

Lab ID: J2508890002	Date Collected: 06/10/2025 10:47					Matrix: Soil		
Sample ID: PCV-09	Date Received: 06/11/2025 14:00							
Parameter	Results	Units	PQL	MDL	DF	Prepared	Analyzed	Lab
Fluoranthene	0.010 I	mg/Kg	0.011	0.0055	1	06/12/2025 08:00	06/13/2025 01:37	J
Fluorene	0.0055 U	mg/Kg	0.011	0.0055	1	06/12/2025 08:00	06/13/2025 01:37	J
Indeno(1,2,3-cd)pyrene	0.0063 I	mg/Kg	0.011	0.0055	1	06/12/2025 08:00	06/13/2025 01:37	J
Naphthalene	0.0055 U	mg/Kg	0.011	0.0055	1	06/12/2025 08:00	06/13/2025 01:37	J
Phenanthrene	0.0055 U	mg/Kg	0.011	0.0055	1	06/12/2025 08:00	06/13/2025 01:37	J
Pyrene	0.0082 I	mg/Kg	0.011	0.0055	1	06/12/2025 08:00	06/13/2025 01:37	J
SEMIVOLATILES (FL-PRO)								
TPH	14 U	mg/Kg	24	14	1	06/12/2025 08:00	06/12/2025 16:10	J
(SM 2540G)								
Percent Moisture	28	%	0.0010	0.0010	1	06/18/2025 15:11	06/18/2025 15:11	J

Analysis Results Comments

Decachlorobiphenyl

SD|Surrogate diluted out.

J4|Estimated Result

Tetrachloro-m-xylene

J4|Estimated Result

SD|Surrogate diluted out.

Surrogates

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Lab
o-Terphenyl (S)	mg/Kg	2	1.40	71	66 - 136	J
p-Terphenyl-d14 (S)	mg/Kg	0.40	0.27	69	51 - 132	J
Decachlorobiphenyl (S)	ug/Kg	82	0	0	63 - 130	J
Tetrachloro-m-xylene (S)	ug/Kg	160	0	0	42 - 129	J
2-Fluorobiphenyl (S)	mg/Kg	0.40	0.20	51	46 - 115	J
Decachlorobiphenyl (S)	ug/Kg	82	77	94	61 - 147	J
Nitrobenzene-d5 (S)	mg/Kg	0.40	0.21	52	34 - 117	J





Advanced Environmental Laboratories, Inc
6681 Southpoint Pkwy Jacksonville, FL 32216
Payments: P.O. Box 551580 Jacksonville, FL 32255-1580
Phone: (904) 363-9350
Fax: (904) 363-9354

FINAL

Workorder: Phillipi Creek (J2508890)

Analytical Results

Surrogates

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Lab
Tetrachloro-m-xylene (S)	ug/Kg	160	390	236	44 - 130	J
Nonatricontane-C39 (S)	mg/Kg	6	4	66	36 - 132	J

Certificate of Analysis

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.





FINAL

Workorder: Phillipi Creek (J2508890)

Analytical Results

Lab ID:	J2508890003	Date Collected:	06/10/2025 11:05			Matrix:	Soil		
Sample ID:	PCV-08	Date Received:	06/11/2025 14:00						
Parameter	Results	Units	PQL	MDL	DF	Prepared	Analyzed	Lab	
METALS (SW-846 3050B/SW-846 6010)									
Aluminum	4400	mg/Kg	260	66	5	06/13/2025 10:55	06/16/2025 16:04	J	
Arsenic	1.9 I	mg/Kg	2.6	0.66	1	06/13/2025 10:55	06/13/2025 20:46	J	
Barium	13	mg/Kg	2.6	0.66	1	06/13/2025 10:55	06/13/2025 20:46	J	
Cadmium	0.23 I	mg/Kg	0.26	0.066	1	06/13/2025 10:55	06/13/2025 20:46	J	
Chromium	11	mg/Kg	1.1	0.26	1	06/13/2025 10:55	06/13/2025 20:46	J	
Copper	27	mg/Kg	2.6	0.66	1	06/13/2025 10:55	06/13/2025 20:46	J	
Lead	8.2	mg/Kg	2.6	0.66	1	06/13/2025 10:55	06/13/2025 20:46	J	
Nickel	2.1 I	mg/Kg	2.6	0.66	1	06/13/2025 10:55	06/13/2025 20:46	J	
Selenium	1.3 U	mg/Kg	5.3	1.3	1	06/13/2025 10:55	06/13/2025 20:46	J	
Silver	0.26 U	mg/Kg	1.1	0.26	1	06/13/2025 10:55	06/13/2025 20:46	J	
Zinc	18 I	mg/Kg	53	13	1	06/13/2025 10:55	06/13/2025 20:46	J	
METALS (SW-846 7471A)									
Mercury	0.0070 I	mg/Kg	0.0071	0.0018	1	06/13/2025 09:54	06/13/2025 12:24	J	
SEMIVOLATILES (EPA 3546/EPA 8081)									
4,4`-DDD	0.012 U	mg/Kg	0.046	0.012	10	06/16/2025 08:00	06/18/2025 15:11	J	
4,4`-DDE	0.012 U	mg/Kg	0.046	0.012	10	06/16/2025 08:00	06/18/2025 15:11	J	
4,4`-DDT	0.023 U	mg/Kg	0.092	0.023	10	06/16/2025 08:00	06/18/2025 15:11	J	
Aldrin	0.012 U	mg/Kg	0.046	0.012	10	06/16/2025 08:00	06/18/2025 15:11	J	
Chlordane (technical)	0.21 U	mg/Kg	0.83	0.21	10	06/16/2025 08:00	06/18/2025 15:11	J	
Dieldrin	0.012 U	mg/Kg	0.046	0.012	10	06/16/2025 08:00	06/18/2025 15:11	J	
Endosulfan I	0.012 U	mg/Kg	0.046	0.012	10	06/16/2025 08:00	06/18/2025 15:11	J	
Endosulfan II	0.012 U	mg/Kg	0.046	0.012	10	06/16/2025 08:00	06/18/2025 15:11	J	
Endosulfan Sulfate	0.012 U	mg/Kg	0.046	0.012	10	06/16/2025 08:00	06/18/2025 15:11	J	
Endrin	0.023 U	mg/Kg	0.092	0.023	10	06/16/2025 08:00	06/18/2025 15:11	J	
Endrin Aldehyde	0.012 U	mg/Kg	0.046	0.012	10	06/16/2025 08:00	06/18/2025 15:11	J	
Heptachlor	0.012 U	mg/Kg	0.046	0.012	10	06/16/2025 08:00	06/18/2025 15:11	J	
Heptachlor Epoxide	0.012 U	mg/Kg	0.046	0.012	10	06/16/2025 08:00	06/18/2025 15:11	J	

Thursday, June 26, 2025 3:50:29 PM
Dates and times are displayed using (-04:00)
Page 20 of 117

Certificate of Analysis
This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.

POWERED BY
HORIZON
v.13.1.0



NELAP Accredited E82574



FINAL

Workorder: Phillipi Creek (J2508890)

Analytical Results

Lab ID: J2508890003
Sample ID: PCV-08

Date Collected: 06/10/2025 11:05
Date Received: 06/11/2025 14:00

Matrix: Soil

Parameter	Results	Units	PQL	MDL	DF	Prepared	Analyzed	Lab
Methoxychlor	0.012 U	mg/Kg	0.046	0.012	10	06/16/2025 08:00	06/18/2025 15:11	J
Toxaphene	0.35 U	mg/Kg	1.4	0.35	10	06/16/2025 08:00	06/18/2025 15:11	J
alpha-BHC	0.012 U	mg/Kg	0.046	0.012	10	06/16/2025 08:00	06/18/2025 15:11	J
beta-BHC	0.012 U	mg/Kg	0.046	0.012	10	06/16/2025 08:00	06/18/2025 15:11	J
delta-BHC	0.012 U	mg/Kg	0.046	0.012	10	06/16/2025 08:00	06/18/2025 15:11	J
gamma-BHC (Lindane)	0.012 U	mg/Kg	0.046	0.012	10	06/16/2025 08:00	06/18/2025 15:11	J
SEMIVOLATILES (EPA 3546/SW-846 8082A)								
Aroclor 1016 (PCB-1016)	0.035 U	mg/Kg	0.14	0.035	1	06/16/2025 08:00	06/18/2025 00:38	J
Aroclor 1221 (PCB-1221)	0.035 U	mg/Kg	0.14	0.035	1	06/16/2025 08:00	06/18/2025 00:38	J
Aroclor 1232 (PCB-1232)	0.035 U	mg/Kg	0.14	0.035	1	06/16/2025 08:00	06/18/2025 00:38	J
Aroclor 1242 (PCB-1242)	0.035 U	mg/Kg	0.14	0.035	1	06/16/2025 08:00	06/18/2025 00:38	J
Aroclor 1248 (PCB-1248)	0.035 U	mg/Kg	0.14	0.035	1	06/16/2025 08:00	06/18/2025 00:38	J
Aroclor 1254 (PCB-1254)	0.035 U	mg/Kg	0.14	0.035	1	06/16/2025 08:00	06/18/2025 00:38	J
Aroclor 1260 (PCB-1260)	0.035 U	mg/Kg	0.14	0.035	1	06/16/2025 08:00	06/18/2025 00:38	J
SEMIVOLATILES (EPA 3546/SW-846 8270E (SIM))								
1-Methylnaphthalene	0.0056 U	mg/Kg	0.011	0.0056	1	06/12/2025 08:00	06/13/2025 02:04	J
2-Methylnaphthalene	0.0056 U	mg/Kg	0.011	0.0056	1	06/12/2025 08:00	06/13/2025 02:04	J
Acenaphthene	0.0056 U	mg/Kg	0.011	0.0056	1	06/12/2025 08:00	06/13/2025 02:04	J
Acenaphthylene	0.0056 U	mg/Kg	0.011	0.0056	1	06/12/2025 08:00	06/13/2025 02:04	J
Anthracene	0.0056 U	mg/Kg	0.011	0.0056	1	06/12/2025 08:00	06/13/2025 02:04	J
Benzo[a]anthracene	0.0056 I	mg/Kg	0.011	0.0056	1	06/12/2025 08:00	06/13/2025 02:04	J
Benzo[a]pyrene	0.0057 I	mg/Kg	0.011	0.0056	1	06/12/2025 08:00	06/13/2025 02:04	J
Benzo[b]fluoranthene	0.0092 I	mg/Kg	0.011	0.0056	1	06/12/2025 08:00	06/13/2025 02:04	J
Benzo[g,h,i]perylene	0.0056 U	mg/Kg	0.011	0.0056	1	06/12/2025 08:00	06/13/2025 02:04	J
Benzo[k]fluoranthene	0.0056 U	mg/Kg	0.011	0.0056	1	06/12/2025 08:00	06/13/2025 02:04	J
Chrysene	0.0070 I	mg/Kg	0.011	0.0056	1	06/12/2025 08:00	06/13/2025 02:04	J
Dibenzo[a,h]anthracene	0.0056 U	mg/Kg	0.011	0.0056	1	06/12/2025 08:00	06/13/2025 02:04	J





FINAL

Workorder: Phillipi Creek (J2508890)

Analytical Results

Lab ID:	J2508890003	Date Collected:	06/10/2025 11:05			Matrix:	Soil	
Sample ID:	PCV-08	Date Received:	06/11/2025 14:00					
Parameter	Results	Units	PQL	MDL	DF	Prepared	Analyzed	Lab
Fluoranthene	0.013	mg/Kg	0.011	0.0056	1	06/12/2025 08:00	06/13/2025 02:04	J
Fluorene	0.0056 U	mg/Kg	0.011	0.0056	1	06/12/2025 08:00	06/13/2025 02:04	J
Indeno(1,2,3-cd)pyrene	0.0056 U	mg/Kg	0.011	0.0056	1	06/12/2025 08:00	06/13/2025 02:04	J
Naphthalene	0.0056 U	mg/Kg	0.011	0.0056	1	06/12/2025 08:00	06/13/2025 02:04	J
Phenanthrene	0.0056 U	mg/Kg	0.011	0.0056	1	06/12/2025 08:00	06/13/2025 02:04	J
Pyrene	0.0096 I	mg/Kg	0.011	0.0056	1	06/12/2025 08:00	06/13/2025 02:04	J
SEMIVOLATILES (FL-PRO)								
TPH	14 U	mg/Kg	24	14	1	06/12/2025 08:00	06/12/2025 16:29	J
(SM 2540G)								
Percent Moisture	28	%	0.0010	0.0010	1	06/18/2025 15:11	06/18/2025 15:11	J

Analysis Results Comments

Decachlorobiphenyl

SD|Surrogate diluted out.

J4|Estimated Result

Tetrachloro-m-xylene

J4|Estimated Result

SD|Surrogate diluted out.

Surrogates

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Lab
Nonatricontane-C39 (S)	mg/Kg	6	4.90	82	36 - 132	J
Decachlorobiphenyl (S)	ug/Kg	82	75	91	61 - 147	J
Nitrobenzene-d5 (S)	mg/Kg	0.40	0.25	62	34 - 117	J
p-Terphenyl-d14 (S)	mg/Kg	0.40	0.32	79	51 - 132	J
o-Terphenyl (S)	mg/Kg	2	1.70	87	66 - 136	J
Tetrachloro-m-xylene (S)	ug/Kg	160	0	0	42 - 129	J
Decachlorobiphenyl (S)	ug/Kg	82	0	0	63 - 130	J





Advanced Environmental Laboratories, Inc
6681 Southpoint Pkwy Jacksonville, FL 32216
Payments: P.O. Box 551580 Jacksonville, FL 32255-1580
Phone: (904) 363-9350
Fax: (904) 363-9354

FINAL

Workorder: Phillipi Creek (J2508890)

Analytical Results

Surrogates

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Lab
2-Fluorobiphenyl (S)	mg/Kg	0.40	0.25	63	46 - 115	J
Tetrachloro-m-xylene (S)	ug/Kg	160	450	272	44 - 130	J

Thursday, June 26, 2025 3:50:29 PM
Dates and times are displayed using (-04:00)
Page 23 of 117

Certificate of Analysis

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.

POWERED BY
HORIZON
v.13.1.0



NELAP Accredited E82574



FINAL

Workorder: Phillipi Creek (J2508890)

Analytical Results

Lab ID:	J2508890004	Date Collected:	06/10/2025 11:35			Matrix:	Soil	
Sample ID:	PCV-07	Date Received:	06/11/2025 14:00					
Parameter	Results	Units	PQL	MDL	DF	Prepared	Analyzed	Lab
METALS (SW-846 3050B/SW-846 6010)								
Aluminum	1100	mg/Kg	110	27	2	06/13/2025 10:55	06/16/2025 16:07	J
Arsenic	0.83 I	mg/Kg	2.7	0.68	1	06/13/2025 10:55	06/13/2025 20:50	J
Barium	5.5	mg/Kg	2.7	0.68	1	06/13/2025 10:55	06/13/2025 20:50	J
Cadmium	0.096 I	mg/Kg	0.27	0.068	1	06/13/2025 10:55	06/13/2025 20:50	J
Chromium	3.3	mg/Kg	1.1	0.27	1	06/13/2025 10:55	06/13/2025 20:50	J
Copper	4.1	mg/Kg	2.7	0.68	1	06/13/2025 10:55	06/13/2025 20:50	J
Lead	2.5 I	mg/Kg	2.7	0.68	1	06/13/2025 10:55	06/13/2025 20:50	J
Nickel	0.68 U	mg/Kg	2.7	0.68	1	06/13/2025 10:55	06/13/2025 20:50	J
Selenium	1.4 U	mg/Kg	5.5	1.4	1	06/13/2025 10:55	06/13/2025 20:50	J
Silver	0.27 U	mg/Kg	1.1	0.27	1	06/13/2025 10:55	06/13/2025 20:50	J
Zinc	14 U	mg/Kg	55	14	1	06/13/2025 10:55	06/13/2025 20:50	J
METALS (SW-846 7471A)								
Mercury	0.0057 I	mg/Kg	0.0069	0.0017	1	06/13/2025 09:54	06/13/2025 12:28	J
SEMIVOLATILES (EPA 3546/EPA 8081)								
4,4`-DDD	0.024 U	mg/Kg	0.096	0.024	20	06/16/2025 08:00	06/18/2025 15:32	J
4,4`-DDE	0.024 U	mg/Kg	0.096	0.024	20	06/16/2025 08:00	06/18/2025 15:32	J
4,4`-DDT	0.048 U	mg/Kg	0.19	0.048	20	06/16/2025 08:00	06/18/2025 15:32	J
Aldrin	0.024 U	mg/Kg	0.096	0.024	20	06/16/2025 08:00	06/18/2025 15:32	J
Chlordane (technical)	0.43 U	mg/Kg	1.7	0.43	20	06/16/2025 08:00	06/18/2025 15:32	J
Dieldrin	0.024 U	mg/Kg	0.096	0.024	20	06/16/2025 08:00	06/18/2025 15:32	J
Endosulfan I	0.024 U	mg/Kg	0.096	0.024	20	06/16/2025 08:00	06/18/2025 15:32	J
Endosulfan II	0.024 U	mg/Kg	0.096	0.024	20	06/16/2025 08:00	06/18/2025 15:32	J
Endosulfan Sulfate	0.024 U	mg/Kg	0.096	0.024	20	06/16/2025 08:00	06/18/2025 15:32	J
Endrin	0.048 U	mg/Kg	0.19	0.048	20	06/16/2025 08:00	06/18/2025 15:32	J
Endrin Aldehyde	0.024 U	mg/Kg	0.096	0.024	20	06/16/2025 08:00	06/18/2025 15:32	J
Heptachlor	0.024 U	mg/Kg	0.096	0.024	20	06/16/2025 08:00	06/18/2025 15:32	J
Heptachlor Epoxide	0.024 U	mg/Kg	0.096	0.024	20	06/16/2025 08:00	06/18/2025 15:32	J

Thursday, June 26, 2025 3:50:29 PM
Dates and times are displayed using (-04:00)
Page 24 of 117

Certificate of Analysis

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.

POWERED BY
HORIZON
v.13.1.0



NELAP Accredited E82574



FINAL

Workorder: Phillipi Creek (J2508890)

Analytical Results

Lab ID: J2508890004
Sample ID: PCV-07

Date Collected: 06/10/2025 11:35
Date Received: 06/11/2025 14:00

Matrix: Soil

Parameter	Results	Units	PQL	MDL	DF	Prepared	Analyzed	Lab
Methoxychlor	0.024 U	mg/Kg	0.096	0.024	20	06/16/2025 08:00	06/18/2025 15:32	J
Toxaphene	0.72 U	mg/Kg	2.9	0.72	20	06/16/2025 08:00	06/18/2025 15:32	J
alpha-BHC	0.024 U	mg/Kg	0.096	0.024	20	06/16/2025 08:00	06/18/2025 15:32	J
beta-BHC	0.024 U	mg/Kg	0.096	0.024	20	06/16/2025 08:00	06/18/2025 15:32	J
delta-BHC	0.024 U	mg/Kg	0.096	0.024	20	06/16/2025 08:00	06/18/2025 15:32	J
gamma-BHC (Lindane)	0.024 U	mg/Kg	0.096	0.024	20	06/16/2025 08:00	06/18/2025 15:32	J
SEMIVOLATILES (EPA 3546/SW-846 8082A)								
Aroclor 1016 (PCB-1016)	0.036 U	mg/Kg	0.14	0.036	1	06/16/2025 08:00	06/18/2025 00:59	J
Aroclor 1221 (PCB-1221)	0.036 U	mg/Kg	0.14	0.036	1	06/16/2025 08:00	06/18/2025 00:59	J
Aroclor 1232 (PCB-1232)	0.036 U	mg/Kg	0.14	0.036	1	06/16/2025 08:00	06/18/2025 00:59	J
Aroclor 1242 (PCB-1242)	0.036 U	mg/Kg	0.14	0.036	1	06/16/2025 08:00	06/18/2025 00:59	J
Aroclor 1248 (PCB-1248)	0.036 U	mg/Kg	0.14	0.036	1	06/16/2025 08:00	06/18/2025 00:59	J
Aroclor 1254 (PCB-1254)	0.036 U	mg/Kg	0.14	0.036	1	06/16/2025 08:00	06/18/2025 00:59	J
Aroclor 1260 (PCB-1260)	0.036 U	mg/Kg	0.14	0.036	1	06/16/2025 08:00	06/18/2025 00:59	J
SEMIVOLATILES (EPA 3546/SW-846 8270E (SIM))								
1-Methylnaphthalene	0.0058 U	mg/Kg	0.012	0.0058	1	06/12/2025 08:00	06/13/2025 02:31	J
2-Methylnaphthalene	0.0058 U	mg/Kg	0.012	0.0058	1	06/12/2025 08:00	06/13/2025 02:31	J
Acenaphthene	0.0058 U	mg/Kg	0.012	0.0058	1	06/12/2025 08:00	06/13/2025 02:31	J
Acenaphthylene	0.0058 U	mg/Kg	0.012	0.0058	1	06/12/2025 08:00	06/13/2025 02:31	J
Anthracene	0.0058 U	mg/Kg	0.012	0.0058	1	06/12/2025 08:00	06/13/2025 02:31	J
Benzo[a]anthracene	0.0058 U	mg/Kg	0.012	0.0058	1	06/12/2025 08:00	06/13/2025 02:31	J
Benzo[a]pyrene	0.0058 U	mg/Kg	0.012	0.0058	1	06/12/2025 08:00	06/13/2025 02:31	J
Benzo[b]fluoranthene	0.0095 I	mg/Kg	0.012	0.0058	1	06/12/2025 08:00	06/13/2025 02:31	J
Benzo[g,h,i]perylene	0.0058 U	mg/Kg	0.012	0.0058	1	06/12/2025 08:00	06/13/2025 02:31	J
Benzo[k]fluoranthene	0.0058 U	mg/Kg	0.012	0.0058	1	06/12/2025 08:00	06/13/2025 02:31	J
Chrysene	0.0071 I	mg/Kg	0.012	0.0058	1	06/12/2025 08:00	06/13/2025 02:31	J
Dibenzo[a,h]anthracene	0.0058 U	mg/Kg	0.012	0.0058	1	06/12/2025 08:00	06/13/2025 02:31	J





FINAL

Workorder: Phillipi Creek (J2508890)

Analytical Results

Lab ID:	J2508890004	Date Collected:	06/10/2025 11:35			Matrix:	Soil	
Sample ID:	PCV-07	Date Received:	06/11/2025 14:00					
Parameter	Results	Units	PQL	MDL	DF	Prepared	Analyzed	Lab
Fluoranthene	0.011 I	mg/Kg	0.012	0.0058	1	06/12/2025 08:00	06/13/2025 02:31	J
Fluorene	0.0058 U	mg/Kg	0.012	0.0058	1	06/12/2025 08:00	06/13/2025 02:31	J
Indeno(1,2,3-cd)pyrene	0.0058 U	mg/Kg	0.012	0.0058	1	06/12/2025 08:00	06/13/2025 02:31	J
Naphthalene	0.0058 U	mg/Kg	0.012	0.0058	1	06/12/2025 08:00	06/13/2025 02:31	J
Phenanthrene	0.0058 U	mg/Kg	0.012	0.0058	1	06/12/2025 08:00	06/13/2025 02:31	J
Pyrene	0.0086 I	mg/Kg	0.012	0.0058	1	06/12/2025 08:00	06/13/2025 02:31	J
SEMIVOLATILES (FL-PRO)								
TPH	14 U	mg/Kg	25	14	1	06/12/2025 08:00	06/12/2025 16:48	J
(SM 2540G)								
Percent Moisture	32	%	0.0010	0.0010	1	06/18/2025 15:11	06/18/2025 15:11	J

Analysis Results Comments

Decachlorobiphenyl

SD|Surrogate diluted out.

J4|Estimated Result

Tetrachloro-m-xylene

J4|Estimated Result

SD|Surrogate diluted out.

Surrogates

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Lab
Nitrobenzene-d5 (S)	mg/Kg	0.40	0.24	59	34 - 117	J
Decachlorobiphenyl (S)	ug/Kg	82	0	0	63 - 130	J
Tetrachloro-m-xylene (S)	ug/Kg	160	0	0	42 - 129	J
Tetrachloro-m-xylene (S)	ug/Kg	160	560	340	44 - 130	J
Decachlorobiphenyl (S)	ug/Kg	82	77	95	61 - 147	J
2-Fluorobiphenyl (S)	mg/Kg	0.40	0.24	60	46 - 115	J
Nonatricontane-C39 (S)	mg/Kg	6	4.70	79	36 - 132	J





Advanced Environmental Laboratories, Inc
6681 Southpoint Pkwy Jacksonville, FL 32216
Payments: P.O. Box 551580 Jacksonville, FL 32255-1580
Phone: (904) 363-9350
Fax: (904) 363-9354

FINAL

Workorder: Phillipi Creek (J2508890)

Analytical Results

Surrogates

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Lab
o-Terphenyl (S)	mg/Kg	2	1.80	88	66 - 136	J
p-Terphenyl-d14 (S)	mg/Kg	0.40	0.31	77	51 - 132	J

Certificate of Analysis

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.



NELAP Accredited E82574



FINAL

Workorder: Phillipi Creek (J2508890)

Analytical Results

Lab ID: J2508890005
Sample ID: PCV-05

Date Collected: 06/10/2025 12:05
Date Received: 06/11/2025 14:00

Matrix: Soil

Parameter	Results	Units	PQL	MDL	DF	Prepared	Analyzed	Lab
METALS (SW-846 3050B/SW-846 6010)								
Aluminum	520	mg/Kg	49	12	1	06/13/2025 10:55	06/13/2025 20:53	J
Arsenic	2.7	mg/Kg	2.4	0.61	1	06/13/2025 10:55	06/13/2025 20:53	J
Barium	2.6	mg/Kg	2.4	0.61	1	06/13/2025 10:55	06/13/2025 20:53	J
Cadmium	0.061 U	mg/Kg	0.24	0.061	1	06/13/2025 10:55	06/13/2025 20:53	J
Chromium	2.5	mg/Kg	0.97	0.24	1	06/13/2025 10:55	06/13/2025 20:53	J
Copper	1.1 I	mg/Kg	2.4	0.61	1	06/13/2025 10:55	06/13/2025 20:53	J
Lead	1.2 I	mg/Kg	2.4	0.61	1	06/13/2025 10:55	06/13/2025 20:53	J
Nickel	0.61 U	mg/Kg	2.4	0.61	1	06/13/2025 10:55	06/13/2025 20:53	J
Selenium	1.2 U	mg/Kg	4.9	1.2	1	06/13/2025 10:55	06/13/2025 20:53	J
Silver	0.24 U	mg/Kg	0.97	0.24	1	06/13/2025 10:55	06/13/2025 20:53	J
Zinc	12 U	mg/Kg	49	12	1	06/13/2025 10:55	06/13/2025 20:53	J
METALS (SW-846 7471A)								
Mercury	0.0026 I	mg/Kg	0.0058	0.0014	1	06/13/2025 09:54	06/13/2025 12:32	J
SEMIVOLATILES (EPA 3546/EPA 8081)								
4,4'-DDD	0.010 U	mg/Kg	0.041	0.010	10	06/16/2025 08:00	06/18/2025 15:52	J
4,4'-DDE	0.010 U	mg/Kg	0.041	0.010	10	06/16/2025 08:00	06/18/2025 15:52	J
4,4'-DDT	0.020 U	mg/Kg	0.082	0.020	10	06/16/2025 08:00	06/18/2025 15:52	J
Aldrin	0.010 U	mg/Kg	0.041	0.010	10	06/16/2025 08:00	06/18/2025 15:52	J
Chlordane (technical)	0.18 U	mg/Kg	0.74	0.18	10	06/16/2025 08:00	06/18/2025 15:52	J
Dieldrin	0.010 U	mg/Kg	0.041	0.010	10	06/16/2025 08:00	06/18/2025 15:52	J
Endosulfan I	0.010 U	mg/Kg	0.041	0.010	10	06/16/2025 08:00	06/18/2025 15:52	J
Endosulfan II	0.010 U	mg/Kg	0.041	0.010	10	06/16/2025 08:00	06/18/2025 15:52	J
Endosulfan Sulfate	0.010 U	mg/Kg	0.041	0.010	10	06/16/2025 08:00	06/18/2025 15:52	J
Endrin	0.020 U	mg/Kg	0.082	0.020	10	06/16/2025 08:00	06/18/2025 15:52	J
Endrin Aldehyde	0.010 U	mg/Kg	0.041	0.010	10	06/16/2025 08:00	06/18/2025 15:52	J
Heptachlor	0.010 U	mg/Kg	0.041	0.010	10	06/16/2025 08:00	06/18/2025 15:52	J
Heptachlor Epoxide	0.010 U	mg/Kg	0.041	0.010	10	06/16/2025 08:00	06/18/2025 15:52	J

Thursday, June 26, 2025 3:50:29 PM
Dates and times are displayed using (-04:00)
Page 28 of 117

Certificate of Analysis

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.

POWERED BY
HORIZON
v.13.1.0



NELAP Accredited E82574



FINAL

Workorder: Phillipi Creek (J2508890)

Analytical Results

Lab ID: J2508890005
Sample ID: PCV-05

Date Collected: 06/10/2025 12:05
Date Received: 06/11/2025 14:00

Matrix: Soil

Parameter	Results	Units	PQL	MDL	DF	Prepared	Analyzed	Lab
Methoxychlor	0.010 U	mg/Kg	0.041	0.010	10	06/16/2025 08:00	06/18/2025 15:52	J
Toxaphene	0.31 U	mg/Kg	1.2	0.31	10	06/16/2025 08:00	06/18/2025 15:52	J
alpha-BHC	0.010 U	mg/Kg	0.041	0.010	10	06/16/2025 08:00	06/18/2025 15:52	J
beta-BHC	0.010 U	mg/Kg	0.041	0.010	10	06/16/2025 08:00	06/18/2025 15:52	J
delta-BHC	0.010 U	mg/Kg	0.041	0.010	10	06/16/2025 08:00	06/18/2025 15:52	J
gamma-BHC (Lindane)	0.010 U	mg/Kg	0.041	0.010	10	06/16/2025 08:00	06/18/2025 15:52	J
SEMIVOLATILES (EPA 3546/SW-846 8082A)								
Aroclor 1016 (PCB-1016)	0.031 U	mg/Kg	0.12	0.031	1	06/16/2025 08:00	06/18/2025 01:20	J
Aroclor 1221 (PCB-1221)	0.031 U	mg/Kg	0.12	0.031	1	06/16/2025 08:00	06/18/2025 01:20	J
Aroclor 1232 (PCB-1232)	0.031 U	mg/Kg	0.12	0.031	1	06/16/2025 08:00	06/18/2025 01:20	J
Aroclor 1242 (PCB-1242)	0.031 U	mg/Kg	0.12	0.031	1	06/16/2025 08:00	06/18/2025 01:20	J
Aroclor 1248 (PCB-1248)	0.031 U	mg/Kg	0.12	0.031	1	06/16/2025 08:00	06/18/2025 01:20	J
Aroclor 1254 (PCB-1254)	0.031 U	mg/Kg	0.12	0.031	1	06/16/2025 08:00	06/18/2025 01:20	J
Aroclor 1260 (PCB-1260)	0.031 U	mg/Kg	0.12	0.031	1	06/16/2025 08:00	06/18/2025 01:20	J
SEMIVOLATILES (EPA 3546/SW-846 8270E (SIM))								
1-Methylnaphthalene	0.0050 U	mg/Kg	0.010	0.0050	1	06/12/2025 08:00	06/13/2025 02:58	J
2-Methylnaphthalene	0.0050 U	mg/Kg	0.010	0.0050	1	06/12/2025 08:00	06/13/2025 02:58	J
Acenaphthene	0.0050 U	mg/Kg	0.010	0.0050	1	06/12/2025 08:00	06/13/2025 02:58	J
Acenaphthylene	0.0050 U	mg/Kg	0.010	0.0050	1	06/12/2025 08:00	06/13/2025 02:58	J
Anthracene	0.0050 U	mg/Kg	0.010	0.0050	1	06/12/2025 08:00	06/13/2025 02:58	J
Benzo[a]anthracene	0.0054 I	mg/Kg	0.010	0.0050	1	06/12/2025 08:00	06/13/2025 02:58	J
Benzo[a]pyrene	0.0080 I	mg/Kg	0.010	0.0050	1	06/12/2025 08:00	06/13/2025 02:58	J
Benzo[b]fluoranthene	0.013	mg/Kg	0.010	0.0050	1	06/12/2025 08:00	06/13/2025 02:58	J
Benzo[g,h,i]perylene	0.0066 I	mg/Kg	0.010	0.0050	1	06/12/2025 08:00	06/13/2025 02:58	J
Benzo[k]fluoranthene	0.0050 U	mg/Kg	0.010	0.0050	1	06/12/2025 08:00	06/13/2025 02:58	J
Chrysene	0.0075 I	mg/Kg	0.010	0.0050	1	06/12/2025 08:00	06/13/2025 02:58	J
Dibenzo[a,h]anthracene	0.0050 U	mg/Kg	0.010	0.0050	1	06/12/2025 08:00	06/13/2025 02:58	J

Certificate of Analysis

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.





FINAL

Workorder: Phillipi Creek (J2508890)

Analytical Results

Lab ID:	J2508890005	Date Collected:	06/10/2025 12:05			Matrix:	Soil	
Sample ID:	PCV-05	Date Received:	06/11/2025 14:00					
Parameter	Results	Units	PQL	MDL	DF	Prepared	Analyzed	Lab
Fluoranthene	0.0075 I	mg/Kg	0.010	0.0050	1	06/12/2025 08:00	06/13/2025 02:58	J
Fluorene	0.0050 U	mg/Kg	0.010	0.0050	1	06/12/2025 08:00	06/13/2025 02:58	J
Indeno(1,2,3-cd)pyrene	0.0070 I	mg/Kg	0.010	0.0050	1	06/12/2025 08:00	06/13/2025 02:58	J
Naphthalene	0.0050 U	mg/Kg	0.010	0.0050	1	06/12/2025 08:00	06/13/2025 02:58	J
Phenanthrene	0.0050 U	mg/Kg	0.010	0.0050	1	06/12/2025 08:00	06/13/2025 02:58	J
Pyrene	0.0064 I	mg/Kg	0.010	0.0050	1	06/12/2025 08:00	06/13/2025 02:58	J
SEMIVOLATILES (FL-PRO)								
TPH	12 U	mg/Kg	21	12	1	06/12/2025 08:00	06/12/2025 17:07	J
(SM 2540G)								
Percent Moisture	20	%	0.0010	0.0010	1	06/18/2025 15:11	06/18/2025 15:11	J

Analysis Results Comments

Decachlorobiphenyl

SD|Surrogate diluted out.

J4|Estimated Result

Tetrachloro-m-xylene

J4|Estimated Result

SD|Surrogate diluted out.

Surrogates

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Lab
Decachlorobiphenyl (S)	ug/Kg	82	86	105	61 - 147	J
2-Fluorobiphenyl (S)	mg/Kg	0.40	0.22	55	46 - 115	J
Tetrachloro-m-xylene (S)	ug/Kg	160	170	103	44 - 130	J
o-Terphenyl (S)	mg/Kg	2	1.60	81	66 - 136	J
Nonatricontane-C39 (S)	mg/Kg	6	4.80	81	36 - 132	J
Tetrachloro-m-xylene (S)	ug/Kg	160	0	0	42 - 129	J
Decachlorobiphenyl (S)	ug/Kg	82	0	0	63 - 130	J





Advanced Environmental Laboratories, Inc
6681 Southpoint Pkwy Jacksonville, FL 32216
Payments: P.O. Box 551580 Jacksonville, FL 32255-1580
Phone: (904) 363-9350
Fax: (904) 363-9354

FINAL

Workorder: Phillipi Creek (J2508890)

Analytical Results

Surrogates

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Lab
Nitrobenzene-d5 (S)	mg/Kg	0.40	0.22	54	34 - 117	J
p-Terphenyl-d14 (S)	mg/Kg	0.40	0.30	75	51 - 132	J

Certificate of Analysis

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.





FINAL

Workorder: Phillipi Creek (J2508890)

Analytical Results

Lab ID:	J2508890006	Date Collected:	06/10/2025 12:40			Matrix:	Soil	
Sample ID:	PCV-04	Date Received:	06/11/2025 14:00					
Parameter	Results	Units	PQL	MDL	DF	Prepared	Analyzed	Lab
METALS (SW-846 3050B/SW-846 6010)								
Aluminum	750	mg/Kg	720	180	10	06/13/2025 10:55	06/16/2025 16:10	J
Arsenic	2.3 I	mg/Kg	3.6	0.90	1	06/13/2025 10:55	06/13/2025 20:56	J
Barium	28	mg/Kg	3.6	0.90	1	06/13/2025 10:55	06/13/2025 20:56	J
Cadmium	0.78	mg/Kg	0.36	0.090	1	06/13/2025 10:55	06/13/2025 20:56	J
Chromium	28	mg/Kg	1.4	0.36	1	06/13/2025 10:55	06/13/2025 20:56	J
Copper	53	mg/Kg	3.6	0.90	1	06/13/2025 10:55	06/13/2025 20:56	J
Lead	43	mg/Kg	3.6	0.90	1	06/13/2025 10:55	06/13/2025 20:56	J
Nickel	5.5	mg/Kg	3.6	0.90	1	06/13/2025 10:55	06/13/2025 20:56	J
Selenium	1.8 U	mg/Kg	7.2	1.8	1	06/13/2025 10:55	06/13/2025 20:56	J
Silver	0.36 U	mg/Kg	1.4	0.36	1	06/13/2025 10:55	06/13/2025 20:56	J
Zinc	54 I	mg/Kg	72	18	1	06/13/2025 10:55	06/13/2025 20:56	J
METALS (SW-846 7471A)								
Mercury	0.098	mg/Kg	0.0088	0.0022	1	06/13/2025 09:54	06/13/2025 12:45	J
SEMIVOLATILES (EPA 3546/EPA 8081)								
4,4' -DDD	0.015 U	mg/Kg	0.059	0.015	10	06/16/2025 08:00	06/18/2025 16:13	J
4,4' -DDE	0.015 U	mg/Kg	0.059	0.015	10	06/16/2025 08:00	06/18/2025 16:13	J
4,4' -DDT	0.030 U	mg/Kg	0.12	0.030	10	06/16/2025 08:00	06/18/2025 16:13	J
Aldrin	0.015 U	mg/Kg	0.059	0.015	10	06/16/2025 08:00	06/18/2025 16:13	J
Chlordane (technical)	0.27 U	mg/Kg	1.1	0.27	10	06/16/2025 08:00	06/18/2025 16:13	J
Dieldrin	0.015 U	mg/Kg	0.059	0.015	10	06/16/2025 08:00	06/18/2025 16:13	J
Endosulfan I	0.015 U	mg/Kg	0.059	0.015	10	06/16/2025 08:00	06/18/2025 16:13	J
Endosulfan II	0.015 U	mg/Kg	0.059	0.015	10	06/16/2025 08:00	06/18/2025 16:13	J
Endosulfan Sulfate	0.015 U	mg/Kg	0.059	0.015	10	06/16/2025 08:00	06/18/2025 16:13	J
Endrin	0.030 U	mg/Kg	0.12	0.030	10	06/16/2025 08:00	06/18/2025 16:13	J
Endrin Aldehyde	0.015 U	mg/Kg	0.059	0.015	10	06/16/2025 08:00	06/18/2025 16:13	J
Heptachlor	0.015 U	mg/Kg	0.059	0.015	10	06/16/2025 08:00	06/18/2025 16:13	J
Heptachlor Epoxide	0.015 U	mg/Kg	0.059	0.015	10	06/16/2025 08:00	06/18/2025 16:13	J

Thursday, June 26, 2025 3:50:29 PM
Dates and times are displayed using (-04:00)
Page 32 of 117

Certificate of Analysis

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.

POWERED BY
HORIZON
v.13.1.0



NELAP Accredited E82574



FINAL

Workorder: Phillipi Creek (J2508890)

Analytical Results

Lab ID: J2508890006
Sample ID: PCV-04

Date Collected: 06/10/2025 12:40
Date Received: 06/11/2025 14:00

Matrix: Soil

Parameter	Results	Units	PQL	MDL	DF	Prepared	Analyzed	Lab
Methoxychlor	0.015 U	mg/Kg	0.059	0.015	10	06/16/2025 08:00	06/18/2025 16:13	J
Toxaphene	0.45 U	mg/Kg	1.8	0.45	10	06/16/2025 08:00	06/18/2025 16:13	J
alpha-BHC	0.015 U	mg/Kg	0.059	0.015	10	06/16/2025 08:00	06/18/2025 16:13	J
beta-BHC	0.015 U	mg/Kg	0.059	0.015	10	06/16/2025 08:00	06/18/2025 16:13	J
delta-BHC	0.015 U	mg/Kg	0.059	0.015	10	06/16/2025 08:00	06/18/2025 16:13	J
gamma-BHC (Lindane)	0.015 U	mg/Kg	0.059	0.015	10	06/16/2025 08:00	06/18/2025 16:13	J
SEMIVOLATILES (EPA 3546/SW-846 8082A)								
Aroclor 1016 (PCB-1016)	0.045 U	mg/Kg	0.18	0.045	1	06/16/2025 08:00	06/18/2025 01:40	J
Aroclor 1221 (PCB-1221)	0.045 U	mg/Kg	0.18	0.045	1	06/16/2025 08:00	06/18/2025 01:40	J
Aroclor 1232 (PCB-1232)	0.045 U	mg/Kg	0.18	0.045	1	06/16/2025 08:00	06/18/2025 01:40	J
Aroclor 1242 (PCB-1242)	0.045 U	mg/Kg	0.18	0.045	1	06/16/2025 08:00	06/18/2025 01:40	J
Aroclor 1248 (PCB-1248)	0.045 U	mg/Kg	0.18	0.045	1	06/16/2025 08:00	06/18/2025 01:40	J
Aroclor 1254 (PCB-1254)	0.045 U	mg/Kg	0.18	0.045	1	06/16/2025 08:00	06/18/2025 01:40	J
Aroclor 1260 (PCB-1260)	0.045 U	mg/Kg	0.18	0.045	1	06/16/2025 08:00	06/18/2025 01:40	J
SEMIVOLATILES (EPA 3546/SW-846 8270E (SIM))								
1-Methylnaphthalene	0.0072 U	mg/Kg	0.014	0.0072	1	06/12/2025 08:00	06/13/2025 03:25	J
2-Methylnaphthalene	0.0072 U	mg/Kg	0.014	0.0072	1	06/12/2025 08:00	06/13/2025 03:25	J
Acenaphthene	0.0072 U	mg/Kg	0.014	0.0072	1	06/12/2025 08:00	06/13/2025 03:25	J
Acenaphthylene	0.0072 U	mg/Kg	0.014	0.0072	1	06/12/2025 08:00	06/13/2025 03:25	J
Anthracene	0.0072 U	mg/Kg	0.014	0.0072	1	06/12/2025 08:00	06/13/2025 03:25	J
Benzo[a]anthracene	0.0072 U	mg/Kg	0.014	0.0072	1	06/12/2025 08:00	06/13/2025 03:25	J
Benzo[a]pyrene	0.0072 U	mg/Kg	0.014	0.0072	1	06/12/2025 08:00	06/13/2025 03:25	J
Benzo[b]fluoranthene	0.0077 I	mg/Kg	0.014	0.0072	1	06/12/2025 08:00	06/13/2025 03:25	J
Benzo[g,h,i]perylene	0.0072 U	mg/Kg	0.014	0.0072	1	06/12/2025 08:00	06/13/2025 03:25	J
Benzo[k]fluoranthene	0.0072 U	mg/Kg	0.014	0.0072	1	06/12/2025 08:00	06/13/2025 03:25	J
Chrysene	0.0072 U	mg/Kg	0.014	0.0072	1	06/12/2025 08:00	06/13/2025 03:25	J
Dibenzo[a,h]anthracene	0.0072 U	mg/Kg	0.014	0.0072	1	06/12/2025 08:00	06/13/2025 03:25	J

Thursday, June 26, 2025 3:50:29 PM
Dates and times are displayed using (-04:00)
Page 33 of 117

Certificate of Analysis

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.

POWERED BY
HORIZON
v.13.1.0



NELAP Accredited E82574



FINAL

Workorder: Phillipi Creek (J2508890)

Analytical Results

Lab ID: J2508890006	Date Collected: 06/10/2025 12:40					Matrix: Soil		
Sample ID: PCV-04	Date Received: 06/11/2025 14:00							
Parameter	Results	Units	PQL	MDL	DF	Prepared	Analyzed	Lab
Fluoranthene	0.0072 U	mg/Kg	0.014	0.0072	1	06/12/2025 08:00	06/13/2025 03:25	J
Fluorene	0.0072 U	mg/Kg	0.014	0.0072	1	06/12/2025 08:00	06/13/2025 03:25	J
Indeno(1,2,3-cd)pyrene	0.0072 U	mg/Kg	0.014	0.0072	1	06/12/2025 08:00	06/13/2025 03:25	J
Naphthalene	0.0072 U	mg/Kg	0.014	0.0072	1	06/12/2025 08:00	06/13/2025 03:25	J
Phenanthrene	0.0072 U	mg/Kg	0.014	0.0072	1	06/12/2025 08:00	06/13/2025 03:25	J
Pyrene	0.0072 U	mg/Kg	0.014	0.0072	1	06/12/2025 08:00	06/13/2025 03:25	J
SEMIVOLATILES (FL-PRO)								
TPH	18 U	mg/Kg	30	18	1	06/12/2025 08:00	06/12/2025 17:26	J
(SM 2540G)								
Percent Moisture	44	%	0.0010	0.0010	1	06/18/2025 15:11	06/18/2025 15:11	J

Analysis Results Comments

Decachlorobiphenyl

SD|Surrogate diluted out.

J4|Estimated Result

Tetrachloro-m-xylene

J4|Estimated Result

SD|Surrogate diluted out.

Surrogates

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Lab
o-Terphenyl (S)	mg/Kg	2	1.60	79	66 - 136	J
Tetrachloro-m-xylene (S)	ug/Kg	170	0	0	42 - 129	J
p-Terphenyl-d14 (S)	mg/Kg	0.40	0.28	70	51 - 132	J
Tetrachloro-m-xylene (S)	ug/Kg	170	170	102	44 - 130	J
2-Fluorobiphenyl (S)	mg/Kg	0.40	0.20	51	46 - 115	J
Decachlorobiphenyl (S)	ug/Kg	83	76	92	61 - 147	J
Nonatricontane-C39 (S)	mg/Kg	6	4.50	75	36 - 132	J





Advanced Environmental Laboratories, Inc
6681 Southpoint Pkwy Jacksonville, FL 32216
Payments: P.O. Box 551580 Jacksonville, FL 32255-1580
Phone: (904) 363-9350
Fax: (904) 363-9354

FINAL

Workorder: Phillipi Creek (J2508890)

Analytical Results

Surrogates

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Lab
Decachlorobiphenyl (S)	ug/Kg	83	0	0	63 - 130	J
Nitrobenzene-d5 (S)	mg/Kg	0.40	0.20	50	34 - 117	J

Certificate of Analysis

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.



NELAP Accredited E82574



FINAL

Workorder: Phillipi Creek (J2508890)

Analytical Results

Lab ID: J2508890007
Sample ID: PCV-03

Date Collected: 06/10/2025 13:07
Date Received: 06/11/2025 14:00

Matrix: Soil

Parameter	Results	Units	PQL	MDL	DF	Prepared	Analyzed	Lab
METALS (SW-846 3050B/SW-846 6010)								
Aluminum	290	mg/Kg	48	12	1	06/13/2025 10:55	06/13/2025 21:00	J
Arsenic	1.1 I	mg/Kg	2.4	0.60	1	06/13/2025 10:55	06/13/2025 21:00	J
Barium	1.8 I	mg/Kg	2.4	0.60	1	06/13/2025 10:55	06/13/2025 21:00	J
Cadmium	0.060 U	mg/Kg	0.24	0.060	1	06/13/2025 10:55	06/13/2025 21:00	J
Chromium	1.4	mg/Kg	0.96	0.24	1	06/13/2025 10:55	06/13/2025 21:00	J
Copper	0.75 I	mg/Kg	2.4	0.60	1	06/13/2025 10:55	06/13/2025 21:00	J
Lead	0.74 I	mg/Kg	2.4	0.60	1	06/13/2025 10:55	06/13/2025 21:00	J
Nickel	0.60 U	mg/Kg	2.4	0.60	1	06/13/2025 10:55	06/13/2025 21:00	J
Selenium	1.2 U	mg/Kg	4.8	1.2	1	06/13/2025 10:55	06/13/2025 21:00	J
Silver	0.24 U	mg/Kg	0.96	0.24	1	06/13/2025 10:55	06/13/2025 21:00	J
Zinc	12 U	mg/Kg	48	12	1	06/13/2025 10:55	06/13/2025 21:00	J
METALS (SW-846 7471A)								
Mercury	0.0025 I	mg/Kg	0.0067	0.0017	1	06/13/2025 09:54	06/13/2025 12:49	J
SEMIVOLATILES (EPA 3546/EPA 8081)								
4,4'-DDD	0.010 U	mg/Kg	0.041	0.010	10	06/16/2025 08:00	06/18/2025 16:33	J
4,4'-DDE	0.010 U	mg/Kg	0.041	0.010	10	06/16/2025 08:00	06/18/2025 16:33	J
4,4'-DDT	0.020 U	mg/Kg	0.082	0.020	10	06/16/2025 08:00	06/18/2025 16:33	J
Aldrin	0.010 U	mg/Kg	0.041	0.010	10	06/16/2025 08:00	06/18/2025 16:33	J
Chlordane (technical)	0.18 U	mg/Kg	0.74	0.18	10	06/16/2025 08:00	06/18/2025 16:33	J
Dieldrin	0.010 U	mg/Kg	0.041	0.010	10	06/16/2025 08:00	06/18/2025 16:33	J
Endosulfan I	0.010 U	mg/Kg	0.041	0.010	10	06/16/2025 08:00	06/18/2025 16:33	J
Endosulfan II	0.010 U	mg/Kg	0.041	0.010	10	06/16/2025 08:00	06/18/2025 16:33	J
Endosulfan Sulfate	0.010 U	mg/Kg	0.041	0.010	10	06/16/2025 08:00	06/18/2025 16:33	J
Endrin	0.020 U	mg/Kg	0.082	0.020	10	06/16/2025 08:00	06/18/2025 16:33	J
Endrin Aldehyde	0.010 U	mg/Kg	0.041	0.010	10	06/16/2025 08:00	06/18/2025 16:33	J
Heptachlor	0.010 U	mg/Kg	0.041	0.010	10	06/16/2025 08:00	06/18/2025 16:33	J
Heptachlor Epoxide	0.010 U	mg/Kg	0.041	0.010	10	06/16/2025 08:00	06/18/2025 16:33	J

Thursday, June 26, 2025 3:50:29 PM
Dates and times are displayed using (-04:00)
Page 36 of 117

Certificate of Analysis

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.

POWERED BY
HORIZON[®]
v.13.1.0



NELAP Accredited E82574



FINAL

Workorder: Phillipi Creek (J2508890)

Analytical Results

Lab ID: J2508890007
Sample ID: PCV-03

Date Collected: 06/10/2025 13:07
Date Received: 06/11/2025 14:00

Matrix: Soil

Parameter	Results	Units	PQL	MDL	DF	Prepared	Analyzed	Lab
Methoxychlor	0.010 U	mg/Kg	0.041	0.010	10	06/16/2025 08:00	06/18/2025 16:33	J
Toxaphene	0.31 U	mg/Kg	1.2	0.31	10	06/16/2025 08:00	06/18/2025 16:33	J
alpha-BHC	0.010 U	mg/Kg	0.041	0.010	10	06/16/2025 08:00	06/18/2025 16:33	J
beta-BHC	0.010 U	mg/Kg	0.041	0.010	10	06/16/2025 08:00	06/18/2025 16:33	J
delta-BHC	0.010 U	mg/Kg	0.041	0.010	10	06/16/2025 08:00	06/18/2025 16:33	J
gamma-BHC (Lindane)	0.010 U	mg/Kg	0.041	0.010	10	06/16/2025 08:00	06/18/2025 16:33	J
SEMIVOLATILES (EPA 3546/SW-846 8082A)								
Aroclor 1016 (PCB-1016)	0.031 U	mg/Kg	0.12	0.031	1	06/16/2025 08:00	06/18/2025 02:01	J
Aroclor 1221 (PCB-1221)	0.031 U	mg/Kg	0.12	0.031	1	06/16/2025 08:00	06/18/2025 02:01	J
Aroclor 1232 (PCB-1232)	0.031 U	mg/Kg	0.12	0.031	1	06/16/2025 08:00	06/18/2025 02:01	J
Aroclor 1242 (PCB-1242)	0.031 U	mg/Kg	0.12	0.031	1	06/16/2025 08:00	06/18/2025 02:01	J
Aroclor 1248 (PCB-1248)	0.031 U	mg/Kg	0.12	0.031	1	06/16/2025 08:00	06/18/2025 02:01	J
Aroclor 1254 (PCB-1254)	0.031 U	mg/Kg	0.12	0.031	1	06/16/2025 08:00	06/18/2025 02:01	J
Aroclor 1260 (PCB-1260)	0.031 U	mg/Kg	0.12	0.031	1	06/16/2025 08:00	06/18/2025 02:01	J
SEMIVOLATILES (EPA 3546/SW-846 8270E (SIM))								
1-Methylnaphthalene	0.0050 U	mg/Kg	0.0099	0.0050	1	06/12/2025 08:00	06/13/2025 03:52	J
2-Methylnaphthalene	0.0050 U	mg/Kg	0.0099	0.0050	1	06/12/2025 08:00	06/13/2025 03:52	J
Acenaphthene	0.0050 U	mg/Kg	0.0099	0.0050	1	06/12/2025 08:00	06/13/2025 03:52	J
Acenaphthylene	0.0050 U	mg/Kg	0.0099	0.0050	1	06/12/2025 08:00	06/13/2025 03:52	J
Anthracene	0.0050 U	mg/Kg	0.0099	0.0050	1	06/12/2025 08:00	06/13/2025 03:52	J
Benzo[a]anthracene	0.0050 U	mg/Kg	0.0099	0.0050	1	06/12/2025 08:00	06/13/2025 03:52	J
Benzo[a]pyrene	0.0050 U	mg/Kg	0.0099	0.0050	1	06/12/2025 08:00	06/13/2025 03:52	J
Benzo[b]fluoranthene	0.0050 U	mg/Kg	0.0099	0.0050	1	06/12/2025 08:00	06/13/2025 03:52	J
Benzo[g,h,i]perylene	0.0050 U	mg/Kg	0.0099	0.0050	1	06/12/2025 08:00	06/13/2025 03:52	J
Benzo[k]fluoranthene	0.0050 U	mg/Kg	0.0099	0.0050	1	06/12/2025 08:00	06/13/2025 03:52	J
Chrysene	0.0050 U	mg/Kg	0.0099	0.0050	1	06/12/2025 08:00	06/13/2025 03:52	J
Dibenzo[a,h]anthracene	0.0050 U	mg/Kg	0.0099	0.0050	1	06/12/2025 08:00	06/13/2025 03:52	J

Certificate of Analysis

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.





FINAL

Workorder: Phillipi Creek (J2508890)

Analytical Results

Lab ID:	J2508890007	Date Collected:				06/10/2025 13:07	Matrix:		Soil
Sample ID:	PCV-03	Date Received:				06/11/2025 14:00			
Parameter	Results	Units	PQL	MDL	DF	Prepared	Analyzed	Lab	
Fluoranthene	0.0050 U	mg/Kg	0.0099	0.0050	1	06/12/2025 08:00	06/13/2025 03:52	J	
Fluorene	0.0050 U	mg/Kg	0.0099	0.0050	1	06/12/2025 08:00	06/13/2025 03:52	J	
Indeno(1,2,3-cd)pyrene	0.0050 U	mg/Kg	0.0099	0.0050	1	06/12/2025 08:00	06/13/2025 03:52	J	
Naphthalene	0.0050 U	mg/Kg	0.0099	0.0050	1	06/12/2025 08:00	06/13/2025 03:52	J	
Phenanthrene	0.0050 U	mg/Kg	0.0099	0.0050	1	06/12/2025 08:00	06/13/2025 03:52	J	
Pyrene	0.0050 U	mg/Kg	0.0099	0.0050	1	06/12/2025 08:00	06/13/2025 03:52	J	
SEMIVOLATILES (FL-PRO)									
TPH	12 U	mg/Kg	21	12	1	06/12/2025 08:00	06/12/2025 17:44	J	
(SM 2540G)									
Percent Moisture	20	%	0.0010	0.0010	1	06/18/2025 15:11	06/18/2025 15:11	J	

Analysis Results Comments

Decachlorobiphenyl

SD|Surrogate diluted out.

J4|Estimated Result

Tetrachloro-m-xylene

SD|Surrogate diluted out.

J4|Estimated Result

Surrogates

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Lab
2-Fluorobiphenyl (S)	mg/Kg	0.40	0.21	53	46 - 115	J
Decachlorobiphenyl (S)	ug/Kg	82	82	99	61 - 147	J
Tetrachloro-m-xylene (S)	ug/Kg	160	150	94	44 - 130	J
p-Terphenyl-d14 (S)	mg/Kg	0.40	0.28	70	51 - 132	J
Decachlorobiphenyl (S)	ug/Kg	82	0	0	63 - 130	J
Tetrachloro-m-xylene (S)	ug/Kg	160	0	0	42 - 129	J
Nitrobenzene-d5 (S)	mg/Kg	0.40	0.21	52	34 - 117	J





Advanced Environmental Laboratories, Inc
6681 Southpoint Pkwy Jacksonville, FL 32216
Payments: P.O. Box 551580 Jacksonville, FL 32255-1580
Phone: (904) 363-9350
Fax: (904) 363-9354

FINAL

Workorder: Phillipi Creek (J2508890)

Analytical Results

Surrogates

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Lab
Nonatricontane-C39 (S)	mg/Kg	6	4.50	75	36 - 132	J
o-Terphenyl (S)	mg/Kg	2	1.50	77	66 - 136	J

Certificate of Analysis

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.





FINAL

Workorder: Phillipi Creek (J2508890)

Analytical Results

Lab ID: J2508890008
Sample ID: PCV-02

Date Collected: 06/10/2025 13:23
Date Received: 06/11/2025 14:00

Matrix: Soil

Parameter	Results	Units	PQL	MDL	DF	Prepared	Analyzed	Lab
METALS (SW-846 3050B/SW-846 6010)								
Aluminum	410	mg/Kg	50	12	1	06/13/2025 10:55	06/13/2025 21:10	J
Arsenic	2.0 I	mg/Kg	2.5	0.62	1	06/13/2025 10:55	06/13/2025 21:10	J
Barium	2.3 I	mg/Kg	2.5	0.62	1	06/13/2025 10:55	06/13/2025 21:10	J
Cadmium	0.062 U	mg/Kg	0.25	0.062	1	06/13/2025 10:55	06/13/2025 21:10	J
Chromium	2.8	mg/Kg	1.0	0.25	1	06/13/2025 10:55	06/13/2025 21:10	J
Copper	1.2 I	mg/Kg	2.5	0.62	1	06/13/2025 10:55	06/13/2025 21:10	J
Lead	1.4 I	mg/Kg	2.5	0.62	1	06/13/2025 10:55	06/13/2025 21:10	J
Nickel	0.62 U	mg/Kg	2.5	0.62	1	06/13/2025 10:55	06/13/2025 21:10	J
Selenium	1.2 U	mg/Kg	5.0	1.2	1	06/13/2025 10:55	06/13/2025 21:10	J
Silver	0.25 U	mg/Kg	1.0	0.25	1	06/13/2025 10:55	06/13/2025 21:10	J
Zinc	12 U	mg/Kg	50	12	1	06/13/2025 10:55	06/13/2025 21:10	J
METALS (SW-846 7471A)								
Mercury	0.0048 I	mg/Kg	0.0058	0.0015	1	06/13/2025 09:54	06/13/2025 12:53	J
SEMIVOLATILES (EPA 3546/EPA 8081)								
4,4'-DDD	0.011 U	mg/Kg	0.042	0.011	10	06/16/2025 08:00	06/18/2025 16:57	J
4,4'-DDE	0.011 U	mg/Kg	0.042	0.011	10	06/16/2025 08:00	06/18/2025 16:57	J
4,4'-DDT	0.021 U	mg/Kg	0.085	0.021	10	06/16/2025 08:00	06/18/2025 16:57	J
Aldrin	0.011 U	mg/Kg	0.042	0.011	10	06/16/2025 08:00	06/18/2025 16:57	J
Chlordane (technical)	0.19 U	mg/Kg	0.76	0.19	10	06/16/2025 08:00	06/18/2025 16:57	J
Dieldrin	0.011 U	mg/Kg	0.042	0.011	10	06/16/2025 08:00	06/18/2025 16:57	J
Endosulfan I	0.011 U	mg/Kg	0.042	0.011	10	06/16/2025 08:00	06/18/2025 16:57	J
Endosulfan II	0.011 U	mg/Kg	0.042	0.011	10	06/16/2025 08:00	06/18/2025 16:57	J
Endosulfan Sulfate	0.011 U	mg/Kg	0.042	0.011	10	06/16/2025 08:00	06/18/2025 16:57	J
Endrin	0.021 U	mg/Kg	0.085	0.021	10	06/16/2025 08:00	06/18/2025 16:57	J
Endrin Aldehyde	0.011 U	mg/Kg	0.042	0.011	10	06/16/2025 08:00	06/18/2025 16:57	J
Heptachlor	0.011 U	mg/Kg	0.042	0.011	10	06/16/2025 08:00	06/18/2025 16:57	J
Heptachlor Epoxide	0.011 U	mg/Kg	0.042	0.011	10	06/16/2025 08:00	06/18/2025 16:57	J

Thursday, June 26, 2025 3:50:29 PM
Dates and times are displayed using (-04:00)
Page 40 of 117

Certificate of Analysis

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.

POWERED BY
HORIZON[®]
v.13.1.0



NELAP Accredited E82574



FINAL

Workorder: Phillipi Creek (J2508890)

Analytical Results

Lab ID: J2508890008
Sample ID: PCV-02

Date Collected: 06/10/2025 13:23
Date Received: 06/11/2025 14:00

Matrix: Soil

Parameter	Results	Units	PQL	MDL	DF	Prepared	Analyzed	Lab
Methoxychlor	0.011 U	mg/Kg	0.042	0.011	10	06/16/2025 08:00	06/18/2025 16:57	J
Toxaphene	0.32 U	mg/Kg	1.3	0.32	10	06/16/2025 08:00	06/18/2025 16:57	J
alpha-BHC	0.011 U	mg/Kg	0.042	0.011	10	06/16/2025 08:00	06/18/2025 16:57	J
beta-BHC	0.011 U	mg/Kg	0.042	0.011	10	06/16/2025 08:00	06/18/2025 16:57	J
delta-BHC	0.011 U	mg/Kg	0.042	0.011	10	06/16/2025 08:00	06/18/2025 16:57	J
gamma-BHC (Lindane)	0.011 U	mg/Kg	0.042	0.011	10	06/16/2025 08:00	06/18/2025 16:57	J
SEMIVOLATILES (EPA 3546/SW-846 8082A)								
Aroclor 1016 (PCB-1016)	0.032 U	mg/Kg	0.13	0.032	1	06/16/2025 08:00	06/18/2025 02:22	J
Aroclor 1221 (PCB-1221)	0.032 U	mg/Kg	0.13	0.032	1	06/16/2025 08:00	06/18/2025 02:22	J
Aroclor 1232 (PCB-1232)	0.032 U	mg/Kg	0.13	0.032	1	06/16/2025 08:00	06/18/2025 02:22	J
Aroclor 1242 (PCB-1242)	0.032 U	mg/Kg	0.13	0.032	1	06/16/2025 08:00	06/18/2025 02:22	J
Aroclor 1248 (PCB-1248)	0.032 U	mg/Kg	0.13	0.032	1	06/16/2025 08:00	06/18/2025 02:22	J
Aroclor 1254 (PCB-1254)	0.032 U	mg/Kg	0.13	0.032	1	06/16/2025 08:00	06/18/2025 02:22	J
Aroclor 1260 (PCB-1260)	0.032 U	mg/Kg	0.13	0.032	1	06/16/2025 08:00	06/18/2025 02:22	J
SEMIVOLATILES (EPA 3546/SW-846 8270E (SIM))								
1-Methylnaphthalene	0.0050 U	mg/Kg	0.010	0.0050	1	06/12/2025 08:00	06/13/2025 04:20	J
2-Methylnaphthalene	0.0050 U	mg/Kg	0.010	0.0050	1	06/12/2025 08:00	06/13/2025 04:20	J
Acenaphthene	0.0050 U	mg/Kg	0.010	0.0050	1	06/12/2025 08:00	06/13/2025 04:20	J
Acenaphthylene	0.0050 U	mg/Kg	0.010	0.0050	1	06/12/2025 08:00	06/13/2025 04:20	J
Anthracene	0.0050 U	mg/Kg	0.010	0.0050	1	06/12/2025 08:00	06/13/2025 04:20	J
Benzo[a]anthracene	0.0050 U	mg/Kg	0.010	0.0050	1	06/12/2025 08:00	06/13/2025 04:20	J
Benzo[a]pyrene	0.0050 U	mg/Kg	0.010	0.0050	1	06/12/2025 08:00	06/13/2025 04:20	J
Benzo[b]fluoranthene	0.0050 U	mg/Kg	0.010	0.0050	1	06/12/2025 08:00	06/13/2025 04:20	J
Benzo[g,h,i]perylene	0.0050 U	mg/Kg	0.010	0.0050	1	06/12/2025 08:00	06/13/2025 04:20	J
Benzo[k]fluoranthene	0.0050 U	mg/Kg	0.010	0.0050	1	06/12/2025 08:00	06/13/2025 04:20	J
Chrysene	0.0050 U	mg/Kg	0.010	0.0050	1	06/12/2025 08:00	06/13/2025 04:20	J
Dibenzo[a,h]anthracene	0.0050 U	mg/Kg	0.010	0.0050	1	06/12/2025 08:00	06/13/2025 04:20	J

Thursday, June 26, 2025 3:50:29 PM
Dates and times are displayed using (-04:00)
Page 41 of 117

Certificate of Analysis

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.

POWERED BY
HORIZON[®]
v.13.1.0



NELAP Accredited E82574



FINAL

Workorder: Phillipi Creek (J2508890)

Analytical Results

Lab ID:	J2508890008	Date Collected:	06/10/2025 13:23			Matrix:	Soil		
Sample ID:	PCV-02	Date Received:	06/11/2025 14:00						
Parameter	Results	Units	PQL	MDL	DF	Prepared	Analyzed	Lab	
Fluoranthene	0.0050 U	mg/Kg	0.010	0.0050	1	06/12/2025 08:00	06/13/2025 04:20	J	
Fluorene	0.0050 U	mg/Kg	0.010	0.0050	1	06/12/2025 08:00	06/13/2025 04:20	J	
Indeno(1,2,3-cd)pyrene	0.0050 U	mg/Kg	0.010	0.0050	1	06/12/2025 08:00	06/13/2025 04:20	J	
Naphthalene	0.0050 U	mg/Kg	0.010	0.0050	1	06/12/2025 08:00	06/13/2025 04:20	J	
Phenanthrene	0.0050 U	mg/Kg	0.010	0.0050	1	06/12/2025 08:00	06/13/2025 04:20	J	
Pyrene	0.0050 U	mg/Kg	0.010	0.0050	1	06/12/2025 08:00	06/13/2025 04:20	J	
SEMIVOLATILES (FL-PRO)									
TPH	12 U	mg/Kg	21	12	1	06/12/2025 08:00	06/12/2025 18:03	J	
(SM 2540G)									
Percent Moisture	20	%	0.0010	0.0010	1	06/18/2025 15:11	06/18/2025 15:11	J	

Analysis Results Comments

Decachlorobiphenyl

SD|Surrogate diluted out.

J4|Estimated Result

Tetrachloro-m-xylene

SD|Surrogate diluted out.

J4|Estimated Result

Surrogates

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Lab
Nitrobenzene-d5 (S)	mg/Kg	0.40	0.21	53	34 - 117	J
p-Terphenyl-d14 (S)	mg/Kg	0.40	0.28	71	51 - 132	J
Tetrachloro-m-xylene (S)	ug/Kg	170	0	0	42 - 129	J
Decachlorobiphenyl (S)	ug/Kg	84	89	106	61 - 147	J
Tetrachloro-m-xylene (S)	ug/Kg	170	160	96	44 - 130	J
Decachlorobiphenyl (S)	ug/Kg	84	0	0	63 - 130	J
o-Terphenyl (S)	mg/Kg	2	1.40	72	66 - 136	J





Advanced Environmental Laboratories, Inc
6681 Southpoint Pkwy Jacksonville, FL 32216
Payments: P.O. Box 551580 Jacksonville, FL 32255-1580
Phone: (904) 363-9350
Fax: (904) 363-9354

FINAL

Workorder: Phillipi Creek (J2508890)

Analytical Results

Surrogates

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Lab
Nonatricontane-C39 (S)	mg/Kg	6	4.10	68	36 - 132	J
2-Fluorobiphenyl (S)	mg/Kg	0.40	0.22	54	46 - 115	J

Certificate of Analysis

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.





FINAL

Workorder: Phillipi Creek (J2508890)

Analytical Results

Lab ID: J2508890009
Sample ID: PCV-01

Date Collected: 06/10/2025 13:45
Date Received: 06/11/2025 14:00

Matrix: Soil

Parameter	Results	Units	PQL	MDL	DF	Prepared	Analyzed	Lab
METALS (SW-846 3050B/SW-846 6010)								
Aluminum	400	mg/Kg	48	12	1	06/13/2025 10:55	06/17/2025 15:09	J
Arsenic	3.3	mg/Kg	2.4	0.60	1	06/13/2025 10:55	06/13/2025 21:13	J
Barium	2.8	mg/Kg	2.4	0.60	1	06/13/2025 10:55	06/13/2025 21:13	J
Cadmium	0.081 I	mg/Kg	0.24	0.060	1	06/13/2025 10:55	06/13/2025 21:13	J
Chromium	2.6	mg/Kg	0.96	0.24	1	06/13/2025 10:55	06/13/2025 21:13	J
Copper	0.62 I	mg/Kg	2.4	0.60	1	06/13/2025 10:55	06/13/2025 21:13	J
Lead	0.71 I	mg/Kg	2.4	0.60	1	06/13/2025 10:55	06/13/2025 21:13	J
Nickel	0.60 U	mg/Kg	2.4	0.60	1	06/13/2025 10:55	06/13/2025 21:13	J
Selenium	1.2 U	mg/Kg	4.8	1.2	1	06/13/2025 10:55	06/13/2025 21:13	J
Silver	0.24 U	mg/Kg	0.96	0.24	1	06/13/2025 10:55	06/13/2025 21:13	J
Zinc	12 U	mg/Kg	48	12	1	06/13/2025 10:55	06/13/2025 21:13	J
METALS (SW-846 7471A)								
Mercury	0.0023 I	mg/Kg	0.0069	0.0017	1	06/13/2025 09:54	06/13/2025 12:57	J
SEMIVOLATILES (EPA 3546/EPA 8081)								
4,4'-DDD	0.0010 U	mg/Kg	0.0041	0.0010	1	06/16/2025 08:00	06/17/2025 20:31	J
4,4'-DDE	0.0010 U	mg/Kg	0.0041	0.0010	1	06/16/2025 08:00	06/17/2025 20:31	J
4,4'-DDT	0.0021 U	mg/Kg	0.0082	0.0021	1	06/16/2025 08:00	06/17/2025 20:31	J
Aldrin	0.0010 U	mg/Kg	0.0041	0.0010	1	06/16/2025 08:00	06/17/2025 20:31	J
Chlordane (technical)	0.019 U	mg/Kg	0.074	0.019	1	06/16/2025 08:00	06/17/2025 20:31	J
Dieldrin	0.0010 U	mg/Kg	0.0041	0.0010	1	06/16/2025 08:00	06/17/2025 20:31	J
Endosulfan I	0.0010 U	mg/Kg	0.0041	0.0010	1	06/16/2025 08:00	06/17/2025 20:31	J
Endosulfan II	0.0010 U	mg/Kg	0.0041	0.0010	1	06/16/2025 08:00	06/17/2025 20:31	J
Endosulfan Sulfate	0.0010 U	mg/Kg	0.0041	0.0010	1	06/16/2025 08:00	06/17/2025 20:31	J
Endrin	0.0021 U	mg/Kg	0.0082	0.0021	1	06/16/2025 08:00	06/17/2025 20:31	J
Endrin Aldehyde	0.0010 U	mg/Kg	0.0041	0.0010	1	06/16/2025 08:00	06/17/2025 20:31	J
Heptachlor	0.0010 U	mg/Kg	0.0041	0.0010	1	06/16/2025 08:00	06/17/2025 20:31	J
Heptachlor Epoxide	0.0010 U	mg/Kg	0.0041	0.0010	1	06/16/2025 08:00	06/17/2025 20:31	J

Thursday, June 26, 2025 3:50:29 PM
Dates and times are displayed using (-04:00)
Page 44 of 117

Certificate of Analysis

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.

POWERED BY
HORIZON
v.13.1.0



NELAP Accredited E82574



FINAL

Workorder: Phillipi Creek (J2508890)

Analytical Results

Lab ID: J2508890009
Sample ID: PCV-01

Date Collected: 06/10/2025 13:45
Date Received: 06/11/2025 14:00

Matrix: Soil

Parameter	Results	Units	PQL	MDL	DF	Prepared	Analyzed	Lab
Methoxychlor	0.0010 U	mg/Kg	0.0041	0.0010	1	06/16/2025 08:00	06/17/2025 20:31	J
Toxaphene	0.031 U	mg/Kg	0.12	0.031	1	06/16/2025 08:00	06/17/2025 20:31	J
alpha-BHC	0.0010 U	mg/Kg	0.0041	0.0010	1	06/16/2025 08:00	06/17/2025 20:31	J
beta-BHC	0.0010 U	mg/Kg	0.0041	0.0010	1	06/16/2025 08:00	06/17/2025 20:31	J
delta-BHC	0.0010 U	mg/Kg	0.0041	0.0010	1	06/16/2025 08:00	06/17/2025 20:31	J
gamma-BHC (Lindane)	0.0010 U	mg/Kg	0.0041	0.0010	1	06/16/2025 08:00	06/17/2025 20:31	J
SEMIVOLATILES (EPA 3546/SW-846 8082A)								
Aroclor 1016 (PCB-1016)	0.031 U	mg/Kg	0.12	0.031	1	06/16/2025 08:00	06/17/2025 20:31	J
Aroclor 1221 (PCB-1221)	0.031 U	mg/Kg	0.12	0.031	1	06/16/2025 08:00	06/17/2025 20:31	J
Aroclor 1232 (PCB-1232)	0.031 U	mg/Kg	0.12	0.031	1	06/16/2025 08:00	06/17/2025 20:31	J
Aroclor 1242 (PCB-1242)	0.031 U	mg/Kg	0.12	0.031	1	06/16/2025 08:00	06/17/2025 20:31	J
Aroclor 1248 (PCB-1248)	0.031 U	mg/Kg	0.12	0.031	1	06/16/2025 08:00	06/17/2025 20:31	J
Aroclor 1254 (PCB-1254)	0.031 U	mg/Kg	0.12	0.031	1	06/16/2025 08:00	06/17/2025 20:31	J
Aroclor 1260 (PCB-1260)	0.031 U	mg/Kg	0.12	0.031	1	06/16/2025 08:00	06/17/2025 20:31	J
SEMIVOLATILES (EPA 3546/SW-846 8270E (SIM))								
1-Methylnaphthalene	0.0049 U	mg/Kg	0.0098	0.0049	1	06/12/2025 08:00	06/13/2025 04:47	J
2-Methylnaphthalene	0.0049 U	mg/Kg	0.0098	0.0049	1	06/12/2025 08:00	06/13/2025 04:47	J
Acenaphthene	0.0049 U	mg/Kg	0.0098	0.0049	1	06/12/2025 08:00	06/13/2025 04:47	J
Acenaphthylene	0.0049 U	mg/Kg	0.0098	0.0049	1	06/12/2025 08:00	06/13/2025 04:47	J
Anthracene	0.0049 U	mg/Kg	0.0098	0.0049	1	06/12/2025 08:00	06/13/2025 04:47	J
Benzo[a]anthracene	0.0049 U	mg/Kg	0.0098	0.0049	1	06/12/2025 08:00	06/13/2025 04:47	J
Benzo[a]pyrene	0.0049 U	mg/Kg	0.0098	0.0049	1	06/12/2025 08:00	06/13/2025 04:47	J
Benzo[b]fluoranthene	0.0049 U	mg/Kg	0.0098	0.0049	1	06/12/2025 08:00	06/13/2025 04:47	J
Benzo[g,h,i]perylene	0.0049 U	mg/Kg	0.0098	0.0049	1	06/12/2025 08:00	06/13/2025 04:47	J
Benzo[k]fluoranthene	0.0049 U	mg/Kg	0.0098	0.0049	1	06/12/2025 08:00	06/13/2025 04:47	J
Chrysene	0.0049 U	mg/Kg	0.0098	0.0049	1	06/12/2025 08:00	06/13/2025 04:47	J
Dibenzo[a,h]anthracene	0.0049 U	mg/Kg	0.0098	0.0049	1	06/12/2025 08:00	06/13/2025 04:47	J

Thursday, June 26, 2025 3:50:29 PM
Dates and times are displayed using (-04:00)
Page 45 of 117

Certificate of Analysis

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.

POWERED BY
HORIZON
v.13.1.0



NELAP Accredited E82574



FINAL

Workorder: Phillipi Creek (J2508890)

Analytical Results

Lab ID: J2508890009	Date Collected: 06/10/2025 13:45					Matrix: Soil			
Sample ID: PCV-01	Date Received: 06/11/2025 14:00								
Parameter	Results	Units	PQL	MDL	DF	Prepared	Analyzed	Lab	
Fluoranthene	0.0049 U	mg/Kg	0.0098	0.0049	1	06/12/2025 08:00	06/13/2025 04:47	J	
Fluorene	0.0049 U	mg/Kg	0.0098	0.0049	1	06/12/2025 08:00	06/13/2025 04:47	J	
Indeno(1,2,3-cd)pyrene	0.0049 U	mg/Kg	0.0098	0.0049	1	06/12/2025 08:00	06/13/2025 04:47	J	
Naphthalene	0.0049 U	mg/Kg	0.0098	0.0049	1	06/12/2025 08:00	06/13/2025 04:47	J	
Phenanthrene	0.0049 U	mg/Kg	0.0098	0.0049	1	06/12/2025 08:00	06/13/2025 04:47	J	
Pyrene	0.0049 U	mg/Kg	0.0098	0.0049	1	06/12/2025 08:00	06/13/2025 04:47	J	
SEMIVOLATILES (FL-PRO)									
TPH	12 U	mg/Kg	21	12	1	06/12/2025 08:00	06/12/2025 19:36	J	
(SM 2540G)									
Percent Moisture	18	%	0.0010	0.0010	1	06/18/2025 15:11	06/18/2025 15:11	J	

Surrogates

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Lab
Decachlorobiphenyl (S)	ug/Kg	84	83	99	63 - 130	J
Tetrachloro-m-xylene (S)	ug/Kg	170	140	82	44 - 130	J
2-Fluorobiphenyl (S)	mg/Kg	0.40	0.28	69	46 - 115	J
p-Terphenyl-d14 (S)	mg/Kg	0.40	0.35	87	51 - 132	J
Nitrobenzene-d5 (S)	mg/Kg	0.40	0.28	69	34 - 117	J
Tetrachloro-m-xylene (S)	ug/Kg	170	140	82	42 - 129	J
Decachlorobiphenyl (S)	ug/Kg	84	83	99	61 - 147	J





Advanced Environmental Laboratories, Inc
6681 Southpoint Pkwy Jacksonville, FL 32216
Payments: P.O. Box 551580 Jacksonville, FL 32255-1580
Phone: (904) 363-9350
Fax: (904) 363-9354

FINAL

Workorder: Phillipi Creek (J2508890)

Analytical Results

Surrogates

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Lab
Nonatricontane-C39 (S)	mg/Kg	6	5.60	93	36 - 132	J
o-Terphenyl (S)	mg/Kg	2	1.90	97	66 - 136	J

Thursday, June 26, 2025 3:50:29 PM
Dates and times are displayed using (-04:00)
Page 47 of 117

Certificate of Analysis

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.

POWERED BY
HORIZON
v.13.1.0



NELAP Accredited E82574



FINAL

Workorder: Phillipi Creek (J2508890)

Analytical Results

Lab ID: J2508890010
Sample ID: PCV-06

Date Collected: 06/10/2025 14:50
Date Received: 06/11/2025 14:00

Matrix: Soil

Parameter	Results	Units	PQL	MDL	DF	Prepared	Analyzed	Lab
METALS (SW-846 3050B/SW-846 6010)								
Aluminum	470	mg/Kg	49	12	1	06/13/2025 10:55	06/13/2025 21:17	J
Arsenic	1.6 I	mg/Kg	2.4	0.61	1	06/13/2025 10:55	06/13/2025 21:17	J
Barium	3.4	mg/Kg	2.4	0.61	1	06/13/2025 10:55	06/13/2025 21:17	J
Cadmium	0.091 I	mg/Kg	0.24	0.061	1	06/13/2025 10:55	06/13/2025 21:17	J
Chromium	4.2	mg/Kg	0.97	0.24	1	06/13/2025 10:55	06/13/2025 21:17	J
Copper	0.92 I	mg/Kg	2.4	0.61	1	06/13/2025 10:55	06/13/2025 21:17	J
Lead	1.3 I	mg/Kg	2.4	0.61	1	06/13/2025 10:55	06/13/2025 21:17	J
Nickel	0.96 I	mg/Kg	2.4	0.61	1	06/13/2025 10:55	06/13/2025 21:17	J
Selenium	1.2 U	mg/Kg	4.9	1.2	1	06/13/2025 10:55	06/13/2025 21:17	J
Silver	0.24 U	mg/Kg	0.97	0.24	1	06/13/2025 10:55	06/13/2025 21:17	J
Zinc	12 U	mg/Kg	49	12	1	06/13/2025 10:55	06/13/2025 21:17	J
METALS (SW-846 7471A)								
Mercury	0.0032 I	mg/Kg	0.0072	0.0018	1	06/13/2025 09:54	06/13/2025 13:01	J
SEMIVOLATILES (EPA 3546/EPA 8081)								
4,4'-DDD	0.011 U	mg/Kg	0.043	0.011	10	06/16/2025 08:00	06/18/2025 17:17	J
4,4'-DDE	0.011 U	mg/Kg	0.043	0.011	10	06/16/2025 08:00	06/18/2025 17:17	J
4,4'-DDT	0.021 U	mg/Kg	0.086	0.021	10	06/16/2025 08:00	06/18/2025 17:17	J
Aldrin	0.011 U	mg/Kg	0.043	0.011	10	06/16/2025 08:00	06/18/2025 17:17	J
Chlordane (technical)	0.19 U	mg/Kg	0.77	0.19	10	06/16/2025 08:00	06/18/2025 17:17	J
Dieldrin	0.011 U	mg/Kg	0.043	0.011	10	06/16/2025 08:00	06/18/2025 17:17	J
Endosulfan I	0.011 U	mg/Kg	0.043	0.011	10	06/16/2025 08:00	06/18/2025 17:17	J
Endosulfan II	0.011 U	mg/Kg	0.043	0.011	10	06/16/2025 08:00	06/18/2025 17:17	J
Endosulfan Sulfate	0.011 U	mg/Kg	0.043	0.011	10	06/16/2025 08:00	06/18/2025 17:17	J
Endrin	0.021 U	mg/Kg	0.086	0.021	10	06/16/2025 08:00	06/18/2025 17:17	J
Endrin Aldehyde	0.011 U	mg/Kg	0.043	0.011	10	06/16/2025 08:00	06/18/2025 17:17	J
Heptachlor	0.011 U	mg/Kg	0.043	0.011	10	06/16/2025 08:00	06/18/2025 17:17	J
Heptachlor Epoxide	0.011 U	mg/Kg	0.043	0.011	10	06/16/2025 08:00	06/18/2025 17:17	J

Thursday, June 26, 2025 3:50:29 PM
Dates and times are displayed using (-04:00)
Page 48 of 117

Certificate of Analysis

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.

POWERED BY
HORIZON
v.13.1.0



NELAP Accredited E82574



FINAL

Workorder: Phillipi Creek (J2508890)

Analytical Results

Lab ID: J2508890010
Sample ID: PCV-06

Date Collected: 06/10/2025 14:50
Date Received: 06/11/2025 14:00

Matrix: Soil

Parameter	Results	Units	PQL	MDL	DF	Prepared	Analyzed	Lab
Methoxychlor	0.011 U	mg/Kg	0.043	0.011	10	06/16/2025 08:00	06/18/2025 17:17	J
Toxaphene	0.32 U	mg/Kg	1.3	0.32	10	06/16/2025 08:00	06/18/2025 17:17	J
alpha-BHC	0.011 U	mg/Kg	0.043	0.011	10	06/16/2025 08:00	06/18/2025 17:17	J
beta-BHC	0.011 U	mg/Kg	0.043	0.011	10	06/16/2025 08:00	06/18/2025 17:17	J
delta-BHC	0.011 U	mg/Kg	0.043	0.011	10	06/16/2025 08:00	06/18/2025 17:17	J
gamma-BHC (Lindane)	0.011 U	mg/Kg	0.043	0.011	10	06/16/2025 08:00	06/18/2025 17:17	J
SEMIVOLATILES (EPA 3546/SW-846 8082A)								
Aroclor 1016 (PCB-1016)	0.032 U	mg/Kg	0.13	0.032	1	06/16/2025 08:00	06/18/2025 02:42	J
Aroclor 1221 (PCB-1221)	0.032 U	mg/Kg	0.13	0.032	1	06/16/2025 08:00	06/18/2025 02:42	J
Aroclor 1232 (PCB-1232)	0.032 U	mg/Kg	0.13	0.032	1	06/16/2025 08:00	06/18/2025 02:42	J
Aroclor 1242 (PCB-1242)	0.032 U	mg/Kg	0.13	0.032	1	06/16/2025 08:00	06/18/2025 02:42	J
Aroclor 1248 (PCB-1248)	0.032 U	mg/Kg	0.13	0.032	1	06/16/2025 08:00	06/18/2025 02:42	J
Aroclor 1254 (PCB-1254)	0.032 U	mg/Kg	0.13	0.032	1	06/16/2025 08:00	06/18/2025 02:42	J
Aroclor 1260 (PCB-1260)	0.032 U	mg/Kg	0.13	0.032	1	06/16/2025 08:00	06/18/2025 02:42	J
SEMIVOLATILES (EPA 3546/SW-846 8270E (SIM))								
1-Methylnaphthalene	0.0052 U	mg/Kg	0.010	0.0052	1	06/12/2025 08:00	06/13/2025 05:14	J
2-Methylnaphthalene	0.0052 U	mg/Kg	0.010	0.0052	1	06/12/2025 08:00	06/13/2025 05:14	J
Acenaphthene	0.0052 U	mg/Kg	0.010	0.0052	1	06/12/2025 08:00	06/13/2025 05:14	J
Acenaphthylene	0.0052 U	mg/Kg	0.010	0.0052	1	06/12/2025 08:00	06/13/2025 05:14	J
Anthracene	0.0052 U	mg/Kg	0.010	0.0052	1	06/12/2025 08:00	06/13/2025 05:14	J
Benzo[a]anthracene	0.021	mg/Kg	0.010	0.0052	1	06/12/2025 08:00	06/13/2025 05:14	J
Benzo[a]pyrene	0.025	mg/Kg	0.010	0.0052	1	06/12/2025 08:00	06/13/2025 05:14	J
Benzo[b]fluoranthene	0.037	mg/Kg	0.010	0.0052	1	06/12/2025 08:00	06/13/2025 05:14	J
Benzo[g,h,i]perylene	0.016	mg/Kg	0.010	0.0052	1	06/12/2025 08:00	06/13/2025 05:14	J
Benzo[k]fluoranthene	0.014	mg/Kg	0.010	0.0052	1	06/12/2025 08:00	06/13/2025 05:14	J
Chrysene	0.027	mg/Kg	0.010	0.0052	1	06/12/2025 08:00	06/13/2025 05:14	J
Dibenzo[a,h]anthracene	0.0052 U	mg/Kg	0.010	0.0052	1	06/12/2025 08:00	06/13/2025 05:14	J

Thursday, June 26, 2025 3:50:29 PM
Dates and times are displayed using (-04:00)
Page 49 of 117

Certificate of Analysis

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.

POWERED BY
HORIZON
v.13.1.0



NELAP Accredited E82574



FINAL

Workorder: Phillipi Creek (J2508890)

Analytical Results

Lab ID: J2508890010	Date Collected: 06/10/2025 14:50					Matrix: Soil		
Sample ID: PCV-06	Date Received: 06/11/2025 14:00							
Parameter	Results	Units	PQL	MDL	DF	Prepared	Analyzed	Lab
Fluoranthene	0.056	mg/Kg	0.010	0.0052	1	06/12/2025 08:00	06/13/2025 05:14	J
Fluorene	0.0052 U	mg/Kg	0.010	0.0052	1	06/12/2025 08:00	06/13/2025 05:14	J
Indeno(1,2,3-cd)pyrene	0.019	mg/Kg	0.010	0.0052	1	06/12/2025 08:00	06/13/2025 05:14	J
Naphthalene	0.0052 U	mg/Kg	0.010	0.0052	1	06/12/2025 08:00	06/13/2025 05:14	J
Phenanthrene	0.028	mg/Kg	0.010	0.0052	1	06/12/2025 08:00	06/13/2025 05:14	J
Pyrene	0.045	mg/Kg	0.010	0.0052	1	06/12/2025 08:00	06/13/2025 05:14	J
SEMIVOLATILES (FL-PRO)								
TPH	13 U	mg/Kg	22	13	1	06/12/2025 08:00	06/12/2025 19:54	J
(SM 2540G)								
Percent Moisture	23	%	0.0010	0.0010	1	06/18/2025 15:11	06/18/2025 15:11	J

Analysis Results Comments

Decachlorobiphenyl

SD|Surrogate diluted out.

J4|Estimated Result

Tetrachloro-m-xylene

J4|Estimated Result

SD|Surrogate diluted out.

Surrogates

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Lab
Nitrobenzene-d5 (S)	mg/Kg	0.40	0.21	53	34 - 117	J
Tetrachloro-m-xylene (S)	ug/Kg	170	270	164	44 - 130	J
Tetrachloro-m-xylene (S)	ug/Kg	170	0	0	42 - 129	J
o-Terphenyl (S)	mg/Kg	2	1.60	81	66 - 136	J
Decachlorobiphenyl (S)	ug/Kg	83	80	96	61 - 147	J
Nonatricontane-C39 (S)	mg/Kg	6	4.50	74	36 - 132	J
Decachlorobiphenyl (S)	ug/Kg	83	0	0	63 - 130	J





Advanced Environmental Laboratories, Inc
6681 Southpoint Pkwy Jacksonville, FL 32216
Payments: P.O. Box 551580 Jacksonville, FL 32255-1580
Phone: (904) 363-9350
Fax: (904) 363-9354

FINAL

Workorder: Phillipi Creek (J2508890)

Analytical Results

Surrogates

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Lab
p-Terphenyl-d14 (S)	mg/Kg	0.40	0.29	72	51 - 132	J
2-Fluorobiphenyl (S)	mg/Kg	0.40	0.22	54	46 - 115	J

Certificate of Analysis

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.



NELAP Accredited E82574



FINAL

Workorder: Phillipi Creek (J2508890)

Analytical Results

Lab ID: J2508890011
Sample ID: PCG-12

Date Collected: 06/10/2025 15:27
Date Received: 06/11/2025 14:00

Matrix: Soil

Parameter	Results	Units	PQL	MDL	DF	Prepared	Analyzed	Lab
METALS (SW-846 3050B/SW-846 6010)								
Aluminum	420	mg/Kg	49	12	1	06/16/2025 09:27	06/16/2025 16:45	J
Arsenic	0.62 U	mg/Kg	2.5	0.62	1	06/16/2025 09:27	06/16/2025 16:45	J
Barium	2.1 I	mg/Kg	2.5	0.62	1	06/16/2025 09:27	06/17/2025 11:31	J
Cadmium	0.062 U	mg/Kg	0.25	0.062	1	06/16/2025 09:27	06/16/2025 16:45	J
Chromium	1.0	mg/Kg	0.99	0.25	1	06/16/2025 09:27	06/16/2025 16:45	J
Copper	0.73 I	mg/Kg	2.5	0.62	1	06/16/2025 09:27	06/17/2025 11:31	J
Lead	4.7	mg/Kg	2.5	0.62	1	06/16/2025 09:27	06/17/2025 11:31	J
Nickel	0.62 U	mg/Kg	2.5	0.62	1	06/16/2025 09:27	06/16/2025 16:45	J
Selenium	1.2 U	mg/Kg	4.9	1.2	1	06/16/2025 09:27	06/16/2025 16:45	J
Silver	0.25 U	mg/Kg	0.99	0.25	1	06/16/2025 09:27	06/16/2025 16:45	J
Zinc	12 U	mg/Kg	49	12	1	06/16/2025 09:27	06/16/2025 16:45	J
METALS (SW-846 7471A)								
Mercury	0.0025 I	mg/Kg	0.0070	0.0017	1	06/13/2025 09:54	06/13/2025 13:05	J
SEMIVOLATILES (EPA 3546/EPA 8081)								
4,4'-DDD	0.022 U	mg/Kg	0.087	0.022	20	06/17/2025 07:45	06/21/2025 22:28	J
4,4'-DDE	0.022 U	mg/Kg	0.087	0.022	20	06/17/2025 07:45	06/21/2025 22:28	J
4,4'-DDT	0.044 U	mg/Kg	0.17	0.044	20	06/17/2025 07:45	06/21/2025 22:28	J
Aldrin	0.022 U	mg/Kg	0.087	0.022	20	06/17/2025 07:45	06/21/2025 22:28	J
Chlordane (technical)	0.39 U	mg/Kg	1.6	0.39	20	06/17/2025 07:45	06/21/2025 22:28	J
Dieldrin	0.022 U	mg/Kg	0.087	0.022	20	06/17/2025 07:45	06/21/2025 22:28	J
Endosulfan I	0.022 U	mg/Kg	0.087	0.022	20	06/17/2025 07:45	06/21/2025 22:28	J
Endosulfan II	0.022 U	mg/Kg	0.087	0.022	20	06/17/2025 07:45	06/21/2025 22:28	J
Endosulfan Sulfate	0.022 U	mg/Kg	0.087	0.022	20	06/17/2025 07:45	06/21/2025 22:28	J
Endrin	0.044 U	mg/Kg	0.17	0.044	20	06/17/2025 07:45	06/21/2025 22:28	J
Endrin Aldehyde	0.022 U	mg/Kg	0.087	0.022	20	06/17/2025 07:45	06/21/2025 22:28	J
Heptachlor	0.022 U	mg/Kg	0.087	0.022	20	06/17/2025 07:45	06/21/2025 22:28	J
Heptachlor Epoxide	0.022 U	mg/Kg	0.087	0.022	20	06/17/2025 07:45	06/21/2025 22:28	J

Thursday, June 26, 2025 3:50:29 PM
Dates and times are displayed using (-04:00)
Page 52 of 117

Certificate of Analysis

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.

POWERED BY
HORIZON[®]
v.13.1.0



NELAP Accredited E82574



FINAL

Workorder: Phillipi Creek (J2508890)

Analytical Results

Lab ID: J2508890011
Sample ID: PCG-12

Date Collected: 06/10/2025 15:27
Date Received: 06/11/2025 14:00

Matrix: Soil

Parameter	Results	Units	PQL	MDL	DF	Prepared	Analyzed	Lab
Methoxychlor	0.022 U	mg/Kg	0.087	0.022	20	06/17/2025 07:45	06/21/2025 22:28	J
Toxaphene	0.66 U	mg/Kg	2.6	0.66	20	06/17/2025 07:45	06/21/2025 22:28	J
alpha-BHC	0.022 U	mg/Kg	0.087	0.022	20	06/17/2025 07:45	06/21/2025 22:28	J
beta-BHC	0.022 U	mg/Kg	0.087	0.022	20	06/17/2025 07:45	06/21/2025 22:28	J
delta-BHC	0.022 U	mg/Kg	0.087	0.022	20	06/17/2025 07:45	06/21/2025 22:28	J
gamma-BHC (Lindane)	0.022 U	mg/Kg	0.087	0.022	20	06/17/2025 07:45	06/21/2025 22:28	J
SEMIVOLATILES (EPA 3546/SW-846 8082A)								
Aroclor 1016 (PCB-1016)	0.033 U	mg/Kg	0.13	0.033	1	06/17/2025 07:45	06/19/2025 01:38	J
Aroclor 1221 (PCB-1221)	0.033 U	mg/Kg	0.13	0.033	1	06/17/2025 07:45	06/19/2025 01:38	J
Aroclor 1232 (PCB-1232)	0.033 U	mg/Kg	0.13	0.033	1	06/17/2025 07:45	06/19/2025 01:38	J
Aroclor 1242 (PCB-1242)	0.033 U	mg/Kg	0.13	0.033	1	06/17/2025 07:45	06/19/2025 01:38	J
Aroclor 1248 (PCB-1248)	0.033 U	mg/Kg	0.13	0.033	1	06/17/2025 07:45	06/19/2025 01:38	J
Aroclor 1254 (PCB-1254)	0.033 U	mg/Kg	0.13	0.033	1	06/17/2025 07:45	06/19/2025 01:38	J
Aroclor 1260 (PCB-1260)	0.033 U	mg/Kg	0.13	0.033	1	06/17/2025 07:45	06/19/2025 01:38	J
SEMIVOLATILES (EPA 3546/SW-846 8270E (SIM))								
1-Methylnaphthalene	0.0053 U	mg/Kg	0.011	0.0053	1	06/12/2025 08:00	06/13/2025 05:41	J
2-Methylnaphthalene	0.0053 U	mg/Kg	0.011	0.0053	1	06/12/2025 08:00	06/13/2025 05:41	J
Acenaphthene	0.0053 U	mg/Kg	0.011	0.0053	1	06/12/2025 08:00	06/13/2025 05:41	J
Acenaphthylene	0.0053 U	mg/Kg	0.011	0.0053	1	06/12/2025 08:00	06/13/2025 05:41	J
Anthracene	0.0053 U	mg/Kg	0.011	0.0053	1	06/12/2025 08:00	06/13/2025 05:41	J
Benzo[a]anthracene	0.0053 U	mg/Kg	0.011	0.0053	1	06/12/2025 08:00	06/13/2025 05:41	J
Benzo[a]pyrene	0.0053 U	mg/Kg	0.011	0.0053	1	06/12/2025 08:00	06/13/2025 05:41	J
Benzo[b]fluoranthene	0.0053 U	mg/Kg	0.011	0.0053	1	06/12/2025 08:00	06/13/2025 05:41	J
Benzo[g,h,i]perylene	0.0053 U	mg/Kg	0.011	0.0053	1	06/12/2025 08:00	06/13/2025 05:41	J
Benzo[k]fluoranthene	0.0053 U	mg/Kg	0.011	0.0053	1	06/12/2025 08:00	06/13/2025 05:41	J
Chrysene	0.0053 U	mg/Kg	0.011	0.0053	1	06/12/2025 08:00	06/13/2025 05:41	J
Dibenzo[a,h]anthracene	0.0053 U	mg/Kg	0.011	0.0053	1	06/12/2025 08:00	06/13/2025 05:41	J

Thursday, June 26, 2025 3:50:29 PM
Dates and times are displayed using (-04:00)
Page 53 of 117

Certificate of Analysis

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.

POWERED BY
HORIZON
v.13.1.0



NELAP Accredited E82574



FINAL

Workorder: Phillipi Creek (J2508890)

Analytical Results

Lab ID:	J2508890011	Date Collected:	06/10/2025 15:27			Matrix:	Soil		
Sample ID:	PCG-12	Date Received:	06/11/2025 14:00						
Parameter	Results	Units	PQL	MDL	DF	Prepared	Analyzed	Lab	
Fluoranthene	0.0053 U	mg/Kg	0.011	0.0053	1	06/12/2025 08:00	06/13/2025 05:41	J	
Fluorene	0.0053 U	mg/Kg	0.011	0.0053	1	06/12/2025 08:00	06/13/2025 05:41	J	
Indeno(1,2,3-cd)pyrene	0.0053 U	mg/Kg	0.011	0.0053	1	06/12/2025 08:00	06/13/2025 05:41	J	
Naphthalene	0.0053 U	mg/Kg	0.011	0.0053	1	06/12/2025 08:00	06/13/2025 05:41	J	
Phenanthrene	0.0053 U	mg/Kg	0.011	0.0053	1	06/12/2025 08:00	06/13/2025 05:41	J	
Pyrene	0.0053 U	mg/Kg	0.011	0.0053	1	06/12/2025 08:00	06/13/2025 05:41	J	
SEMIVOLATILES (FL-PRO)									
TPH	13 U	mg/Kg	23	13	1	06/12/2025 08:00	06/12/2025 20:13	J	
(SM 2540G)									
Percent Moisture	25	%	0.0010	0.0010	1	06/18/2025 15:11	06/18/2025 15:11	J	

Analysis Results Comments

Decachlorobiphenyl

J4|Estimated Result

SD|Surrogate diluted out.

Tetrachloro-m-xylene

J4|Estimated Result

SD|Surrogate diluted out.

Surrogates

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Lab
Decachlorobiphenyl (S)	ug/Kg	82	87	106	61 - 147	J
Nitrobenzene-d5 (S)	mg/Kg	0.40	0.23	57	34 - 117	J
p-Terphenyl-d14 (S)	mg/Kg	0.40	0.28	70	51 - 132	J
Decachlorobiphenyl (S)	ug/Kg	82	0	0	63 - 130	J
Tetrachloro-m-xylene (S)	ug/Kg	160	220	131	44 - 130	J
Tetrachloro-m-xylene (S)	ug/Kg	160	0	0	42 - 129	J
Nonatricontane-C39 (S)	mg/Kg	6	4.50	75	36 - 132	J





Advanced Environmental Laboratories, Inc
6681 Southpoint Pkwy Jacksonville, FL 32216
Payments: P.O. Box 551580 Jacksonville, FL 32255-1580
Phone: (904) 363-9350
Fax: (904) 363-9354

FINAL

Workorder: Phillipi Creek (J2508890)

Analytical Results

Surrogates

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Lab
o-Terphenyl (S)	mg/Kg	2	1.50	77	66 - 136	J
2-Fluorobiphenyl (S)	mg/Kg	0.40	0.23	57	46 - 115	J

Certificate of Analysis

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.



NELAP Accredited E82574



FINAL

Workorder: Phillipi Creek (J2508890)

Analytical Results

Lab ID: J2508890012
Sample ID: PCG-13

Date Collected: 06/10/2025 15:41
Date Received: 06/11/2025 14:00

Matrix: Soil

Parameter	Results	Units	PQL	MDL	DF	Prepared	Analyzed	Lab
METALS (SW-846 3050B/SW-846 6010)								
Aluminum	680	mg/Kg	53	13	1	06/16/2025 09:27	06/16/2025 16:48	J
Arsenic	0.66 U	mg/Kg	2.6	0.66	1	06/16/2025 09:27	06/16/2025 16:48	J
Barium	6.1	mg/Kg	2.6	0.66	1	06/16/2025 09:27	06/17/2025 11:34	J
Cadmium	0.066 U	mg/Kg	0.26	0.066	1	06/16/2025 09:27	06/16/2025 16:48	J
Chromium	1.8	mg/Kg	1.1	0.26	1	06/16/2025 09:27	06/16/2025 16:48	J
Copper	1.2 I	mg/Kg	2.6	0.66	1	06/16/2025 09:27	06/17/2025 11:34	J
Lead	1.0 I	mg/Kg	2.6	0.66	1	06/16/2025 09:27	06/17/2025 11:34	J
Nickel	0.66 U	mg/Kg	2.6	0.66	1	06/16/2025 09:27	06/16/2025 16:48	J
Selenium	1.3 U	mg/Kg	5.3	1.3	1	06/16/2025 09:27	06/16/2025 16:48	J
Silver	0.26 U	mg/Kg	1.1	0.26	1	06/16/2025 09:27	06/16/2025 16:48	J
Zinc	13 U	mg/Kg	53	13	1	06/16/2025 09:27	06/16/2025 16:48	J
METALS (SW-846 7471A)								
Mercury	0.0042 I	mg/Kg	0.0065	0.0016	1	06/13/2025 09:54	06/13/2025 13:09	J
SEMIVOLATILES (EPA 3546/EPA 8081)								
4,4'-DDD	0.022 U	mg/Kg	0.088	0.022	20	06/17/2025 07:45	06/21/2025 22:49	J
4,4'-DDE	0.022 U	mg/Kg	0.088	0.022	20	06/17/2025 07:45	06/21/2025 22:49	J
4,4'-DDT	0.044 U	mg/Kg	0.18	0.044	20	06/17/2025 07:45	06/21/2025 22:49	J
Aldrin	0.022 U	mg/Kg	0.088	0.022	20	06/17/2025 07:45	06/21/2025 22:49	J
Chlordane (technical)	0.40 U	mg/Kg	1.6	0.40	20	06/17/2025 07:45	06/21/2025 22:49	J
Dieldrin	0.022 U	mg/Kg	0.088	0.022	20	06/17/2025 07:45	06/21/2025 22:49	J
Endosulfan I	0.022 U	mg/Kg	0.088	0.022	20	06/17/2025 07:45	06/21/2025 22:49	J
Endosulfan II	0.022 U	mg/Kg	0.088	0.022	20	06/17/2025 07:45	06/21/2025 22:49	J
Endosulfan Sulfate	0.022 U	mg/Kg	0.088	0.022	20	06/17/2025 07:45	06/21/2025 22:49	J
Endrin	0.044 U	mg/Kg	0.18	0.044	20	06/17/2025 07:45	06/21/2025 22:49	J
Endrin Aldehyde	0.022 U	mg/Kg	0.088	0.022	20	06/17/2025 07:45	06/21/2025 22:49	J
Heptachlor	0.022 U	mg/Kg	0.088	0.022	20	06/17/2025 07:45	06/21/2025 22:49	J
Heptachlor Epoxide	0.022 U	mg/Kg	0.088	0.022	20	06/17/2025 07:45	06/21/2025 22:49	J

Thursday, June 26, 2025 3:50:29 PM
Dates and times are displayed using (-04:00)
Page 56 of 117

Certificate of Analysis

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.

POWERED BY
HORIZON
v.13.1.0



NELAP Accredited E82574



FINAL

Workorder: Phillipi Creek (J2508890)

Analytical Results

Lab ID: J2508890012
Sample ID: PCG-13

Date Collected: 06/10/2025 15:41
Date Received: 06/11/2025 14:00

Matrix: Soil

Parameter	Results	Units	PQL	MDL	DF	Prepared	Analyzed	Lab
Methoxychlor	0.022 U	mg/Kg	0.088	0.022	20	06/17/2025 07:45	06/21/2025 22:49	J
Toxaphene	0.66 U	mg/Kg	2.6	0.66	20	06/17/2025 07:45	06/21/2025 22:49	J
alpha-BHC	0.022 U	mg/Kg	0.088	0.022	20	06/17/2025 07:45	06/21/2025 22:49	J
beta-BHC	0.022 U	mg/Kg	0.088	0.022	20	06/17/2025 07:45	06/21/2025 22:49	J
delta-BHC	0.022 U	mg/Kg	0.088	0.022	20	06/17/2025 07:45	06/21/2025 22:49	J
gamma-BHC (Lindane)	0.022 U	mg/Kg	0.088	0.022	20	06/17/2025 07:45	06/21/2025 22:49	J
SEMIVOLATILES (EPA 3546/SW-846 8082A)								
Aroclor 1016 (PCB-1016)	0.033 U	mg/Kg	0.13	0.033	1	06/17/2025 07:45	06/19/2025 02:40	J
Aroclor 1221 (PCB-1221)	0.033 U	mg/Kg	0.13	0.033	1	06/17/2025 07:45	06/19/2025 02:40	J
Aroclor 1232 (PCB-1232)	0.033 U	mg/Kg	0.13	0.033	1	06/17/2025 07:45	06/19/2025 02:40	J
Aroclor 1242 (PCB-1242)	0.033 U	mg/Kg	0.13	0.033	1	06/17/2025 07:45	06/19/2025 02:40	J
Aroclor 1248 (PCB-1248)	0.033 U	mg/Kg	0.13	0.033	1	06/17/2025 07:45	06/19/2025 02:40	J
Aroclor 1254 (PCB-1254)	0.033 U	mg/Kg	0.13	0.033	1	06/17/2025 07:45	06/19/2025 02:40	J
Aroclor 1260 (PCB-1260)	0.033 U	mg/Kg	0.13	0.033	1	06/17/2025 07:45	06/19/2025 02:40	J
SEMIVOLATILES (EPA 3546/SW-846 8270E (SIM))								
1-Methylnaphthalene	0.0053 U	mg/Kg	0.011	0.0053	1	06/12/2025 08:00	06/13/2025 06:08	J
2-Methylnaphthalene	0.0053 U	mg/Kg	0.011	0.0053	1	06/12/2025 08:00	06/13/2025 06:08	J
Acenaphthene	0.0053 U	mg/Kg	0.011	0.0053	1	06/12/2025 08:00	06/13/2025 06:08	J
Acenaphthylene	0.0053 U	mg/Kg	0.011	0.0053	1	06/12/2025 08:00	06/13/2025 06:08	J
Anthracene	0.0053 U	mg/Kg	0.011	0.0053	1	06/12/2025 08:00	06/13/2025 06:08	J
Benzo[a]anthracene	0.045	mg/Kg	0.011	0.0053	1	06/12/2025 08:00	06/13/2025 06:08	J
Benzo[a]pyrene	0.056	mg/Kg	0.011	0.0053	1	06/12/2025 08:00	06/13/2025 06:08	J
Benzo[b]fluoranthene	0.088	mg/Kg	0.011	0.0053	1	06/12/2025 08:00	06/13/2025 06:08	J
Benzo[g,h,i]perylene	0.041	mg/Kg	0.011	0.0053	1	06/12/2025 08:00	06/13/2025 06:08	J
Benzo[k]fluoranthene	0.034	mg/Kg	0.011	0.0053	1	06/12/2025 08:00	06/13/2025 06:08	J
Chrysene	0.070	mg/Kg	0.011	0.0053	1	06/12/2025 08:00	06/13/2025 06:08	J
Dibenzo[a,h]anthracene	0.0082 I	mg/Kg	0.011	0.0053	1	06/12/2025 08:00	06/13/2025 06:08	J

Thursday, June 26, 2025 3:50:29 PM
Dates and times are displayed using (-04:00)
Page 57 of 117

Certificate of Analysis

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.

POWERED BY
HORIZON
v.13.1.0



NELAP Accredited E82574



FINAL

Workorder: Phillipi Creek (J2508890)

Analytical Results

Lab ID:	J2508890012	Date Collected:	06/10/2025 15:41			Matrix:	Soil	
Sample ID:	PCG-13	Date Received:	06/11/2025 14:00					
Parameter	Results	Units	PQL	MDL	DF	Prepared	Analyzed	Lab
Fluoranthene	0.13	mg/Kg	0.011	0.0053	1	06/12/2025 08:00	06/13/2025 06:08	J
Fluorene	0.0053 U	mg/Kg	0.011	0.0053	1	06/12/2025 08:00	06/13/2025 06:08	J
Indeno(1,2,3-cd)pyrene	0.047	mg/Kg	0.011	0.0053	1	06/12/2025 08:00	06/13/2025 06:08	J
Naphthalene	0.0053 U	mg/Kg	0.011	0.0053	1	06/12/2025 08:00	06/13/2025 06:08	J
Phenanthrene	0.037	mg/Kg	0.011	0.0053	1	06/12/2025 08:00	06/13/2025 06:08	J
Pyrene	0.096	mg/Kg	0.011	0.0053	1	06/12/2025 08:00	06/13/2025 06:08	J
SEMIVOLATILES (FL-PRO)								
TPH	13 U	mg/Kg	22	13	1	06/12/2025 08:00	06/12/2025 20:31	J
(SM 2540G)								
Percent Moisture	24	%	0.0010	0.0010	1	06/18/2025 15:11	06/18/2025 15:11	J

Analysis Results Comments

Decachlorobiphenyl

J4|Estimated Result

SD|Surrogate diluted out.

Tetrachloro-m-xylene

J4|Estimated Result

SD|Surrogate diluted out.

Surrogates

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Lab
Tetrachloro-m-xylene (S)	ug/Kg	170	210	124	44 - 130	J
p-Terphenyl-d14 (S)	mg/Kg	0.40	0.35	86	51 - 132	J
Tetrachloro-m-xylene (S)	ug/Kg	170	0	0	42 - 129	J
2-Fluorobiphenyl (S)	mg/Kg	0.40	0.26	65	46 - 115	J
Decachlorobiphenyl (S)	ug/Kg	84	92	110	61 - 147	J
Nonatricontane-C39 (S)	mg/Kg	6	6.50	109	36 - 132	J
o-Terphenyl (S)	mg/Kg	2	2.30	113	66 - 136	J

Certificate of Analysis

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.





Advanced Environmental Laboratories, Inc
6681 Southpoint Pkwy Jacksonville, FL 32216
Payments: P.O. Box 551580 Jacksonville, FL 32255-1580
Phone: (904) 363-9350
Fax: (904) 363-9354

FINAL

Workorder: Phillipi Creek (J2508890)

Analytical Results

Surrogates

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Lab
Decachlorobiphenyl (S)	ug/Kg	84	0	0	63 - 130	J
Nitrobenzene-d5 (S)	mg/Kg	0.40	0.26	64	34 - 117	J

Certificate of Analysis

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.





FINAL

Workorder: Phillipi Creek (J2508890)

Analytical Results

Lab ID: J2508890013
Sample ID: PCG-14

Date Collected: 06/10/2025 15:53
Date Received: 06/11/2025 14:00

Matrix: Soil

Parameter	Results	Units	PQL	MDL	DF	Prepared	Analyzed	Lab
METALS (SW-846 3050B/SW-846 6010)								
Aluminum	970	mg/Kg	51	13	1	06/16/2025 09:27	06/16/2025 16:51	J
Arsenic	0.64 U	mg/Kg	2.6	0.64	1	06/16/2025 09:27	06/16/2025 16:51	J
Barium	9.7	mg/Kg	2.6	0.64	1	06/16/2025 09:27	06/17/2025 11:37	J
Cadmium	0.064 U	mg/Kg	0.26	0.064	1	06/16/2025 09:27	06/16/2025 16:51	J
Chromium	2.5	mg/Kg	1.0	0.26	1	06/16/2025 09:27	06/16/2025 16:51	J
Copper	1.6 I	mg/Kg	2.6	0.64	1	06/16/2025 09:27	06/17/2025 11:37	J
Lead	63	mg/Kg	2.6	0.64	1	06/16/2025 09:27	06/17/2025 11:37	J
Nickel	0.64 U	mg/Kg	2.6	0.64	1	06/16/2025 09:27	06/16/2025 16:51	J
Selenium	1.3 U	mg/Kg	5.1	1.3	1	06/16/2025 09:27	06/16/2025 16:51	J
Silver	0.26 U	mg/Kg	1.0	0.26	1	06/16/2025 09:27	06/16/2025 16:51	J
Zinc	13 U	mg/Kg	51	13	1	06/16/2025 09:27	06/16/2025 16:51	J
METALS (SW-846 7471A)								
Mercury	0.0047 I	mg/Kg	0.0061	0.0015	1	06/13/2025 09:54	06/13/2025 13:13	J
SEMIVOLATILES (EPA 3546/EPA 8081)								
4,4'-DDD	0.054 U	mg/Kg	0.21	0.054	50	06/17/2025 07:45	06/21/2025 08:46	J
4,4'-DDE	0.054 U	mg/Kg	0.21	0.054	50	06/17/2025 07:45	06/21/2025 08:46	J
4,4'-DDT	0.11 U	mg/Kg	0.43	0.11	50	06/17/2025 07:45	06/21/2025 08:46	J
Aldrin	0.054 U	mg/Kg	0.21	0.054	50	06/17/2025 07:45	06/21/2025 08:46	J
Chlordane (technical)	0.97 U	mg/Kg	3.9	0.97	50	06/17/2025 07:45	06/21/2025 08:46	J
Dieldrin	0.054 U	mg/Kg	0.21	0.054	50	06/17/2025 07:45	06/21/2025 08:46	J
Endosulfan I	0.054 U	mg/Kg	0.21	0.054	50	06/17/2025 07:45	06/21/2025 08:46	J
Endosulfan II	0.054 U	mg/Kg	0.21	0.054	50	06/17/2025 07:45	06/21/2025 08:46	J
Endosulfan Sulfate	0.054 U	mg/Kg	0.21	0.054	50	06/17/2025 07:45	06/21/2025 08:46	J
Endrin	0.11 U	mg/Kg	0.43	0.11	50	06/17/2025 07:45	06/21/2025 08:46	J
Endrin Aldehyde	0.054 U	mg/Kg	0.21	0.054	50	06/17/2025 07:45	06/21/2025 08:46	J
Heptachlor	0.054 U	mg/Kg	0.21	0.054	50	06/17/2025 07:45	06/21/2025 08:46	J
Heptachlor Epoxide	0.054 U	mg/Kg	0.21	0.054	50	06/17/2025 07:45	06/21/2025 08:46	J

Thursday, June 26, 2025 3:50:29 PM
Dates and times are displayed using (-04:00)
Page 60 of 117

Certificate of Analysis

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.

POWERED BY
HORIZON
v.13.1.0



NELAP Accredited E82574



FINAL

Workorder: Phillipi Creek (J2508890)

Analytical Results

Lab ID: J2508890013
Sample ID: PCG-14

Date Collected: 06/10/2025 15:53
Date Received: 06/11/2025 14:00

Matrix: Soil

Parameter	Results	Units	PQL	MDL	DF	Prepared	Analyzed	Lab
Methoxychlor	0.054 U	mg/Kg	0.21	0.054	50	06/17/2025 07:45	06/21/2025 08:46	J
Toxaphene	1.6 U	mg/Kg	6.4	1.6	50	06/17/2025 07:45	06/21/2025 08:46	J
alpha-BHC	0.054 U	mg/Kg	0.21	0.054	50	06/17/2025 07:45	06/21/2025 08:46	J
beta-BHC	0.054 U	mg/Kg	0.21	0.054	50	06/17/2025 07:45	06/21/2025 08:46	J
delta-BHC	0.054 U	mg/Kg	0.21	0.054	50	06/17/2025 07:45	06/21/2025 08:46	J
gamma-BHC (Lindane)	0.054 U	mg/Kg	0.21	0.054	50	06/17/2025 07:45	06/21/2025 08:46	J
SEMIVOLATILES (EPA 3546/SW-846 8082A)								
Aroclor 1016 (PCB-1016)	0.032 U	mg/Kg	0.13	0.032	1	06/17/2025 07:45	06/19/2025 03:01	J
Aroclor 1221 (PCB-1221)	0.032 U	mg/Kg	0.13	0.032	1	06/17/2025 07:45	06/19/2025 03:01	J
Aroclor 1232 (PCB-1232)	0.032 U	mg/Kg	0.13	0.032	1	06/17/2025 07:45	06/19/2025 03:01	J
Aroclor 1242 (PCB-1242)	0.032 U	mg/Kg	0.13	0.032	1	06/17/2025 07:45	06/19/2025 03:01	J
Aroclor 1248 (PCB-1248)	0.032 U	mg/Kg	0.13	0.032	1	06/17/2025 07:45	06/19/2025 03:01	J
Aroclor 1254 (PCB-1254)	0.032 U	mg/Kg	0.13	0.032	1	06/17/2025 07:45	06/19/2025 03:01	J
Aroclor 1260 (PCB-1260)	0.032 U	mg/Kg	0.13	0.032	1	06/17/2025 07:45	06/19/2025 03:01	J
SEMIVOLATILES (EPA 3546/SW-846 8270E (SIM))								
1-Methylnaphthalene	0.0052 U	mg/Kg	0.010	0.0052	1	06/12/2025 08:00	06/13/2025 06:35	J
2-Methylnaphthalene	0.0052 U	mg/Kg	0.010	0.0052	1	06/12/2025 08:00	06/13/2025 06:35	J
Acenaphthene	0.0052 U	mg/Kg	0.010	0.0052	1	06/12/2025 08:00	06/13/2025 06:35	J
Acenaphthylene	0.0052 U	mg/Kg	0.010	0.0052	1	06/12/2025 08:00	06/13/2025 06:35	J
Anthracene	0.0052 U	mg/Kg	0.010	0.0052	1	06/12/2025 08:00	06/13/2025 06:35	J
Benzo[a]anthracene	0.0052 U	mg/Kg	0.010	0.0052	1	06/12/2025 08:00	06/13/2025 06:35	J
Benzo[a]pyrene	0.0052 U	mg/Kg	0.010	0.0052	1	06/12/2025 08:00	06/13/2025 06:35	J
Benzo[b]fluoranthene	0.0058 I	mg/Kg	0.010	0.0052	1	06/12/2025 08:00	06/13/2025 06:35	J
Benzo[g,h,i]perylene	0.0052 U	mg/Kg	0.010	0.0052	1	06/12/2025 08:00	06/13/2025 06:35	J
Benzo[k]fluoranthene	0.0052 U	mg/Kg	0.010	0.0052	1	06/12/2025 08:00	06/13/2025 06:35	J
Chrysene	0.0052 U	mg/Kg	0.010	0.0052	1	06/12/2025 08:00	06/13/2025 06:35	J
Dibenzo[a,h]anthracene	0.0052 U	mg/Kg	0.010	0.0052	1	06/12/2025 08:00	06/13/2025 06:35	J

Thursday, June 26, 2025 3:50:29 PM
Dates and times are displayed using (-04:00)
Page 61 of 117

Certificate of Analysis

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.

POWERED BY
HORIZON
v.13.1.0



NELAP Accredited E82574



FINAL

Workorder: Phillipi Creek (J2508890)

Analytical Results

Lab ID:	J2508890013	Date Collected:				06/10/2025 15:53	Matrix:		Soil
Sample ID:	PCG-14	Date Received:				06/11/2025 14:00			
Parameter	Results	Units	PQL	MDL	DF	Prepared	Analyzed	Lab	
Fluoranthene	0.0052 U	mg/Kg	0.010	0.0052	1	06/12/2025 08:00	06/13/2025 06:35	J	
Fluorene	0.0052 U	mg/Kg	0.010	0.0052	1	06/12/2025 08:00	06/13/2025 06:35	J	
Indeno(1,2,3-cd)pyrene	0.0052 U	mg/Kg	0.010	0.0052	1	06/12/2025 08:00	06/13/2025 06:35	J	
Naphthalene	0.0052 U	mg/Kg	0.010	0.0052	1	06/12/2025 08:00	06/13/2025 06:35	J	
Phenanthrene	0.0052 U	mg/Kg	0.010	0.0052	1	06/12/2025 08:00	06/13/2025 06:35	J	
Pyrene	0.0052 U	mg/Kg	0.010	0.0052	1	06/12/2025 08:00	06/13/2025 06:35	J	
SEMIVOLATILES (FL-PRO)									
TPH	13 U	mg/Kg	22	13	1	06/12/2025 08:00	06/12/2025 20:50	J	
(SM 2540G)									
Percent Moisture	23	%	0.0010	0.0010	1	06/18/2025 15:11	06/18/2025 15:11	J	

Analysis Results Comments

Decachlorobiphenyl

J4|Estimated Result

SD|Surrogate diluted out.

Tetrachloro-m-xylene

J4|Estimated Result

SD|Surrogate diluted out.

Surrogates

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Lab
2-Fluorobiphenyl (S)	mg/Kg	0.40	0.25	62	46 - 115	J
p-Terphenyl-d14 (S)	mg/Kg	0.40	0.34	86	51 - 132	J
Nonatricontane-C39 (S)	mg/Kg	6	5.90	99	36 - 132	J
Decachlorobiphenyl (S)	ug/Kg	82	83	100	61 - 147	J
Nitrobenzene-d5 (S)	mg/Kg	0.40	0.24	61	34 - 117	J
Tetrachloro-m-xylene (S)	ug/Kg	160	160	95	44 - 130	J
Tetrachloro-m-xylene (S)	ug/Kg	160	0	0	42 - 129	J





Advanced Environmental Laboratories, Inc
6681 Southpoint Pkwy Jacksonville, FL 32216
Payments: P.O. Box 551580 Jacksonville, FL 32255-1580
Phone: (904) 363-9350
Fax: (904) 363-9354

FINAL

Workorder: Phillipi Creek (J2508890)

Analytical Results

Surrogates

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Lab
Decachlorobiphenyl (S)	ug/Kg	82	0	0	63 - 130	J
o-Terphenyl (S)	mg/Kg	2	1.90	97	66 - 136	J

Thursday, June 26, 2025 3:50:29 PM
Dates and times are displayed using (-04:00)
Page 63 of 117

Certificate of Analysis

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.



NELAP Accredited E82574

POWERED BY
HORIZON
v.13.1.0



FINAL

Workorder: Phillipi Creek (J2508890)

Analytical Results

Lab ID: J2508890014
Sample ID: PCG-15

Date Collected: 06/10/2025 15:58
Date Received: 06/11/2025 14:00

Matrix: Soil

Parameter	Results	Units	PQL	MDL	DF	Prepared	Analyzed	Lab
METALS (SW-846 3050B/SW-846 6010)								
Aluminum	580	mg/Kg	53	13	1	06/16/2025 09:27	06/16/2025 16:55	J
Arsenic	0.66 U	mg/Kg	2.6	0.66	1	06/16/2025 09:27	06/16/2025 16:55	J
Barium	5.5	mg/Kg	2.6	0.66	1	06/16/2025 09:27	06/17/2025 11:41	J
Cadmium	0.066 U	mg/Kg	0.26	0.066	1	06/16/2025 09:27	06/16/2025 16:55	J
Chromium	1.6	mg/Kg	1.1	0.26	1	06/16/2025 09:27	06/16/2025 16:55	J
Copper	0.83 I	mg/Kg	2.6	0.66	1	06/16/2025 09:27	06/17/2025 11:41	J
Lead	0.73 I	mg/Kg	2.6	0.66	1	06/16/2025 09:27	06/17/2025 11:41	J
Nickel	0.66 U	mg/Kg	2.6	0.66	1	06/16/2025 09:27	06/16/2025 16:55	J
Selenium	1.3 U	mg/Kg	5.3	1.3	1	06/16/2025 09:27	06/16/2025 16:55	J
Silver	0.26 U	mg/Kg	1.1	0.26	1	06/16/2025 09:27	06/16/2025 16:55	J
Zinc	13 U	mg/Kg	53	13	1	06/16/2025 09:27	06/16/2025 16:55	J
METALS (SW-846 7471A)								
Mercury	0.0024 I	mg/Kg	0.0063	0.0016	1	06/13/2025 09:54	06/13/2025 13:17	J
SEMIVOLATILES (EPA 3546/EPA 8081)								
4,4'-DDD	0.056 U	mg/Kg	0.22	0.056	50	06/17/2025 07:45	06/21/2025 23:09	J
4,4'-DDE	0.056 U	mg/Kg	0.22	0.056	50	06/17/2025 07:45	06/21/2025 23:09	J
4,4'-DDT	0.11 U	mg/Kg	0.45	0.11	50	06/17/2025 07:45	06/21/2025 23:09	J
Aldrin	0.056 U	mg/Kg	0.22	0.056	50	06/17/2025 07:45	06/21/2025 23:09	J
Chlordane (technical)	1.0 U	mg/Kg	4.0	1.0	50	06/17/2025 07:45	06/21/2025 23:09	J
Dieldrin	0.056 U	mg/Kg	0.22	0.056	50	06/17/2025 07:45	06/21/2025 23:09	J
Endosulfan I	0.056 U	mg/Kg	0.22	0.056	50	06/17/2025 07:45	06/21/2025 23:09	J
Endosulfan II	0.056 U	mg/Kg	0.22	0.056	50	06/17/2025 07:45	06/21/2025 23:09	J
Endosulfan Sulfate	0.056 U	mg/Kg	0.22	0.056	50	06/17/2025 07:45	06/21/2025 23:09	J
Endrin	0.11 U	mg/Kg	0.45	0.11	50	06/17/2025 07:45	06/21/2025 23:09	J
Endrin Aldehyde	0.056 U	mg/Kg	0.22	0.056	50	06/17/2025 07:45	06/21/2025 23:09	J
Heptachlor	0.056 U	mg/Kg	0.22	0.056	50	06/17/2025 07:45	06/21/2025 23:09	J
Heptachlor Epoxide	0.056 U	mg/Kg	0.22	0.056	50	06/17/2025 07:45	06/21/2025 23:09	J

Thursday, June 26, 2025 3:50:29 PM
Dates and times are displayed using (-04:00)
Page 64 of 117

Certificate of Analysis

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.

POWERED BY
HORIZON
v.13.1.0



NELAP Accredited E82574



FINAL

Workorder: Phillipi Creek (J2508890)

Analytical Results

Lab ID: J2508890014
Sample ID: PCG-15

Date Collected: 06/10/2025 15:58
Date Received: 06/11/2025 14:00

Matrix: Soil

Parameter	Results	Units	PQL	MDL	DF	Prepared	Analyzed	Lab
Methoxychlor	0.056 U	mg/Kg	0.22	0.056	50	06/17/2025 07:45	06/21/2025 23:09	J
Toxaphene	1.7 U	mg/Kg	6.7	1.7	50	06/17/2025 07:45	06/21/2025 23:09	J
alpha-BHC	0.056 U	mg/Kg	0.22	0.056	50	06/17/2025 07:45	06/21/2025 23:09	J
beta-BHC	0.056 U	mg/Kg	0.22	0.056	50	06/17/2025 07:45	06/21/2025 23:09	J
delta-BHC	0.056 U	mg/Kg	0.22	0.056	50	06/17/2025 07:45	06/21/2025 23:09	J
gamma-BHC (Lindane)	0.056 U	mg/Kg	0.22	0.056	50	06/17/2025 07:45	06/21/2025 23:09	J
SEMIVOLATILES (EPA 3546/SW-846 8082A)								
Aroclor 1016 (PCB-1016)	0.034 U	mg/Kg	0.13	0.034	1	06/17/2025 07:45	06/19/2025 03:22	J
Aroclor 1221 (PCB-1221)	0.034 U	mg/Kg	0.13	0.034	1	06/17/2025 07:45	06/19/2025 03:22	J
Aroclor 1232 (PCB-1232)	0.034 U	mg/Kg	0.13	0.034	1	06/17/2025 07:45	06/19/2025 03:22	J
Aroclor 1242 (PCB-1242)	0.034 U	mg/Kg	0.13	0.034	1	06/17/2025 07:45	06/19/2025 03:22	J
Aroclor 1248 (PCB-1248)	0.034 U	mg/Kg	0.13	0.034	1	06/17/2025 07:45	06/19/2025 03:22	J
Aroclor 1254 (PCB-1254)	0.034 U	mg/Kg	0.13	0.034	1	06/17/2025 07:45	06/19/2025 03:22	J
Aroclor 1260 (PCB-1260)	0.034 U	mg/Kg	0.13	0.034	1	06/17/2025 07:45	06/19/2025 03:22	J
SEMIVOLATILES (EPA 3546/SW-846 8270E (SIM))								
1-Methylnaphthalene	0.0055 U	mg/Kg	0.011	0.0055	1	06/12/2025 08:00	06/13/2025 07:02	J
2-Methylnaphthalene	0.0055 U	mg/Kg	0.011	0.0055	1	06/12/2025 08:00	06/13/2025 07:02	J
Acenaphthene	0.0055 U	mg/Kg	0.011	0.0055	1	06/12/2025 08:00	06/13/2025 07:02	J
Acenaphthylene	0.0055 U	mg/Kg	0.011	0.0055	1	06/12/2025 08:00	06/13/2025 07:02	J
Anthracene	0.0055 U	mg/Kg	0.011	0.0055	1	06/12/2025 08:00	06/13/2025 07:02	J
Benzo[a]anthracene	0.0055 U	mg/Kg	0.011	0.0055	1	06/12/2025 08:00	06/13/2025 07:02	J
Benzo[a]pyrene	0.0055 U	mg/Kg	0.011	0.0055	1	06/12/2025 08:00	06/13/2025 07:02	J
Benzo[b]fluoranthene	0.0055 U	mg/Kg	0.011	0.0055	1	06/12/2025 08:00	06/13/2025 07:02	J
Benzo[g,h,i]perylene	0.0055 U	mg/Kg	0.011	0.0055	1	06/12/2025 08:00	06/13/2025 07:02	J
Benzo[k]fluoranthene	0.0055 U	mg/Kg	0.011	0.0055	1	06/12/2025 08:00	06/13/2025 07:02	J
Chrysene	0.0055 U	mg/Kg	0.011	0.0055	1	06/12/2025 08:00	06/13/2025 07:02	J
Dibenzo[a,h]anthracene	0.0055 U	mg/Kg	0.011	0.0055	1	06/12/2025 08:00	06/13/2025 07:02	J

Thursday, June 26, 2025 3:50:29 PM
Dates and times are displayed using (-04:00)
Page 65 of 117

Certificate of Analysis

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.

POWERED BY
HORIZON
v.13.1.0



NELAP Accredited E82574



FINAL

Workorder: Phillipi Creek (J2508890)

Analytical Results

Lab ID: J2508890014	Date Collected: 06/10/2025 15:58					Matrix: Soil		
Sample ID: PCG-15	Date Received: 06/11/2025 14:00							
Parameter	Results	Units	PQL	MDL	DF	Prepared	Analyzed	Lab
Fluoranthene	0.0055 U	mg/Kg	0.011	0.0055	1	06/12/2025 08:00	06/13/2025 07:02	J
Fluorene	0.0055 U	mg/Kg	0.011	0.0055	1	06/12/2025 08:00	06/13/2025 07:02	J
Indeno(1,2,3-cd)pyrene	0.0055 U	mg/Kg	0.011	0.0055	1	06/12/2025 08:00	06/13/2025 07:02	J
Naphthalene	0.0055 U	mg/Kg	0.011	0.0055	1	06/12/2025 08:00	06/13/2025 07:02	J
Phenanthrene	0.0055 U	mg/Kg	0.011	0.0055	1	06/12/2025 08:00	06/13/2025 07:02	J
Pyrene	0.0055 U	mg/Kg	0.011	0.0055	1	06/12/2025 08:00	06/13/2025 07:02	J
SEMIVOLATILES (FL-PRO)								
TPH	13 U	mg/Kg	23	13	1	06/12/2025 08:00	06/12/2025 21:08	J
(SM 2540G)								
Percent Moisture	27	%	0.0010	0.0010	1	06/18/2025 15:11	06/18/2025 15:11	J

Task Comments

10370580 - GCSJ/8072

The surrogates in the following samples are not applicable: J2508890014. Sample analysis required a dilution greater than 4X, which resulted in undetected surrogate concentrations. The data has been qualified accordingly.

Analysis Results Comments

Decachlorobiphenyl

SD|Surrogate diluted out.

J4|Estimated Result

Tetrachloro-m-xylene

SD|Surrogate diluted out.

J4|Estimated Result

Surrogates

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Lab
2-Fluorobiphenyl (S)	mg/Kg	0.40	0.25	62	46 - 115	J
Tetrachloro-m-xylene (S)	ug/Kg	160	170	103	44 - 130	J
Nonatricontane-C39 (S)	mg/Kg	6	6.20	103	36 - 132	J
p-Terphenyl-d14 (S)	mg/Kg	0.40	0.32	79	51 - 132	J
Decachlorobiphenyl (S)	ug/Kg	82	0	0	63 - 130	J
Tetrachloro-m-xylene (S)	ug/Kg	160	0	0	42 - 129	J





FINAL

Workorder: Phillipi Creek (J2508890)

Analytical Results

Surrogates

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Lab
Nitrobenzene-d5 (S)	mg/Kg	0.40	0.25	64	34 - 117	J
Decachlorobiphenyl (S)	ug/Kg	82	85	103	61 - 147	J
o-Terphenyl (S)	mg/Kg	2	2	98	66 - 136	J

Certificate of Analysis

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.



NELAP Accredited E82574



FINAL

Workorder: Phillipi Creek (J2508890)

Analytical Results

Lab ID: J2508890015
Sample ID: PCG-16

Date Collected: 06/10/2025 16:12
Date Received: 06/11/2025 14:00

Matrix: Soil

Parameter	Results	Units	PQL	MDL	DF	Prepared	Analyzed	Lab
METALS (SW-846 3050B/SW-846 6010)								
Aluminum	540	mg/Kg	52	13	1	06/16/2025 09:27	06/16/2025 16:58	J
Arsenic	0.64 U	mg/Kg	2.6	0.64	1	06/16/2025 09:27	06/16/2025 16:58	J
Barium	5.0	mg/Kg	2.6	0.64	1	06/16/2025 09:27	06/17/2025 11:44	J
Cadmium	0.064 U	mg/Kg	0.26	0.064	1	06/16/2025 09:27	06/16/2025 16:58	J
Chromium	1.5	mg/Kg	1.0	0.26	1	06/16/2025 09:27	06/16/2025 16:58	J
Copper	0.77 I	mg/Kg	2.6	0.64	1	06/16/2025 09:27	06/17/2025 11:44	J
Lead	0.64 U	mg/Kg	2.6	0.64	1	06/16/2025 09:27	06/17/2025 11:44	J
Nickel	0.64 U	mg/Kg	2.6	0.64	1	06/16/2025 09:27	06/16/2025 16:58	J
Selenium	1.3 U	mg/Kg	5.2	1.3	1	06/16/2025 09:27	06/16/2025 16:58	J
Silver	0.26 U	mg/Kg	1.0	0.26	1	06/16/2025 09:27	06/16/2025 16:58	J
Zinc	13 U	mg/Kg	52	13	1	06/16/2025 09:27	06/16/2025 16:58	J
METALS (SW-846 7471A)								
Mercury	0.0032 I	mg/Kg	0.0074	0.0019	1	06/13/2025 09:54	06/13/2025 13:21	J
SEMIVOLATILES (EPA 3546/EPA 8081)								
4,4'-DDD	0.023 U	mg/Kg	0.091	0.023	20	06/17/2025 07:45	06/21/2025 23:30	J
4,4'-DDE	0.023 U	mg/Kg	0.091	0.023	20	06/17/2025 07:45	06/21/2025 23:30	J
4,4'-DDT	0.046 U	mg/Kg	0.18	0.046	20	06/17/2025 07:45	06/21/2025 23:30	J
Aldrin	0.023 U	mg/Kg	0.091	0.023	20	06/17/2025 07:45	06/21/2025 23:30	J
Chlordane (technical)	0.41 U	mg/Kg	1.6	0.41	20	06/17/2025 07:45	06/21/2025 23:30	J
Dieldrin	0.023 U	mg/Kg	0.091	0.023	20	06/17/2025 07:45	06/21/2025 23:30	J
Endosulfan I	0.023 U	mg/Kg	0.091	0.023	20	06/17/2025 07:45	06/21/2025 23:30	J
Endosulfan II	0.023 U	mg/Kg	0.091	0.023	20	06/17/2025 07:45	06/21/2025 23:30	J
Endosulfan Sulfate	0.023 U	mg/Kg	0.091	0.023	20	06/17/2025 07:45	06/21/2025 23:30	J
Endrin	0.046 U	mg/Kg	0.18	0.046	20	06/17/2025 07:45	06/21/2025 23:30	J
Endrin Aldehyde	0.023 U	mg/Kg	0.091	0.023	20	06/17/2025 07:45	06/21/2025 23:30	J
Heptachlor	0.023 U	mg/Kg	0.091	0.023	20	06/17/2025 07:45	06/21/2025 23:30	J
Heptachlor Epoxide	0.023 U	mg/Kg	0.091	0.023	20	06/17/2025 07:45	06/21/2025 23:30	J

Thursday, June 26, 2025 3:50:29 PM
Dates and times are displayed using (-04:00)
Page 68 of 117

Certificate of Analysis

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.

POWERED BY
HORIZON
v.13.1.0



NELAP Accredited E82574



FINAL

Workorder: Phillipi Creek (J2508890)

Analytical Results

Lab ID:	J2508890015	Date Collected:				06/10/2025 16:12	Matrix:		Soil
Sample ID:	PCG-16	Date Received:				06/11/2025 14:00			
Parameter	Results	Units	PQL	MDL	DF	Prepared	Analyzed	Lab	
Methoxychlor	0.023 U	mg/Kg	0.091	0.023	20	06/17/2025 07:45	06/21/2025 23:30	J	
Toxaphene	0.69 U	mg/Kg	2.7	0.69	20	06/17/2025 07:45	06/21/2025 23:30	J	
alpha-BHC	0.023 U	mg/Kg	0.091	0.023	20	06/17/2025 07:45	06/21/2025 23:30	J	
beta-BHC	0.023 U	mg/Kg	0.091	0.023	20	06/17/2025 07:45	06/21/2025 23:30	J	
delta-BHC	0.023 U	mg/Kg	0.091	0.023	20	06/17/2025 07:45	06/21/2025 23:30	J	
gamma-BHC (Lindane)	0.023 U	mg/Kg	0.091	0.023	20	06/17/2025 07:45	06/21/2025 23:30	J	
SEMIVOLATILES (EPA 3546/SW-846 8082A)									
Aroclor 1016 (PCB-1016)	0.034 U	mg/Kg	0.14	0.034	1	06/17/2025 07:45	06/19/2025 03:42	J	
Aroclor 1221 (PCB-1221)	0.034 U	mg/Kg	0.14	0.034	1	06/17/2025 07:45	06/19/2025 03:42	J	
Aroclor 1232 (PCB-1232)	0.034 U	mg/Kg	0.14	0.034	1	06/17/2025 07:45	06/19/2025 03:42	J	
Aroclor 1242 (PCB-1242)	0.034 U	mg/Kg	0.14	0.034	1	06/17/2025 07:45	06/19/2025 03:42	J	
Aroclor 1248 (PCB-1248)	0.034 U	mg/Kg	0.14	0.034	1	06/17/2025 07:45	06/19/2025 03:42	J	
Aroclor 1254 (PCB-1254)	0.034 U	mg/Kg	0.14	0.034	1	06/17/2025 07:45	06/19/2025 03:42	J	
Aroclor 1260 (PCB-1260)	0.034 U	mg/Kg	0.14	0.034	1	06/17/2025 07:45	06/19/2025 03:42	J	
SEMIVOLATILES (EPA 3546/SW-846 8270E (SIM))									
1-Methylnaphthalene	0.0054 U	mg/Kg	0.011	0.0054	1	06/12/2025 08:00	06/13/2025 07:29	J	
2-Methylnaphthalene	0.0054 U	mg/Kg	0.011	0.0054	1	06/12/2025 08:00	06/13/2025 07:29	J	
Acenaphthene	0.0054 U	mg/Kg	0.011	0.0054	1	06/12/2025 08:00	06/13/2025 07:29	J	
Acenaphthylene	0.0054 U	mg/Kg	0.011	0.0054	1	06/12/2025 08:00	06/13/2025 07:29	J	
Anthracene	0.0054 U	mg/Kg	0.011	0.0054	1	06/12/2025 08:00	06/13/2025 07:29	J	
Benzo[a]anthracene	0.0054 U	mg/Kg	0.011	0.0054	1	06/12/2025 08:00	06/13/2025 07:29	J	
Benzo[a]pyrene	0.0054 U	mg/Kg	0.011	0.0054	1	06/12/2025 08:00	06/13/2025 07:29	J	
Benzo[b]fluoranthene	0.0054 U	mg/Kg	0.011	0.0054	1	06/12/2025 08:00	06/13/2025 07:29	J	
Benzo[g,h,i]perylene	0.0054 U	mg/Kg	0.011	0.0054	1	06/12/2025 08:00	06/13/2025 07:29	J	
Benzo[k]fluoranthene	0.0054 U	mg/Kg	0.011	0.0054	1	06/12/2025 08:00	06/13/2025 07:29	J	
Chrysene	0.0054 U	mg/Kg	0.011	0.0054	1	06/12/2025 08:00	06/13/2025 07:29	J	
Dibenzo[a,h]anthracene	0.0054 U	mg/Kg	0.011	0.0054	1	06/12/2025 08:00	06/13/2025 07:29	J	





FINAL

Workorder: Phillipi Creek (J2508890)

Analytical Results

Lab ID:	J2508890015	Date Collected:	06/10/2025 16:12			Matrix:	Soil	
Sample ID:	PCG-16	Date Received:	06/11/2025 14:00					
Parameter	Results	Units	PQL	MDL	DF	Prepared	Analyzed	Lab
Fluoranthene	0.0062 I	mg/Kg	0.011	0.0054	1	06/12/2025 08:00	06/13/2025 07:29	J
Fluorene	0.0054 U	mg/Kg	0.011	0.0054	1	06/12/2025 08:00	06/13/2025 07:29	J
Indeno(1,2,3-cd)pyrene	0.0054 U	mg/Kg	0.011	0.0054	1	06/12/2025 08:00	06/13/2025 07:29	J
Naphthalene	0.0054 U	mg/Kg	0.011	0.0054	1	06/12/2025 08:00	06/13/2025 07:29	J
Phenanthrene	0.0054 U	mg/Kg	0.011	0.0054	1	06/12/2025 08:00	06/13/2025 07:29	J
Pyrene	0.0054 I	mg/Kg	0.011	0.0054	1	06/12/2025 08:00	06/13/2025 07:29	J
SEMIVOLATILES (FL-PRO)								
TPH	13 U	mg/Kg	23	13	1	06/12/2025 08:00	06/12/2025 21:26	J
(SM 2540G)								
Percent Moisture	26	%	0.0010	0.0010	1	06/18/2025 15:11	06/18/2025 15:11	J

Analysis Results Comments

Decachlorobiphenyl

J4|Estimated Result

SD|Surrogate diluted out.

Tetrachloro-m-xylene

J4|Estimated Result

SD|Surrogate diluted out.

Surrogates

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Lab
2-Fluorobiphenyl (S)	mg/Kg	0.40	0.25	62	46 - 115	J
p-Terphenyl-d14 (S)	mg/Kg	0.40	0.32	81	51 - 132	J
Tetrachloro-m-xylene (S)	ug/Kg	170	0	0	42 - 129	J
Nonatricontane-C39 (S)	mg/Kg	6	5.90	99	36 - 132	J
o-Terphenyl (S)	mg/Kg	2	2.10	104	66 - 136	J
Tetrachloro-m-xylene (S)	ug/Kg	170	180	107	44 - 130	J
Nitrobenzene-d5 (S)	mg/Kg	0.40	0.24	61	34 - 117	J

Certificate of Analysis

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.





Advanced Environmental Laboratories, Inc
6681 Southpoint Pkwy Jacksonville, FL 32216
Payments: P.O. Box 551580 Jacksonville, FL 32255-1580
Phone: (904) 363-9350
Fax: (904) 363-9354

FINAL

Workorder: Phillipi Creek (J2508890)

Analytical Results

Surrogates

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Lab
Decachlorobiphenyl (S)	ug/Kg	84	82	98	61 - 147	J
Decachlorobiphenyl (S)	ug/Kg	84	0	0	63 - 130	J

Thursday, June 26, 2025 3:50:29 PM
Dates and times are displayed using (-04:00)
Page 71 of 117

Certificate of Analysis

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.

POWERED BY
HORIZON
v.13.1.0



NELAP Accredited E82574



FINAL

Workorder: Phillipi Creek (J2508890)

Analytical Results

Lab ID: J2508890016
Sample ID: PCG-17

Date Collected: 06/10/2025 16:22
Date Received: 06/11/2025 14:00

Matrix: Soil

Parameter	Results	Units	PQL	MDL	DF	Prepared	Analyzed	Lab
METALS (SW-846 3050B/SW-846 6010)								
Aluminum	670	mg/Kg	51	13	1	06/16/2025 09:27	06/16/2025 17:02	J
Arsenic	0.63 U	mg/Kg	2.5	0.63	1	06/16/2025 09:27	06/16/2025 17:02	J
Barium	4.6	mg/Kg	2.5	0.63	1	06/16/2025 09:27	06/17/2025 11:47	J
Cadmium	0.063 U	mg/Kg	0.25	0.063	1	06/16/2025 09:27	06/16/2025 17:02	J
Chromium	2.1	mg/Kg	1.0	0.25	1	06/16/2025 09:27	06/16/2025 17:02	J
Copper	0.96 I	mg/Kg	2.5	0.63	1	06/16/2025 09:27	06/17/2025 11:47	J
Lead	0.82 I	mg/Kg	2.5	0.63	1	06/16/2025 09:27	06/17/2025 11:47	J
Nickel	0.63 U	mg/Kg	2.5	0.63	1	06/16/2025 09:27	06/16/2025 17:02	J
Selenium	1.3 U	mg/Kg	5.1	1.3	1	06/16/2025 09:27	06/16/2025 17:02	J
Silver	0.25 U	mg/Kg	1.0	0.25	1	06/16/2025 09:27	06/16/2025 17:02	J
Zinc	13 U	mg/Kg	51	13	1	06/16/2025 09:27	06/16/2025 17:02	J
METALS (SW-846 7471A)								
Mercury	0.0034 I	mg/Kg	0.0067	0.0017	1	06/13/2025 09:54	06/13/2025 13:33	J
SEMIVOLATILES (EPA 3546/EPA 8081)								
4,4'-DDD	0.021 U	mg/Kg	0.086	0.021	20	06/17/2025 07:45	06/21/2025 23:50	J
4,4'-DDE	0.021 U	mg/Kg	0.086	0.021	20	06/17/2025 07:45	06/21/2025 23:50	J
4,4'-DDT	0.043 U	mg/Kg	0.17	0.043	20	06/17/2025 07:45	06/21/2025 23:50	J
Aldrin	0.021 U	mg/Kg	0.086	0.021	20	06/17/2025 07:45	06/21/2025 23:50	J
Chlordane (technical)	0.39 U	mg/Kg	1.5	0.39	20	06/17/2025 07:45	06/21/2025 23:50	J
Dieldrin	0.021 U	mg/Kg	0.086	0.021	20	06/17/2025 07:45	06/21/2025 23:50	J
Endosulfan I	0.021 U	mg/Kg	0.086	0.021	20	06/17/2025 07:45	06/21/2025 23:50	J
Endosulfan II	0.021 U	mg/Kg	0.086	0.021	20	06/17/2025 07:45	06/21/2025 23:50	J
Endosulfan Sulfate	0.021 U	mg/Kg	0.086	0.021	20	06/17/2025 07:45	06/21/2025 23:50	J
Endrin	0.043 U	mg/Kg	0.17	0.043	20	06/17/2025 07:45	06/21/2025 23:50	J
Endrin Aldehyde	0.021 U	mg/Kg	0.086	0.021	20	06/17/2025 07:45	06/21/2025 23:50	J
Heptachlor	0.021 U	mg/Kg	0.086	0.021	20	06/17/2025 07:45	06/21/2025 23:50	J
Heptachlor Epoxide	0.021 U	mg/Kg	0.086	0.021	20	06/17/2025 07:45	06/21/2025 23:50	J

Thursday, June 26, 2025 3:50:29 PM
Dates and times are displayed using (-04:00)
Page 72 of 117

Certificate of Analysis

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.

POWERED BY
HORIZON[®]
v.13.1.0



NELAP Accredited E82574



FINAL

Workorder: Phillipi Creek (J2508890)

Analytical Results

Lab ID: J2508890016
Sample ID: PCG-17

Date Collected: 06/10/2025 16:22
Date Received: 06/11/2025 14:00

Matrix: Soil

Parameter	Results	Units	PQL	MDL	DF	Prepared	Analyzed	Lab
Methoxychlor	0.021 U	mg/Kg	0.086	0.021	20	06/17/2025 07:45	06/21/2025 23:50	J
Toxaphene	0.64 U	mg/Kg	2.6	0.64	20	06/17/2025 07:45	06/21/2025 23:50	J
alpha-BHC	0.021 U	mg/Kg	0.086	0.021	20	06/17/2025 07:45	06/21/2025 23:50	J
beta-BHC	0.021 U	mg/Kg	0.086	0.021	20	06/17/2025 07:45	06/21/2025 23:50	J
delta-BHC	0.021 U	mg/Kg	0.086	0.021	20	06/17/2025 07:45	06/21/2025 23:50	J
gamma-BHC (Lindane)	0.021 U	mg/Kg	0.086	0.021	20	06/17/2025 07:45	06/21/2025 23:50	J
SEMIVOLATILES (EPA 3546/SW-846 8082A)								
Aroclor 1016 (PCB-1016)	0.032 U	mg/Kg	0.13	0.032	1	06/17/2025 07:45	06/19/2025 04:03	J
Aroclor 1221 (PCB-1221)	0.032 U	mg/Kg	0.13	0.032	1	06/17/2025 07:45	06/19/2025 04:03	J
Aroclor 1232 (PCB-1232)	0.032 U	mg/Kg	0.13	0.032	1	06/17/2025 07:45	06/19/2025 04:03	J
Aroclor 1242 (PCB-1242)	0.032 U	mg/Kg	0.13	0.032	1	06/17/2025 07:45	06/19/2025 04:03	J
Aroclor 1248 (PCB-1248)	0.032 U	mg/Kg	0.13	0.032	1	06/17/2025 07:45	06/19/2025 04:03	J
Aroclor 1254 (PCB-1254)	0.032 U	mg/Kg	0.13	0.032	1	06/17/2025 07:45	06/19/2025 04:03	J
Aroclor 1260 (PCB-1260)	0.032 U	mg/Kg	0.13	0.032	1	06/17/2025 07:45	06/19/2025 04:03	J
SEMIVOLATILES (EPA 3546/SW-846 8270E (SIM))								
1-Methylnaphthalene	0.0052 U	mg/Kg	0.010	0.0052	1	06/12/2025 08:00	06/13/2025 07:56	J
2-Methylnaphthalene	0.0052 U	mg/Kg	0.010	0.0052	1	06/12/2025 08:00	06/13/2025 07:56	J
Acenaphthene	0.0052 U	mg/Kg	0.010	0.0052	1	06/12/2025 08:00	06/13/2025 07:56	J
Acenaphthylene	0.0052 U	mg/Kg	0.010	0.0052	1	06/12/2025 08:00	06/13/2025 07:56	J
Anthracene	0.0052 U	mg/Kg	0.010	0.0052	1	06/12/2025 08:00	06/13/2025 07:56	J
Benzo[a]anthracene	0.0052 U	mg/Kg	0.010	0.0052	1	06/12/2025 08:00	06/13/2025 07:56	J
Benzo[a]pyrene	0.0052 U	mg/Kg	0.010	0.0052	1	06/12/2025 08:00	06/13/2025 07:56	J
Benzo[b]fluoranthene	0.0052 U	mg/Kg	0.010	0.0052	1	06/12/2025 08:00	06/13/2025 07:56	J
Benzo[g,h,i]perylene	0.0052 U	mg/Kg	0.010	0.0052	1	06/12/2025 08:00	06/13/2025 07:56	J
Benzo[k]fluoranthene	0.0052 U	mg/Kg	0.010	0.0052	1	06/12/2025 08:00	06/13/2025 07:56	J
Chrysene	0.0052 U	mg/Kg	0.010	0.0052	1	06/12/2025 08:00	06/13/2025 07:56	J
Dibenzo[a,h]anthracene	0.0052 U	mg/Kg	0.010	0.0052	1	06/12/2025 08:00	06/13/2025 07:56	J

Thursday, June 26, 2025 3:50:29 PM
Dates and times are displayed using (-04:00)
Page 73 of 117

Certificate of Analysis

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.

POWERED BY
HORIZON
v.13.1.0



NELAP Accredited E82574



FINAL

Workorder: Phillipi Creek (J2508890)

Analytical Results

Lab ID: J2508890016	Date Collected: 06/10/2025 16:22					Matrix: Soil		
Sample ID: PCG-17	Date Received: 06/11/2025 14:00							
Parameter	Results	Units	PQL	MDL	DF	Prepared	Analyzed	Lab
Fluoranthene	0.0052 U	mg/Kg	0.010	0.0052	1	06/12/2025 08:00	06/13/2025 07:56	J
Fluorene	0.0052 U	mg/Kg	0.010	0.0052	1	06/12/2025 08:00	06/13/2025 07:56	J
Indeno(1,2,3-cd)pyrene	0.0052 U	mg/Kg	0.010	0.0052	1	06/12/2025 08:00	06/13/2025 07:56	J
Naphthalene	0.0052 U	mg/Kg	0.010	0.0052	1	06/12/2025 08:00	06/13/2025 07:56	J
Phenanthrene	0.0052 U	mg/Kg	0.010	0.0052	1	06/12/2025 08:00	06/13/2025 07:56	J
Pyrene	0.0052 U	mg/Kg	0.010	0.0052	1	06/12/2025 08:00	06/13/2025 07:56	J
SEMIVOLATILES (FL-PRO)								
TPH	13 U	mg/Kg	22	13	1	06/12/2025 08:00	06/12/2025 21:44	J
(SM 2540G)								
Percent Moisture	23	%	0.0010	0.0010	1	06/18/2025 15:11	06/18/2025 15:11	J

Analysis Results Comments

Decachlorobiphenyl

J4|Estimated Result

SD|Surrogate diluted out.

Tetrachloro-m-xylene

J4|Estimated Result

SD|Surrogate diluted out.

Surrogates

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Lab
Nonatricontane-C39 (S)	mg/Kg	6	7	117	36 - 132	J
Nitrobenzene-d5 (S)	mg/Kg	0.40	0.28	70	34 - 117	J
2-Fluorobiphenyl (S)	mg/Kg	0.40	0.27	68	46 - 115	J
Tetrachloro-m-xylene (S)	ug/Kg	170	0	0	42 - 129	J
p-Terphenyl-d14 (S)	mg/Kg	0.40	0.34	84	51 - 132	J
o-Terphenyl (S)	mg/Kg	2	2.30	113	66 - 136	J
Decachlorobiphenyl (S)	ug/Kg	83	0	0	63 - 130	J





Advanced Environmental Laboratories, Inc
6681 Southpoint Pkwy Jacksonville, FL 32216
Payments: P.O. Box 551580 Jacksonville, FL 32255-1580
Phone: (904) 363-9350
Fax: (904) 363-9354

FINAL

Workorder: Phillipi Creek (J2508890)

Analytical Results

Surrogates

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Lab
Tetrachloro-m-xylene (S)	ug/Kg	170	200	120	44 - 130	J
Decachlorobiphenyl (S)	ug/Kg	83	83	100	61 - 147	J

Certificate of Analysis

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.



NELAP Accredited E82574



FINAL

Workorder: Phillipi Creek (J2508890)

Analytical Results

Lab ID:	J2508890017	Date Collected:	06/10/2025 16:32			Matrix:	Soil	
Sample ID:	PCG-18	Date Received:	06/11/2025 14:00					
Parameter	Results	Units	PQL	MDL	DF	Prepared	Analyzed	Lab
METALS (SW-846 3050B/SW-846 6010)								
Aluminum	560	mg/Kg	51	13	1	06/16/2025 09:27	06/16/2025 17:05	J
Arsenic	0.63 U	mg/Kg	2.5	0.63	1	06/16/2025 09:27	06/16/2025 17:05	J
Barium	6.4	mg/Kg	2.5	0.63	1	06/16/2025 09:27	06/17/2025 11:51	J
Cadmium	0.063 U	mg/Kg	0.25	0.063	1	06/16/2025 09:27	06/16/2025 17:05	J
Chromium	1.9	mg/Kg	1.0	0.25	1	06/16/2025 09:27	06/16/2025 17:05	J
Copper	1.1 I	mg/Kg	2.5	0.63	1	06/16/2025 09:27	06/17/2025 11:51	J
Lead	0.63 U	mg/Kg	2.5	0.63	1	06/16/2025 09:27	06/17/2025 11:51	J
Nickel	0.63 U	mg/Kg	2.5	0.63	1	06/16/2025 09:27	06/16/2025 17:05	J
Selenium	1.3 U	mg/Kg	5.1	1.3	1	06/16/2025 09:27	06/16/2025 17:05	J
Silver	0.25 U	mg/Kg	1.0	0.25	1	06/16/2025 09:27	06/16/2025 17:05	J
Zinc	13 U	mg/Kg	51	13	1	06/16/2025 09:27	06/16/2025 17:05	J
METALS (SW-846 7471A)								
Mercury	0.0035 I	mg/Kg	0.0058	0.0014	1	06/13/2025 09:54	06/13/2025 13:37	J
SEMIVOLATILES (EPA 3546/EPA 8081)								
4,4`-DDD	0.021 U	mg/Kg	0.083	0.021	20	06/17/2025 07:45	06/22/2025 00:11	J
4,4`-DDE	0.021 U	mg/Kg	0.083	0.021	20	06/17/2025 07:45	06/22/2025 00:11	J
4,4`-DDT	0.042 U	mg/Kg	0.17	0.042	20	06/17/2025 07:45	06/22/2025 00:11	J
Aldrin	0.021 U	mg/Kg	0.083	0.021	20	06/17/2025 07:45	06/22/2025 00:11	J
Chlordane (technical)	0.37 U	mg/Kg	1.5	0.37	20	06/17/2025 07:45	06/22/2025 00:11	J
Dieldrin	0.021 U	mg/Kg	0.083	0.021	20	06/17/2025 07:45	06/22/2025 00:11	J
Endosulfan I	0.021 U	mg/Kg	0.083	0.021	20	06/17/2025 07:45	06/22/2025 00:11	J
Endosulfan II	0.021 U	mg/Kg	0.083	0.021	20	06/17/2025 07:45	06/22/2025 00:11	J
Endosulfan Sulfate	0.021 U	mg/Kg	0.083	0.021	20	06/17/2025 07:45	06/22/2025 00:11	J
Endrin	0.042 U	mg/Kg	0.17	0.042	20	06/17/2025 07:45	06/22/2025 00:11	J
Endrin Aldehyde	0.021 U	mg/Kg	0.083	0.021	20	06/17/2025 07:45	06/22/2025 00:11	J
Heptachlor	0.021 U	mg/Kg	0.083	0.021	20	06/17/2025 07:45	06/22/2025 00:11	J
Heptachlor Epoxide	0.021 U	mg/Kg	0.083	0.021	20	06/17/2025 07:45	06/22/2025 00:11	J

Thursday, June 26, 2025 3:50:29 PM
Dates and times are displayed using (-04:00)
Page 76 of 117

Certificate of Analysis

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.

POWERED BY
HORIZON
v.13.1.0



NELAP Accredited E82574



FINAL

Workorder: Phillipi Creek (J2508890)

Analytical Results

Lab ID: J2508890017
Sample ID: PCG-18

Date Collected: 06/10/2025 16:32
Date Received: 06/11/2025 14:00

Matrix: Soil

Parameter	Results	Units	PQL	MDL	DF	Prepared	Analyzed	Lab
Methoxychlor	0.021 U	mg/Kg	0.083	0.021	20	06/17/2025 07:45	06/22/2025 00:11	J
Toxaphene	0.62 U	mg/Kg	2.5	0.62	20	06/17/2025 07:45	06/22/2025 00:11	J
alpha-BHC	0.021 U	mg/Kg	0.083	0.021	20	06/17/2025 07:45	06/22/2025 00:11	J
beta-BHC	0.021 U	mg/Kg	0.083	0.021	20	06/17/2025 07:45	06/22/2025 00:11	J
delta-BHC	0.021 U	mg/Kg	0.083	0.021	20	06/17/2025 07:45	06/22/2025 00:11	J
gamma-BHC (Lindane)	0.021 U	mg/Kg	0.083	0.021	20	06/17/2025 07:45	06/22/2025 00:11	J
SEMIVOLATILES (EPA 3546/SW-846 8082A)								
Aroclor 1016 (PCB-1016)	0.031 U	mg/Kg	0.12	0.031	1	06/17/2025 07:45	06/19/2025 04:24	J
Aroclor 1221 (PCB-1221)	0.031 U	mg/Kg	0.12	0.031	1	06/17/2025 07:45	06/19/2025 04:24	J
Aroclor 1232 (PCB-1232)	0.031 U	mg/Kg	0.12	0.031	1	06/17/2025 07:45	06/19/2025 04:24	J
Aroclor 1242 (PCB-1242)	0.031 U	mg/Kg	0.12	0.031	1	06/17/2025 07:45	06/19/2025 04:24	J
Aroclor 1248 (PCB-1248)	0.031 U	mg/Kg	0.12	0.031	1	06/17/2025 07:45	06/19/2025 04:24	J
Aroclor 1254 (PCB-1254)	0.031 U	mg/Kg	0.12	0.031	1	06/17/2025 07:45	06/19/2025 04:24	J
Aroclor 1260 (PCB-1260)	0.031 U	mg/Kg	0.12	0.031	1	06/17/2025 07:45	06/19/2025 04:24	J
SEMIVOLATILES (EPA 3546/SW-846 8270E (SIM))								
1-Methylnaphthalene	0.0051 U	mg/Kg	0.010	0.0051	1	06/12/2025 08:00	06/13/2025 08:23	J
2-Methylnaphthalene	0.0051 U	mg/Kg	0.010	0.0051	1	06/12/2025 08:00	06/13/2025 08:23	J
Acenaphthene	0.0051 U	mg/Kg	0.010	0.0051	1	06/12/2025 08:00	06/13/2025 08:23	J
Acenaphthylene	0.0051 U	mg/Kg	0.010	0.0051	1	06/12/2025 08:00	06/13/2025 08:23	J
Anthracene	0.0051 U	mg/Kg	0.010	0.0051	1	06/12/2025 08:00	06/13/2025 08:23	J
Benzo[a]anthracene	0.010	mg/Kg	0.010	0.0051	1	06/12/2025 08:00	06/13/2025 08:23	J
Benzo[a]pyrene	0.016	mg/Kg	0.010	0.0051	1	06/12/2025 08:00	06/13/2025 08:23	J
Benzo[b]fluoranthene	0.025	mg/Kg	0.010	0.0051	1	06/12/2025 08:00	06/13/2025 08:23	J
Benzo[g,h,i]perylene	0.014	mg/Kg	0.010	0.0051	1	06/12/2025 08:00	06/13/2025 08:23	J
Benzo[k]fluoranthene	0.010 I	mg/Kg	0.010	0.0051	1	06/12/2025 08:00	06/13/2025 08:23	J
Chrysene	0.015	mg/Kg	0.010	0.0051	1	06/12/2025 08:00	06/13/2025 08:23	J
Dibenzo[a,h]anthracene	0.0051 U	mg/Kg	0.010	0.0051	1	06/12/2025 08:00	06/13/2025 08:23	J

Thursday, June 26, 2025 3:50:29 PM
Dates and times are displayed using (-04:00)
Page 77 of 117

Certificate of Analysis

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.

POWERED BY
HORIZON
v.13.1.0



NELAP Accredited E82574



FINAL

Workorder: Phillipi Creek (J2508890)

Analytical Results

Lab ID: J2508890017	Date Collected: 06/10/2025 16:32					Matrix: Soil		
Sample ID: PCG-18	Date Received: 06/11/2025 14:00							
Parameter	Results	Units	PQL	MDL	DF	Prepared	Analyzed	Lab
Fluoranthene	0.020	mg/Kg	0.010	0.0051	1	06/12/2025 08:00	06/13/2025 08:23	J
Fluorene	0.0051 U	mg/Kg	0.010	0.0051	1	06/12/2025 08:00	06/13/2025 08:23	J
Indeno(1,2,3-cd)pyrene	0.015	mg/Kg	0.010	0.0051	1	06/12/2025 08:00	06/13/2025 08:23	J
Naphthalene	0.0051 U	mg/Kg	0.010	0.0051	1	06/12/2025 08:00	06/13/2025 08:23	J
Phenanthrene	0.0070 I	mg/Kg	0.010	0.0051	1	06/12/2025 08:00	06/13/2025 08:23	J
Pyrene	0.017	mg/Kg	0.010	0.0051	1	06/12/2025 08:00	06/13/2025 08:23	J
SEMIVOLATILES (FL-PRO)								
TPH	12 U	mg/Kg	22	12	1	06/12/2025 08:00	06/12/2025 22:03	J
(SM 2540G)								
Percent Moisture	21	%	0.0010	0.0010	1	06/18/2025 15:11	06/18/2025 15:11	J

Analysis Results Comments

Decachlorobiphenyl

J4|Estimated Result

SD|Surrogate diluted out.

Tetrachloro-m-xylene

J4|Estimated Result

SD|Surrogate diluted out.

Surrogates

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Lab
Decachlorobiphenyl (S)	ug/Kg	82	0	0	63 - 130	J
Tetrachloro-m-xylene (S)	ug/Kg	160	0	0	42 - 129	J
Decachlorobiphenyl (S)	ug/Kg	82	83	102	61 - 147	J
p-Terphenyl-d14 (S)	mg/Kg	0.40	0.33	83	51 - 132	J
2-Fluorobiphenyl (S)	mg/Kg	0.40	0.25	63	46 - 115	J
Nonatricontane-C39 (S)	mg/Kg	6	5.60	94	36 - 132	J
Nitrobenzene-d5 (S)	mg/Kg	0.40	0.25	63	34 - 117	J

Certificate of Analysis

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.





Advanced Environmental Laboratories, Inc
6681 Southpoint Pkwy Jacksonville, FL 32216
Payments: P.O. Box 551580 Jacksonville, FL 32255-1580
Phone: (904) 363-9350
Fax: (904) 363-9354

FINAL

Workorder: Phillipi Creek (J2508890)

Analytical Results

Surrogates

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Lab
Tetrachloro-m-xylene (S)	ug/Kg	160	190	117	44 - 130	J
o-Terphenyl (S)	mg/Kg	2	2	98	66 - 136	J

Thursday, June 26, 2025 3:50:29 PM
Dates and times are displayed using (-04:00)
Page 79 of 117

Certificate of Analysis

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.

POWERED BY
HORIZON
v.13.1.0



NELAP Accredited E82574



FINAL

Workorder: Phillipi Creek (J2508890)

Analytical Results

Lab ID: J2508890018
Sample ID: PCG-19

Date Collected: 06/10/2025 16:38
Date Received: 06/11/2025 14:00

Matrix: Soil

Parameter	Results	Units	PQL	MDL	DF	Prepared	Analyzed	Lab
METALS (SW-846 3050B/SW-846 6010)								
Aluminum	880	mg/Kg	52	13	1	06/16/2025 09:27	06/16/2025 17:08	J
Arsenic	1.0 I	mg/Kg	2.6	0.65	1	06/16/2025 09:27	06/17/2025 11:54	J
Barium	6.0	mg/Kg	2.6	0.65	1	06/16/2025 09:27	06/17/2025 11:54	J
Cadmium	0.065 U	mg/Kg	0.26	0.065	1	06/16/2025 09:27	06/16/2025 17:08	J
Chromium	2.6	mg/Kg	1.0	0.26	1	06/16/2025 09:27	06/16/2025 17:08	J
Copper	1.8 I	mg/Kg	2.6	0.65	1	06/16/2025 09:27	06/17/2025 11:54	J
Lead	1.0 I	mg/Kg	2.6	0.65	1	06/16/2025 09:27	06/17/2025 11:54	J
Nickel	0.65 U	mg/Kg	2.6	0.65	1	06/16/2025 09:27	06/16/2025 17:08	J
Selenium	1.3 U	mg/Kg	5.2	1.3	1	06/16/2025 09:27	06/16/2025 17:08	J
Silver	0.26 U	mg/Kg	1.0	0.26	1	06/16/2025 09:27	06/16/2025 17:08	J
Zinc	13 U	mg/Kg	52	13	1	06/16/2025 09:27	06/16/2025 17:08	J
METALS (SW-846 7471A)								
Mercury	0.0052 I	mg/Kg	0.0062	0.0016	1	06/13/2025 09:54	06/13/2025 13:41	J
SEMIVOLATILES (EPA 3546/EPA 8081)								
4,4'-DDD	0.022 U	mg/Kg	0.087	0.022	20	06/17/2025 07:45	06/22/2025 00:31	J
4,4'-DDE	0.022 U	mg/Kg	0.087	0.022	20	06/17/2025 07:45	06/22/2025 00:31	J
4,4'-DDT	0.043 U	mg/Kg	0.17	0.043	20	06/17/2025 07:45	06/22/2025 00:31	J
Aldrin	0.022 U	mg/Kg	0.087	0.022	20	06/17/2025 07:45	06/22/2025 00:31	J
Chlordane (technical)	0.39 U	mg/Kg	1.6	0.39	20	06/17/2025 07:45	06/22/2025 00:31	J
Dieldrin	0.022 U	mg/Kg	0.087	0.022	20	06/17/2025 07:45	06/22/2025 00:31	J
Endosulfan I	0.022 U	mg/Kg	0.087	0.022	20	06/17/2025 07:45	06/22/2025 00:31	J
Endosulfan II	0.022 U	mg/Kg	0.087	0.022	20	06/17/2025 07:45	06/22/2025 00:31	J
Endosulfan Sulfate	0.022 U	mg/Kg	0.087	0.022	20	06/17/2025 07:45	06/22/2025 00:31	J
Endrin	0.043 U	mg/Kg	0.17	0.043	20	06/17/2025 07:45	06/22/2025 00:31	J
Endrin Aldehyde	0.022 U	mg/Kg	0.087	0.022	20	06/17/2025 07:45	06/22/2025 00:31	J
Heptachlor	0.022 U	mg/Kg	0.087	0.022	20	06/17/2025 07:45	06/22/2025 00:31	J
Heptachlor Epoxide	0.022 U	mg/Kg	0.087	0.022	20	06/17/2025 07:45	06/22/2025 00:31	J

Thursday, June 26, 2025 3:50:29 PM
Dates and times are displayed using (-04:00)
Page 80 of 117

Certificate of Analysis

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.

POWERED BY
HORIZON
v.13.1.0



NELAP Accredited E82574



FINAL

Workorder: Phillipi Creek (J2508890)

Analytical Results

Lab ID: J2508890018
Sample ID: PCG-19

Date Collected: 06/10/2025 16:38
Date Received: 06/11/2025 14:00

Matrix: Soil

Parameter	Results	Units	PQL	MDL	DF	Prepared	Analyzed	Lab
Methoxychlor	0.022 U	mg/Kg	0.087	0.022	20	06/17/2025 07:45	06/22/2025 00:31	J
Toxaphene	0.65 U	mg/Kg	2.6	0.65	20	06/17/2025 07:45	06/22/2025 00:31	J
alpha-BHC	0.022 U	mg/Kg	0.087	0.022	20	06/17/2025 07:45	06/22/2025 00:31	J
beta-BHC	0.022 U	mg/Kg	0.087	0.022	20	06/17/2025 07:45	06/22/2025 00:31	J
delta-BHC	0.022 U	mg/Kg	0.087	0.022	20	06/17/2025 07:45	06/22/2025 00:31	J
gamma-BHC (Lindane)	0.022 U	mg/Kg	0.087	0.022	20	06/17/2025 07:45	06/22/2025 00:31	J
SEMIVOLATILES (EPA 3546/SW-846 8082A)								
Aroclor 1016 (PCB-1016)	0.033 U	mg/Kg	0.13	0.033	1	06/17/2025 07:45	06/19/2025 04:44	J
Aroclor 1221 (PCB-1221)	0.033 U	mg/Kg	0.13	0.033	1	06/17/2025 07:45	06/19/2025 04:44	J
Aroclor 1232 (PCB-1232)	0.033 U	mg/Kg	0.13	0.033	1	06/17/2025 07:45	06/19/2025 04:44	J
Aroclor 1242 (PCB-1242)	0.033 U	mg/Kg	0.13	0.033	1	06/17/2025 07:45	06/19/2025 04:44	J
Aroclor 1248 (PCB-1248)	0.033 U	mg/Kg	0.13	0.033	1	06/17/2025 07:45	06/19/2025 04:44	J
Aroclor 1254 (PCB-1254)	0.033 U	mg/Kg	0.13	0.033	1	06/17/2025 07:45	06/19/2025 04:44	J
Aroclor 1260 (PCB-1260)	0.033 U	mg/Kg	0.13	0.033	1	06/17/2025 07:45	06/19/2025 04:44	J
SEMIVOLATILES (EPA 3546/SW-846 8270E (SIM))								
1-Methylnaphthalene	0.0052 U	mg/Kg	0.010	0.0052	1	06/12/2025 08:00	06/13/2025 08:50	J
2-Methylnaphthalene	0.0052 U	mg/Kg	0.010	0.0052	1	06/12/2025 08:00	06/13/2025 08:50	J
Acenaphthene	0.0052 U	mg/Kg	0.010	0.0052	1	06/12/2025 08:00	06/13/2025 08:50	J
Acenaphthylene	0.0052 U	mg/Kg	0.010	0.0052	1	06/12/2025 08:00	06/13/2025 08:50	J
Anthracene	0.0052 U	mg/Kg	0.010	0.0052	1	06/12/2025 08:00	06/13/2025 08:50	J
Benzo[a]anthracene	0.0052 U	mg/Kg	0.010	0.0052	1	06/12/2025 08:00	06/13/2025 08:50	J
Benzo[a]pyrene	0.0052 U	mg/Kg	0.010	0.0052	1	06/12/2025 08:00	06/13/2025 08:50	J
Benzo[b]fluoranthene	0.0052 U	mg/Kg	0.010	0.0052	1	06/12/2025 08:00	06/13/2025 08:50	J
Benzo[g,h,i]perylene	0.0052 U	mg/Kg	0.010	0.0052	1	06/12/2025 08:00	06/13/2025 08:50	J
Benzo[k]fluoranthene	0.0052 U	mg/Kg	0.010	0.0052	1	06/12/2025 08:00	06/13/2025 08:50	J
Chrysene	0.0052 U	mg/Kg	0.010	0.0052	1	06/12/2025 08:00	06/13/2025 08:50	J
Dibenzo[a,h]anthracene	0.0052 U	mg/Kg	0.010	0.0052	1	06/12/2025 08:00	06/13/2025 08:50	J

Thursday, June 26, 2025 3:50:29 PM
Dates and times are displayed using (-04:00)
Page 81 of 117

Certificate of Analysis

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.

POWERED BY
HORIZON
v.13.1.0



NELAP Accredited E82574



FINAL

Workorder: Phillipi Creek (J2508890)

Analytical Results

Lab ID:	J2508890018	Date Collected:	06/10/2025 16:38			Matrix:	Soil		
Sample ID:	PCG-19	Date Received:	06/11/2025 14:00						
Parameter	Results	Units	PQL	MDL	DF	Prepared	Analyzed	Lab	
Fluoranthene	0.0052 U	mg/Kg	0.010	0.0052	1	06/12/2025 08:00	06/13/2025 08:50	J	
Fluorene	0.0052 U	mg/Kg	0.010	0.0052	1	06/12/2025 08:00	06/13/2025 08:50	J	
Indeno(1,2,3-cd)pyrene	0.0052 U	mg/Kg	0.010	0.0052	1	06/12/2025 08:00	06/13/2025 08:50	J	
Naphthalene	0.0052 U	mg/Kg	0.010	0.0052	1	06/12/2025 08:00	06/13/2025 08:50	J	
Phenanthrene	0.0052 U	mg/Kg	0.010	0.0052	1	06/12/2025 08:00	06/13/2025 08:50	J	
Pyrene	0.0052 U	mg/Kg	0.010	0.0052	1	06/12/2025 08:00	06/13/2025 08:50	J	
SEMIVOLATILES (FL-PRO)									
TPH	13 U	mg/Kg	22	13	1	06/12/2025 08:00	06/12/2025 22:21	J	
(SM 2540G)									
Percent Moisture	22	%	0.0010	0.0010	1	06/18/2025 15:11	06/18/2025 15:11	J	

Analysis Results Comments

Decachlorobiphenyl

J4|Estimated Result

SD|Surrogate diluted out.

Tetrachloro-m-xylene

J4|Estimated Result

SD|Surrogate diluted out.

Surrogates

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Lab
Tetrachloro-m-xylene (S)	ug/Kg	170	0	0	42 - 129	J
Nonatricontane-C39 (S)	mg/Kg	6	4.30	71	36 - 132	J
o-Terphenyl (S)	mg/Kg	2	1.70	85	66 - 136	J
Tetrachloro-m-xylene (S)	ug/Kg	170	320	190	44 - 130	J
2-Fluorobiphenyl (S)	mg/Kg	0.40	0.21	52	46 - 115	J
Nitrobenzene-d5 (S)	mg/Kg	0.40	0.20	50	34 - 117	J
Decachlorobiphenyl (S)	ug/Kg	84	0	0	63 - 130	J





Advanced Environmental Laboratories, Inc
6681 Southpoint Pkwy Jacksonville, FL 32216
Payments: P.O. Box 551580 Jacksonville, FL 32255-1580
Phone: (904) 363-9350
Fax: (904) 363-9354

FINAL

Workorder: Phillipi Creek (J2508890)

Analytical Results

Surrogates

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Lab
p-Terphenyl-d14 (S)	mg/Kg	0.40	0.30	74	51 - 132	J
Decachlorobiphenyl (S)	ug/Kg	84	93	110	61 - 147	J

Thursday, June 26, 2025 3:50:29 PM
Dates and times are displayed using (-04:00)
Page 83 of 117

Certificate of Analysis

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.



NELAP Accredited E82574

POWERED BY
HORIZON
v.13.1.0



FINAL

Workorder: Phillipi Creek (J2508890)

Analytical Results

Lab ID: J2508890019
Sample ID: PCG-20

Date Collected: 06/10/2025 16:51
Date Received: 06/11/2025 14:00

Matrix: Soil

Parameter	Results	Units	PQL	MDL	DF	Prepared	Analyzed	Lab
METALS (SW-846 3050B/SW-846 6010)								
Aluminum	620	mg/Kg	52	13	1	06/16/2025 09:27	06/17/2025 12:04	J
Arsenic	0.65 U	mg/Kg	2.6	0.65	1	06/16/2025 09:27	06/16/2025 17:18	J
Barium	4.8	mg/Kg	2.6	0.65	1	06/16/2025 09:27	06/17/2025 12:04	J
Cadmium	0.065 U	mg/Kg	0.26	0.065	1	06/16/2025 09:27	06/16/2025 17:18	J
Chromium	2.9	mg/Kg	1.0	0.26	1	06/16/2025 09:27	06/16/2025 17:18	J
Copper	1.3 I	mg/Kg	2.6	0.65	1	06/16/2025 09:27	06/17/2025 12:04	J
Lead	0.69 I	mg/Kg	2.6	0.65	1	06/16/2025 09:27	06/17/2025 12:04	J
Nickel	0.65 U	mg/Kg	2.6	0.65	1	06/16/2025 09:27	06/16/2025 17:18	J
Selenium	1.3 U	mg/Kg	5.2	1.3	1	06/16/2025 09:27	06/16/2025 17:18	J
Silver	0.26 U	mg/Kg	1.0	0.26	1	06/16/2025 09:27	06/16/2025 17:18	J
Zinc	13 U	mg/Kg	52	13	1	06/16/2025 09:27	06/16/2025 17:18	J
METALS (SW-846 7471A)								
Mercury	0.0052 I	mg/Kg	0.0059	0.0015	1	06/13/2025 09:54	06/13/2025 13:46	J
SEMIVOLATILES (EPA 3546/EPA 8081)								
4,4'-DDD	0.021 U	mg/Kg	0.083	0.021	20	06/17/2025 07:45	06/22/2025 00:52	J
4,4'-DDE	0.021 U	mg/Kg	0.083	0.021	20	06/17/2025 07:45	06/22/2025 00:52	J
4,4'-DDT	0.042 U	mg/Kg	0.17	0.042	20	06/17/2025 07:45	06/22/2025 00:52	J
Aldrin	0.021 U	mg/Kg	0.083	0.021	20	06/17/2025 07:45	06/22/2025 00:52	J
Chlordane (technical)	0.38 U	mg/Kg	1.5	0.38	20	06/17/2025 07:45	06/22/2025 00:52	J
Dieldrin	0.021 U	mg/Kg	0.083	0.021	20	06/17/2025 07:45	06/22/2025 00:52	J
Endosulfan I	0.021 U	mg/Kg	0.083	0.021	20	06/17/2025 07:45	06/22/2025 00:52	J
Endosulfan II	0.021 U	mg/Kg	0.083	0.021	20	06/17/2025 07:45	06/22/2025 00:52	J
Endosulfan Sulfate	0.021 U	mg/Kg	0.083	0.021	20	06/17/2025 07:45	06/22/2025 00:52	J
Endrin	0.042 U	mg/Kg	0.17	0.042	20	06/17/2025 07:45	06/22/2025 00:52	J
Endrin Aldehyde	0.021 U	mg/Kg	0.083	0.021	20	06/17/2025 07:45	06/22/2025 00:52	J
Heptachlor	0.021 U	mg/Kg	0.083	0.021	20	06/17/2025 07:45	06/22/2025 00:52	J
Heptachlor Epoxide	0.021 U	mg/Kg	0.083	0.021	20	06/17/2025 07:45	06/22/2025 00:52	J

Thursday, June 26, 2025 3:50:29 PM
Dates and times are displayed using (-04:00)
Page 84 of 117

Certificate of Analysis

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.

POWERED BY
HORIZON
v.13.1.0



NELAP Accredited E82574



FINAL

Workorder: Phillipi Creek (J2508890)

Analytical Results

Lab ID: J2508890019
Sample ID: PCG-20

Date Collected: 06/10/2025 16:51
Date Received: 06/11/2025 14:00

Matrix: Soil

Parameter	Results	Units	PQL	MDL	DF	Prepared	Analyzed	Lab
Methoxychlor	0.021 U	mg/Kg	0.083	0.021	20	06/17/2025 07:45	06/22/2025 00:52	J
Toxaphene	0.63 U	mg/Kg	2.5	0.63	20	06/17/2025 07:45	06/22/2025 00:52	J
alpha-BHC	0.021 U	mg/Kg	0.083	0.021	20	06/17/2025 07:45	06/22/2025 00:52	J
beta-BHC	0.021 U	mg/Kg	0.083	0.021	20	06/17/2025 07:45	06/22/2025 00:52	J
delta-BHC	0.021 U	mg/Kg	0.083	0.021	20	06/17/2025 07:45	06/22/2025 00:52	J
gamma-BHC (Lindane)	0.021 U	mg/Kg	0.083	0.021	20	06/17/2025 07:45	06/22/2025 00:52	J
SEMIVOLATILES (EPA 3546/SW-846 8082A)								
Aroclor 1016 (PCB-1016)	0.031 U	mg/Kg	0.13	0.031	1	06/17/2025 07:45	06/19/2025 05:05	J
Aroclor 1221 (PCB-1221)	0.031 U	mg/Kg	0.13	0.031	1	06/17/2025 07:45	06/19/2025 05:05	J
Aroclor 1232 (PCB-1232)	0.031 U	mg/Kg	0.13	0.031	1	06/17/2025 07:45	06/19/2025 05:05	J
Aroclor 1242 (PCB-1242)	0.031 U	mg/Kg	0.13	0.031	1	06/17/2025 07:45	06/19/2025 05:05	J
Aroclor 1248 (PCB-1248)	0.031 U	mg/Kg	0.13	0.031	1	06/17/2025 07:45	06/19/2025 05:05	J
Aroclor 1254 (PCB-1254)	0.031 U	mg/Kg	0.13	0.031	1	06/17/2025 07:45	06/19/2025 05:05	J
Aroclor 1260 (PCB-1260)	0.031 U	mg/Kg	0.13	0.031	1	06/17/2025 07:45	06/19/2025 05:05	J
SEMIVOLATILES (EPA 3546/SW-846 8270E (SIM))								
1-Methylnaphthalene	0.0050 U	mg/Kg	0.010	0.0050	1	06/12/2025 08:00	06/13/2025 09:17	J
2-Methylnaphthalene	0.0050 U	mg/Kg	0.010	0.0050	1	06/12/2025 08:00	06/13/2025 09:17	J
Acenaphthene	0.0050 U	mg/Kg	0.010	0.0050	1	06/12/2025 08:00	06/13/2025 09:17	J
Acenaphthylene	0.0050 U	mg/Kg	0.010	0.0050	1	06/12/2025 08:00	06/13/2025 09:17	J
Anthracene	0.0050 U	mg/Kg	0.010	0.0050	1	06/12/2025 08:00	06/13/2025 09:17	J
Benzo[a]anthracene	0.0050 U	mg/Kg	0.010	0.0050	1	06/12/2025 08:00	06/13/2025 09:17	J
Benzo[a]pyrene	0.0050 U	mg/Kg	0.010	0.0050	1	06/12/2025 08:00	06/13/2025 09:17	J
Benzo[b]fluoranthene	0.0050 U	mg/Kg	0.010	0.0050	1	06/12/2025 08:00	06/13/2025 09:17	J
Benzo[g,h,i]perylene	0.0050 U	mg/Kg	0.010	0.0050	1	06/12/2025 08:00	06/13/2025 09:17	J
Benzo[k]fluoranthene	0.0050 U	mg/Kg	0.010	0.0050	1	06/12/2025 08:00	06/13/2025 09:17	J
Chrysene	0.0050 U	mg/Kg	0.010	0.0050	1	06/12/2025 08:00	06/13/2025 09:17	J
Dibenzo[a,h]anthracene	0.0050 U	mg/Kg	0.010	0.0050	1	06/12/2025 08:00	06/13/2025 09:17	J

Thursday, June 26, 2025 3:50:29 PM
Dates and times are displayed using (-04:00)
Page 85 of 117

Certificate of Analysis

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.

POWERED BY
HORIZON
v.13.1.0



NELAP Accredited E82574



FINAL

Workorder: Phillipi Creek (J2508890)

Analytical Results

Lab ID: J2508890019	Date Collected: 06/10/2025 16:51					Matrix: Soil		
Sample ID: PCG-20	Date Received: 06/11/2025 14:00							
Parameter	Results	Units	PQL	MDL	DF	Prepared	Analyzed	Lab
Fluoranthene	0.0050 U	mg/Kg	0.010	0.0050	1	06/12/2025 08:00	06/13/2025 09:17	J
Fluorene	0.0050 U	mg/Kg	0.010	0.0050	1	06/12/2025 08:00	06/13/2025 09:17	J
Indeno(1,2,3-cd)pyrene	0.0050 U	mg/Kg	0.010	0.0050	1	06/12/2025 08:00	06/13/2025 09:17	J
Naphthalene	0.0050 U	mg/Kg	0.010	0.0050	1	06/12/2025 08:00	06/13/2025 09:17	J
Phenanthrene	0.0050 U	mg/Kg	0.010	0.0050	1	06/12/2025 08:00	06/13/2025 09:17	J
Pyrene	0.0050 U	mg/Kg	0.010	0.0050	1	06/12/2025 08:00	06/13/2025 09:17	J
SEMIVOLATILES (FL-PRO)								
TPH	12 U	mg/Kg	21	12	1	06/18/2025 08:30	06/19/2025 00:44	J
(SM 2540G)								
Percent Moisture	21	%	0.0010	0.0010	1	06/18/2025 15:11	06/18/2025 15:11	J

Analysis Results Comments

Decachlorobiphenyl

J4|Estimated Result

SD|Surrogate diluted out.

Tetrachloro-m-xylene

J4|Estimated Result

SD|Surrogate diluted out.

o-Terphenyl

J4|Estimated Result

Surrogates

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Lab
Nonatricontane-C39 (S)	mg/Kg	6	2.40	39	36 - 132	J
Tetrachloro-m-xylene (S)	ug/Kg	170	0	0	42 - 129	J
o-Terphenyl (S)	mg/Kg	2	0.87	44	66 - 136	J
Tetrachloro-m-xylene (S)	ug/Kg	170	190	115	44 - 130	J
Decachlorobiphenyl (S)	ug/Kg	83	0	0	63 - 130	J
Decachlorobiphenyl (S)	ug/Kg	83	91	110	61 - 147	J
2-Fluorobiphenyl (S)	mg/Kg	0.40	0.28	71	46 - 115	J





Advanced Environmental Laboratories, Inc
6681 Southpoint Pkwy Jacksonville, FL 32216
Payments: P.O. Box 551580 Jacksonville, FL 32255-1580
Phone: (904) 363-9350
Fax: (904) 363-9354

FINAL

Workorder: Phillipi Creek (J2508890)

Analytical Results

Surrogates

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Lab
p-Terphenyl-d14 (S)	mg/Kg	0.40	0.34	85	51 - 132	J
Nitrobenzene-d5 (S)	mg/Kg	0.40	0.30	75	34 - 117	J

Thursday, June 26, 2025 3:50:29 PM
Dates and times are displayed using (-04:00)
Page 87 of 117

Certificate of Analysis

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.



NELAP Accredited E82574

POWERED BY
HORIZON
v.13.1.0



FINAL

Workorder: Phillipi Creek (J2508890)

Analytical Results

Lab ID: J2508890020
Sample ID: PCG-11

Date Collected: 06/10/2025 17:37
Date Received: 06/11/2025 14:00

Matrix: Soil

Parameter	Results	Units	PQL	MDL	DF	Prepared	Analyzed	Lab
METALS (SW-846 3050B/SW-846 6010)								
Aluminum	600	mg/Kg	54	14	1	06/16/2025 09:27	06/17/2025 12:08	J
Arsenic	0.68 U	mg/Kg	2.7	0.68	1	06/16/2025 09:27	06/16/2025 17:22	J
Barium	5.5	mg/Kg	2.7	0.68	1	06/16/2025 09:27	06/17/2025 12:08	J
Cadmium	0.068 U	mg/Kg	0.27	0.068	1	06/16/2025 09:27	06/16/2025 17:22	J
Chromium	1.8	mg/Kg	1.1	0.27	1	06/16/2025 09:27	06/16/2025 17:22	J
Copper	1.0 I	mg/Kg	2.7	0.68	1	06/16/2025 09:27	06/17/2025 12:08	J
Lead	1.0 I	mg/Kg	2.7	0.68	1	06/16/2025 09:27	06/17/2025 12:08	J
Nickel	0.68 U	mg/Kg	2.7	0.68	1	06/16/2025 09:27	06/16/2025 17:22	J
Selenium	1.4 U	mg/Kg	5.4	1.4	1	06/16/2025 09:27	06/16/2025 17:22	J
Silver	0.27 U	mg/Kg	1.1	0.27	1	06/16/2025 09:27	06/16/2025 17:22	J
Zinc	14 U	mg/Kg	54	14	1	06/16/2025 09:27	06/16/2025 17:22	J
METALS (SW-846 7471A)								
Mercury	0.0048 I	mg/Kg	0.0064	0.0016	1	06/13/2025 09:54	06/13/2025 13:50	J
SEMIVOLATILES (EPA 3546/EPA 8081)								
4,4'-DDD	0.055 U	mg/Kg	0.22	0.055	50	06/17/2025 07:45	06/21/2025 09:07	J
4,4'-DDE	0.055 U	mg/Kg	0.22	0.055	50	06/17/2025 07:45	06/21/2025 09:07	J
4,4'-DDT	0.11 U	mg/Kg	0.44	0.11	50	06/17/2025 07:45	06/21/2025 09:07	J
Aldrin	0.055 U	mg/Kg	0.22	0.055	50	06/17/2025 07:45	06/21/2025 09:07	J
Chlordane (technical)	1.0 U	mg/Kg	4.0	1.0	50	06/17/2025 07:45	06/21/2025 09:07	J
Dieldrin	0.055 U	mg/Kg	0.22	0.055	50	06/17/2025 07:45	06/21/2025 09:07	J
Endosulfan I	0.055 U	mg/Kg	0.22	0.055	50	06/17/2025 07:45	06/21/2025 09:07	J
Endosulfan II	0.055 U	mg/Kg	0.22	0.055	50	06/17/2025 07:45	06/21/2025 09:07	J
Endosulfan Sulfate	0.055 U	mg/Kg	0.22	0.055	50	06/17/2025 07:45	06/21/2025 09:07	J
Endrin	0.11 U	mg/Kg	0.44	0.11	50	06/17/2025 07:45	06/21/2025 09:07	J
Endrin Aldehyde	0.055 U	mg/Kg	0.22	0.055	50	06/17/2025 07:45	06/21/2025 09:07	J
Heptachlor	0.055 U	mg/Kg	0.22	0.055	50	06/17/2025 07:45	06/21/2025 09:07	J
Heptachlor Epoxide	0.055 U	mg/Kg	0.22	0.055	50	06/17/2025 07:45	06/21/2025 09:07	J

Thursday, June 26, 2025 3:50:29 PM
Dates and times are displayed using (-04:00)
Page 88 of 117

Certificate of Analysis

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.

POWERED BY
HORIZON
v.13.1.0



NELAP Accredited E82574



FINAL

Workorder: Phillipi Creek (J2508890)

Analytical Results

Lab ID: J2508890020
Sample ID: PCG-11

Date Collected: 06/10/2025 17:37
Date Received: 06/11/2025 14:00

Matrix: Soil

Parameter	Results	Units	PQL	MDL	DF	Prepared	Analyzed	Lab
Methoxychlor	0.055 U	mg/Kg	0.22	0.055	50	06/17/2025 07:45	06/21/2025 09:07	J
Toxaphene	1.7 U	mg/Kg	6.7	1.7	50	06/17/2025 07:45	06/21/2025 09:07	J
alpha-BHC	0.055 U	mg/Kg	0.22	0.055	50	06/17/2025 07:45	06/21/2025 09:07	J
beta-BHC	0.055 U	mg/Kg	0.22	0.055	50	06/17/2025 07:45	06/21/2025 09:07	J
delta-BHC	0.055 U	mg/Kg	0.22	0.055	50	06/17/2025 07:45	06/21/2025 09:07	J
gamma-BHC (Lindane)	0.055 U	mg/Kg	0.22	0.055	50	06/17/2025 07:45	06/21/2025 09:07	J
SEMIVOLATILES (EPA 3546/SW-846 8082A)								
Aroclor 1016 (PCB-1016)	0.033 U	mg/Kg	0.13	0.033	1	06/17/2025 07:45	06/19/2025 05:26	J
Aroclor 1221 (PCB-1221)	0.033 U	mg/Kg	0.13	0.033	1	06/17/2025 07:45	06/19/2025 05:26	J
Aroclor 1232 (PCB-1232)	0.033 U	mg/Kg	0.13	0.033	1	06/17/2025 07:45	06/19/2025 05:26	J
Aroclor 1242 (PCB-1242)	0.033 U	mg/Kg	0.13	0.033	1	06/17/2025 07:45	06/19/2025 05:26	J
Aroclor 1248 (PCB-1248)	0.033 U	mg/Kg	0.13	0.033	1	06/17/2025 07:45	06/19/2025 05:26	J
Aroclor 1254 (PCB-1254)	0.033 U	mg/Kg	0.13	0.033	1	06/17/2025 07:45	06/19/2025 05:26	J
Aroclor 1260 (PCB-1260)	0.033 U	mg/Kg	0.13	0.033	1	06/17/2025 07:45	06/19/2025 05:26	J
SEMIVOLATILES (EPA 3546/SW-846 8270E (SIM))								
1-Methylnaphthalene	0.0053 U	mg/Kg	0.011	0.0053	1	06/12/2025 08:00	06/13/2025 09:45	J
2-Methylnaphthalene	0.0053 U	mg/Kg	0.011	0.0053	1	06/12/2025 08:00	06/13/2025 09:45	J
Acenaphthene	0.0053 U	mg/Kg	0.011	0.0053	1	06/12/2025 08:00	06/13/2025 09:45	J
Acenaphthylene	0.0053 U	mg/Kg	0.011	0.0053	1	06/12/2025 08:00	06/13/2025 09:45	J
Anthracene	0.0053 U	mg/Kg	0.011	0.0053	1	06/12/2025 08:00	06/13/2025 09:45	J
Benzo[a]anthracene	0.0053 U	mg/Kg	0.011	0.0053	1	06/12/2025 08:00	06/13/2025 09:45	J
Benzo[a]pyrene	0.0062 I	mg/Kg	0.011	0.0053	1	06/12/2025 08:00	06/13/2025 09:45	J
Benzo[b]fluoranthene	0.010 I	mg/Kg	0.011	0.0053	1	06/12/2025 08:00	06/13/2025 09:45	J
Benzo[g,h,i]perylene	0.0054 I	mg/Kg	0.011	0.0053	1	06/12/2025 08:00	06/13/2025 09:45	J
Benzo[k]fluoranthene	0.0053 U	mg/Kg	0.011	0.0053	1	06/12/2025 08:00	06/13/2025 09:45	J
Chrysene	0.0066 I	mg/Kg	0.011	0.0053	1	06/12/2025 08:00	06/13/2025 09:45	J
Dibenzo[a,h]anthracene	0.0053 U	mg/Kg	0.011	0.0053	1	06/12/2025 08:00	06/13/2025 09:45	J

Thursday, June 26, 2025 3:50:29 PM
Dates and times are displayed using (-04:00)
Page 89 of 117

Certificate of Analysis

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.

POWERED BY
HORIZON
v.13.1.0



NELAP Accredited E82574



FINAL

Workorder: Phillipi Creek (J2508890)

Analytical Results

Lab ID:	J2508890020	Date Collected:	06/10/2025 17:37			Matrix:	Soil	
Sample ID:	PCG-11	Date Received:	06/11/2025 14:00					
Parameter	Results	Units	PQL	MDL	DF	Prepared	Analyzed	Lab
Fluoranthene	0.0087 I	mg/Kg	0.011	0.0053	1	06/12/2025 08:00	06/13/2025 09:45	J
Fluorene	0.0053 U	mg/Kg	0.011	0.0053	1	06/12/2025 08:00	06/13/2025 09:45	J
Indeno(1,2,3-cd)pyrene	0.0054 I	mg/Kg	0.011	0.0053	1	06/12/2025 08:00	06/13/2025 09:45	J
Naphthalene	0.0053 U	mg/Kg	0.011	0.0053	1	06/12/2025 08:00	06/13/2025 09:45	J
Phenanthrene	0.0053 U	mg/Kg	0.011	0.0053	1	06/12/2025 08:00	06/13/2025 09:45	J
Pyrene	0.0074 I	mg/Kg	0.011	0.0053	1	06/12/2025 08:00	06/13/2025 09:45	J
SEMIVOLATILES (FL-PRO)								
TPH	13 U	mg/Kg	23	13	1	06/18/2025 08:30	06/19/2025 01:03	J
(SM 2540G)								
Percent Moisture	25	%	0.0010	0.0010	1	06/18/2025 15:11	06/18/2025 15:11	J

Analysis Results Comments

Decachlorobiphenyl

J4|Estimated Result

SD|Surrogate diluted out.

Tetrachloro-m-xylene

J4|Estimated Result

SD|Surrogate diluted out.

o-Terphenyl

J4|Estimated Result

Surrogates

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Lab
p-Terphenyl-d14 (S)	mg/Kg	0.40	0.32	81	51 - 132	J
Tetrachloro-m-xylene (S)	ug/Kg	170	0	0	42 - 129	J
2-Fluorobiphenyl (S)	mg/Kg	0.40	0.28	69	46 - 115	J
o-Terphenyl (S)	mg/Kg	2	1.20	60	66 - 136	J
Nonatricontane-C39 (S)	mg/Kg	6	3.20	54	36 - 132	J
Nitrobenzene-d5 (S)	mg/Kg	0.40	0.29	72	34 - 117	J
Decachlorobiphenyl (S)	ug/Kg	83	88	107	61 - 147	J





Advanced Environmental Laboratories, Inc
6681 Southpoint Pkwy Jacksonville, FL 32216
Payments: P.O. Box 551580 Jacksonville, FL 32255-1580
Phone: (904) 363-9350
Fax: (904) 363-9354

FINAL

Workorder: Phillipi Creek (J2508890)

Analytical Results

Surrogates

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Lab
Decachlorobiphenyl (S)	ug/Kg	83	0	0	63 - 130	J
Tetrachloro-m-xylene (S)	ug/Kg	170	190	112	44 - 130	J

Certificate of Analysis

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.



NELAP Accredited E82574



FINAL

Workorder: Phillipi Creek (J2508890)

QC Results

QC Batch: CVAj/3014 **Analysis Method:** SW-846 7471A
Preparation Method: SW-846 7471A
Associated Lab IDs: J2508890001, J2508890002, J2508890003, J2508890004, J2508890005, J2508890006, J2508890007, J2508890008, J2508890009, J2508890010, J2508890011, J2508890012, J2508890013, J2508890014, J2508890015, J2508890016, J2508890017, J2508890018, J2508890019, J2508890020

Method Blank(5881427)

Parameter	Results	Units	PQL	MDL	Lab
Mercury	0.0012 U	mg/Kg	0.0050	0.0012	J

Lab Control Sample (5881428)

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Lab
Mercury	mg/Kg	0.10	0.1	101	80 - 120	J

Matrix Spike (5881429); Matrix Spike Duplicate (5881430); Original (J2508890001); Parent Lab Sample (J2508890001)

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Dup Result	Dup Recovery	RPD	RPD Limit	Lab
Mercury	mg/Kg	0.0970	0.11	94	80 - 120	0.13	101	14	20	J

Certificate of Analysis

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.



NELAP Accredited E82574



FINAL

Workorder: Phillipi Creek (J2508890)

QC Results

QC Batch: GCSJ/8051 Analysis Method: FL-PRO
Preparation Method: FL-PRO
Associated Lab IDs: J2508890001, J2508890002, J2508890003, J2508890004, J2508890005, J2508890006, J2508890007, J2508890008, J2508890009, J2508890010, J2508890011, J2508890012, J2508890013, J2508890014, J2508890015, J2508890016, J2508890017, J2508890018

Method Blank(5880278)

Parameter	Results	Units	PQL	MDL	Lab
TPH	9.8 U	mg/Kg	17	9.8	J

Surrogates

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Lab
Nonatricontane-C39 (S)	mg/L	6	3.80	63	36 - 132	J
o-Terphenyl (S)	mg/L	2	1.30	65	66 - 136	J

Lab Control Sample (5880279)

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Lab
TPH	mg/Kg	34	23	67	49 - 128	J

Surrogates

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Lab
Nonatricontane-C39 (S)	mg/L	6	4.50	74	36 - 132	J
o-Terphenyl (S)	mg/L	2	1.40	72	66 - 136	J

Matrix Spike (5880280); Matrix Spike Duplicate (5880281); Original (J2508890001); Parent Lab Sample (J2508890001)

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Dup Result	Dup Recovery	RPD	RPD Limit	Lab
TPH	mg/Kg	34	27	78	49 - 128	28	82	5	25	J

Surrogates

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Dup Result	Dup Recovery	RPD	RPD Limit	Lab
Nonatricontane-C39 (S)	mg/L	6	4.80	80	36 - 132	4.50	75	7	25	J
o-Terphenyl (S)	mg/L	2	1.60	81	66 - 136	1.60	80	1	25	J

Certificate of Analysis

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.



NELAP Accredited E82574



FINAL

Workorder: Phillipi Creek (J2508890)

QC Results

QC Batch: GCSJ/8066 **Analysis Method:** EPA 8081
Preparation Method: EPA 3546
Associated Lab IDs: J2508890001, J2508890002, J2508890003, J2508890004, J2508890005, J2508890006, J2508890007, J2508890008, J2508890009, J2508890010

Method Blank(5884557)

Parameter	Results	Units	PQL	MDL	Lab
alpha-BHC	0.00083 U	mg/Kg	0.0033	0.00083	J
gamma-BHC (Lindane)	0.00083 U	mg/Kg	0.0033	0.00083	J
beta-BHC	0.00083 U	mg/Kg	0.0033	0.00083	J
delta-BHC	0.00083 U	mg/Kg	0.0033	0.00083	J
Heptachlor	0.00083 U	mg/Kg	0.0033	0.00083	J
Aldrin	0.00083 U	mg/Kg	0.0033	0.00083	J
Heptachlor Epoxide	0.00083 U	mg/Kg	0.0033	0.00083	J
Endosulfan I	0.00083 U	mg/Kg	0.0033	0.00083	J
4,4'-DDE	0.00083 U	mg/Kg	0.0033	0.00083	J
Dieldrin	0.00083 U	mg/Kg	0.0033	0.00083	J
Endrin	0.0017 U	mg/Kg	0.0066	0.0017	J
4,4'-DDD	0.00083 U	mg/Kg	0.0033	0.00083	J
Endosulfan II	0.00083 U	mg/Kg	0.0033	0.00083	J
Endrin Aldehyde	0.00083 U	mg/Kg	0.0033	0.00083	J
4,4'-DDT	0.0017 U	mg/Kg	0.0066	0.0017	J
Endosulfan Sulfate	0.00083 U	mg/Kg	0.0033	0.00083	J
Methoxychlor	0.00083 U	mg/Kg	0.0033	0.00083	J
Chlordane (technical)	0.015 U	mg/Kg	0.060	0.015	J
Toxaphene	0.025 U	mg/Kg	0.10	0.025	J

Surrogates

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Lab
Decachlorobiphenyl (S)	mg/L	0.0830	0.0820	99	63 - 130	J
Tetrachloro-m-xylene (S)	mg/L	0.17	0.13	79	42 - 129	J

Lab Control Sample (5884558)

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Lab
alpha-BHC	mg/Kg	0.0170	0.017	103	45 - 137	J
gamma-BHC (Lindane)	mg/Kg	0.0170	0.018	107	49 - 135	J
beta-BHC	mg/Kg	0.0170	0.019	113	50 - 136	J
delta-BHC	mg/Kg	0.0170	0.014	87	47 - 139	J
Heptachlor	mg/Kg	0.0170	0.017	100	47 - 136	J
Aldrin	mg/Kg	0.0170	0.018	107	45 - 136	J

Thursday, June 26, 2025 3:50:29 PM
Dates and times are displayed using (-04:00)
Page 94 of 117

Certificate of Analysis
This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.

POWERED BY
HORIZON
v.13.1.0



NELAP Accredited E82574



FINAL

Workorder: Phillipi Creek (J2508890)

QC Batch: GCSJ/8066 **Analysis Method:** EPA 8081
Preparation Method: EPA 3546
Associated Lab IDs: J2508890001, J2508890002, J2508890003, J2508890004, J2508890005, J2508890006, J2508890007, J2508890008, J2508890009, J2508890010

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Lab
Heptachlor Epoxide	mg/Kg	0.0170	0.017	102	52 - 136	J
Endosulfan I	mg/Kg	0.0170	0.017	102	53 - 132	J
4,4'-DDE	mg/Kg	0.0170	0.017	104	56 - 134	J
Dieldrin	mg/Kg	0.0170	0.018	109	56 - 136	J
Endrin	mg/Kg	0.0170	0.017	104	57 - 140	J
4,4'-DDD	mg/Kg	0.0170	0.017	102	56 - 139	J
Endosulfan II	mg/Kg	0.0170	0.015	92	53 - 134	J
Endrin Aldehyde	mg/Kg	0.0170	0.016	93	35 - 137	J
4,4'-DDT	mg/Kg	0.0170	0.017	101	50 - 141	J
Endosulfan Sulfate	mg/Kg	0.0170	0.015	93	55 - 136	J
Methoxychlor	mg/Kg	0.0170	0.017	103	52 - 143	J

Surrogates

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Lab
Decachlorobiphenyl (S)	mg/L	0.0830	0.0820	99	63 - 130	J
Tetrachloro-m-xylene (S)	mg/L	0.17	0.13	80	42 - 129	J

Matrix Spike (5884559); Matrix Spike Duplicate (5884560); Original (J2508795001); Parent Lab Sample (J2508795001)

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Dup Result	Dup Recovery	RPD	RPD Limit	Lab
alpha-BHC	mg/Kg	0.0170	0.012	73	45 - 137	0.012	71	2	30	J
gamma-BHC (Lindane)	mg/Kg	0.0170	0.012	73	49 - 135	0.012	71	2	30	J
beta-BHC	mg/Kg	0.0170	0.019	113	50 - 136	0.019	112	1	30	J
delta-BHC	mg/Kg	0.0170	0.0096	58	47 - 139	0.0094	57	2	30	J
Heptachlor	mg/Kg	0.0170	0.015	93	47 - 136	0.015	91	2	30	J
Aldrin	mg/Kg	0.0170	0.015	93	45 - 136	0.013	77	19	30	J
Heptachlor Epoxide	mg/Kg	0.0170	0.016	94	52 - 136	0.015	93	1	30	J
Endosulfan I	mg/Kg	0.0170	0.014	87	53 - 132	0.015	89	3	30	J
4,4'-DDE	mg/Kg	0.0170	0.013	80	56 - 134	0.013	80	1	30	J
Dieldrin	mg/Kg	0.0170	0.014	84	56 - 136	0.014	84	1	30	J
Endrin	mg/Kg	0.0170	0.014	82	57 - 140	0.014	83	1	30	J
4,4'-DDD	mg/Kg	0.0170	0.012	75	56 - 139	0.013	77	2	30	J
Endosulfan II	mg/Kg	0.0170	0.014	84	53 - 134	0.015	90	7	30	J
Endrin Aldehyde	mg/Kg	0.0170	0.012	73	35 - 137	0.012	72	0	30	J
4,4'-DDT	mg/Kg	0.0170	0.014	83	50 - 141	0.014	82	1	30	J
Endosulfan Sulfate	mg/Kg	0.0170	0.017	104	55 - 136	0.018	111	7	30	J

Thursday, June 26, 2025 3:50:29 PM
Dates and times are displayed using (-04:00)
Page 95 of 117

Certificate of Analysis

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.

POWERED BY
HORIZON
v.13.1.0



NELAP Accredited E82574



Advanced Environmental Laboratories, Inc
6681 Southpoint Pkwy Jacksonville, FL 32216
Payments: P.O. Box 551580 Jacksonville, FL 32255-1580
Phone: (904) 363-9350
Fax: (904) 363-9354

FINAL

Workorder: Phillipi Creek (J2508890)

QC Batch: GCSJ/8066 Analysis Method: EPA 8081
Preparation Method: EPA 3546
Associated Lab IDs: J2508890001, J2508890002, J2508890003, J2508890004, J2508890005, J2508890006, J2508890007, J2508890008, J2508890009, J2508890010

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Dup Result	Dup Recovery	RPD	RPD Limit	Lab
Methoxychlor	mg/Kg	0.0170	0.017	100	52 - 143	0.018	110	10	30	J

Surrogates

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Dup Result	Dup Recovery	RPD	RPD Limit	Lab
Decachlorobiphenyl (S)	mg/L	0.0830	0.10	122	63 - 130	0.0970	117	4		J
Tetrachloro-m-xylene (S)	mg/L	0.17	0.18	106	42 - 129	0.17	102	3		J

Certificate of Analysis

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.





FINAL

Workorder: Phillipi Creek (J2508890)

QC Results

QC Batch: GCSJ/8067 Analysis Method: SW-846 8082A
Preparation Method: EPA 3546
Associated Lab IDs: J2508890001, J2508890002, J2508890003, J2508890004, J2508890005, J2508890006, J2508890007, J2508890008, J2508890009, J2508890010

Method Blank(5884563)

Parameter	Results	Units	PQL	MDL	Lab
Aroclor 1016 (PCB-1016)	0.025 U	mg/Kg	0.10	0.025	J
Aroclor 1221 (PCB-1221)	0.025 U	mg/Kg	0.10	0.025	J
Aroclor 1232 (PCB-1232)	0.025 U	mg/Kg	0.10	0.025	J
Aroclor 1242 (PCB-1242)	0.025 U	mg/Kg	0.10	0.025	J
Aroclor 1248 (PCB-1248)	0.025 U	mg/Kg	0.10	0.025	J
Aroclor 1254 (PCB-1254)	0.025 U	mg/Kg	0.10	0.025	J
Aroclor 1260 (PCB-1260)	0.025 U	mg/Kg	0.10	0.025	J

Surrogates

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Lab
Decachlorobiphenyl (S)	mg/L	0.0830	0.0820	99	61 - 147	J
Tetrachloro-m-xylene (S)	mg/L	0.17	0.13	79	44 - 130	J

Lab Control Sample (5884564)

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Lab
Aroclor 1016 (PCB-1016)	mg/Kg	0.16	0.14	84	47 - 134	J
Aroclor 1260 (PCB-1260)	mg/Kg	0.16	0.18	109	53 - 140	J

Surrogates

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Lab
Decachlorobiphenyl (S)	mg/L	0.0820	0.0780	95	61 - 147	J
Tetrachloro-m-xylene (S)	mg/L	0.16	0.14	84	44 - 130	J

Matrix Spike (5884565); Matrix Spike Duplicate (5884566); Original (J2508795001); Parent Lab Sample (J2508795001)

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Dup Result	Dup Recovery	RPD	RPD Limit	Lab
Aroclor 1016 (PCB-1016)	mg/Kg	0.17	0.13	79	47 - 134	0.14	85	7		J
Aroclor 1260 (PCB-1260)	mg/Kg	0.17	0.12	73	53 - 140	0.14	86	16		J

Surrogates

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Dup Result	Dup Recovery	RPD	RPD Limit	Lab
Decachlorobiphenyl (S)	mg/L	0.0830	0.0730	88	61 - 147	0.0810	98	11		J
Tetrachloro-m-xylene (S)	mg/L	0.17	0.13	80	44 - 130	0.14	87	8		J

Certificate of Analysis

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.





FINAL

Workorder: Phillipi Creek (J2508890)

QC Results

QC Batch: GCSJ/8072

Analysis Method: EPA 8081

Preparation Method: EPA 3546

Associated Lab IDs: J2508890011, J2508890012, J2508890013, J2508890014, J2508890015, J2508890016, J2508890017, J2508890018, J2508890019, J2508890020

Method Blank(5886239)

Parameter	Results	Units	PQL	MDL	Lab
alpha-BHC	0.00083 U	mg/Kg	0.0033	0.00083	J
gamma-BHC (Lindane)	0.00083 U	mg/Kg	0.0033	0.00083	J
beta-BHC	0.00083 U	mg/Kg	0.0033	0.00083	J
delta-BHC	0.00083 U	mg/Kg	0.0033	0.00083	J
Heptachlor	0.00083 U	mg/Kg	0.0033	0.00083	J
Aldrin	0.00083 U	mg/Kg	0.0033	0.00083	J
Heptachlor Epoxide	0.00083 U	mg/Kg	0.0033	0.00083	J
Endosulfan I	0.00083 U	mg/Kg	0.0033	0.00083	J
4,4'-DDE	0.00083 U	mg/Kg	0.0033	0.00083	J
Dieldrin	0.00083 U	mg/Kg	0.0033	0.00083	J
Endrin	0.0017 U	mg/Kg	0.0066	0.0017	J
4,4'-DDD	0.00083 U	mg/Kg	0.0033	0.00083	J
Endosulfan II	0.00083 U	mg/Kg	0.0033	0.00083	J
Endrin Aldehyde	0.00083 U	mg/Kg	0.0033	0.00083	J
4,4'-DDT	0.0017 U	mg/Kg	0.0066	0.0017	J
Endosulfan Sulfate	0.00083 U	mg/Kg	0.0033	0.00083	J
Methoxychlor	0.00083 U	mg/Kg	0.0033	0.00083	J
Chlordane (technical)	0.015 U	mg/Kg	0.060	0.015	J
Toxaphene	0.025 U	mg/Kg	0.099	0.025	J

Surrogates

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Lab
Decachlorobiphenyl (S)	mg/L	0.0830	0.0810	98	63 - 130	J
Tetrachloro-m-xylene (S)	mg/L	0.17	0.14	82	42 - 129	J

Lab Control Sample (5886240)

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Lab
alpha-BHC	mg/Kg	0.0170	0.014	83	45 - 137	J
gamma-BHC (Lindane)	mg/Kg	0.0170	0.014	81	49 - 135	J
beta-BHC	mg/Kg	0.0170	0.017	103	50 - 136	J
delta-BHC	mg/Kg	0.0170	0.013	76	47 - 139	J
Heptachlor	mg/Kg	0.0170	0.017	100	47 - 136	J
Aldrin	mg/Kg	0.0170	0.015	90	45 - 136	J

Thursday, June 26, 2025 3:50:29 PM
Dates and times are displayed using (-04:00)
Page 98 of 117

Certificate of Analysis

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.

POWERED BY
HORIZON
v.13.1.0



NELAP Accredited E82574



FINAL

Workorder: Phillipi Creek (J2508890)

QC Batch: GCSJ/8072 Analysis Method: EPA 8081
Preparation Method: EPA 3546
Associated Lab IDs: J2508890011, J2508890012, J2508890013, J2508890014, J2508890015, J2508890016, J2508890017, J2508890018, J2508890019, J2508890020

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Lab
Heptachlor Epoxide	mg/Kg	0.0170	0.015	92	52 - 136	J
Endosulfan I	mg/Kg	0.0170	0.016	96	53 - 132	J
4,4'-DDE	mg/Kg	0.0170	0.016	97	56 - 134	J
Dieldrin	mg/Kg	0.0170	0.016	94	56 - 136	J
Endrin	mg/Kg	0.0170	0.016	95	57 - 140	J
4,4'-DDD	mg/Kg	0.0170	0.015	92	56 - 139	J
Endosulfan II	mg/Kg	0.0170	0.015	89	53 - 134	J
Endrin Aldehyde	mg/Kg	0.0170	0.014	86	35 - 137	J
4,4'-DDT	mg/Kg	0.0170	0.018	110	50 - 141	J
Endosulfan Sulfate	mg/Kg	0.0170	0.017	100	55 - 136	J
Methoxychlor	mg/Kg	0.0170	0.019	112	52 - 143	J

Surrogates

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Lab
Decachlorobiphenyl (S)	mg/L	0.0830	0.0870	104	63 - 130	J
Tetrachloro-m-xylene (S)	mg/L	0.17	0.15	87	42 - 129	J

Matrix Spike (5886241); Matrix Spike Duplicate (5886242); Original (J2508890011); Parent Lab Sample (J2508890011)

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Dup Result	Dup Recovery	RPD	RPD Limit	Lab
alpha-BHC	mg/Kg	0.0170	0.0099	60	45 - 137	0.012	70	15	30	J
gamma-BHC (Lindane)	mg/Kg	0.0170	0.021	130	49 - 135	0.023	140	7	30	J
beta-BHC	mg/Kg	0.0170	0.018	110	50 - 136	0.023	140	24	30	J
delta-BHC	mg/Kg	0.0170	0.0099	60	47 - 139	0.012	70	15	30	J
Heptachlor	mg/Kg	0.0170	0.0099	60	47 - 136	0.012	70	15	30	J
Aldrin	mg/Kg	0.0170	0.017	100	45 - 136	0.018	110	9	30	J
Heptachlor Epoxide	mg/Kg	0.0170	0.023	140	52 - 136	0.023	140	0	30	J
Endosulfan I	mg/Kg	0.0170	0.028	170	53 - 132	0.012	70	84	30	J
4,4'-DDE	mg/Kg	0.0170	0.012	70	56 - 134	0.012	70	0	30	J
Dieldrin	mg/Kg	0.0170	0.017	100	56 - 136	0.018	110	9	30	J
Endrin	mg/Kg	0.0170	0.021	130	57 - 140	0.026	160	20	30	J
4,4'-DDD	mg/Kg	0.0170	0.0099	60	56 - 139	0.016	100	50	30	J
Endosulfan II	mg/Kg	0.0170	0.013	80	53 - 134	0.018	110	31	30	J
Endrin Aldehyde	mg/Kg	0.0170	0.013	80	35 - 137	0.033	200	85	30	J
4,4'-DDT	mg/Kg	0.0170	0.02	120	50 - 141	0.021	130	8	30	J
Endosulfan Sulfate	mg/Kg	0.0170	0.015	90	55 - 136	0.016	100	10	30	J

Thursday, June 26, 2025 3:50:29 PM
Dates and times are displayed using (-04:00)
Page 99 of 117

Certificate of Analysis

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.

POWERED BY
HORIZON
v.13.1.0



NELAP Accredited E82574



FINAL

Workorder: Phillipi Creek (J2508890)

QC Batch: GCSJ/8072 Analysis Method: EPA 8081
Preparation Method: EPA 3546
Associated Lab IDs: J2508890011, J2508890012, J2508890013, J2508890014, J2508890015, J2508890016, J2508890017, J2508890018, J2508890019, J2508890020

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Dup Result	Dup Recovery	RPD	RPD Limit	Lab
Methoxychlor	mg/Kg	0.0170	0.017	100	52 - 143	0.016	100	0	30	J

Surrogates

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Dup Result	Dup Recovery	RPD	RPD Limit	Lab
Decachlorobiphenyl (S)	mg/L	0.0830	0	0	63 - 130	0	0	0		J
Tetrachloro-m-xylene (S)	mg/L	0.17	0	0	42 - 129	0	0	0		J

QC Result Comments

Matrix Spike - 5886241 - Endosulfan I

J4|Estimated Result

Matrix Spike - 5886241 - Heptachlor Epoxide

J4|Estimated Result

Matrix Spike Duplicate - 5886242 - 4,4'-DDD

J4|Estimated Result

Matrix Spike Duplicate - 5886242 - Endosulfan I

J4|Estimated Result

Matrix Spike Duplicate - 5886242 - Endosulfan II

J4|Estimated Result

Matrix Spike Duplicate - 5886242 - Endrin

J4|Estimated Result

Matrix Spike Duplicate - 5886242 - Endrin Aldehyde

J4|Estimated Result

Matrix Spike Duplicate - 5886242 - Heptachlor Epoxide

J4|Estimated Result

Matrix Spike Duplicate - 5886242 - beta-BHC

J4|Estimated Result

Matrix Spike Duplicate - 5886242 - gamma-BHC (Lindane)

J4|Estimated Result

Certificate of Analysis

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.





FINAL

Workorder: Phillipi Creek (J2508890)

QC Results

QC Batch: GCSJ/8073 Analysis Method: SW-846 8082A
Preparation Method: EPA 3546
Associated Lab IDs: J2508890011, J2508890012, J2508890013, J2508890014, J2508890015, J2508890016, J2508890017, J2508890018, J2508890019, J2508890020

Method Blank(5886243)

Parameter	Results	Units	PQL	MDL	Lab
Aroclor 1016 (PCB-1016)	0.025 U	mg/Kg	0.099	0.025	J
Aroclor 1221 (PCB-1221)	0.025 U	mg/Kg	0.099	0.025	J
Aroclor 1232 (PCB-1232)	0.025 U	mg/Kg	0.099	0.025	J
Aroclor 1242 (PCB-1242)	0.025 U	mg/Kg	0.099	0.025	J
Aroclor 1248 (PCB-1248)	0.025 U	mg/Kg	0.099	0.025	J
Aroclor 1254 (PCB-1254)	0.025 U	mg/Kg	0.099	0.025	J
Aroclor 1260 (PCB-1260)	0.025 U	mg/Kg	0.099	0.025	J

Surrogates

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Lab
Decachlorobiphenyl (S)	mg/L	0.0830	0.0810	98	61 - 147	J
Tetrachloro-m-xylene (S)	mg/L	0.17	0.14	82	44 - 130	J

Lab Control Sample (5886244)

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Lab
Aroclor 1016 (PCB-1016)	mg/Kg	0.17	0.14	84	47 - 134	J
Aroclor 1260 (PCB-1260)	mg/Kg	0.17	0.14	81	53 - 140	J

Surrogates

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Lab
Decachlorobiphenyl (S)	mg/L	0.0840	0.0760	91	61 - 147	J
Tetrachloro-m-xylene (S)	mg/L	0.17	0.14	82	44 - 130	J

Matrix Spike (5886245); Matrix Spike Duplicate (5886246); Original (J2508890011); Parent Lab Sample (J2508890011)

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Dup Result	Dup Recovery	RPD	RPD Limit	Lab
Aroclor 1016 (PCB-1016)	mg/Kg	0.17	0.11	66	47 - 134	0.12	72	9		J
Aroclor 1260 (PCB-1260)	mg/Kg	0.17	0.15	93	53 - 140	0.18	106	13		J

Surrogates

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Dup Result	Dup Recovery	RPD	RPD Limit	Lab
Decachlorobiphenyl (S)	mg/L	0.0830	0.08	97	61 - 147	0.0880	106	9		J
Tetrachloro-m-xylene (S)	mg/L	0.17	0.19	113	44 - 130	0.25	152	30		J

Certificate of Analysis

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.





Advanced Environmental Laboratories, Inc
6681 Southpoint Pkwy Jacksonville, FL 32216
Payments: P.O. Box 551580 Jacksonville, FL 32255-1580
Phone: (904) 363-9350
Fax: (904) 363-9354

FINAL

Workorder: Phillipi Creek (J2508890)

QC Result Comments

Matrix Spike - 5886245 - Aroclor 1016 (PCB-1016)

J4|Estimated Result

Matrix Spike - 5886245 - Aroclor 1260 (PCB-1260)

J4|Estimated Result

Matrix Spike Duplicate - 5886246 - Aroclor 1016 (PCB-1016)

J4|Estimated Result

Matrix Spike Duplicate - 5886246 - Aroclor 1260 (PCB-1260)

J4|Estimated Result

Certificate of Analysis

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.



NELAP Accredited E82574



FINAL

Workorder: Phillipi Creek (J2508890)

QC Results

QC Batch: GCSJ/8074
Preparation Method: FL-PRO
Associated Lab IDs: J2508890019, J2508890020

Analysis Method: FL-PRO

Method Blank(5888705)

Parameter	Results	Units	PQL	MDL	Lab
TPH	9.8 U	mg/Kg	17	9.8	J

Surrogates

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Lab
Nonatricontane-C39 (S)	mg/L	6	5.70	96	36 - 132	J
o-Terphenyl (S)	mg/L	2	2.10	105	66 - 136	J

Lab Control Sample (5888706)

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Lab
TPH	mg/Kg	34	33	96	49 - 128	J

Surrogates

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Lab
Nonatricontane-C39 (S)	mg/L	6	5.70	95	36 - 132	J
o-Terphenyl (S)	mg/L	2	2.10	103	66 - 136	J

Matrix Spike (5888707); Matrix Spike Duplicate (5888708); Original (J2508993001); Parent Lab Sample (J2508993001)

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Dup Result	Dup Recovery	RPD	RPD Limit	Lab
TPH	mg/Kg	34	35	102	49 - 128	30	90	13	25	J

Surrogates

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Dup Result	Dup Recovery	RPD	RPD Limit	Lab
Nonatricontane-C39 (S)	mg/L	6	6.10	101	36 - 132	5	84	19	25	J
o-Terphenyl (S)	mg/L	2	2	101	66 - 136	1.70	86	16	25	J

Certificate of Analysis

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.





FINAL

Workorder: Phillipi Creek (J2508890)

QC Results

QC Batch: ICPJ/4477

Analysis Method: SW-846 6010

Preparation Method: SW-846 3050B

Associated Lab IDs: J2508890001, J2508890002, J2508890003, J2508890004, J2508890005, J2508890006, J2508890007, J2508890008, J2508890009, J2508890010

Method Blank(5881667)

Parameter	Results	Units	PQL	MDL	Lab
Silver	0.19 U	mg/Kg	0.77	0.19	J
Aluminum	9.7 U	mg/Kg	39	9.7	J
Arsenic	0.48 U	mg/Kg	1.9	0.48	J
Barium	0.48 U	mg/Kg	1.9	0.48	J
Cadmium	0.048 U	mg/Kg	0.19	0.048	J
Chromium	0.19 U	mg/Kg	0.77	0.19	J
Copper	0.48 U	mg/Kg	1.9	0.48	J
Nickel	0.48 U	mg/Kg	1.9	0.48	J
Lead	0.48 U	mg/Kg	1.9	0.48	J
Selenium	0.97 U	mg/Kg	3.9	0.97	J
Zinc	9.7 U	mg/Kg	39	9.7	J

Lab Control Sample (5881668); Lab Control Sample Duplicate (5881669); Parent Lab Sample (J2508890001, J2508890002, J2508890003, J2508890004, J2508890005, J2508890006, J2508890007, J2508890008, J2508890009, J2508890010)

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Dup Result	Dup Recovery	RPD	RPD Limit	Lab
Silver	mg/Kg	3.90	3.9	100	80 - 120	4.1	100	4	20	J
Aluminum	mg/Kg	190	190	98	80 - 120	200	97	3	20	J
Arsenic	mg/Kg	9.70	10	103	80 - 120	10	102	3	20	J
Barium	mg/Kg	9.70	9.9	102	80 - 120	10	102	4	20	J
Cadmium	mg/Kg	0.97	1	104	80 - 120	1.1	104	4	20	J
Chromium	mg/Kg	3.90	4.1	106	80 - 120	4.2	105	3	20	J
Copper	mg/Kg	9.70	10	104	80 - 120	11	104	5	20	J
Nickel	mg/Kg	9.70	10	104	80 - 120	11	104	5	20	J
Lead	mg/Kg	9.70	10	108	80 - 120	11	108	5	20	J
Selenium	mg/Kg	19	20	104	80 - 120	21	104	4	20	J
Zinc	mg/Kg	190	200	101	80 - 120	210	102	5	20	J

Certificate of Analysis

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.





FINAL

Workorder: Phillipi Creek (J2508890)

QC Results

QC Batch: ICPJ/4480

Analysis Method: SW-846 6010

Preparation Method: SW-846 3050B

Associated Lab IDs: J2508890011, J2508890012, J2508890013, J2508890014, J2508890015, J2508890016, J2508890017, J2508890018, J2508890019, J2508890020

Method Blank(5883652)

Parameter	Results	Units	PQL	MDL	Lab
Silver	0.20 U	mg/Kg	0.79	0.20	J
Aluminum	9.9 U	mg/Kg	39	9.9	J
Arsenic	0.49 U	mg/Kg	2.0	0.49	J
Barium	0.49 U	mg/Kg	2.0	0.49	J
Cadmium	0.049 U	mg/Kg	0.20	0.049	J
Chromium	0.20 U	mg/Kg	0.79	0.20	J
Copper	0.49 U	mg/Kg	2.0	0.49	J
Nickel	0.49 U	mg/Kg	2.0	0.49	J
Lead	0.49 U	mg/Kg	2.0	0.49	J
Selenium	0.99 U	mg/Kg	3.9	0.99	J
Zinc	9.9 U	mg/Kg	39	9.9	J

Lab Control Sample (5883653); Lab Control Sample Duplicate (5883654); Parent Lab Sample (J2508890011, J2508890012, J2508890013, J2508890014, J2508890015, J2508890016, J2508890017, J2508890018, J2508890019, J2508890020)

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Dup Result	Dup Recovery	RPD	RPD Limit	Lab
Silver	mg/Kg	4	3.7	93	80 - 120	3.5	90	7	20	J
Aluminum	mg/Kg	200	190	93	80 - 120	180	94	2	20	J
Arsenic	mg/Kg	10	9.7	97	80 - 120	9.1	94	6	20	J
Barium	mg/Kg	10	9.6	96	80 - 120	9.2	95	4	20	J
Cadmium	mg/Kg	1	0.96	96	80 - 120	0.9	93	6	20	J
Chromium	mg/Kg	4	3.9	97	80 - 120	3.7	95	5	20	J
Copper	mg/Kg	10	10	102	80 - 120	9.8	102	3	20	J
Nickel	mg/Kg	10	9.9	99	80 - 120	9.5	98	4	20	J
Lead	mg/Kg	10	10	100	80 - 120	9.7	101	3	20	J
Selenium	mg/Kg	20	20	99	80 - 120	19	98	4	20	J
Zinc	mg/Kg	200	200	98	80 - 120	190	99	3	20	J

Certificate of Analysis

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.





FINAL

Workorder: Phillipi Creek (J2508890)

QC Results

QC Batch: MSSJ/4995 Analysis Method: SW-846 8270E (SIM)
Preparation Method: EPA 3546
Associated Lab IDs: J2508890001, J2508890002, J2508890003, J2508890004, J2508890005, J2508890006, J2508890007, J2508890008, J2508890009, J2508890010, J2508890011, J2508890012, J2508890013, J2508890014, J2508890015, J2508890016, J2508890017, J2508890018, J2508890019, J2508890020

Method Blank(5880274)

Parameter	Results	Units	PQL	MDL	Lab
Naphthalene	0.0040 U	mg/Kg	0.0080	0.0040	J
2-Methylnaphthalene	0.0040 U	mg/Kg	0.0080	0.0040	J
1-Methylnaphthalene	0.0040 U	mg/Kg	0.0080	0.0040	J
Acenaphthylene	0.0040 U	mg/Kg	0.0080	0.0040	J
Acenaphthene	0.0040 U	mg/Kg	0.0080	0.0040	J
Fluorene	0.0040 U	mg/Kg	0.0080	0.0040	J
Phenanthrene	0.0040 U	mg/Kg	0.0080	0.0040	J
Anthracene	0.0040 U	mg/Kg	0.0080	0.0040	J
Fluoranthene	0.0040 U	mg/Kg	0.0080	0.0040	J
Pyrene	0.0040 U	mg/Kg	0.0080	0.0040	J
Benzo[a]anthracene	0.0040 U	mg/Kg	0.0080	0.0040	J
Chrysene	0.0040 U	mg/Kg	0.0080	0.0040	J
Benzo[b]fluoranthene	0.0040 U	mg/Kg	0.0080	0.0040	J
Benzo[k]fluoranthene	0.0040 U	mg/Kg	0.0080	0.0040	J
Benzo[a]pyrene	0.0040 U	mg/Kg	0.0080	0.0040	J
Indeno(1,2,3-cd)pyrene	0.0040 U	mg/Kg	0.0080	0.0040	J
Dibenzo[a,h]anthracene	0.0040 U	mg/Kg	0.0080	0.0040	J
Benzo[g,h,i]perylene	0.0040 U	mg/Kg	0.0080	0.0040	J

Surrogates

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Lab
2-Fluorobiphenyl (S)	mg/L	0.40	0.32	79	46 - 115	J
Nitrobenzene-d5 (S)	mg/L	0.40	0.34	84	34 - 117	J
p-Terphenyl-d14 (S)	mg/L	0.40	0.41	103	51 - 132	J

Lab Control Sample (5880275)

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Lab
Naphthalene	mg/Kg	0.20	0.15	75	38 - 111	J
2-Methylnaphthalene	mg/Kg	0.20	0.14	73	39 - 114	J
1-Methylnaphthalene	mg/Kg	0.20	0.15	76	43 - 111	J
Acenaphthylene	mg/Kg	0.20	0.15	77	39 - 116	J
Acenaphthene	mg/Kg	0.20	0.15	76	44 - 111	J

Thursday, June 26, 2025 3:50:29 PM
Dates and times are displayed using (-04:00)
Page 106 of 117

Certificate of Analysis

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.

POWERED BY
HORIZON[®]
v.13.1.0



NELAP Accredited E82574



FINAL

Workorder: Phillipi Creek (J2508890)

QC Batch: MSSJ/4995 Analysis Method: SW-846 8270E (SIM)
Preparation Method: EPA 3546
Associated Lab IDs: J2508890001, J2508890002, J2508890003, J2508890004, J2508890005, J2508890006, J2508890007, J2508890008, J2508890009, J2508890010, J2508890011, J2508890012, J2508890013, J2508890014, J2508890015, J2508890016, J2508890017, J2508890018, J2508890019, J2508890020

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Lab
Fluorene	mg/Kg	0.20	0.15	75	47 - 114	J
Phenanthrene	mg/Kg	0.20	0.16	79	49 - 113	J
Anthracene	mg/Kg	0.20	0.17	86	50 - 114	J
Fluoranthene	mg/Kg	0.20	0.16	78	55 - 119	J
Pyrene	mg/Kg	0.20	0.15	78	55 - 117	J
Benzo[a]anthracene	mg/Kg	0.20	0.16	79	54 - 122	J
Chrysene	mg/Kg	0.20	0.16	79	57 - 118	J
Benzo[b]fluoranthene	mg/Kg	0.20	0.16	80	53 - 128	J
Benzo[k]fluoranthene	mg/Kg	0.20	0.17	88	56 - 123	J
Benzo[a]pyrene	mg/Kg	0.20	0.16	82	50 - 125	J
Indeno(1,2,3-cd)pyrene	mg/Kg	0.20	0.13	67	49 - 130	J
Dibenzo[a,h]anthracene	mg/Kg	0.20	0.17	86	50 - 129	J
Benzo[g,h,i]perylene	mg/Kg	0.20	0.16	80	49 - 127	J

Surrogates

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Lab
2-Fluorobiphenyl (S)	mg/L	0.40	0.29	72	46 - 115	J
Nitrobenzene-d5 (S)	mg/L	0.40	0.30	76	34 - 117	J
p-Terphenyl-d14 (S)	mg/L	0.40	0.35	88	51 - 132	J

Matrix Spike (5880276); Matrix Spike Duplicate (5880277); Original (J2508890001); Parent Lab Sample (J2508890001)

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Dup Result	Dup Recovery	RPD	RPD Limit	Lab
Naphthalene	mg/Kg	0.20	0.16	78	38 - 111	0.14	72	9	20	J
2-Methylnaphthalene	mg/Kg	0.20	0.16	77	39 - 114	0.14	70	10	20	J
1-Methylnaphthalene	mg/Kg	0.20	0.16	80	43 - 111	0.15	73	10	20	J
Acenaphthylene	mg/Kg	0.20	0.17	85	39 - 116	0.15	77	11	20	J
Acenaphthene	mg/Kg	0.20	0.16	82	44 - 111	0.15	77	7	20	J
Fluorene	mg/Kg	0.20	0.17	83	47 - 114	0.15	75	11	20	J
Phenanthrene	mg/Kg	0.20	0.17	87	49 - 113	0.15	77	12	20	J
Anthracene	mg/Kg	0.20	0.18	90	50 - 114	0.16	81	10	20	J
Fluoranthene	mg/Kg	0.20	0.19	88	55 - 119	0.15	72	19	20	J
Pyrene	mg/Kg	0.20	0.18	87	55 - 117	0.15	74	16	20	J
Benzo[a]anthracene	mg/Kg	0.20	0.18	90	54 - 122	0.15	78	16	20	J
Chrysene	mg/Kg	0.20	0.18	86	57 - 118	0.15	73	16	20	J

Thursday, June 26, 2025 3:50:29 PM
Dates and times are displayed using (-04:00)
Page 107 of 117

Certificate of Analysis

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.

POWERED BY
HORIZON[®]
v.13.1.0



NELAP Accredited E82574



FINAL

Workorder: Phillipi Creek (J2508890)

QC Batch: MSSJ/4995

Analysis Method: SW-846 8270E (SIM)

Preparation Method: EPA 3546

Associated Lab IDs: J2508890001, J2508890002, J2508890003, J2508890004, J2508890005, J2508890006, J2508890007, J2508890008, J2508890009, J2508890010, J2508890011, J2508890012, J2508890013, J2508890014, J2508890015, J2508890016, J2508890017, J2508890018, J2508890019, J2508890020

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Dup Result	Dup Recovery	RPD	RPD Limit	Lab
Benzo[b]fluoranthene	mg/Kg	0.20	0.19	91	53 - 128	0.16	75	19	20	J
Benzo[k]fluoranthene	mg/Kg	0.20	0.19	97	56 - 123	0.17	83	15	20	J
Benzo[a]pyrene	mg/Kg	0.20	0.19	94	50 - 125	0.16	80	16	20	J
Indeno(1,2,3-cd)pyrene	mg/Kg	0.20	0.16	78	49 - 130	0.14	66	18	20	J
Dibenzo[a,h]anthracene	mg/Kg	0.20	0.18	92	50 - 129	0.16	79	16	20	J
Benzo[g,h,i]perylene	mg/Kg	0.20	0.18	90	49 - 127	0.15	74	19	20	J

Surrogates

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Dup Result	Dup Recovery	RPD	RPD Limit	Lab
2-Fluorobiphenyl (S)	mg/L	0.40	0.31	78	46 - 115	0.28	70	11	20	J
Nitrobenzene-d5 (S)	mg/L	0.40	0.32	79	34 - 117	0.29	74	7	20	J
p-Terphenyl-d14 (S)	mg/L	0.40	0.36	91	51 - 132	0.32	80	13	20	J

Certificate of Analysis

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.





FINAL

Workorder: Phillipi Creek (J2508890)

QC Cross Reference

Lab ID	Sample ID	Prep Batch	Prep Method
CVAj/3014 - SW-846 7471A			
J2508890001	PCV-10	DGMj/10817	SW-846 7471A
J2508890002	PCV-09	DGMj/10817	SW-846 7471A
J2508890003	PCV-08	DGMj/10817	SW-846 7471A
J2508890004	PCV-07	DGMj/10817	SW-846 7471A
J2508890005	PCV-05	DGMj/10817	SW-846 7471A
J2508890006	PCV-04	DGMj/10817	SW-846 7471A
J2508890007	PCV-03	DGMj/10817	SW-846 7471A
J2508890008	PCV-02	DGMj/10817	SW-846 7471A
J2508890009	PCV-01	DGMj/10817	SW-846 7471A
J2508890010	PCV-06	DGMj/10817	SW-846 7471A
J2508890011	PCG-12	DGMj/10817	SW-846 7471A
J2508890012	PCG-13	DGMj/10817	SW-846 7471A
J2508890013	PCG-14	DGMj/10817	SW-846 7471A
J2508890014	PCG-15	DGMj/10817	SW-846 7471A
J2508890015	PCG-16	DGMj/10817	SW-846 7471A
J2508890016	PCG-17	DGMj/10817	SW-846 7471A
J2508890017	PCG-18	DGMj/10817	SW-846 7471A
J2508890018	PCG-19	DGMj/10817	SW-846 7471A
J2508890019	PCG-20	DGMj/10817	SW-846 7471A
J2508890020	PCG-11	DGMj/10817	SW-846 7471A

Certificate of Analysis

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.





FINAL

Workorder: Phillipi Creek (J2508890)

QC Cross Reference

Lab ID	Sample ID	Prep Batch	Prep Method
GCSj/8051 - FL-PRO			
J2508890001	PCV-10	EXTj/12082	FL-PRO
J2508890002	PCV-09	EXTj/12082	FL-PRO
J2508890003	PCV-08	EXTj/12082	FL-PRO
J2508890004	PCV-07	EXTj/12082	FL-PRO
J2508890005	PCV-05	EXTj/12082	FL-PRO
J2508890006	PCV-04	EXTj/12082	FL-PRO
J2508890007	PCV-03	EXTj/12082	FL-PRO
J2508890008	PCV-02	EXTj/12082	FL-PRO
J2508890009	PCV-01	EXTj/12082	FL-PRO
J2508890010	PCV-06	EXTj/12082	FL-PRO
J2508890011	PCG-12	EXTj/12082	FL-PRO
J2508890012	PCG-13	EXTj/12082	FL-PRO
J2508890013	PCG-14	EXTj/12082	FL-PRO
J2508890014	PCG-15	EXTj/12082	FL-PRO
J2508890015	PCG-16	EXTj/12082	FL-PRO
J2508890016	PCG-17	EXTj/12082	FL-PRO
J2508890017	PCG-18	EXTj/12082	FL-PRO
J2508890018	PCG-19	EXTj/12082	FL-PRO
GCSj/8066 - EPA 8081			
J2508890001	PCV-10	EXTj/12104	EPA 3546
J2508890002	PCV-09	EXTj/12104	EPA 3546
J2508890003	PCV-08	EXTj/12104	EPA 3546
J2508890004	PCV-07	EXTj/12104	EPA 3546
J2508890005	PCV-05	EXTj/12104	EPA 3546
J2508890006	PCV-04	EXTj/12104	EPA 3546
J2508890007	PCV-03	EXTj/12104	EPA 3546
J2508890008	PCV-02	EXTj/12104	EPA 3546
J2508890009	PCV-01	EXTj/12104	EPA 3546
J2508890010	PCV-06	EXTj/12104	EPA 3546





FINAL

Workorder: Phillipi Creek (J2508890)

QC Cross Reference

Lab ID	Sample ID	Prep Batch	Prep Method
GCSj/8067 - SW-846 8082A			
J2508890001	PCV-10	EXTj/12105	EPA 3546
J2508890002	PCV-09	EXTj/12105	EPA 3546
J2508890003	PCV-08	EXTj/12105	EPA 3546
J2508890004	PCV-07	EXTj/12105	EPA 3546
J2508890005	PCV-05	EXTj/12105	EPA 3546
J2508890006	PCV-04	EXTj/12105	EPA 3546
J2508890007	PCV-03	EXTj/12105	EPA 3546
J2508890008	PCV-02	EXTj/12105	EPA 3546
J2508890009	PCV-01	EXTj/12105	EPA 3546
J2508890010	PCV-06	EXTj/12105	EPA 3546
GCSj/8072 - EPA 8081			
J2508890011	PCG-12	EXTj/12118	EPA 3546
J2508890012	PCG-13	EXTj/12118	EPA 3546
J2508890013	PCG-14	EXTj/12118	EPA 3546
J2508890014	PCG-15	EXTj/12118	EPA 3546
J2508890015	PCG-16	EXTj/12118	EPA 3546
J2508890016	PCG-17	EXTj/12118	EPA 3546
J2508890017	PCG-18	EXTj/12118	EPA 3546
J2508890018	PCG-19	EXTj/12118	EPA 3546
J2508890019	PCG-20	EXTj/12118	EPA 3546
J2508890020	PCG-11	EXTj/12118	EPA 3546
GCSj/8073 - SW-846 8082A			
J2508890011	PCG-12	EXTj/12119	EPA 3546
J2508890012	PCG-13	EXTj/12119	EPA 3546
J2508890013	PCG-14	EXTj/12119	EPA 3546
J2508890014	PCG-15	EXTj/12119	EPA 3546
J2508890015	PCG-16	EXTj/12119	EPA 3546
J2508890016	PCG-17	EXTj/12119	EPA 3546
J2508890017	PCG-18	EXTj/12119	EPA 3546
J2508890018	PCG-19	EXTj/12119	EPA 3546
J2508890019	PCG-20	EXTj/12119	EPA 3546
J2508890020	PCG-11	EXTj/12119	EPA 3546





FINAL

Workorder: Phillipi Creek (J2508890)

QC Cross Reference

Lab ID	Sample ID	Prep Batch	Prep Method
GCSj/8074 - FL-PRO			
J2508890019	PCG-20	EXTj/12139	FL-PRO
J2508890020	PCG-11	EXTj/12139	FL-PRO
ICPj/4477 - SW-846 6010			
J2508890001	PCV-10	DGMj/10823	SW-846 3050B
J2508890002	PCV-09	DGMj/10823	SW-846 3050B
J2508890003	PCV-08	DGMj/10823	SW-846 3050B
J2508890004	PCV-07	DGMj/10823	SW-846 3050B
J2508890005	PCV-05	DGMj/10823	SW-846 3050B
J2508890006	PCV-04	DGMj/10823	SW-846 3050B
J2508890007	PCV-03	DGMj/10823	SW-846 3050B
J2508890008	PCV-02	DGMj/10823	SW-846 3050B
J2508890009	PCV-01	DGMj/10823	SW-846 3050B
J2508890010	PCV-06	DGMj/10823	SW-846 3050B
ICPj/4480 - SW-846 6010			
J2508890011	PCG-12	DGMj/10828	SW-846 3050B
J2508890012	PCG-13	DGMj/10828	SW-846 3050B
J2508890013	PCG-14	DGMj/10828	SW-846 3050B
J2508890014	PCG-15	DGMj/10828	SW-846 3050B
J2508890015	PCG-16	DGMj/10828	SW-846 3050B
J2508890016	PCG-17	DGMj/10828	SW-846 3050B
J2508890017	PCG-18	DGMj/10828	SW-846 3050B
J2508890018	PCG-19	DGMj/10828	SW-846 3050B
J2508890019	PCG-20	DGMj/10828	SW-846 3050B
J2508890020	PCG-11	DGMj/10828	SW-846 3050B

Certificate of Analysis

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.





FINAL

Workorder: Phillipi Creek (J2508890)

QC Cross Reference

Lab ID	Sample ID	Prep Batch	Prep Method
MSSj/4995 - SW-846 8270E (SIM)			
J2508890001	PCV-10	EXTj/12081	EPA 3546
J2508890002	PCV-09	EXTj/12081	EPA 3546
J2508890003	PCV-08	EXTj/12081	EPA 3546
J2508890004	PCV-07	EXTj/12081	EPA 3546
J2508890005	PCV-05	EXTj/12081	EPA 3546
J2508890006	PCV-04	EXTj/12081	EPA 3546
J2508890007	PCV-03	EXTj/12081	EPA 3546
J2508890008	PCV-02	EXTj/12081	EPA 3546
J2508890009	PCV-01	EXTj/12081	EPA 3546
J2508890010	PCV-06	EXTj/12081	EPA 3546
J2508890011	PCG-12	EXTj/12081	EPA 3546
J2508890012	PCG-13	EXTj/12081	EPA 3546
J2508890013	PCG-14	EXTj/12081	EPA 3546
J2508890014	PCG-15	EXTj/12081	EPA 3546
J2508890015	PCG-16	EXTj/12081	EPA 3546
J2508890016	PCG-17	EXTj/12081	EPA 3546
J2508890017	PCG-18	EXTj/12081	EPA 3546
J2508890018	PCG-19	EXTj/12081	EPA 3546
J2508890019	PCG-20	EXTj/12081	EPA 3546
J2508890020	PCG-11	EXTj/12081	EPA 3546

Certificate of Analysis

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.





Advanced Environmental Laboratories, Inc
6681 Southpoint Pkwy Jacksonville, FL 32216
Payments: P.O. Box 551580 Jacksonville, FL 32255-1580
Phone: (904) 363-9350
Fax: (904) 363-9354

FINAL

Workorder: Phillipi Creek (J2508890)

QC Cross Reference

Lab ID	Sample ID	Prep Batch	Prep Method
WCAj/19462 - SM 2540G			
J2508890001	PCV-10		
J2508890002	PCV-09		
J2508890003	PCV-08		
J2508890004	PCV-07		
J2508890005	PCV-05		
J2508890006	PCV-04		
J2508890007	PCV-03		
J2508890008	PCV-02		
J2508890009	PCV-01		
J2508890010	PCV-06		
J2508890011	PCG-12		
J2508890012	PCG-13		
J2508890013	PCG-14		
J2508890014	PCG-15		
J2508890015	PCG-16		
J2508890016	PCG-17		
J2508890017	PCG-18		
J2508890018	PCG-19		
J2508890019	PCG-20		
J2508890020	PCG-11		





Advanced
Environmental Laboratories, Inc.

☐ Altamonte Springs: 380 Northlake Blvd., Ste. 1048, FL 32701 • 407 937 1594 • Lab ID: E53076
☐ Fort Myers: 13100 Westlakes Terrace, Ste. 10, FL 33913 • 239 674 8130 • Lab ID: E64492
☒ Jacksonville: 6661 Southpoint Pkwy., FL 32216 • 904 363 9350 • Lab ID: E62574
☐ Tallahassee: 2639 North Monroe St., Suite D, FL 32303 • 850 219 6274 • Lab ID: E61095



2

Client Name: Athena Technologies		Project Name: Phillipi Creek										
Address: 1293 Graham Farm Rd		Project Number:										
McCellanville, SC 29458		PO Number:										
Phone: 561-702-0768 8035531425		FDEP Facility No:										
FAX:		FDEP Facility Addr:										
Contact: Neil Wicker		Special Instructions:										
Sampled By: WICKER												
Turn Around Time: Standard Rush												
AEL Profile #: 77037		ADAPT EQUIS Other										
SAMPLE ID	SAMPLE DESCRIPTION	Grab Comp	SAMPLING DATE TIME	MATRIX	NO. COUNT	ANALYSIS REQUIRED	BOTTLE SIZE & TYPE	PAH by 8270SIM	TRPH by FLPOR	8081/8082	Al,As,Ba,Cd,Cr,Cu,Pb,Hg, Ni,Se,Ag,Zn	LABORATORY I.D. NUMBER
PCV-10	BEACHES/5 SAND	Comp	6/10/1018	SO	1	X	X	X	X	X	X	-001
PCV-09	SAND w/ SILT	Comp	6/10/1018	SO	1	X	X	X	X	X	X	-002
PCV-08	SAND w/ SILT	Comp	6/10/1105	SO	1	X	X	X	X	X	X	-003
PCV-07	SILTY ORG SAND	Comp	6/10/1135	SO	1	X	X	X	X	X	X	-004
PCV-05	SAND w/ SILT	Comp	6/10/1205	SO	1	X	X	X	X	X	X	-005
PCV-04	SILT SAND	Comp	6/10/1240	SO	1	X	X	X	X	X	X	-006
PCV-03	SAND	Comp	6/10/1357	SO	1	X	X	X	X	X	X	-007
PCV-02	SAND	Comp	6/10/1383	SO	1	X	X	X	X	X	X	-008
PCV-01	SAND	Comp	6/10/1345	SO	1	X	X	X	X	X	X	-009
PCV-06	SAND	Comp	6/10/1455	SO	1	X	X	X	X	X	X	-010

Matrix Code: WW = wastewater SW = surface water GW = ground water DW = drinking water O = oil A = air SO = soil SL = sludge

Received on Ice ☐ Yes ☐ No Temp taken from sample ☐ Temp from blank ☐ Where required, pH checked

Device used for measuring Temp by unique identifier (circle IR temp gun used) J 99 °C Temp when received (observed) 1.2 °C Temp when received (corrected) 1.2 °C

PCN: AD-D051web Form last revised 08/07/2019

Relinquished by: Date Time Received by: Date Time

1 Jamar J 99 6/11/18 1400 David J 6/11/18 1400

2

3

4

FOR DRINKING WATER USE:

(When PWS information not otherwise supplied) PWS ID:

Contact Person:

Supplier of Water:

Site Address:



Advanced
Environmental
Laboratories, Inc.

Sample Receiving Checklist

☒ JAX ☐ TPA ☐ MIA ☐ ALS
☐ FTM ☐ GNV ☐ LPD ☐ SEM



Client: Athena Technologies
Received by: S-D.
Date/Time: 6.11.25/1400

Log-In request number: _____
Project name: Philipi Creek
Completed by: R.P.

Cooler/Shipping Information: Type: ☒ Cooler ☐ Box ☐ Other (describe)

Courier: ☐ AEL ☒ Client ☐ UPS ☐ Blue Streak ☐ FedEx ☐ Other Tracking # _____

Cooler temperature: Identify the cooler and document the temperature blank (bottle) or ice water (cooler) measurement

Cooler/Container ID	1				
Temp (°C)	1.2				
Temp taken from	☒ Bottle ☐ Cooler	☐ Bottle ☐ Cooler	☐ Bottle ☐ Cooler	☐ Bottle ☐ Cooler	☐ Bottle ☐ Cooler
Temp measured with	IR gun/Therm (ID): <u>59A</u>	IR gun/Therm (ID): _____	IR gun/Therm (ID): _____	IR gun/Therm (ID): _____	IR gun/Therm (ID): _____

Other Information: Any discrepancies should be explained in the "Comments" section below.

CHECKLIST	YES	NO	NA
1. Were custody seals on shipping container(s) intact?	☒		
2. Were custody papers properly included with samples?	☒		
3. Were custody papers properly filled out (ink, signed, match labels)?	☒		
4. Did all bottles arrive in good condition (unbroken)?	☒		
5. Were all bottle labels complete (sample #, date, signed, analysis, preservatives)?	☒		
6. Did the sample labels agree with the chain of custody?	☒		
7. Were correct bottles used for the tests indicated?	☒		
8. Were proper sample preservation techniques indicated on the label?	☒		
9. Were samples received within holding times?	☒		
10. Were all VOA vials free of the presence of air bubbles?			☒
11. Have all Soil VOA Vials and Encores been placed in a freezer within 48 hours of collection?			☒
12. Were samples in direct contact with wet ice? If "No," check one: ☐ NO ICE ☐ BLUE ICE	☒		
13. Was the cooler temperature less than 6°C?	☒		
14. Where pH preservation required, are sample pHs checked and any anomalies recorded by Sample control? Are all <2 or >10? Note: VOA samples are checked by laboratory analysts.	☒		
15. Was sufficient sample volume provided to perform all tests?	☒		
16. If for Bacteriological testing, were containers supplied by AEL? (See QA officer if answer is no)			☒
17. Were all sample containers provided by AEL? (Other than Bacteriological)	☒		
18. Were samples accepted into the laboratory?	☒		
19. When necessary to split samples into other bottles, is it noted in the comments?	☒		
20. Where Encores received and if so, how many?		☒	

Comments: (Note all sample(s) and container (s)" with a "No" checklist response in this comment section)

Site Name			Lab Sample ID				J2508890001			J2508890002			J2508890003			J2508890004			J2508890005		
Site Location			Sample Number				PCV-10			PCV-09			PCV-08			PCV-07			PCV-05		
Project Manager			Date/ Time Sampled				06/10/2025 10:18			06/10/2025 10:47			06/10/2025 11:05			06/10/2025 11:35			06/10/2025 12:05		
Checked By			Sample Interval (ft,bls)																		
Analyte	CAS #	Method	Units	RES (1)	COM (2)	LGW (3)	Result	Qual	Exceeds	Result	Qual	Exceeds	Result	Qual	Exceeds	Result	Qual	Exceeds	Result	Qual	Exceeds
BENZO(a)ANTHRACENE	56-55-3	EPA 8270/PAH Low Level	mg/kg	N/A	N/A	0.8	0.0068	U		0.0055	U		0.0056	I		0.0058	U		0.0054	I	
BENZO(a)PYRENE	50-32-8	EPA 8270/PAH Low Level	mg/kg	0.1	0.7	8	0.0083	I		0.0066	I		0.0057	I		0.0058	U		0.008	I	
BENZO(b)FLUORANTHENE	205-99-2	EPA 8270/PAH Low Level	mg/kg	N/A	N/A	2.4	0.015			0.012			0.0092	I		0.0095	I		0.013		
BENZO(k)FLUORANTHENE	207-08-9	EPA 8270/PAH Low Level	mg/kg	N/A	N/A	24	0.0068	U		0.0055	U		0.0056	U		0.0058	U		0.005	U	
CHRYSENE	218-01-9	EPA 8270/PAH Low Level	mg/kg	N/A	N/A	77	0.0099	I		0.0074	I		0.007	I		0.0071	I		0.0075	I	
DIBENZ(a,h)ANTHRACENE	53-70-3	EPA 8270/PAH Low Level	mg/kg	N/A	N/A	0.7	0.0068	U		0.0055	U		0.0056	U		0.0058	U		0.005	U	
INDENO(1,2,3-c,d)PYRENE	193-39-5	EPA 8270/PAH Low Level	mg/kg	N/A	N/A	6.6	0.0077	I		0.0063	I		0.0056	U		0.0058	U		0.007	I	
Total Benzo(a)pyrene Equivalents	Total B(a)P	Calculation	mg/kg	0.1	0.7		0.014			0.011			0.01			0.0074			0.013		

Site Name			Lab Sample ID				J2508890006			J2508890007			J2508890008			J2508890009			J2508890010		
Site Location			Sample Number				PCV-04			PCV-03			PCV-02			PCV-01			PCV-06		
Project Manager			Date/ Time Sampled				06/10/2025 12:40			06/10/2025 13:07			06/10/2025 13:23			06/10/2025 13:45			06/10/2025 14:50		
Checked By			Sample Interval (ft,bls)																		
Analyte	CAS #	Method	Units	RES (1)	COM (2)	LGW (3)	Result	Qual	Exceeds	Result	Qual	Exceeds	Result	Qual	Exceeds	Result	Qual	Exceeds	Result	Qual	Exceeds
BENZO(a)ANTHRACENE	56-55-3	EPA 8270/PAH Low Level	mg/kg	N/A	N/A	0.8	0.0072	U		0.005	U		0.005	U		0.0049	U		0.021		
BENZO(a)PYRENE	50-32-8	EPA 8270/PAH Low Level	mg/kg	0.1	0.7	8	0.0072	U		0.005	U		0.005	U		0.0049	U		0.025		
BENZO(b)FLUORANTHENE	205-99-2	EPA 8270/PAH Low Level	mg/kg	N/A	N/A	2.4	0.0077	I		0.005	U		0.005	U		0.0049	U		0.037		
BENZO(k)FLUORANTHENE	207-08-9	EPA 8270/PAH Low Level	mg/kg	N/A	N/A	24	0.0072	U		0.005	U		0.005	U		0.0049	U		0.014		
CHRYSENE	218-01-9	EPA 8270/PAH Low Level	mg/kg	N/A	N/A	77	0.0072	U		0.005	U		0.005	U		0.0049	U		0.027		
DIBENZ(a,h)ANTHRACENE	53-70-3	EPA 8270/PAH Low Level	mg/kg	N/A	N/A	0.7	0.0072	U		0.005	U		0.005	U		0.0049	U		0.0052	U	
INDENO(1,2,3-c,d)PYRENE	193-39-5	EPA 8270/PAH Low Level	mg/kg	N/A	N/A	6.6	0.0072	U		0.005	U		0.005	U		0.0049	U		0.019		
Total Benzo(a)pyrene Equivalents	Total B(a)P	Calculation	mg/kg	0.1	0.7		0.0087			0.0058			0.0058			0.0057			0.035		

Site Name			Lab Sample ID				J2508890011			J2508890012			J2508890013			J2508890014			J2508890015		
Site Location			Sample Number				PCG-12			PCG-13			PCG-14			PCG-15			PCG-16		
Project Manager			Date/ Time Sampled				06/10/2025 15:27			06/10/2025 15:41			06/10/2025 15:53			06/10/2025 15:58			06/10/2025 16:12		
Checked By			Sample Interval (ft,bls)																		
Analyte	CAS #	Method	Units	RES (1)	COM (2)	LGW (3)	Result	Qual	Exceeds	Result	Qual	Exceeds	Result	Qual	Exceeds	Result	Qual	Exceeds	Result	Qual	Exceeds
BENZO(a)ANTHRACENE	56-55-3	EPA 8270/PAH Low Level	mg/kg	N/A	N/A	0.8	0.0053	U		0.045			0.0052	U		0.0055	U		0.0054	U	
BENZO(a)PYRENE	50-32-8	EPA 8270/PAH Low Level	mg/kg	0.1	0.7	8	0.0053	U		0.056			0.0052	U		0.0055	U		0.0054	U	
BENZO(b)FLUORANTHENE	205-99-2	EPA 8270/PAH Low Level	mg/kg	N/A	N/A	2.4	0.0053	U		0.088			0.0058	I		0.0055	U		0.0054	U	
BENZO(k)FLUORANTHENE	207-08-9	EPA 8270/PAH Low Level	mg/kg	N/A	N/A	24	0.0053	U		0.034			0.0052	U		0.0055	U		0.0054	U	
CHRYSENE	218-01-9	EPA 8270/PAH Low Level	mg/kg	N/A	N/A	77	0.0053	U		0.07			0.0052	U		0.0055	U		0.0054	U	
DIBENZ(a,h)ANTHRACENE	53-70-3	EPA 8270/PAH Low Level	mg/kg	N/A	N/A	0.7	0.0053	U		0.0082	I		0.0052	U		0.0055	U		0.0054	U	
INDENO(1,2,3-c,d)PYRENE	193-39-5	EPA 8270/PAH Low Level	mg/kg	N/A	N/A	6.6	0.0053	U		0.047			0.0052	U		0.0055	U		0.0054	U	
Total Benzo(a)pyrene Equivalents	Total B(a)P	Calculation	mg/kg	0.1	0.7		0.0061			0.083			0.0063			0.0064			0.0062		

Site Name			Lab Sample ID				J2508890016			J2508890017			J2508890018			J2508890019			J2508890020		
Site Location			Sample Number				PCG-17			PCG-18			PCG-19			PCG-20			PCG-11		
Project Manager			Date/ Time Sampled				06/10/2025 16:22			06/10/2025 16:32			06/10/2025 16:38			06/10/2025 16:51			06/10/2025 17:37		
Checked By			Sample Interval (ft,bls)																		
Analyte	CAS #	Method	Units	RES (1)	COM (2)	LGW (3)	Result	Qual	Exceeds	Result	Qual	Exceeds	Result	Qual	Exceeds	Result	Qual	Exceeds	Result	Qual	Exceeds
BENZO(a)ANTHRACENE	56-55-3	EPA 8270/PAH Low Level	mg/kg	N/A	N/A	0.8	0.0052	U		0.01			0.0052	U		0.005	U		0.0053	U	
BENZO(a)PYRENE	50-32-8	EPA 8270/PAH Low Level	mg/kg	0.1	0.7	8	0.0052	U		0.016			0.0052	U		0.005	U		0.0062	I	
BENZO(b)FLUORANTHENE	205-99-2	EPA 8270/PAH Low Level	mg/kg	N/A	N/A	2.4	0.0052	U		0.025			0.0052	U		0.005	U		0.01	I	
BENZO(k)FLUORANTHENE	207-08-9	EPA 8270/PAH Low Level	mg/kg	N/A	N/A	24	0.0052	U		0.01	I		0.0052	U		0.005	U		0.0053	U	
CHRYSENE	218-01-9	EPA 8270/PAH Low Level	mg/kg	N/A	N/A	77	0.0052	U		0.015			0.0052	U		0.005	U		0.0066	I	
DIBENZ(a,h)ANTHRACENE	53-70-3	EPA 8270/PAH Low Level	mg/kg	N/A	N/A	0.7	0.0052	U		0.0051	U		0.0052	U		0.005	U		0.0053	U	
INDENO(1,2,3-c,d)PYRENE	193-39-5	EPA 8270/PAH Low Level	mg/kg	N/A	N/A	6.6	0.0052	U		0.015			0.0052	U		0.005	U		0.0054	I	
Total Benzo(a)pyrene Equivalents	Total B(a)P	Calculation	mg/kg	0.1	0.7		0.006			0.024			0.006			0.0058			0.011		

Site Name			Lab Sample ID				J2508890001			J2508890002			J2508890003			J2508890004			J2508890005		
Site Location			Sample Number				PCV-10			PCV-09			PCV-08			PCV-07			PCV-05		
Project Manager			Date/ Time Sampled				06/10/2025 10:18			06/10/2025 10:47			06/10/2025 11:05			06/10/2025 11:35			06/10/2025 12:05		
Checked By			Sample Interval (ft,bls)																		
Analyte	CAS #	Method	Units	RES (1)	COM (2)	LGW (3)	Result	Qual	Exceeds	Result	Qual	Exceeds	Result	Qual	Exceeds	Result	Qual	Exceeds	Result	Qual	Exceeds
1-METHYLNAPHTHALENE	90-12-0	EPA 8270/PAH Low Level	mg/kg	200	1800	3.1	0.0068	U		0.0055	U		0.0056	U		0.0058	U		0.005	U	
2-METHYLNAPHTHALENE	91-57-6	EPA 8270/PAH Low Level	mg/kg	210	2100	8.5	0.0068	U		0.0055	U		0.0056	U		0.0058	U		0.005	U	
ACENAPHTHENE	83-32-9	EPA 8270/PAH Low Level	mg/kg	2400	20000	2.1	0.0068	U		0.0055	U		0.0056	U		0.0058	U		0.005	U	
ACENAPHTHYLENE	208-96-8	EPA 8270/PAH Low Level	mg/kg	1800	20000	27	0.0068	U		0.0055	U		0.0056	U		0.0058	U		0.005	U	
ANTHRACENE	120-12-7	EPA 8270/PAH Low Level	mg/kg	21000	300000	2500	0.0068	U		0.0055	U		0.0056	U		0.0058	U		0.005	U	
BENZO(g,h,i)PERYLENE	191-24-2	EPA 8270/PAH Low Level	mg/kg	2500	52000	32000	0.0076	I		0.0059	I		0.0056	U		0.0058	U		0.0066	I	
FLUORANTHENE	206-44-0	EPA 8270/PAH Low Level	mg/kg	3200	59000	1200	0.016			0.01	I		0.013			0.011	I		0.0075	I	
FLUORENE	86-73-7	EPA 8270/PAH Low Level	mg/kg	2600	33000	160	0.0068	U		0.0055	U		0.0056	U		0.0058	U		0.005	U	
NAPHTHALENE	91-20-3	EPA 8270/PAH Low Level	mg/kg	55	300	1.2	0.0068	U		0.0055	U		0.0056	U		0.0058	U		0.005	U	
PHENANTHRENE	85-01-8	EPA 8270/PAH Low Level	mg/kg	2200	36000	250	0.0068	U		0.0055	U		0.0056	U		0.0058	U		0.005	U	
PYRENE	129-00-0	EPA 8270/PAH Low Level	mg/kg	2400	45000	880	0.013	I		0.0082	I		0.0096	I		0.0086	I		0.0064	I	

Site Name			Lab Sample ID				J2508890006			J2508890007			J2508890008			J2508890009			J2508890010		
Site Location			Sample Number				PCV-04			PCV-03			PCV-02			PCV-01			PCV-06		
Project Manager			Date/ Time Sampled				06/10/2025 12:40			06/10/2025 13:07			06/10/2025 13:23			06/10/2025 13:45			06/10/2025 14:50		
Checked By			Sample Interval (ft,bls)																		
Analyte	CAS #	Method	Units	RES (1)	COM (2)	LGW (3)	Result	Qual	Exceeds	Result	Qual	Exceeds	Result	Qual	Exceeds	Result	Qual	Exceeds	Result	Qual	Exceeds
1-METHYLNAPHTHALENE	90-12-0	EPA 8270/PAH Low Level	mg/kg	200	1800	3.1	0.0072	U		0.005	U		0.005	U		0.0049	U		0.0052	U	
2-METHYLNAPHTHALENE	91-57-6	EPA 8270/PAH Low Level	mg/kg	210	2100	8.5	0.0072	U		0.005	U		0.005	U		0.0049	U		0.0052	U	
ACENAPHTHENE	83-32-9	EPA 8270/PAH Low Level	mg/kg	2400	20000	2.1	0.0072	U		0.005	U		0.005	U		0.0049	U		0.0052	U	
ACENAPHTHYLENE	208-96-8	EPA 8270/PAH Low Level	mg/kg	1800	20000	27	0.0072	U		0.005	U		0.005	U		0.0049	U		0.0052	U	
ANTHRACENE	120-12-7	EPA 8270/PAH Low Level	mg/kg	21000	300000	2500	0.0072	U		0.005	U		0.005	U		0.0049	U		0.0052	U	
BENZO(g,h,i)PERYLENE	191-24-2	EPA 8270/PAH Low Level	mg/kg	2500	52000	32000	0.0072	U		0.005	U		0.005	U		0.0049	U		0.016		
FLUORANTHENE	206-44-0	EPA 8270/PAH Low Level	mg/kg	3200	59000	1200	0.0072	U		0.005	U		0.005	U		0.0049	U		0.056		
FLUORENE	86-73-7	EPA 8270/PAH Low Level	mg/kg	2600	33000	160	0.0072	U		0.005	U		0.005	U		0.0049	U		0.0052	U	
NAPHTHALENE	91-20-3	EPA 8270/PAH Low Level	mg/kg	55	300	1.2	0.0072	U		0.005	U		0.005	U		0.0049	U		0.0052	U	
PHENANTHRENE	85-01-8	EPA 8270/PAH Low Level	mg/kg	2200	36000	250	0.0072	U		0.005	U		0.005	U		0.0049	U		0.028		
PYRENE	129-00-0	EPA 8270/PAH Low Level	mg/kg	2400	45000	880	0.0072	U		0.005	U		0.005	U		0.0049	U		0.045		

Site Name			Lab Sample ID				J2508890011			J2508890012			J2508890013			J2508890014			J2508890015		
Site Location			Sample Number				PCG-12			PCG-13			PCG-14			PCG-15			PCG-16		
Project Manager			Date/ Time Sampled				06/10/2025 15:27			06/10/2025 15:41			06/10/2025 15:53			06/10/2025 15:58			06/10/2025 16:12		
Checked By			Sample Interval (ft,bls)																		
Analyte	CAS #	Method	Units	RES (1)	COM (2)	LGW (3)	Result	Qual	Exceeds	Result	Qual	Exceeds	Result	Qual	Exceeds	Result	Qual	Exceeds	Result	Qual	Exceeds
1-METHYLNAPHTHALENE	90-12-0	EPA 8270/PAH Low Level	mg/kg	200	1800	3.1	0.0053	U		0.0053	U		0.0052	U		0.0055	U		0.0054	U	
2-METHYLNAPHTHALENE	91-57-6	EPA 8270/PAH Low Level	mg/kg	210	2100	8.5	0.0053	U		0.0053	U		0.0052	U		0.0055	U		0.0054	U	
ACENAPHTHENE	83-32-9	EPA 8270/PAH Low Level	mg/kg	2400	20000	2.1	0.0053	U		0.0053	U		0.0052	U		0.0055	U		0.0054	U	
ACENAPHTHYLENE	208-96-8	EPA 8270/PAH Low Level	mg/kg	1800	20000	27	0.0053	U		0.0053	U		0.0052	U		0.0055	U		0.0054	U	
ANTHRACENE	120-12-7	EPA 8270/PAH Low Level	mg/kg	21000	300000	2500	0.0053	U		0.0053	U		0.0052	U		0.0055	U		0.0054	U	
BENZO(g,h,i)PERYLENE	191-24-2	EPA 8270/PAH Low Level	mg/kg	2500	52000	32000	0.0053	U		0.041			0.0052	U		0.0055	U		0.0054	U	
FLUORANTHENE	206-44-0	EPA 8270/PAH Low Level	mg/kg	3200	59000	1200	0.0053	U		0.13			0.0052	U		0.0055	U		0.0062	I	
FLUORENE	86-73-7	EPA 8270/PAH Low Level	mg/kg	2600	33000	160	0.0053	U		0.0053	U		0.0052	U		0.0055	U		0.0054	U	
NAPHTHALENE	91-20-3	EPA 8270/PAH Low Level	mg/kg	55	300	1.2	0.0053	U		0.0053	U		0.0052	U		0.0055	U		0.0054	U	
PHENANTHRENE	85-01-8	EPA 8270/PAH Low Level	mg/kg	2200	36000	250	0.0053	U		0.037			0.0052	U		0.0055	U		0.0054	U	
PYRENE	129-00-0	EPA 8270/PAH Low Level	mg/kg	2400	45000	880	0.0053	U		0.096			0.0052	U		0.0055	U		0.0054	I	

Site Name			Lab Sample ID				J2508890016			J2508890017			J2508890018			J2508890019			J2508890020		
Site Location			Sample Number				PCG-17			PCG-18			PCG-19			PCG-20			PCG-11		
Project Manager			Date/ Time Sampled				06/10/2025 16:22			06/10/2025 16:32			06/10/2025 16:38			06/10/2025 16:51			06/10/2025 17:37		
Checked By			Sample Interval (ft,bls)																		
Analyte	CAS #	Method	Units	RES (1)	COM (2)	LGW (3)	Result	Qual	Exceeds	Result	Qual	Exceeds	Result	Qual	Exceeds	Result	Qual	Exceeds	Result	Qual	Exceeds
1-METHYLNAPHTHALENE	90-12-0	EPA 8270/PAH Low Level	mg/kg	200	1800	3.1	0.0052	U		0.0051	U		0.0052	U		0.005	U		0.0053	U	
2-METHYLNAPHTHALENE	91-57-6	EPA 8270/PAH Low Level	mg/kg	210	2100	8.5	0.0052	U		0.0051	U		0.0052	U		0.005	U		0.0053	U	
ACENAPHTHENE	83-32-9	EPA 8270/PAH Low Level	mg/kg	2400	20000	2.1	0.0052	U		0.0051	U		0.0052	U		0.005	U		0.0053	U	
ACENAPHTHYLENE	208-96-8	EPA 8270/PAH Low Level	mg/kg	1800	20000	27	0.0052	U		0.0051	U		0.0052	U		0.005	U		0.0053	U	
ANTHRACENE	120-12-7	EPA 8270/PAH Low Level	mg/kg	21000	300000	2500	0.0052	U		0.0051	U		0.0052	U		0.005	U		0.0053	U	
BENZO(g,h,i)PERYLENE	191-24-2	EPA 8270/PAH Low Level	mg/kg	2500	52000	32000	0.0052	U		0.014			0.0052	U		0.005	U		0.0054	I	
FLUORANTHENE	206-44-0	EPA 8270/PAH Low Level	mg/kg	3200	59000	1200	0.0052	U		0.02			0.0052	U		0.005	U		0.0087	I	
FLUORENE	86-73-7	EPA 8270/PAH Low Level	mg/kg	2600	33000	160	0.0052	U		0.0051	U		0.0052	U		0.005	U		0.0053	U	
NAPHTHALENE	91-20-3	EPA 8270/PAH Low Level	mg/kg	55	300	1.2	0.0052	U		0.0051	U		0.0052	U		0.005	U		0.0053	U	
PHENANTHRENE	85-01-8	EPA 8270/PAH Low Level	mg/kg	2200	36000	250	0.0052	U		0.007	I		0.0052	U		0.005	U		0.0053	U	
PYRENE	129-00-0	EPA 8270/PAH Low Level	mg/kg	2400	45000	880	0.0052	U		0.017			0.0052	U		0.005	U		0.0074	I	

Site Name			Lab Sample ID			J2508890001			J2508890002			J2508890003			J2508890004			J2508890005			J2508890006			
Site Location			Sample Number			PCV-10			PCV-09			PCV-08			PCV-07			PCV-05			PCV-04			
Project Manager			Date/ Time Sampled			06/10/2025 10:18			06/10/2025 10:47			06/10/2025 11:05			06/10/2025 11:35			06/10/2025 12:05			06/10/2025 12:40			
Checked By			Sample Interval (ft,bls)																					
Analyte	CAS #	Method	Units	RES (1)	COM (2)	LGW (3)	Result	Qual	Exceeds	Result	Qual	Exceeds	Result	Qual	Exceeds	Result	Qual	Exceeds	Result	Qual	Exceeds	Result	Qual	Exceeds
FL-PRO	TRPH	FDEP FL-PRO	mg/kg	460	2700	340	17	U		14	U		14	U		14	U		12	U		18	U	

Site Name			Lab Sample ID			J2508890007			J2508890008			J2508890009			J2508890010			J2508890011			J2508890012			J2508890013			
Site Location			Sample Number			PCV-03			PCV-02			PCV-01			PCV-06			PCG-12			PCG-13			PCG-14			
Project Manager			Date/ Time Sampled			06/10/2025 13:07			06/10/2025 13:23			06/10/2025 13:45			06/10/2025 14:50			06/10/2025 15:27			06/10/2025 15:41			06/10/2025 15:53			
Checked By			Sample Interval (ft,bls)																								
Analyte	CAS #	Method	Units	RES (1)	COM (2)	LGW (3)	Result	Qual	Exceeds	Result	Qual	Exceeds	Result	Qual	Exceeds	Result	Qual	Exceeds	Result	Qual	Exceeds	Result	Qual	Exceeds	Result	Qual	Exceeds
FL-PRO	TRPH	FDEP FL-PRO	mg/kg	460	2700	340	12	U		12	U		12	U		13	U		13	U		13	U		13	U	

Site Name			Lab Sample ID			J2508890014			J2508890015			J2508890016			J2508890017			J2508890018			J2508890019			J2508890020			
Site Location			Sample Number			PCG-15			PCG-16			PCG-17			PCG-18			PCG-19			PCG-20			PCG-11			
Project Manager			Date/ Time Sampled			06/10/2025 15:58			06/10/2025 16:12			06/10/2025 16:22			06/10/2025 16:32			06/10/2025 16:38			06/10/2025 16:51			06/10/2025 17:37			
Checked By			Sample Interval (ft,bls)																								
Analyte	CAS #	Method	Units	RES (1)	COM (2)	LGW (3)	Result	Qual	Exceeds	Result	Qual	Exceeds	Result	Qual	Exceeds	Result	Qual	Exceeds	Result	Qual	Exceeds	Result	Qual	Exceeds	Result	Qual	Exceeds
FL-PRO	TRPH	FDEP FL-PRO	mg/kg	460	2700	340	13	U		13	U		13	U		12	U		13	U		12	U		13	U	

Site Name			Lab Sample ID				J2508890001			J2508890002			J2508890003			J2508890004			J2508890005			J2508890006		
Site Location			Sample Number				PCV-10			PCV-09			PCV-08			PCV-07			PCV-05			PCV-04		
Project Manager			Date/ Time Sampled				06/10/2025 10:18			06/10/2025 10:47			06/10/2025 11:05			06/10/2025 11:35			06/10/2025 12:05			06/10/2025 12:40		
Checked By			Sample Interval (ft,bls)																					
Analyte	CAS #	Method	Units	RES (1)	COM (2)	LGW (3)	Result	Qual	Exceeds	Result	Qual	Exceeds	Result	Qual	Exceeds	Result	Qual	Exceeds	Result	Qual	Exceeds	Result	Qual	Exceeds
ALUMINUM	7429-90-5	EPA 6010	mg/kg	80000	N/A	N/A	4700			2200			4400			1100			520			750		
ARSENIC	7440-38-2	EPA 6010	mg/kg	2.1	12	N/A	1.6	I		1.1	I		1.9	I		0.83	I		2.7	1		2.3	I	1
BARIUM	7440-39-3	EPA 6010	mg/kg	120	130000	1600	14			6.9			13			5.5			2.6			28		
CADMIUM	7440-43-9	EPA 6010	mg/kg	82	1700	7.5	0.31	I		0.16	I		0.23	I		0.096	I		0.061	U		0.78		
CHROMIUM	7440-47-3	EPA 6010	mg/kg	210	470	38	11			5.9			11			3.3			2.5			28		
COPPER	7440-50-8	EPA 6010	mg/kg	150	89000	N/A	16			7.4			27			4.1			1.1	I		53		
LEAD	7439-92-1	EPA 6010	mg/kg	400	1400	N/A	11			4.8			8.2			2.5	I		1.2	I		43		
MERCURY	7439-97-6	EPA 7471	mg/kg	3	17	2.1	0.036			0.0064	I		0.007	I		0.0057	I		0.0026	I		0.098		
NICKEL	7440-02-0	EPA 6010	mg/kg	340	35000	130	1.4	I		0.67	U		2.1	I		0.68	U		0.61	U		5.5		
SELENIUM	7782-49-2	EPA 6010	mg/kg	440	11000	5.2	1.7	U		1.3	U		1.3	U		1.4	U		1.2	U		1.8	U	
SILVER	7440-22-4	EPA 6010	mg/kg	410	8200	17	0.33	U		0.27	U		0.26	U		0.27	U		0.24	U		0.36	U	
ZINC	7440-66-6	EPA 6010	mg/kg	26000	630000	N/A	41	I		16	I		18	I		14	U		12	U		54	I	

Site Name			Lab Sample ID				J2508890007			J2508890008			J2508890009			J2508890010			J2508890011			J2508890012		
Site Location			Sample Number				PCV-03			PCV-02			PCV-01			PCV-06			PCG-12			PCG-13		
Project Manager			Date/ Time Sampled				06/10/2025 13:07			06/10/2025 13:23			06/10/2025 13:45			06/10/2025 14:50			06/10/2025 15:27			06/10/2025 15:41		
Checked By			Sample Interval (ft,bls)																					
Analyte	CAS #	Method	Units	RES (1)	COM (2)	LGW (3)	Result	Qual	Exceeds	Result	Qual	Exceeds	Result	Qual	Exceeds	Result	Qual	Exceeds	Result	Qual	Exceeds	Result	Qual	Exceeds
ALUMINUM	7429-90-5	EPA 6010	mg/kg	80000	N/A	N/A	290			410			400			470			420			680		
ARSENIC	7440-38-2	EPA 6010	mg/kg	2.1	12	N/A	1.1	I		2	I		3.3	1		1.6	I		0.62	U		0.66	U	
BARIUM	7440-39-3	EPA 6010	mg/kg	120	130000	1600	1.8	I		2.3	I		2.8			3.4			2.1	I		6.1		
CADMIUM	7440-43-9	EPA 6010	mg/kg	82	1700	7.5	0.06	U		0.062	U		0.081	I		0.091	I		0.062	U		0.066	U	
CHROMIUM	7440-47-3	EPA 6010	mg/kg	210	470	38	1.4			2.8			2.6			4.2			1			1.8		
COPPER	7440-50-8	EPA 6010	mg/kg	150	89000	N/A	0.75	I		1.2	I		0.62	I		0.92	I		0.73	I		1.2	I	
LEAD	7439-92-1	EPA 6010	mg/kg	400	1400	N/A	0.74	I		1.4	I		0.71	I		1.3	I		4.7			1	I	
MERCURY	7439-97-6	EPA 7471	mg/kg	3	17	2.1	0.0025	I		0.0048	I		0.0023	I		0.0032	I		0.0025	I		0.0042	I	
NICKEL	7440-02-0	EPA 6010	mg/kg	340	35000	130	0.6	U		0.62	U		0.6	U		0.96	I		0.62	U		0.66	U	
SELENIUM	7782-49-2	EPA 6010	mg/kg	440	11000	5.2	1.2	U		1.2	U		1.2	U		1.2	U		1.2	U		1.3	U	
SILVER	7440-22-4	EPA 6010	mg/kg	410	8200	17	0.24	U		0.25	U		0.24	U		0.24	U		0.25	U		0.26	U	
ZINC	7440-66-6	EPA 6010	mg/kg	26000	630000	N/A	12	U		12	U		12	U		12	U		12	U		13	U	

Site Name			Lab Sample ID				J2508890013			J2508890014			J2508890015			J2508890016			J2508890017			J2508890018		
Site Location			Sample Number				PCG-14			PCG-15			PCG-16			PCG-17			PCG-18			PCG-19		
Project Manager			Date/ Time Sampled				06/10/2025 15:53			06/10/2025 15:58			06/10/2025 16:12			06/10/2025 16:22			06/10/2025 16:32			06/10/2025 16:38		
Checked By			Sample Interval (ft,bls)																					
Analyte	CAS #	Method	Units	RES (1)	COM (2)	LGW (3)	Result	Qual	Exceeds	Result	Qual	Exceeds	Result	Qual	Exceeds	Result	Qual	Exceeds	Result	Qual	Exceeds	Result	Qual	Exceeds
ALUMINUM	7429-90-5	EPA 6010	mg/kg	80000	N/A	N/A	970			580			540			670			560			880		
ARSENIC	7440-38-2	EPA 6010	mg/kg	2.1	12	N/A	0.64	U		0.66	U		0.64	U		0.63	U		0.63	U		1	I	
BARIUM	7440-39-3	EPA 6010	mg/kg	120	130000	1600	9.7			5.5			5			4.6			6.4			6		
CADMIUM	7440-43-9	EPA 6010	mg/kg	82	1700	7.5	0.064	U		0.066	U		0.064	U		0.063	U		0.063	U		0.065	U	
CHROMIUM	7440-47-3	EPA 6010	mg/kg	210	470	38	2.5			1.6			1.5			2.1			1.9			2.6		
COPPER	7440-50-8	EPA 6010	mg/kg	150	89000	N/A	1.6	I		0.83	I		0.77	I		0.96	I		1.1	I		1.8	I	
LEAD	7439-92-1	EPA 6010	mg/kg	400	1400	N/A	63			0.73	I		0.64	U		0.82	I		0.63	U		1	I	
MERCURY	7439-97-6	EPA 7471	mg/kg	3	17	2.1	0.0047	I		0.0024	I		0.0032	I		0.0034	I		0.0035	I		0.0052	I	
NICKEL	7440-02-0	EPA 6010	mg/kg	340	35000	130	0.64	U		0.66	U		0.64	U		0.63	U		0.63	U		0.65	U	
SELENIUM	7782-49-2	EPA 6010	mg/kg	440	11000	5.2	1.3	U		1.3	U		1.3	U		1.3	U		1.3	U		1.3	U	
SILVER	7440-22-4	EPA 6010	mg/kg	410	8200	17	0.26	U		0.26	U		0.26	U		0.25	U		0.25	U		0.26	U	
ZINC	7440-66-6	EPA 6010	mg/kg	26000	630000	N/A	13	U		13	U		13	U		13	U		13	U		13	U	

Site Name			Lab Sample ID				J2508890019			J2508890020		
Site Location			Sample Number				PCG-20			PCG-11		
Project Manager			Date/ Time Sampled				06/10/2025 16:51			06/10/2025 17:37		
Checked By			Sample Interval (ft,bls)									
Analyte	CAS #	Method	Units	RES (1)	COM (2)	LGW (3)	Result	Qual	Exceeds	Result	Qual	Exceeds
ALUMINUM	7429-90-5	EPA 6010	mg/kg	80000	N/A	N/A	620			600		
ARSENIC	7440-38-2	EPA 6010	mg/kg	2.1	12	N/A	0.65	U		0.68	U	
BARIUM	7440-39-3	EPA 6010	mg/kg	120	130000	1600	4.8			5.5		
CADMIUM	7440-43-9	EPA 6010	mg/kg	82	1700	7.5	0.065	U		0.068	U	
CHROMIUM	7440-47-3	EPA 6010	mg/kg	210	470	38	2.9			1.8		
COPPER	7440-50-8	EPA 6010	mg/kg	150	89000	N/A	1.3	I		1	I	
LEAD	7439-92-1	EPA 6010	mg/kg	400	1400	N/A	0.69	I		1	I	
MERCURY	7439-97-6	EPA 7471	mg/kg	3	17	2.1	0.0052	I		0.0048	I	
NICKEL	7440-02-0	EPA 6010	mg/kg	340	35000	130	0.65	U		0.68	U	
SELENIUM	7782-49-2	EPA 6010	mg/kg	440	11000	5.2	1.3	U		1.4	U	
SILVER	7440-22-4	EPA 6010	mg/kg	410	8200	17	0.26	U		0.27	U	
ZINC	7440-66-6	EPA 6010	mg/kg	26000	630000	N/A	13	U		14	U	

Site Name			Lab Sample ID				J2508890001			J2508890002			J2508890003			J2508890004			J2508890005			J2508890006		
Site Location			Sample Number				PCV-10			PCV-09			PCV-08			PCV-07			PCV-05			PCV-04		
Project Manager			Date/ Time Sampled				06/10/2025 10:18			06/10/2025 10:47			06/10/2025 11:05			06/10/2025 11:35			06/10/2025 12:05			06/10/2025 12:40		
Checked By			Sample Interval (ft,bls)																					
Analyte	CAS #	Method	Units	RES (1)	COM (2)	LGW (3)	Result	Qual	Exceeds	Result	Qual	Exceeds	Result	Qual	Exceeds	Result	Qual	Exceeds	Result	Qual	Exceeds	Result	Qual	Exceeds
ALDRIN	309-00-2	EPA 8081	mg/kg	0.06	0.3	0.2	0.014	U		0.011	U		0.012	U		0.024	U		0.01	U		0.015	U	
alpha-BHC	319-84-6	EPA 8081	mg/kg	0.1	0.6	0.0003	0.014	U	3	0.011	U	3	0.012	U	3	0.024	U	3	0.01	U	3	0.015	U	3
beta-BHC	319-85-7	EPA 8081	mg/kg	0.5	2.4	0.001	0.014	U	3	0.011	U	3	0.012	U	3	0.024	U	3	0.01	U	3	0.015	U	3
CHLORDANE	57-74-9	EPA 8081	mg/kg	2.8	14	9.6	0.25	U		0.2	U		0.21	U		0.43	U		0.18	U		0.27	U	
delta-BHC	319-86-8	EPA 8081	mg/kg	24	490	0.2	0.014	U		0.011	U		0.012	U		0.024	U		0.01	U		0.015	U	
DIELDRIN	60-57-1	EPA 8081	mg/kg	0.06	0.3	0.002	0.014	U	3	0.011	U	3	0.012	U	3	0.024	U	3	0.01	U	3	0.015	U	3
ENDOSULFAN I	959-98-8	EPA 8081	mg/kg	N/A	N/A	N/A	0.014	U		0.011	U		0.012	U		0.024	U		0.01	U		0.015	U	
ENDOSULFAN II	33213-65-9	EPA 8081	mg/kg	N/A	N/A	N/A	0.014	U		0.011	U		0.012	U		0.024	U		0.01	U		0.015	U	
ENDOSULFAN SULFATE	1031-07-8	EPA 8081	mg/kg	N/A	N/A	N/A	0.014	U		0.011	U		0.012	U		0.024	U		0.01	U		0.015	U	
ENDRIN	72-20-8	EPA 8081	mg/kg	25	510	1	0.028	U		0.023	U		0.023	U		0.048	U		0.02	U		0.03	U	
ENDRIN ALDEHYDE	7421-93-4	EPA 8081	mg/kg	N/A	N/A	N/A	0.014	U		0.011	U		0.012	U		0.024	U		0.01	U		0.015	U	
gamma-BHC (LINDANE)	58-89-9	EPA 8081	mg/kg	0.7	2.5	0.009	0.014	U	3	0.011	U	3	0.012	U	3	0.024	U	3	0.01	U	3	0.015	U	3
HEPTACHLOR	76-44-8	EPA 8081	mg/kg	0.2	1	23	0.014	U		0.011	U		0.012	U		0.024	U		0.01	U		0.015	U	
HEPTACHLOR EPOXIDE	1024-57-3	EPA 8081	mg/kg	0.1	0.5	0.6	0.014	U		0.011	U		0.012	U		0.024	U		0.01	U		0.015	U	
METHOXYCHLOR	72-43-5	EPA 8081	mg/kg	420	8800	160	0.014	U		0.011	U		0.012	U		0.024	U		0.01	U		0.015	U	
p,p-DDD	72-54-8	EPA 8081	mg/kg	4.2	22	5.8	0.014	U		0.011	U		0.012	U		0.024	U		0.01	U		0.015	U	
p,p-DDE	72-55-9	EPA 8081	mg/kg	2.9	15	18	0.014	U		0.011	U		0.012	U		0.024	U		0.01	U		0.015	U	
p,p-DDT	50-29-3	EPA 8081	mg/kg	2.9	15	11	0.028	U		0.023	U		0.023	U		0.048	U		0.02	U		0.03	U	
PCB-1016	12674-11-2	EPA 8082	mg/kg	N/A	N/A	N/A	0.042	U		0.034	U		0.035	U		0.036	U		0.031	U		0.045	U	
PCB-1221	11104-28-2	EPA 8082	mg/kg	N/A	N/A	N/A	0.042	U		0.034	U		0.035	U		0.036	U		0.031	U		0.045	U	
PCB-1232	11141-16-5	EPA 8082	mg/kg	N/A	N/A	N/A	0.042	U		0.034	U		0.035	U		0.036	U		0.031	U		0.045	U	
PCB-1242	53469-21-9	EPA 8082	mg/kg	N/A	N/A	N/A	0.042	U		0.034	U		0.035	U		0.036	U		0.031	U		0.045	U	
PCB-1248	12672-29-6	EPA 8082	mg/kg	N/A	N/A	N/A	0.042	U		0.034	U		0.035	U		0.036	U		0.031	U		0.045	U	
PCB-1254	11097-69-1	EPA 8082	mg/kg	N/A	N/A	N/A	0.042	U		0.034	U		0.035	U		0.036	U		0.031	U		0.045	U	
PCB-1260	11096-82-5	EPA 8082	mg/kg	N/A	N/A	N/A	0.042	U		0.034	U		0.035	U		0.036	U		0.031	U		0.045	U	
TOXAPHENE	8001-35-2	EPA 8081	mg/kg	0.9	4.5	31	0.42	U		0.34	U		0.35	U		0.72	U		0.31	U		0.45	U	
Endosulfan (alpha+beta+sulfate)	115-29-7	Calculation	mg/kg	450	7600	3.8	0.014	U		0.011	U		0.012	U		0.024	U		0.01	U		0.015	U	
Heptachlor (and its epoxide)	D031	Calculation	mg/kg	0.1	0.5	0.6	0.014	U		0.011	U		0.012	U		0.024	U		0.01	U		0.015	U	
PCB, Total	1336-36-3	Calculation	mg/kg	0.5	2.6	17	0.042	U		0.034	U		0.035	U		0.036	U		0.031	U		0.045	U	

Site Name			Lab Sample ID				J2508890007			J2508890008			J2508890009			J2508890010			J2508890011			J2508890012		
Site Location			Sample Number				PCV-03			PCV-02			PCV-01			PCV-06			PCG-12			PCG-13		
Project Manager			Date/ Time Sampled				06/10/2025 13:07			06/10/2025 13:23			06/10/2025 13:45			06/10/2025 14:50			06/10/2025 15:27			06/10/2025 15:41		
Checked By			Sample Interval (ft,bls)																					
Analyte	CAS #	Method	Units	RES (1)	COM (2)	LGW (3)	Result	Qual	Exceeds	Result	Qual	Exceeds	Result	Qual	Exceeds	Result	Qual	Exceeds	Result	Qual	Exceeds	Result	Qual	Exceeds
ALDRIN	309-00-2	EPA 8081	mg/kg	0.06	0.3	0.2	0.01	U		0.011	U		0.001	U		0.011	U		0.022	U		0.022	U	
alpha-BHC	319-84-6	EPA 8081	mg/kg	0.1	0.6	0.0003	0.01	U	3	0.011	U	3	0.001	U	3	0.011	U	3	0.022	U	3	0.022	U	3
beta-BHC	319-85-7	EPA 8081	mg/kg	0.5	2.4	0.001	0.01	U	3	0.011	U	3	0.001	U	3	0.011	U	3	0.022	U	3	0.022	U	3
CHLORDANE	57-74-9	EPA 8081	mg/kg	2.8	14	9.6	0.18	U		0.19	U		0.019	U		0.19	U		0.39	U		0.4	U	
delta-BHC	319-86-8	EPA 8081	mg/kg	24	490	0.2	0.01	U		0.011	U		0.001	U		0.011	U		0.022	U		0.022	U	
DIELDRIN	60-57-1	EPA 8081	mg/kg	0.06	0.3	0.002	0.01	U	3	0.011	U	3	0.001	U		0.011	U	3	0.022	U	3	0.022	U	3
ENDOSULFAN I	959-98-8	EPA 8081	mg/kg	N/A	N/A	N/A	0.01	U		0.011	U		0.001	U		0.011	U		0.022	U		0.022	U	
ENDOSULFAN II	33213-65-9	EPA 8081	mg/kg	N/A	N/A	N/A	0.01	U		0.011	U		0.001	U		0.011	U		0.022	U		0.022	U	
ENDOSULFAN SULFATE	1031-07-8	EPA 8081	mg/kg	N/A	N/A	N/A	0.01	U		0.011	U		0.001	U		0.011	U		0.022	U		0.022	U	
ENDRIN	72-20-8	EPA 8081	mg/kg	25	510	1	0.02	U		0.021	U		0.0021	U		0.021	U		0.044	U		0.044	U	
ENDRIN ALDEHYDE	7421-93-4	EPA 8081	mg/kg	N/A	N/A	N/A	0.01	U		0.011	U		0.001	U		0.011	U		0.022	U		0.022	U	
gamma-BHC (LINDANE)	58-89-9	EPA 8081	mg/kg	0.7	2.5	0.009	0.01	U	3	0.011	U	3	0.001	U		0.011	U	3	0.022	U	3	0.022	U	3
HEPTACHLOR	76-44-8	EPA 8081	mg/kg	0.2	1	23	0.01	U		0.011	U		0.001	U		0.011	U		0.022	U		0.022	U	
HEPTACHLOR EPOXIDE	1024-57-3	EPA 8081	mg/kg	0.1	0.5	0.6	0.01	U		0.011	U		0.001	U		0.011	U		0.022	U		0.022	U	
METHOXYCHLOR	72-43-5	EPA 8081	mg/kg	420	8800	160	0.01	U		0.011	U		0.001	U		0.011	U		0.022	U		0.022	U	
p,p-DDD	72-54-8	EPA 8081	mg/kg	4.2	22	5.8	0.01	U		0.011	U		0.001	U		0.011	U		0.022	U		0.022	U	
p,p-DDE	72-55-9	EPA 8081	mg/kg	2.9	15	18	0.01	U		0.011	U		0.001	U		0.011	U		0.022	U		0.022	U	
p,p-DDT	50-29-3	EPA 8081	mg/kg	2.9	15	11	0.02	U		0.021	U		0.0021	U		0.021	U		0.044	U		0.044	U	
PCB-1016	12674-11-2	EPA 8082	mg/kg	N/A	N/A	N/A	0.031	U		0.032	U		0.031	U		0.032	U		0.033	U		0.033	U	
PCB-1221	11104-28-2	EPA 8082	mg/kg	N/A	N/A	N/A	0.031	U		0.032	U		0.031	U		0.032	U		0.033	U		0.033	U	
PCB-1232	11141-16-5	EPA 8082	mg/kg	N/A	N/A	N/A	0.031	U		0.032	U		0.031	U		0.032	U		0.033	U		0.033	U	
PCB-1242	53469-21-9	EPA 8082	mg/kg	N/A	N/A	N/A	0.031	U		0.032	U		0.031	U		0.032	U		0.033	U		0.033	U	
PCB-1248	12672-29-6	EPA 8082	mg/kg	N/A	N/A	N/A	0.031	U		0.032	U		0.031	U		0.032	U		0.033	U		0.033	U	
PCB-1254	11097-69-1	EPA 8082	mg/kg	N/A	N/A	N/A	0.031	U		0.032	U		0.031	U		0.032	U		0.033	U		0.033	U	
PCB-1260	11096-82-5	EPA 8082	mg/kg	N/A	N/A	N/A	0.031	U		0.032	U		0.031	U		0.032	U		0.033	U		0.033	U	
TOXAPHENE	8001-35-2	EPA 8081	mg/kg	0.9	4.5	31	0.31	U		0.32	U		0.031	U		0.32	U		0.66	U		0.66	U	
Endosulfan (alpha+beta+sulfate)	115-29-7	Calculation	mg/kg	450	7600	3.8	0.01	U		0.011	U		0.001	U		0.011	U		0.022	U		0.022	U	
Heptachlor (and its epoxide)	D031	Calculation	mg/kg	0.1	0.5	0.6	0.01	U		0.011	U		0.001	U		0.011	U		0.022	U		0.022	U	
PCB, Total	1336-36-3	Calculation	mg/kg	0.5	2.6	17	0.031	U		0.032	U		0.031	U		0.032	U		0.033	U		0.033	U	

Site Name			Lab Sample ID				J2508890013			J2508890014			J2508890015			J2508890016			J2508890017			J2508890018		
Site Location			Sample Number				PCG-14			PCG-15			PCG-16			PCG-17			PCG-18			PCG-19		
Project Manager			Date/ Time Sampled				06/10/2025 15:53			06/10/2025 15:58			06/10/2025 16:12			06/10/2025 16:22			06/10/2025 16:32			06/10/2025 16:38		
Checked By			Sample Interval (ft,bls)																					
Analyte	CAS #	Method	Units	RES (1)	COM (2)	LGW (3)	Result	Qual	Exceeds	Result	Qual	Exceeds	Result	Qual	Exceeds	Result	Qual	Exceeds	Result	Qual	Exceeds	Result	Qual	Exceeds
ALDRIN	309-00-2	EPA 8081	mg/kg	0.06	0.3	0.2	0.054	U		0.056	U		0.023	U		0.021	U		0.021	U		0.022	U	
alpha-BHC	319-84-6	EPA 8081	mg/kg	0.1	0.6	0.0003	0.054	U	3	0.056	U	3	0.023	U	3	0.021	U	3	0.021	U	3	0.022	U	3
beta-BHC	319-85-7	EPA 8081	mg/kg	0.5	2.4	0.001	0.054	U	3	0.056	U	3	0.023	U	3	0.021	U	3	0.021	U	3	0.022	U	3
CHLORDANE	57-74-9	EPA 8081	mg/kg	2.8	14	9.6	0.97	U		1	U		0.41	U		0.39	U		0.37	U		0.39	U	
delta-BHC	319-86-8	EPA 8081	mg/kg	24	490	0.2	0.054	U		0.056	U		0.023	U		0.021	U		0.021	U		0.022	U	
DIELDRIN	60-57-1	EPA 8081	mg/kg	0.06	0.3	0.002	0.054	U	3	0.056	U	3	0.023	U	3	0.021	U	3	0.021	U	3	0.022	U	3
ENDOSULFAN I	959-98-8	EPA 8081	mg/kg	N/A	N/A	N/A	0.054	U		0.056	U		0.023	U		0.021	U		0.021	U		0.022	U	
ENDOSULFAN II	33213-65-9	EPA 8081	mg/kg	N/A	N/A	N/A	0.054	U		0.056	U		0.023	U		0.021	U		0.021	U		0.022	U	
ENDOSULFAN SULFATE	1031-07-8	EPA 8081	mg/kg	N/A	N/A	N/A	0.054	U		0.056	U		0.023	U		0.021	U		0.021	U		0.022	U	
ENDRIN	72-20-8	EPA 8081	mg/kg	25	510	1	0.11	U		0.11	U		0.046	U		0.043	U		0.042	U		0.043	U	
ENDRIN ALDEHYDE	7421-93-4	EPA 8081	mg/kg	N/A	N/A	N/A	0.054	U		0.056	U		0.023	U		0.021	U		0.021	U		0.022	U	
gamma-BHC (LINDANE)	58-89-9	EPA 8081	mg/kg	0.7	2.5	0.009	0.054	U	3	0.056	U	3	0.023	U	3	0.021	U	3	0.021	U	3	0.022	U	3
HEPTACHLOR	76-44-8	EPA 8081	mg/kg	0.2	1	23	0.054	U		0.056	U		0.023	U		0.021	U		0.021	U		0.022	U	
HEPTACHLOR EPOXIDE	1024-57-3	EPA 8081	mg/kg	0.1	0.5	0.6	0.054	U		0.056	U		0.023	U		0.021	U		0.021	U		0.022	U	
METHOXYCHLOR	72-43-5	EPA 8081	mg/kg	420	8800	160	0.054	U		0.056	U		0.023	U		0.021	U		0.021	U		0.022	U	
p,p-DDD	72-54-8	EPA 8081	mg/kg	4.2	22	5.8	0.054	U		0.056	U		0.023	U		0.021	U		0.021	U		0.022	U	
p,p-DDE	72-55-9	EPA 8081	mg/kg	2.9	15	18	0.054	U		0.056	U		0.023	U		0.021	U		0.021	U		0.022	U	
p,p-DDT	50-29-3	EPA 8081	mg/kg	2.9	15	11	0.11	U		0.11	U		0.046	U		0.043	U		0.042	U		0.043	U	
PCB-1016	12674-11-2	EPA 8082	mg/kg	N/A	N/A	N/A	0.032	U		0.034	U		0.034	U		0.032	U		0.031	U		0.033	U	
PCB-1221	11104-28-2	EPA 8082	mg/kg	N/A	N/A	N/A	0.032	U		0.034	U		0.034	U		0.032	U		0.031	U		0.033	U	
PCB-1232	11141-16-5	EPA 8082	mg/kg	N/A	N/A	N/A	0.032	U		0.034	U		0.034	U		0.032	U		0.031	U		0.033	U	
PCB-1242	53469-21-9	EPA 8082	mg/kg	N/A	N/A	N/A	0.032	U		0.034	U		0.034	U		0.032	U		0.031	U		0.033	U	
PCB-1248	12672-29-6	EPA 8082	mg/kg	N/A	N/A	N/A	0.032	U		0.034	U		0.034	U		0.032	U		0.031	U		0.033	U	
PCB-1254	11097-69-1	EPA 8082	mg/kg	N/A	N/A	N/A	0.032	U		0.034	U		0.034	U		0.032	U		0.031	U		0.033	U	
PCB-1260	11096-82-5	EPA 8082	mg/kg	N/A	N/A	N/A	0.032	U		0.034	U		0.034	U		0.032	U		0.031	U		0.033	U	
TOXAPHENE	8001-35-2	EPA 8081	mg/kg	0.9	4.5	31	1.6	U	1	1.7	U	1	0.69	U		0.64	U		0.62	U		0.65	U	
Endosulfan (alpha+beta+sulfate)	115-29-7	Calculation	mg/kg	450	7600	3.8	0.054	U		0.056	U		0.023	U		0.021	U		0.021	U		0.022	U	
Heptachlor (and its epoxide)	D031	Calculation	mg/kg	0.1	0.5	0.6	0.054	U		0.056	U		0.023	U		0.021	U		0.021	U		0.022	U	
PCB, Total	1336-36-3	Calculation	mg/kg	0.5	2.6	17	0.032	U		0.034	U		0.034	U		0.032	U		0.031	U		0.033	U	

Site Name			Lab Sample ID				J2508890019			J2508890020		
Site Location			Sample Number				PCG-20			PCG-11		
Project Manager			Date/ Time Sampled				06/10/2025 16:51			06/10/2025 17:37		
Checked By			Sample Interval (ft,bls)									
Analyte	CAS #	Method	Units	RES (1)	COM (2)	LGW (3)	Result	Qual	Exceeds	Result	Qual	Exceeds
ALDRIN	309-00-2	EPA 8081	mg/kg	0.06	0.3	0.2	0.021	U		0.055	U	
alpha-BHC	319-84-6	EPA 8081	mg/kg	0.1	0.6	0.0003	0.021	U	3	0.055	U	3
beta-BHC	319-85-7	EPA 8081	mg/kg	0.5	2.4	0.001	0.021	U	3	0.055	U	3
CHLORDANE	57-74-9	EPA 8081	mg/kg	2.8	14	9.6	0.38	U		1	U	
delta-BHC	319-86-8	EPA 8081	mg/kg	24	490	0.2	0.021	U		0.055	U	
DIELDRIN	60-57-1	EPA 8081	mg/kg	0.06	0.3	0.002	0.021	U	3	0.055	U	3
ENDOSULFAN I	959-98-8	EPA 8081	mg/kg	N/A	N/A	N/A	0.021	U		0.055	U	
ENDOSULFAN II	33213-65-9	EPA 8081	mg/kg	N/A	N/A	N/A	0.021	U		0.055	U	
ENDOSULFAN SULFATE	1031-07-8	EPA 8081	mg/kg	N/A	N/A	N/A	0.021	U		0.055	U	
ENDRIN	72-20-8	EPA 8081	mg/kg	25	510	1	0.042	U		0.11	U	
ENDRIN ALDEHYDE	7421-93-4	EPA 8081	mg/kg	N/A	N/A	N/A	0.021	U		0.055	U	
gamma-BHC (LINDANE)	58-89-9	EPA 8081	mg/kg	0.7	2.5	0.009	0.021	U	3	0.055	U	3
HEPTACHLOR	76-44-8	EPA 8081	mg/kg	0.2	1	23	0.021	U		0.055	U	
HEPTACHLOR EPOXIDE	1024-57-3	EPA 8081	mg/kg	0.1	0.5	0.6	0.021	U		0.055	U	
METHOXYCHLOR	72-43-5	EPA 8081	mg/kg	420	8800	160	0.021	U		0.055	U	
p,p-DDD	72-54-8	EPA 8081	mg/kg	4.2	22	5.8	0.021	U		0.055	U	
p,p-DDE	72-55-9	EPA 8081	mg/kg	2.9	15	18	0.021	U		0.055	U	
p,p-DDT	50-29-3	EPA 8081	mg/kg	2.9	15	11	0.042	U		0.11	U	
PCB-1016	12674-11-2	EPA 8082	mg/kg	N/A	N/A	N/A	0.031	U		0.033	U	
PCB-1221	11104-28-2	EPA 8082	mg/kg	N/A	N/A	N/A	0.031	U		0.033	U	
PCB-1232	11141-16-5	EPA 8082	mg/kg	N/A	N/A	N/A	0.031	U		0.033	U	
PCB-1242	53469-21-9	EPA 8082	mg/kg	N/A	N/A	N/A	0.031	U		0.033	U	
PCB-1248	12672-29-6	EPA 8082	mg/kg	N/A	N/A	N/A	0.031	U		0.033	U	
PCB-1254	11097-69-1	EPA 8082	mg/kg	N/A	N/A	N/A	0.031	U		0.033	U	
PCB-1260	11096-82-5	EPA 8082	mg/kg	N/A	N/A	N/A	0.031	U		0.033	U	
TOXAPHENE	8001-35-2	EPA 8081	mg/kg	0.9	4.5	31	0.63	U		1.7	U	1
Endosulfan (alpha+beta+sulfate)	115-29-7	Calculation	mg/kg	450	7600	3.8	0.021	U		0.055	U	
Heptachlor (and its epoxide)	D031	Calculation	mg/kg	0.1	0.5	0.6	0.021	U		0.055	U	
PCB, Total	1336-36-3	Calculation	mg/kg	0.5	2.6	17	0.031	U		0.033	U	

APPENDIX B

Core Photographs and Logs



Cummins Cederberg

**Phillippi Creek
Maintenance Dredging
Feasibility Study Project
Upstream Extension Area
Sarasota County, Florida**

June 2025

PCV-25-01

Top Elev. (ft MLW): -2.1
Bottom Elev. (ft MLW): -5.7

Notes:

- Photo Mosaic Image
- Photo Scale in Feet



Athena Technologies, Inc.
1293 Graham Farm Road
McClellanville, SC 29458
www.athenatechnologies.com
(843) 887-3800

DRILLING LOG		CLIENT Cummins Cederberg, Inc.		PROJECT OWNER FI West Coast Inland Navigation District		SHEET 1 OF 1 SHEETS	
1. PROJECT Phillippi Creek Maintenance Dredging Feasibility Project Upstream Extension Area, Sarasota County, FL				9. SIZE AND TYPE OF BIT 3.0 In.			
2. BORING DESIGNATION PCV-25-01		LOCATION COORDINATES X = 484,700 Y = 1,069,174		10. COORDINATE SYSTEM/DATUM Florida State Plane West		HORIZONTAL NAD 1983	VERTICAL MLW
3. DRILLING AGENCY Athena Technologies, Inc.		CONTRACTOR FILE NO.		11. MANUFACTURER'S DESIGNATION OF DRILL ☐ AUTO HAMMER ☐ MANUAL HAMMER			
4. NAME OF DRILLER N. Wicker				12. TOTAL SAMPLES		DISTURBED 2	UNDISTURBED (UD)
5. DIRECTION OF BORING ☒ VERTICAL ☐ INCLINED				DEG. FROM VERTICAL		BEARING	
6. THICKNESS OF OVERBURDEN 0.0 Ft.				13. TOTAL NUMBER CORE BOXES			
7. DEPTH DRILLED INTO ROCK 0.0 Ft.				14. WATER DEPTH 4.0 Ft.			
8. TOTAL DEPTH OF BORING 4.3 Ft.				15. DATE BORING		STARTED 06-10-25 13:44	COMPLETED 06-10-25
				16. ELEVATION TOP OF BORING -2.1 Ft.			
				17. TOTAL RECOVERY FOR BORING 3.6 Ft.			
				18. SIGNATURE AND TITLE OF INSPECTOR A. Freeze			
ELEV. (ft) -2.1	SCALE (ft) 0.0	LEGEND	CLASSIFICATION OF MATERIALS Depths and elevations based on measured values	% REC.	BOX OR SAMPLE	REMARKS	
			Poorly graded SAND; mostly medium quartz sand, few medium sand to fine gravel-sized phosphate, trace medium sand to fine gravel-sized shells, trace coarse quartz sand, loose, subround, gray (2.5Y-5/1), (SP).		S-1	Sample #S-1, Depth = 2.3' Mean (mm): 0.55, Phi Sorting: 1.14 Fines (#230) - 1.39 (SP)	
-4.4	2.3		Poorly graded SAND; mostly medium quartz sand, few medium sand to coarse gravel-sized shells, trace medium sand to fine gravel-sized phosphate, trace inorganic silt in matrix, loose, subround, dark grayish brown (2.5Y-4/2), (SP).		S-2	Sample #S-2, Depth = 2.9' Mean (mm): 0.74, Phi Sorting: 1.32 Fines (#230) - 1.27 (SP)	
-5.7	3.6		End of Boring				

FLORIDA DEP ROSS CUMMINS CEDERBERG, PHILLIPPI CREEK EXTENSION, FL (2025).GPJ FL DEP ROSS.GDT 8/12/25



Cummins Cederberg

**Phillippi Creek
Maintenance Dredging
Feasibility Study Project
Upstream Extension Area
Sarasota County, Florida**

June 2025

PCV-25-02

Top Elev. (ft MLW): -0.2
Bottom Elev. (ft MLW): -4.5

Notes:

- Photo Mosaic Image
- Photo Scale in Feet

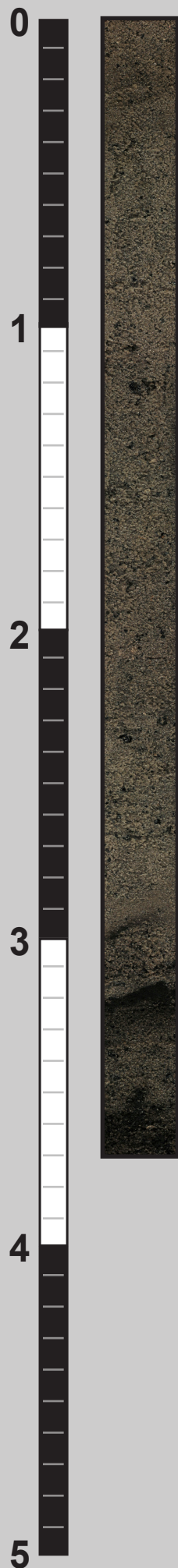


Athena Technologies, Inc.
1293 Graham Farm Road
McClellanville, SC 29458
www.athenatechnologies.com
(843) 887-3800

Boring Designation PCV-25-02

DRILLING LOG		CLIENT Cummins Cederberg, Inc.		PROJECT OWNER FI West Coast Inland Navigation District		SHEET 1 OF 1 SHEETS	
1. PROJECT Phillippi Creek Maintenance Dredging Feasibility Project Upstream Extension Area, Sarasota County, FL				9. SIZE AND TYPE OF BIT 3.0 In.			
2. BORING DESIGNATION PCV-25-02		LOCATION COORDINATES X = 485,989 Y = 1,069,940		10. COORDINATE SYSTEM/DATUM Florida State Plane West		HORIZONTAL NAD 1983	
3. DRILLING AGENCY Athena Technologies, Inc.		CONTRACTOR FILE NO.		11. MANUFACTURER'S DESIGNATION OF DRILL		☐ AUTO HAMMER ☐ MANUAL HAMMER	
4. NAME OF DRILLER N. Wicker				12. TOTAL SAMPLES		DISTURBED 3	
5. DIRECTION OF BORING ☒ VERTICAL ☐ INCLINED				DEG. FROM VERTICAL		BEARING	
6. THICKNESS OF OVERBURDEN 0.0 Ft.				13. TOTAL NUMBER CORE BOXES			
7. DEPTH DRILLED INTO ROCK 0.0 Ft.				14. WATER DEPTH 2.4 Ft.			
8. TOTAL DEPTH OF BORING 5.2 Ft.				15. DATE BORING		STARTED 06-10-25 12:23 COMPLETED 06-10-25	
				16. ELEVATION TOP OF BORING -0.2 Ft.			
				17. TOTAL RECOVERY FOR BORING 4.3 Ft.			
				18. SIGNATURE AND TITLE OF INSPECTOR A. Freeze			
ELEV. (ft)	SCALE (ft)	LEGEND	CLASSIFICATION OF MATERIALS Depths and elevations based on measured values	% REC.	BOX OR SAMPLE	REMARKS	
-0.2	0.0						
-2.2	2.0		Poorly graded SAND; mostly medium quartz sand, few coarse quartz sand, trace fine to coarse sand-sized phosphate & shells, loose, subround, grayish brown (2.5Y-5/2) grades to, gray (2.5Y-5/1), (SP).		S-1	Sample #S-1, Depth = 2.0' Mean (mm): 0.51, Phi Sorting: 0.86 Fines (#230) - 1.12 (SP)	
-3.2	3.0		Poorly graded SAND; mostly medium quartz sand, trace organic/inorganic silt, trace fine sand to fine gravel-sized phosphate & shells, trace coarse quartz sand, loose, subround, bioturbated, dark grayish brown (2.5Y-4/2) mottled with, very dark gray (10YR-3/1), (SP).		S-2	Sample #S-2, Depth = 3.0' Mean (mm): 0.36, Phi Sorting: 0.83 Fines (#230) - 1.84 (SP)	
-4.5	4.3		Poorly graded SAND; mostly medium quartz sand, few fine to coarse sand-sized phosphate, trace organic/inorganic silt in burrows, trace coarse quartz sand, trace fine sand to fine gravel-sized shells, gravel-sized sandstone clast at top, loose, subround, grayish brown (2.5Y-5/2), (SP).		S-3	Sample #S-3, Depth = 4.3' Mean (mm): 0.57, Phi Sorting: 0.90 Fines (#230) - 1.26 (SP)	
			End of Boring				

FLORIDA DEP ROSS CUMMINS CEDERBERG, PHILLIPPI CREEK EXTENSION, FL (2025).GPJ FL DEP ROSS.GDT 8/12/25



Cummins Cederberg

**Phillippi Creek
Maintenance Dredging
Feasibility Study Project
Upstream Extension Area
Sarasota County, Florida**

June 2025

PCV-25-03

Top Elev. (ft MLW): -1.8
Bottom Elev. (ft MLW): -5.5

Notes:

- Photo Mosaic Image
- Photo Scale in Feet



Athena Technologies, Inc.
1293 Graham Farm Road
McClellanville, SC 29458
www.athenatechnologies.com
(843) 887-3800

DRILLING LOG		CLIENT Cummins Cederberg, Inc.		PROJECT OWNER FI West Coast Inland Navigation District		SHEET 1 OF 1 SHEETS	
1. PROJECT Phillippi Creek Maintenance Dredging Feasibility Project Upstream Extension Area, Sarasota County, FL				9. SIZE AND TYPE OF BIT 3.0 In.			
2. BORING DESIGNATION PCV-25-03		LOCATION COORDINATES X = 486,493 Y = 1,071,835		10. COORDINATE SYSTEM/DATUM Florida State Plane West		HORIZONTAL NAD 1983 VERTICAL MLW	
3. DRILLING AGENCY Athena Technologies, Inc.		CONTRACTOR FILE NO.		11. MANUFACTURER'S DESIGNATION OF DRILL ☐ AUTO HAMMER ☐ MANUAL HAMMER			
4. NAME OF DRILLER N. Wicker				12. TOTAL SAMPLES		DISTURBED 2 UNDISTURBED (UD)	
5. DIRECTION OF BORING ☒ VERTICAL ☐ INCLINED				DEG. FROM VERTICAL		BEARING	
6. THICKNESS OF OVERBURDEN 0.0 Ft.				13. TOTAL NUMBER CORE BOXES			
7. DEPTH DRILLED INTO ROCK 0.0 Ft.				14. WATER DEPTH 4.0 Ft.			
8. TOTAL DEPTH OF BORING 4.5 Ft.				15. DATE BORING		STARTED 06-10-25 12:07 COMPLETED 06-10-25	
				16. ELEVATION TOP OF BORING -1.8 Ft.		17. TOTAL RECOVERY FOR BORING 3.7 Ft.	
				18. SIGNATURE AND TITLE OF INSPECTOR A. Freeze			

ELEV. (ft)	SCALE (ft)	LEGEND	CLASSIFICATION OF MATERIALS Depths and elevations based on measured values	% REC.	BOX OR SAMPLE	REMARKS
-1.8	0.0					
-5.0	3.2		Poorly graded SAND; mostly medium quartz sand, few fine sand to fine gravel-sized phosphate, few coarse quartz sand (primarily in layer at base), trace fine to coarse sand-sized shells, loose, subround, dark grayish brown (2.5Y-4/2) grades to, gray (2.5Y-5/1), (SP).		S-1	Sample #S-1, Depth = 3.2' Mean (mm): 0.55, Phi Sorting: 1.28 Fines (#230) - 0.92 (SP)
-5.5	3.7		Poorly graded SAND with silt; mostly medium quartz sand, few organic/inorganic silt in matrix & bedding, few fine to coarse sand-sized phosphate & shells, trace coarse quartz sand, loose, subround, very dark brown (10YR-2/2) and, dark grayish brown (2.5Y-4/2), (SP-SM).			
			End of Boring			

FLORIDA DEP ROSS CUMMINS CEDERBERG, PHILLIPPI CREEK EXTENSION, FL (2025).GPJ FL DEP ROSS.GDT 8/12/25



Cummins Cederberg

**Phillippi Creek
Maintenance Dredging
Feasibility Study Project
Upstream Extension Area
Sarasota County, Florida**

June 2025

PCV-25-04

Top Elev. (ft MLW): -3.0
Bottom Elev. (ft MLW): -6.2

Notes:

- Photo Mosaic Image
- Photo Scale in Feet



Athena Technologies, Inc.
1293 Graham Farm Road
McClellanville, SC 29458
www.athenatechnologies.com
(843) 887-3800

DRILLING LOG		CLIENT Cummins Cederberg, Inc.		PROJECT OWNER FI West Coast Inland Navigation District		SHEET 1 OF 1 SHEETS	
1. PROJECT Phillippi Creek Maintenance Dredging Feasibility Project Upstream Extension Area, Sarasota County, FL				9. SIZE AND TYPE OF BIT 3.0 In.			
2. BORING DESIGNATION PCV-25-04		LOCATION COORDINATES X = 486,606 Y = 1,073,344		10. COORDINATE SYSTEM/DATUM Florida State Plane West		HORIZONTAL NAD 1983 VERTICAL MLW	
3. DRILLING AGENCY Athena Technologies, Inc.		CONTRACTOR FILE NO.		11. MANUFACTURER'S DESIGNATION OF DRILL ☐ AUTO HAMMER ☐ MANUAL HAMMER			
4. NAME OF DRILLER N. Wicker				12. TOTAL SAMPLES 2		DISTURBED UNDISTURBED (UD)	
5. DIRECTION OF BORING ☒ VERTICAL ☐ INCLINED				13. TOTAL NUMBER CORE BOXES		14. WATER DEPTH 5.5 Ft.	
6. THICKNESS OF OVERBURDEN 0.0 Ft.		DEG. FROM VERTICAL		15. DATE BORING 06-10-25 11:40		STARTED COMPLETED 06-10-25	
7. DEPTH DRILLED INTO ROCK 0.0 Ft.		BEARING		16. ELEVATION TOP OF BORING -3.0 Ft.		17. TOTAL RECOVERY FOR BORING 3.2 Ft.	
8. TOTAL DEPTH OF BORING 3.8 Ft.				18. SIGNATURE AND TITLE OF INSPECTOR A. Freeze			
ELEV. (ft)	SCALE (ft)	LEGEND	CLASSIFICATION OF MATERIALS Depths and elevations based on measured values	% REC.	BOX OR SAMPLE	REMARKS	
-3.0	0.0						
-4.5	1.5		Poorly graded SAND; mostly medium quartz sand, few fine sand to coarse gravel-sized phosphate, few gravel-sized organic material/debris, few coarse quartz sand, trace fine sand to fine gravel-sized shells, loose, subround, dark grayish brown (2.5Y-4/2) gr, gray (2.5Y-5/1), (SP).		S-1	Sample #S-1, Depth = 1.5' Mean (mm): 0.59, Phi Sorting: 1.23 Fines (#230) - 1.14 (SP)	
-5.5	2.5		Poorly graded SAND; mostly fine to medium quartz sand, trace fine to coarse sand-sized phosphate, trace coarse quartz sand, gravel-sized phosphate at 1.8', loose, subround, gray (2.5Y-6/1), (SP).		S-2	Sample #S-2, Depth = 2.0' Mean (mm): 0.61, Phi Sorting: 1.47 Fines (#230) - 0.88 (SP)	
-6.2	3.2		Silty SAND; mostly fine quartz sand, little organic/inorganic silt in matrix & burrows, trace organic material/debris, loose, bioturbated, black (2.5Y-2.5/1) mottled with, dark gray (2.5Y-4/1), (SM).				
			End of Boring				

FLORIDA DEP ROSS CUMMINS CEDERBERG, PHILLIPPI CREEK EXTENSION, FL (2025).GPJ FL DEP ROSS.GDT 8/12/25



Cummins Cederberg

**Phillippi Creek
Maintenance Dredging
Feasibility Study Project
Upstream Extension Area
Sarasota County, Florida**

June 2025

PCV-25-05

Top Elev. (ft MLW): -3.0
Bottom Elev. (ft MLW): -7.1

Notes:

- Photo Mosaic Image
- Photo Scale in Feet



Athena Technologies, Inc.
1293 Graham Farm Road
McClellanville, SC 29458
www.athenatechnologies.com
(843) 887-3800

DRILLING LOG		CLIENT Cummins Cederberg, Inc.		PROJECT OWNER FI West Coast Inland Navigation District		SHEET 1 OF 1 SHEETS	
1. PROJECT Phillippi Creek Maintenance Dredging Feasibility Project Upstream Extension Area, Sarasota County, FL				9. SIZE AND TYPE OF BIT 3.0 In.			
2. BORING DESIGNATION PCV-25-05		LOCATION COORDINATES X = 486,678 Y = 1,074,615		10. COORDINATE SYSTEM/DATUM Florida State Plane West		HORIZONTAL NAD 1983	
3. DRILLING AGENCY Athena Technologies, Inc.		CONTRACTOR FILE NO.		11. MANUFACTURER'S DESIGNATION OF DRILL		☐ AUTO HAMMER ☐ MANUAL HAMMER	
4. NAME OF DRILLER N. Wicker				12. TOTAL SAMPLES		DISTURBED 2	
5. DIRECTION OF BORING ☒ VERTICAL ☐ INCLINED				13. TOTAL NUMBER CORE BOXES		14. WATER DEPTH 5.5 Ft.	
6. THICKNESS OF OVERBURDEN 0.0 Ft.				15. DATE BORING		STARTED 06-10-25 11:03	
7. DEPTH DRILLED INTO ROCK 0.0 Ft.				16. ELEVATION TOP OF BORING -3.0 Ft.		COMPLETED 06-10-25	
8. TOTAL DEPTH OF BORING 5.0 Ft.				17. TOTAL RECOVERY FOR BORING 4.1 Ft.		18. SIGNATURE AND TITLE OF INSPECTOR A. Freeze	
ELEV. (ft)	SCALE (ft)	LEGEND	CLASSIFICATION OF MATERIALS Depths and elevations based on measured values	% REC.	BOX OR SAMPLE	REMARKS	
-3.0	0.0						
-3.7	0.7		Poorly graded SAND; mostly fine to medium quartz sand, trace fine to coarse sand-sized phosphate & shells, trace organic/inorganic silt in matrix, trace organic material/debris, loose, subround, dark grayish brown (2.5Y-4/2), (SP).		S-1	Sample #S-1, Depth = 0.7' Mean (mm): 0.49, Phi Sorting: 0.78 Fines (#230) - 1.23 (SP)	
-5.6	2.6		Poorly graded SAND; mostly medium quartz sand, few fine to coarse sand-sized phosphate, trace coarse quartz sand, trace fine sand to fine gravel-sized shells, gravel-sized sandstone clast at 1.8', grain size decreases below 2.0', loose, subround, gray (2.5Y-5/1), (SP).		S-2	Sample #S-2, Depth = 2.0' Mean (mm): 0.57, Phi Sorting: 0.94 Fines (#230) - 0.66 (SP)	
-5.9	2.9		Poorly graded SAND with silt; mostly fine quartz sand, few organic/inorganic silt in bedding, trace organic material/debris, loose, subround, black (10-YR-2/1) and, dark gray (2.5Y-4/1), (SP-SM).				
-6.7	3.7		Poorly graded SAND; mostly medium quartz sand, trace fine to coarse sand-sized phosphate & shells, trace coarse quartz sand, gravel-sized sandstone clast at 3.5', loose, subround, grayish brown (10YR-5/2), (SP).				
-7.1	4.1		Silty SAND; mostly fine quartz sand, little organic/inorganic silt in matrix & bedding, gravel-sized phosphate at 4.0', loose, bioturbated, black (10YR-2/1) mottled with, very dark grayish brown (2.5Y-3/2), (SM).				
			End of Boring				

FLORIDA DEP ROSS CUMMINS CEDERBERG, PHILLIPPI CREEK EXTENSION, FL (2025).GPJ FL DEP ROSS.GDT 8/12/25



Cummins Cederberg

**Phillippi Creek
Maintenance Dredging
Feasibility Study Project
Upstream Extension Area
Sarasota County, Florida**

June 2025

PCV-25-06

Top Elev. (ft MLW): -3.3
Bottom Elev. (ft MLW): -6.5

Notes:

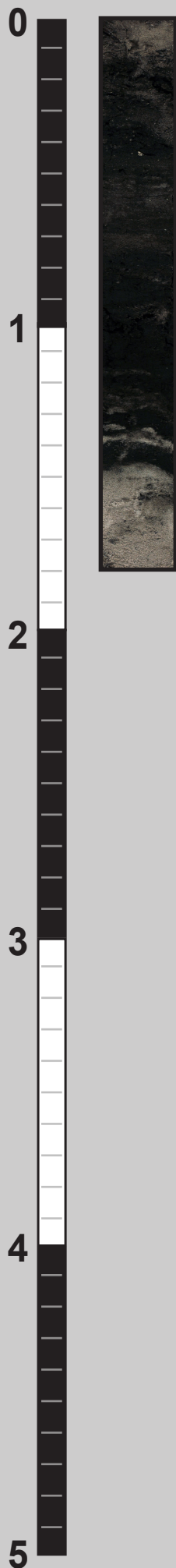
- Photo Mosaic Image
- Photo Scale in Feet



Athena Technologies, Inc.
1293 Graham Farm Road
McClellanville, SC 29458
www.athenatechnologies.com
(843) 887-3800

DRILLING LOG		CLIENT Cummins Cederberg, Inc.		PROJECT OWNER FI West Coast Inland Navigation District		SHEET 1 OF 1 SHEETS	
1. PROJECT Phillippi Creek Maintenance Dredging Feasibility Project Upstream Extension Area, Sarasota County, FL				9. SIZE AND TYPE OF BIT 3.0 In.			
2. BORING DESIGNATION PCV-25-06		LOCATION COORDINATES X = 487,269 Y = 1,077,073		10. COORDINATE SYSTEM/DATUM Florida State Plane West		HORIZONTAL NAD 1983	
3. DRILLING AGENCY Athena Technologies, Inc.		CONTRACTOR FILE NO.		11. MANUFACTURER'S DESIGNATION OF DRILL		☐ AUTO HAMMER ☐ MANUAL HAMMER	
4. NAME OF DRILLER N. Wicker				12. TOTAL SAMPLES		DISTURBED 2	
5. DIRECTION OF BORING ☒ VERTICAL ☐ INCLINED				13. TOTAL NUMBER CORE BOXES		14. WATER DEPTH 5.5 Ft.	
6. THICKNESS OF OVERBURDEN 0.0 Ft.				15. DATE BORING		STARTED 06-10-25 14:50	
7. DEPTH DRILLED INTO ROCK 0.0 Ft.				16. ELEVATION TOP OF BORING		COMPLETED 06-10-25	
8. TOTAL DEPTH OF BORING 3.9 Ft.				17. TOTAL RECOVERY FOR BORING 3.2 Ft.		18. SIGNATURE AND TITLE OF INSPECTOR A. Freeze	
ELEV. (ft.)	SCALE (ft.)	LEGEND	CLASSIFICATION OF MATERIALS Depths and elevations based on measured values	% REC.	BOX OR SAMPLE	REMARKS	
-3.3	0.0						
			Poorly graded SAND; mostly fine to medium quartz sand, trace fine sand to fine gravel-sized shells, trace fine to coarse sand-sized phosphate, trace organic/inorganic silt in bedding between 1.2-1.6', loose, subround, gray (2.5Y-5/1) grades to, gray (2.5Y-6/1), (SP).		S-1	Sample #S-1, Depth = 1.7' Mean (mm): 0.36, Phi Sorting: 1.14 Fines (#230) - 1.03 (SP)	
-5.5	2.2		PEAT; organic material/debris (e.g., wood, leaves, sticks), black (10YR-2/1), (PT).				
-5.9	2.6		Poorly graded SAND; mostly medium quartz sand, trace fine to coarse sand-sized phosphate, gravel-sized phosphate at base, loose, subround, gray (2.5Y-5/1), (SP).				
-6.1	2.8		Silty SAND; mostly fine quartz sand, little organic/inorganic silt, loose, black (10YR-2/1), (SM).				
-6.3	3.0		Poorly graded SAND; mostly medium quartz sand, few sand-sized shells, loose, gray (2.5Y-5/1), (SP).				
-6.4	3.1		Poorly graded SAND with silt; mostly medium to coarse quartz sand, few organic material/debris, few organic/inorganic silt, loose, black (2.5Y-2.5/1), (SP-SM).				
-6.5	3.2		End of Boring				

FLORIDA DEP ROSS CUMMINS CEDERBERG, PHILLIPPI CREEK EXTENSION, FL (2025).GPJ FL DEP ROSS.GDT 8/12/25



Cummins Cederberg

**Phillippi Creek
Maintenance Dredging
Feasibility Study Project
Upstream Extension Area
Sarasota County, Florida**

June 2025

PCV-25-07

Top Elev. (ft MLW): -3.3
Bottom Elev. (ft MLW): -5.1

Notes:

- Photo Mosaic Image
- Photo Scale in Feet



Athena Technologies, Inc.
1293 Graham Farm Road
McClellanville, SC 29458
www.athenatechnologies.com
(843) 887-3800

DRILLING LOG		CLIENT Cummins Cederberg, Inc.		PROJECT OWNER FI West Coast Inland Navigation District		SHEET 1 OF 1 SHEETS	
1. PROJECT Phillippi Creek Maintenance Dredging Feasibility Project Upstream Extension Area, Sarasota County, FL				9. SIZE AND TYPE OF BIT 3.0 In.			
2. BORING DESIGNATION PCV-25-07		LOCATION COORDINATES X = 487,162 Y = 1,077,457		10. COORDINATE SYSTEM/DATUM Florida State Plane West		HORIZONTAL NAD 1983	VERTICAL MLW
3. DRILLING AGENCY Athena Technologies, Inc.		CONTRACTOR FILE NO.		11. MANUFACTURER'S DESIGNATION OF DRILL ☐ AUTO HAMMER ☐ MANUAL HAMMER			
4. NAME OF DRILLER N. Wicker				12. TOTAL SAMPLES		DISTURBED 3	UNDISTURBED (UD)
5. DIRECTION OF BORING ☒ VERTICAL ☐ INCLINED				DEG. FROM VERTICAL		BEARING	
6. THICKNESS OF OVERBURDEN 0.0 Ft.				13. TOTAL NUMBER CORE BOXES			
7. DEPTH DRILLED INTO ROCK 0.0 Ft.				14. WATER DEPTH 5.9 Ft.			
8. TOTAL DEPTH OF BORING 2.3 Ft.				15. DATE BORING		STARTED 06-10-25 10:35	COMPLETED 06-10-25
				16. ELEVATION TOP OF BORING -3.3 Ft.		17. TOTAL RECOVERY FOR BORING 1.8 Ft.	
				18. SIGNATURE AND TITLE OF INSPECTOR A. Freeze			
ELEV. (ft)	SCALE (ft)	LEGEND	CLASSIFICATION OF MATERIALS Depths and elevations based on measured values	% REC.	BOX OR SAMPLE	REMARKS	
-3.3	0.0						
-3.5	0.2		Poorly graded SAND with silt; mostly fine quartz sand, few organic silt, few organic debris/material, loose, subround, grayish brown (10YR-5/2), (SP-SM).				
			Poorly graded SAND with silt; mostly fine quartz sand, few to little organic/inorganic silt, trace fine to coarse sand-sized shells to 0.8', loose, bioturbated, black (10YR-2/1) and, dark gray (2.5Y-4/1), (SP-SM).		S-1	Sample #S-1, Depth = 1.5' Mean (mm): 0.20, Phi Sorting: 1.01 Fines (#230) - 6.36 (SP-SM)	
-4.8	1.5						
-5.1	1.8		Poorly graded SAND; mostly fine quartz sand, loose, subround, light gray (10YR-7/1), (SP).		S-2	Sample #S-2, Depth = 1.8' Mean (mm): 0.21, Phi Sorting: 0.54 Fines (#230) - 2.73 (SP)	
			End of Boring				

FLORIDA DEP ROSS CUMMINS CEDERBERG, PHILLIPPI CREEK EXTENSION, FL (2025).GPJ FL DEP ROSS.GDT 8/12/25



Cummins Cederberg

**Phillippi Creek
Maintenance Dredging
Feasibility Study Project
Upstream Extension Area
Sarasota County, Florida**

June 2025

PCV-25-08

Top Elev. (ft MLW): -1.0
Bottom Elev. (ft MLW): -5.3

Notes:

- Photo Mosaic Image
- Photo Scale in Feet

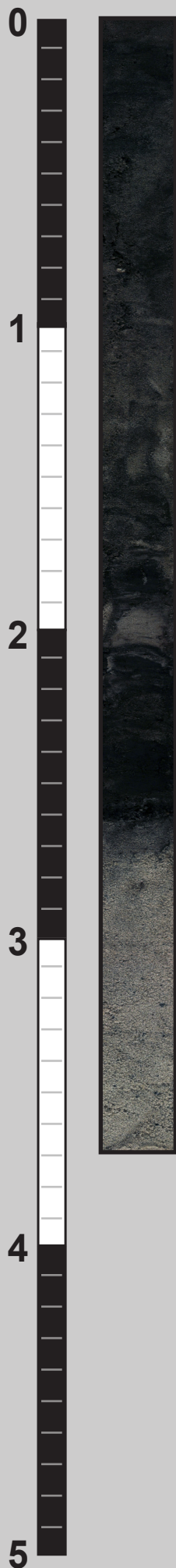


Athena Technologies, Inc.
1293 Graham Farm Road
McClellanville, SC 29458
www.athenatechnologies.com
(843) 887-3800

Boring Designation PCV-25-08

DRILLING LOG		CLIENT Cummins Cederberg, Inc.		PROJECT OWNER FI West Coast Inland Navigation District		SHEET 1 OF 1 SHEETS	
1. PROJECT Phillippi Creek Maintenance Dredging Feasibility Project Upstream Extension Area, Sarasota County, FL				9. SIZE AND TYPE OF BIT 3.0 In.			
2. BORING DESIGNATION PCV-25-08		LOCATION COORDINATES X = 488,054 Y = 1,078,715		10. COORDINATE SYSTEM/DATUM Florida State Plane West		HORIZONTAL NAD 1983	
3. DRILLING AGENCY Athena Technologies, Inc.		CONTRACTOR FILE NO.		11. MANUFACTURER'S DESIGNATION OF DRILL		☐ AUTO HAMMER ☐ MANUAL HAMMER	
4. NAME OF DRILLER N. Wicker				12. TOTAL SAMPLES		DISTURBED 2	
5. DIRECTION OF BORING ☒ VERTICAL ☐ INCLINED				DEG. FROM VERTICAL		BEARING	
6. THICKNESS OF OVERBURDEN 0.0 Ft.				13. TOTAL NUMBER CORE BOXES			
7. DEPTH DRILLED INTO ROCK 0.0 Ft.				14. WATER DEPTH 3.9 Ft.			
8. TOTAL DEPTH OF BORING 5.2 Ft.				15. DATE BORING		STARTED 06-10-25 10:05 COMPLETED 06-10-25	
				16. ELEVATION TOP OF BORING -1.0 Ft.			
				17. TOTAL RECOVERY FOR BORING 4.3 Ft.			
				18. SIGNATURE AND TITLE OF INSPECTOR A. Freeze			
ELEV. (ft)	SCALE (ft)	LEGEND	CLASSIFICATION OF MATERIALS Depths and elevations based on measured values	% REC.	BOX OR SAMPLE	REMARKS	
-1.0	0.0						
-2.6	1.6		Poorly graded SAND; mostly fine quartz sand, few organic debris/material in bedding, loose, subround, grayish brown (10YR-5/2) and, very dark gray (10YR-3/1), (SP).		S-1	Sample #S-1, Depth = 1.6' Mean (mm): 0.21, Phi Sorting: 0.72 Fines (#230) - 0.71 (SP)	
-5.3	4.3		Poorly graded SAND; mostly fine quartz sand, trace organic/inorganic silt in bedding & burrows, trace organic material/debris in bedding, loose, subround, bioturbated, grayish brown (10YR-5/2) and, very dark gray (10YR-3/1), (SP).		S-2	Sample #S-2, Depth = 4.0' Mean (mm): 0.17, Phi Sorting: 0.76 Fines (#230) - 1.96 (SP)	
			End of Boring				

FLORIDA DEP ROSS CUMMINS CEDERBERG, PHILLIPPI CREEK EXTENSION, FL (2025).GPJ FL DEP ROSS.GDT 8/12/25



Cummins Cederberg

**Phillippi Creek
Maintenance Dredging
Feasibility Study Project
Upstream Extension Area
Sarasota County, Florida**

June 2025

PCV-25-09

Top Elev. (ft MLW): 0.0
Bottom Elev. (ft MLW): -3.7

Notes:

- Photo Mosaic Image
- Photo Scale in Feet



Athena Technologies, Inc.
1293 Graham Farm Road
McClellanville, SC 29458
www.athenatechnologies.com
(843) 887-3800

DRILLING LOG		CLIENT Cummins Cederberg, Inc.		PROJECT OWNER FI West Coast Inland Navigation District		SHEET 1 OF 1 SHEETS	
1. PROJECT Phillippi Creek Maintenance Dredging Feasibility Project Upstream Extension Area, Sarasota County, FL				9. SIZE AND TYPE OF BIT 3.0 In.			
2. BORING DESIGNATION PCV-25-09		LOCATION COORDINATES X = 488,328 Y = 1,079,121		10. COORDINATE SYSTEM/DATUM Florida State Plane West		HORIZONTAL NAD 1983 VERTICAL MLW	
3. DRILLING AGENCY Athena Technologies, Inc.		CONTRACTOR FILE NO.		11. MANUFACTURER'S DESIGNATION OF DRILL ☐ AUTO HAMMER ☐ MANUAL HAMMER			
4. NAME OF DRILLER N. Wicker				12. TOTAL SAMPLES		DISTURBED 3 UNDISTURBED (UD)	
5. DIRECTION OF BORING ☒ VERTICAL ☐ INCLINED				DEG. FROM VERTICAL		BEARING	
6. THICKNESS OF OVERBURDEN 0.0 Ft.				13. TOTAL NUMBER CORE BOXES			
7. DEPTH DRILLED INTO ROCK 0.0 Ft.				14. WATER DEPTH 2.1 Ft.			
8. TOTAL DEPTH OF BORING 5.0 Ft.				15. DATE BORING		STARTED 06-10-25 09:47 COMPLETED 06-10-25	
				16. ELEVATION TOP OF BORING 0.0 Ft.			
				17. TOTAL RECOVERY FOR BORING 3.7 Ft.			
				18. SIGNATURE AND TITLE OF INSPECTOR A. Freeze			
ELEV. (ft) 0.0	SCALE (ft) 0.0	LEGEND	CLASSIFICATION OF MATERIALS Depths and elevations based on measured values	% REC.	BOX OR SAMPLE	REMARKS	
-1.7	1.7		Poorly graded SAND; mostly fine quartz sand, trace organic/inorganic silt in matrix, burrows & bedding, trace fine to coarse sand-sized shells, gravel-sized shell at 0.8', loose, subround, bioturbated, very dark grayish brown (2.5Y-3/2) grades to, black (10YR-2/1), (SP).		S-1	Sample #S-1, Depth = 1.7' Mean (mm): 0.20, Phi Sorting: 0.59 Fines (#230) - 1.91 (SP)	
-2.6	2.6		Silty SAND; mostly fine quartz sand, little organic/inorganic silt in bedding & burrows, loose, black (10YR-2/1) and, grayish brown (10YR-5/2), (SM).		S-2	Sample #S-2, Depth = 2.6' Mean (mm): 0.16, Phi Sorting: 0.87 Fines (#230) - 13.82 (SM)	
-3.7	3.7		Poorly graded SAND; mostly fine to medium quartz sand, trace fine to coarse sand-sized phosphate, loose, subround, gray (10YR-6/1), (SP).		S-3	Sample #S-3, Depth = 3.7' Mean (mm): 0.29, Phi Sorting: 0.84 Fines (#230) - 0.93 (SP)	
			End of Boring				

FLORIDA DEP ROSS CUMMINS CEDERBERG, PHILLIPPI CREEK EXTENSION, FL (2025).GPJ FL DEP ROSS.GDT 8/12/25



Cummins Cederberg

**Phillippi Creek
Maintenance Dredging
Feasibility Study Project
Upstream Extension Area
Sarasota County, Florida**

June 2025

PCV-25-10

Top Elev. (ft MLW): -0.2
Bottom Elev. (ft MLW): -4.1

Notes:

- Photo Mosaic Image
- Photo Scale in Feet



Athena Technologies, Inc.
1293 Graham Farm Road
McClellanville, SC 29458
www.athenatechnologies.com
(843) 887-3800

Boring Designation PCV-25-10

DRILLING LOG		CLIENT Cummins Cederberg, Inc.		PROJECT OWNER FI West Coast Inland Navigation District		SHEET 1 OF 1 SHEETS	
1. PROJECT Phillippi Creek Maintenance Dredging Feasibility Project Upstream Extension Area, Sarasota County, FL				9. SIZE AND TYPE OF BIT 3.0 In.			
2. BORING DESIGNATION PCV-25-10		LOCATION COORDINATES X = 488,907 Y = 1,079,792		10. COORDINATE SYSTEM/DATUM Florida State Plane West		HORIZONTAL NAD 1983	VERTICAL MLW
3. DRILLING AGENCY Athena Technologies, Inc.		CONTRACTOR FILE NO.		11. MANUFACTURER'S DESIGNATION OF DRILL ☐ AUTO HAMMER ☐ MANUAL HAMMER			
4. NAME OF DRILLER N. Wicker				12. TOTAL SAMPLES		DISTURBED 4	UNDISTURBED (UD)
5. DIRECTION OF BORING ☒ VERTICAL ☐ INCLINED				DEG. FROM VERTICAL		BEARING	
6. THICKNESS OF OVERBURDEN 0.0 Ft.				13. TOTAL NUMBER CORE BOXES			
7. DEPTH DRILLED INTO ROCK 0.0 Ft.				14. WATER DEPTH 2.3 Ft.			
8. TOTAL DEPTH OF BORING 5.0 Ft.				15. DATE BORING		STARTED 06-10-25 09:18	COMPLETED 06-10-25
				16. ELEVATION TOP OF BORING -0.2 Ft.			
				17. TOTAL RECOVERY FOR BORING 3.9 Ft.			
				18. SIGNATURE AND TITLE OF INSPECTOR A. Freeze			

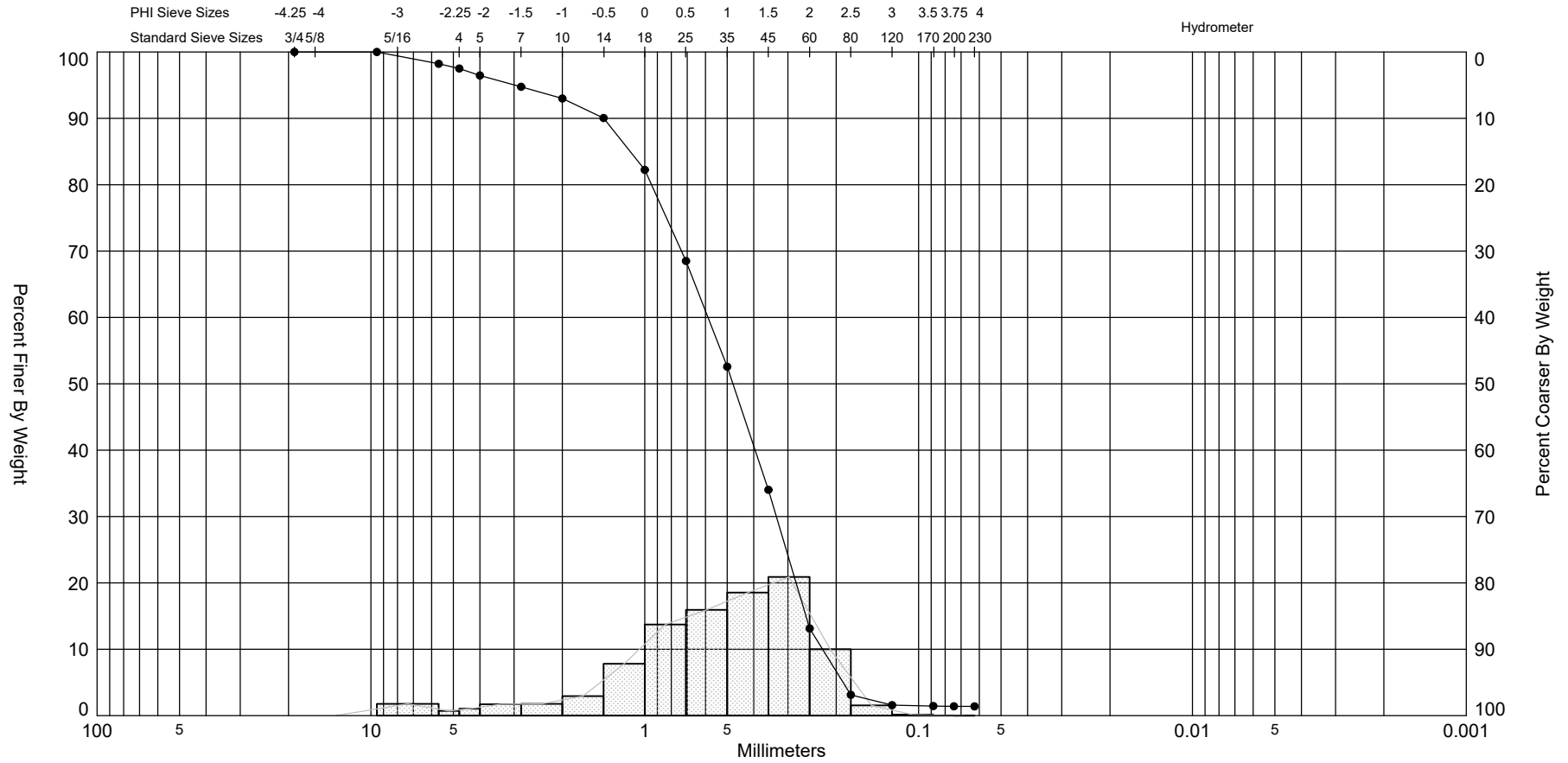
ELEV. (ft)	SCALE (ft)	LEGEND	CLASSIFICATION OF MATERIALS Depths and elevations based on measured values	% REC.	BOX OR SAMPLE	REMARKS
-0.2	0.0					
			Silty SAND; mostly fine quartz sand, little organic silt, little organic debris/material, few fine quartz sand in matrix below 0.8', medium plasticity, soft, black (10YR-2/1), (SM).		S-1	Sample #S-1, Depth = 2.0' Mean (mm): 0.19, Phi Sorting: 1.39 Fines (#230) - 16.41 (SM)
-2.2	2.0					
-2.6	2.4		Poorly graded SAND; mostly fine quartz sand, trace organic/inorganic silt in matrix & bedding, trace organic debris/material, loose, black (10YR-2/1) and, dark gray (10YR-4/1), (SP).		S-2	Sample #S-2, Depth = 2.4' Mean (mm): 0.18, Phi Sorting: 0.58 Fines (#230) - 3.42 (SP)
-3.4	3.2		Poorly graded SAND; mostly fine quartz sand, trace organic silt, trace fine to medium sand-sized phosphate, loose, subround, gray (10YR-6/1), (SP).		S-3	Sample #S-3, Depth = 3.9' Mean (mm): 0.33, Phi Sorting: 0.72 Fines (#230) - 1.10 (SP)
-4.1	3.9		Poorly graded SAND; mostly fine quartz sand, few organic debris/material, trace organic/inorganic silt, loose, subround, light brownish gray (10YR-6/2), (SP).			
			End of Boring			

FLORIDA DEP ROSS CUMMINS CEDERBERG, PHILLIPPI CREEK EXTENSION, FL (2025).GPJ FL DEP ROSS.GDT 8/12/25

APPENDIX C

Grain Size Distribution Data

Granularmetric Report Depths and elevations based on measured values				 Athena Technologies, Inc. 1293 Graham Farm Road McClellanville, SC 29458 Office: 843-887-3800			
Project Name: Phillippi Creek Maintenance Dredging Feasibility Project							
Sample Name: PCV-25-01 #S-1							
Analysis Date: 07-30-25							
Analyzed By: Terracon Consultants, Inc.							
Easting (ft): 484,700		Northing (ft): 1,069,174		Coordinate System: Florida State Plane West		Elevation (ft): -4.4 MLW	
USCS: SP		Munsell: Wet - 10YR-6/1 Moist - 5Y-6/2		Comments: Sample Interval = -2.1' to -4.4' MLW			
Dry Weight (g): 211.36	Wash Weight (g): 208.45	Pan Retained (g):	Sieve Loss (%):	Fines (%): #200 - 1.40 #230 - 1.39	Organics (%):	Carbonates (%):	Shells (%):
Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	% Passing Sieve	
3/4	-4.25	19.03	0.00	0.00	0.00	100.00	
5/8	-3.25	9.51	0.00	0.00	0.00	100.00	
#3.5	-2.50	5.66	3.77	1.78	3.77	98.22	
#4	-2.25	4.76	1.50	0.71	5.27	97.51	
#5	-2.00	4.00	2.21	1.05	7.48	96.46	
#7	-1.50	2.83	3.60	1.70	11.08	94.76	
#10	-1.00	2.00	3.75	1.77	14.83	92.99	
#14	-0.50	1.41	6.22	2.94	21.05	90.05	
#18	0.00	1.00	16.51	7.81	37.56	82.24	
#25	0.50	0.71	29.01	13.73	66.57	68.51	
#35	1.00	0.50	33.68	15.93	100.25	52.58	
#45	1.50	0.35	39.20	18.55	139.45	34.03	
#60	2.00	0.25	44.16	20.89	183.61	13.14	
#80	2.50	0.18	21.16	10.01	204.77	3.13	
#120	3.00	0.13	3.28	1.55	208.05	1.58	
#170	3.50	0.09	0.29	0.14	208.34	1.44	
#200	3.75	0.07	0.08	0.04	208.42	1.40	
#230	4.00	0.06	0.03	0.01	208.45	1.39	
Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95	
2.41	1.93	1.72	1.07	0.26	-0.11	-1.57	
Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis		
Statistics	0.85	0.55	1.14	-1.08	4.32		

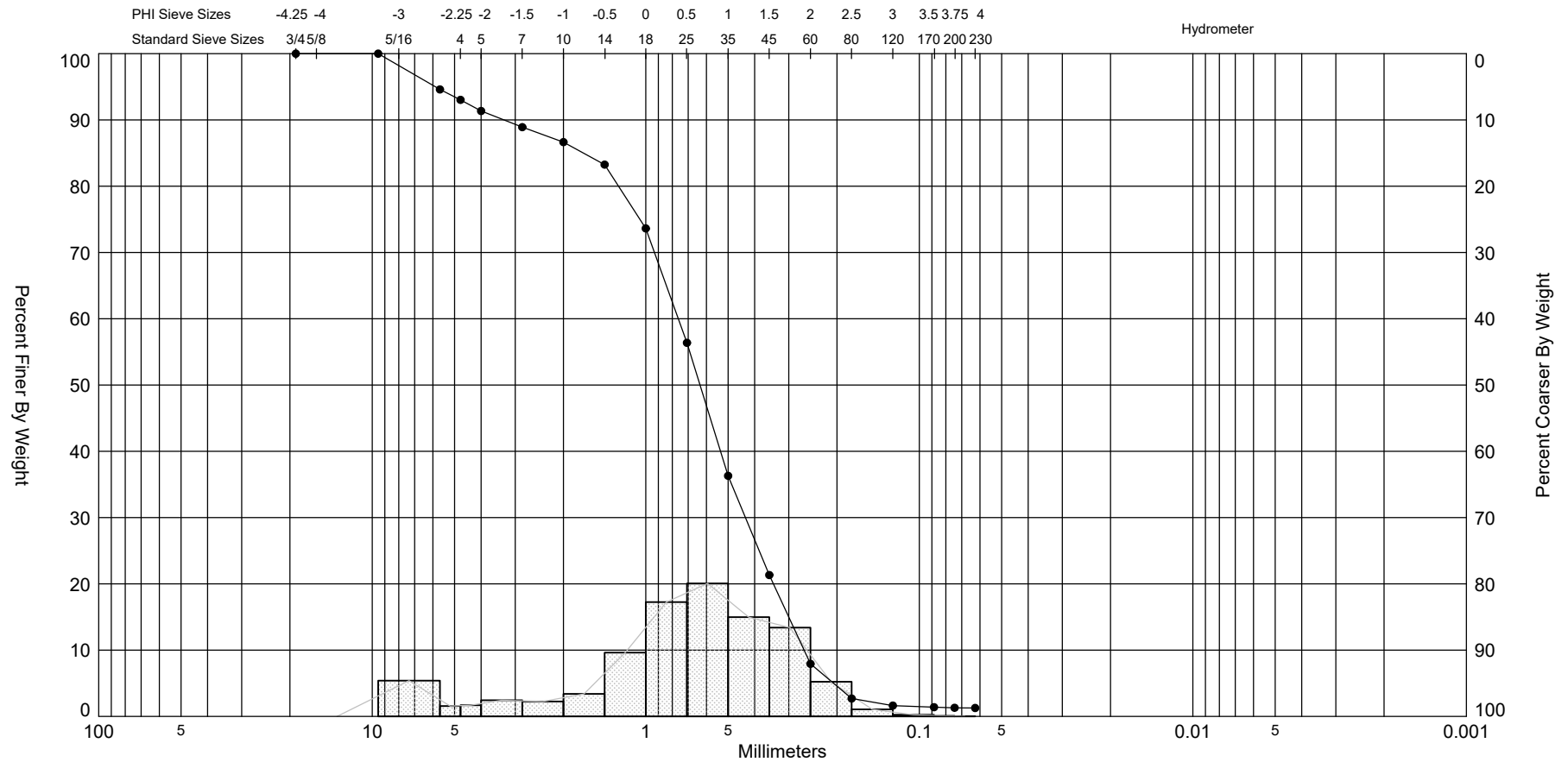


Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort	Sample Information	
PCV-25-01 #S-1		-4.4	SP	#200 - 1.40 #230 - 1.39			1.07	0.85	-1.08	4.32	1.14	Project Name:	Phillippi Creek Maintenance Dredging Feasibility Project
Comments: Sample Interval = -2.1' to -4.4' MLW												Analysis Date:	07-30-25
Depths and elevations based on measured values												Analyzed By:	Terracon Consultants, Inc.
						Athena Technologies, Inc. 1293 Graham Farm Road McClellanville, SC 29458 Office: 843-887-3800						Easting (X, ft):	484,700
												Northing (Y, ft):	1,069,174
												Horizontal System:	NAD 1983
												Vertical System:	MLW

Granularmetric Report Depths and elevations based on measured values				 Athena Technologies, Inc. 1293 Graham Farm Road McClellanville, SC 29458 Office: 843-887-3800			
Project Name: Phillippi Creek Maintenance Dredging Feasibility Project							
Sample Name: PCV-25-01 #S-2							
Analysis Date: 07-30-25							
Analyzed By: Terracon Consultants, Inc.							
Easting (ft): 484,700		Northing (ft): 1,069,174		Coordinate System: Florida State Plane West		Elevation (ft): -5.0 MLW	
USCS: SP		Munsell: Wet - 10YR-6/1 Moist - 5Y-6/2		Comments: Sample Interval = -4.4' to -5' MLW			
Dry Weight (g): 201.83	Wash Weight (g): 199.29	Pan Retained (g):	Sieve Loss (%):	Fines (%): #200 - 1.30 #230 - 1.27	Organics (%):	Carbonates (%):	Shells (%):
Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	% Passing Sieve	
3/4	-4.25	19.03	0.00	0.00	0.00	100.00	
5/8	-3.25	9.51	0.00	0.00	0.00	100.00	
#3.5	-2.50	5.66	10.90	5.40	10.90	94.60	
#4	-2.25	4.76	3.16	1.57	14.06	93.03	
#5	-2.00	4.00	3.40	1.68	17.46	91.35	
#7	-1.50	2.83	4.93	2.44	22.39	88.91	
#10	-1.00	2.00	4.57	2.26	26.96	86.65	
#14	-0.50	1.41	6.85	3.39	33.81	83.26	
#18	0.00	1.00	19.43	9.63	53.24	73.63	
#25	0.50	0.71	34.83	17.26	88.07	56.37	
#35	1.00	0.50	40.50	20.07	128.57	36.30	
#45	1.50	0.35	30.22	14.97	158.79	21.33	
#60	2.00	0.25	27.05	13.40	185.84	7.93	
#80	2.50	0.18	10.56	5.23	196.40	2.70	
#120	3.00	0.13	2.15	1.07	198.55	1.63	
#170	3.50	0.09	0.48	0.24	199.03	1.39	
#200	3.75	0.07	0.19	0.09	199.22	1.30	
#230	4.00	0.06	0.07	0.03	199.29	1.27	
Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95	
2.28	1.70	1.38	0.66	-0.07	-0.61	-2.63	
Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis		
Statistics	0.43	0.74	1.32	-0.92	3.55		

SIEVE ANALYSIS CUMMINS CEDERBERG, PHILLIPPI CREEK EXTENSION, FL (2025) GPU FL DEP ROSS.GDT 8/12/25

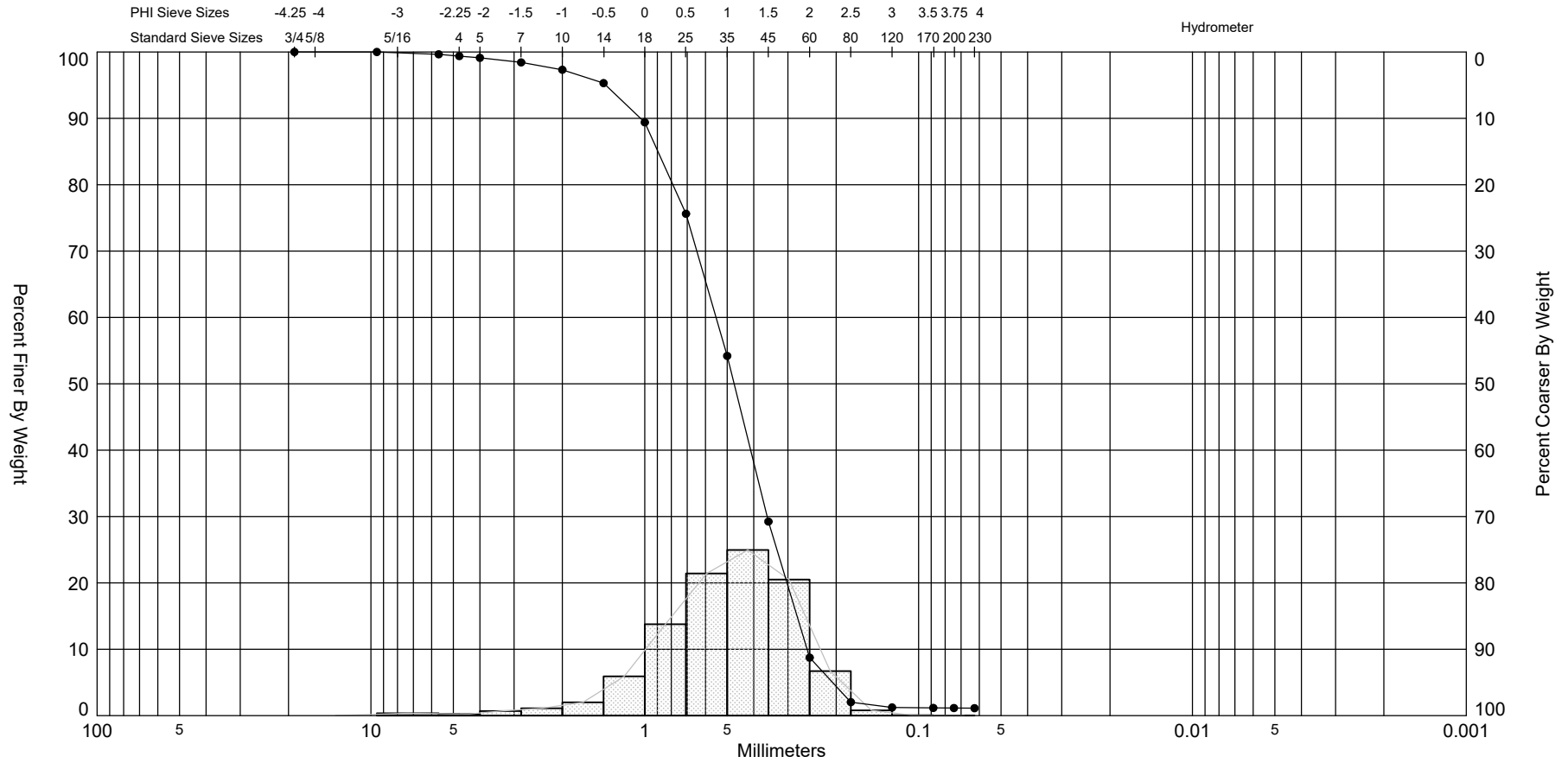


Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort	Sample Information	
PCV-25-01 #S-2		-5.0	SP	#200 - 1.30 #230 - 1.27			0.66	0.43	-0.92	3.55	1.32	Project Name:	Phillippi Creek Maintenance Dredging Feasibility Project
Comments: Sample Interval = -4.4' to -5' MLW												Analysis Date:	07-30-25
Depths and elevations based on measured values												Analyzed By:	Terracon Consultants, Inc.
						Athena Technologies, Inc. 1293 Graham Farm Road McClellanville, SC 29458 Office: 843-887-3800						Easting (X, ft):	484,700
												Northing (Y, ft):	1,069,174
												Horizontal System:	NAD 1983
												Vertical System:	MLW

Granularmetric Report				 Athena Technologies, Inc. 1293 Graham Farm Road McClellanville, SC 29458 Office: 843-887-3800			
Depths and elevations based on measured values							
Project Name: Phillippi Creek Maintenance Dredging Feasibility Project							
Sample Name: PCV-25-02 #S-1							
Analysis Date: 07-30-25							
Analyzed By: Terracon Consultants, Inc.				Coordinate System:		Elevation (ft):	
Easting (ft):		Northing (ft):		Florida State Plane West		-2.2 MLW	
USCS:		Munsell:		Comments:			
SP		Wet - 10YR-7/1 Moist - 5Y-7/1		Sample Interval = -0.2' to -2.2' MLW			
Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
179.87	177.86			#200 - 1.14 #230 - 1.12			
Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	% Passing Sieve	
3/4	-4.25	19.03	0.00	0.00	0.00	100.00	
5/8	-3.25	9.51	0.00	0.00	0.00	100.00	
#3.5	-2.50	5.66	0.63	0.35	0.63	99.65	
#4	-2.25	4.76	0.48	0.27	1.11	99.38	
#5	-2.00	4.00	0.47	0.26	1.58	99.12	
#7	-1.50	2.83	1.24	0.69	2.82	98.43	
#10	-1.00	2.00	2.00	1.11	4.82	97.32	
#14	-0.50	1.41	3.62	2.01	8.44	95.31	
#18	0.00	1.00	10.63	5.91	19.07	89.40	
#25	0.50	0.71	24.78	13.78	43.85	75.62	
#35	1.00	0.50	38.53	21.42	82.38	54.20	
#45	1.50	0.35	44.89	24.96	127.27	29.24	
#60	2.00	0.25	36.87	20.50	164.14	8.74	
#80	2.50	0.18	12.07	6.71	176.21	2.03	
#120	3.00	0.13	1.44	0.80	177.65	1.23	
#170	3.50	0.09	0.13	0.07	177.78	1.16	
#200	3.75	0.07	0.04	0.02	177.82	1.14	
#230	4.00	0.06	0.04	0.02	177.86	1.12	
Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95	
2.28	1.82	1.60	1.08	0.51	0.20	-0.47	
Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis		
Statistics	0.98	0.51	0.86	-0.97	5.09		

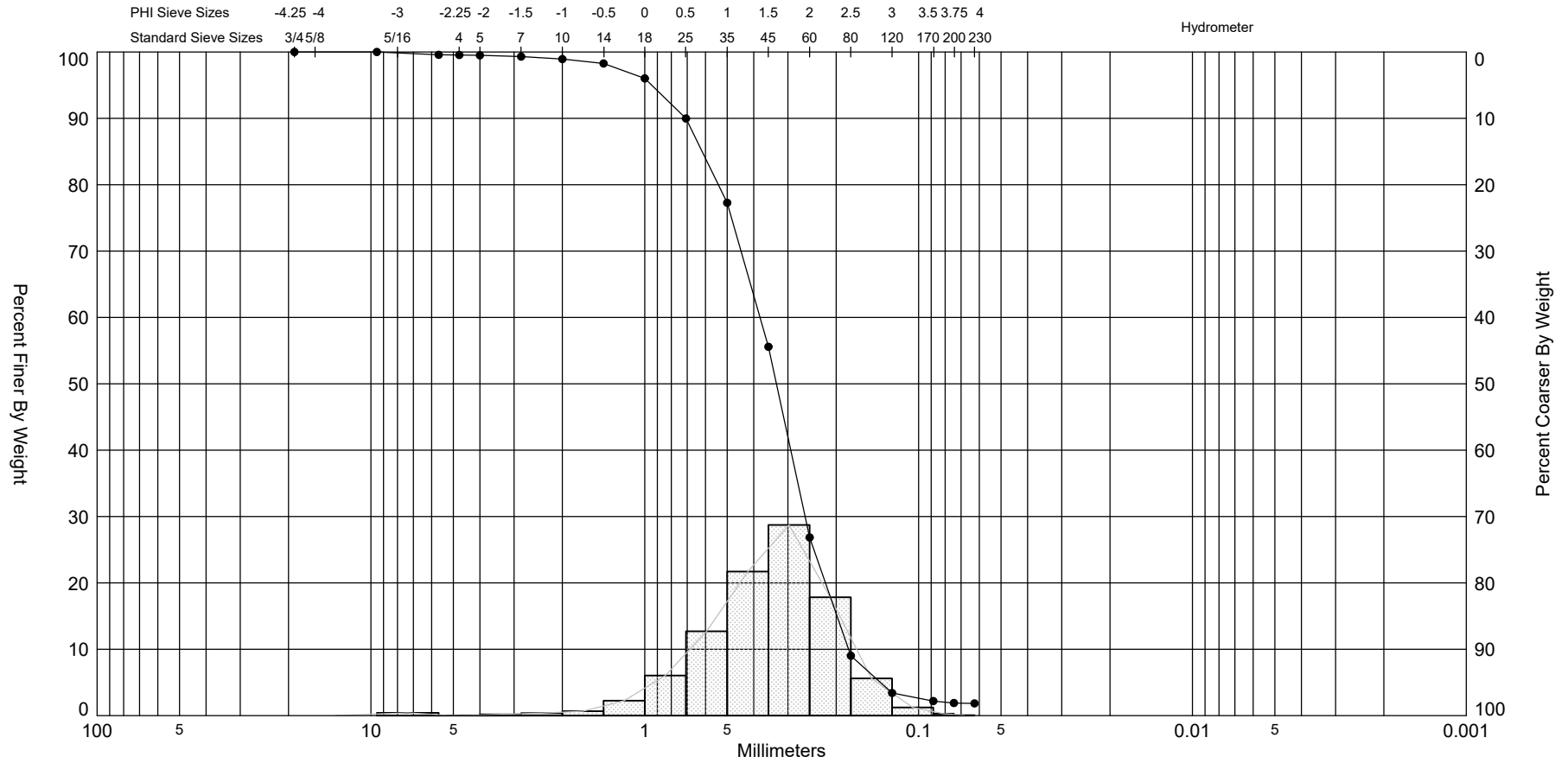
SIEVE ANALYSIS CUMMINS CEDERBERG, PHILLIPPI CREEK EXTENSION, FL (2025) GPU FL DEP ROSS.GDT 8/12/25



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort	Sample Information	
PCV-25-02 #S-1		-2.2	SP	#200 - 1.14 #230 - 1.12			1.08	0.98	-0.97	5.09	0.86	Project Name:	Phillippi Creek Maintenance Dredging Feasibility Project
Comments: Sample Interval = -0.2' to -2.2' MLW												Analysis Date:	07-30-25
Depths and elevations based on measured values												Analyzed By:	Terracon Consultants, Inc.
						Athena Technologies, Inc. 1293 Graham Farm Road McClellanville, SC 29458 Office: 843-887-3800						Easting (X, ft):	485,989
												Northing (Y, ft):	1,069,940
												Horizontal System:	NAD 1983
												Vertical System:	MLW

Granularmetric Report Depths and elevations based on measured values				 Athena Technologies, Inc. 1293 Graham Farm Road McClellanville, SC 29458 Office: 843-887-3800			
Project Name: Phillippi Creek Maintenance Dredging Feasibility Project							
Sample Name: PCV-25-02 #S-2							
Analysis Date: 07-30-25							
Analyzed By: Terracon Consultants, Inc.							
Easting (ft): 485,989		Northing (ft): 1,069,940		Coordinate System: Florida State Plane West		Elevation (ft): -3.2 MLW	
USCS: SP		Munsell: Wet - 10YR-6/1 Moist - 5Y-6/2		Comments: Sample Interval = -2.2' to -3.2' MLW			
Dry Weight (g): 185.71	Wash Weight (g): 182.26	Pan Retained (g):	Sieve Loss (%):	Fines (%): #200 - 1.90 #230 - 1.84	Organics (%):	Carbonates (%):	Shells (%):
Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	% Passing Sieve	
3/4	-4.25	19.03	0.00	0.00	0.00	100.00	
5/8	-3.25	9.51	0.00	0.00	0.00	100.00	
#3.5	-2.50	5.66	0.78	0.42	0.78	99.58	
#4	-2.25	4.76	0.06	0.03	0.84	99.55	
#5	-2.00	4.00	0.09	0.05	0.93	99.50	
#7	-1.50	2.83	0.36	0.19	1.29	99.31	
#10	-1.00	2.00	0.70	0.38	1.99	98.93	
#14	-0.50	1.41	1.22	0.66	3.21	98.27	
#18	0.00	1.00	4.18	2.25	7.39	96.02	
#25	0.50	0.71	11.21	6.04	18.60	89.98	
#35	1.00	0.50	23.58	12.70	42.18	77.28	
#45	1.50	0.35	40.30	21.70	82.48	55.58	
#60	2.00	0.25	53.35	28.73	135.83	26.85	
#80	2.50	0.18	33.11	17.83	168.94	9.02	
#120	3.00	0.13	10.41	5.61	179.35	3.41	
#170	3.50	0.09	2.27	1.22	181.62	2.19	
#200	3.75	0.07	0.53	0.29	182.15	1.90	
#230	4.00	0.06	0.11	0.06	182.26	1.84	
Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95	
2.86	2.30	2.05	1.60	1.05	0.74	0.08	
Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis		
Statistics	1.49	0.36	0.83	-1.04	6.45		



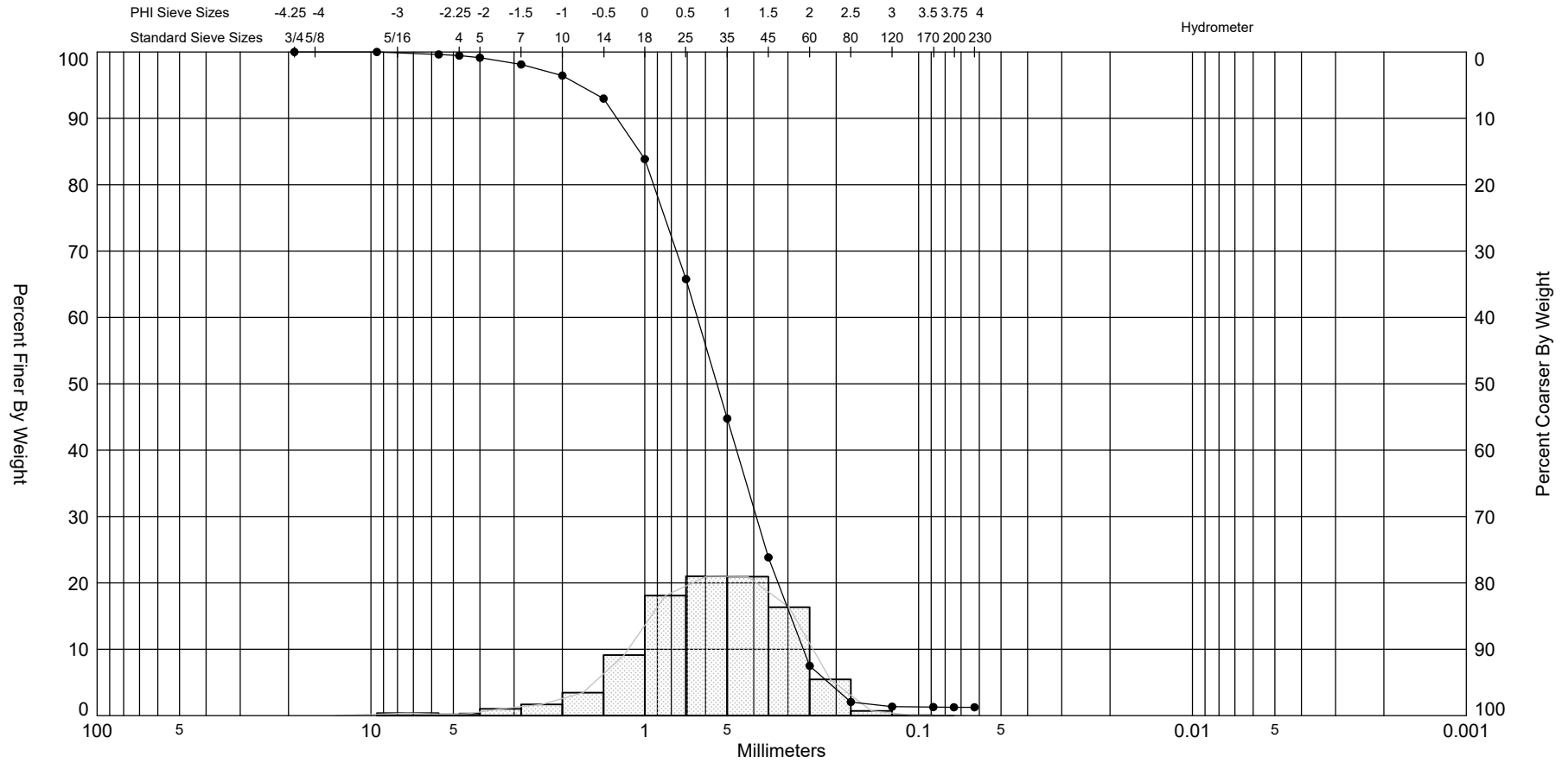
Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort	Sample Information	
PCV-25-02 #S-2		-3.2	SP	#200 - 1.90 #230 - 1.84			1.6	1.49	-1.04	6.45	0.83	Project Name:	Phillippi Creek Maintenance Dredging Feasibility Project
Comments: Sample Interval = -2.2' to -3.2' MLW												Analysis Date:	07-30-25
Depths and elevations based on measured values												Analyzed By:	Terracon Consultants, Inc.
						Athena Technologies, Inc. 1293 Graham Farm Road McClellanville, SC 29458 Office: 843-887-3800						Easting (X, ft):	485,989
												Northing (Y, ft):	1,069,940
												Horizontal System:	NAD 1983
												Vertical System:	MLW

GRANULARMETRIC REPORT CUMMINS CEDERBERG, PHILLIPPI CREEK EXTENSION, FL (2025), GPJ FL DEP ROSS, GDT 8/12/25

Granularmetric Report Depths and elevations based on measured values				 Athena Technologies, Inc. 1293 Graham Farm Road McClellanville, SC 29458 Office: 843-887-3800			
Project Name: Phillippi Creek Maintenance Dredging Feasibility Project							
Sample Name: PCV-25-02 #S-3							
Analysis Date: 07-30-25							
Analyzed By: Terracon Consultants, Inc.							
Easting (ft): 485,989		Northing (ft): 1,069,940		Coordinate System: Florida State Plane West		Elevation (ft): -4.5 MLW	
USCS: SP		Munsell: Wet - 10YR-7/1 Moist - 5Y-7/2		Comments: Sample Interval = -3.2' to -4.5' MLW			
Dry Weight (g): 193.02	Wash Weight (g): 190.55	Pan Retained (g):	Sieve Loss (%):	Fines (%): #200 - 1.26 #230 - 1.26	Organics (%):	Carbonates (%):	Shells (%):
Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	% Passing Sieve	
3/4	-4.25	19.03	0.00	0.00	0.00	100.00	
5/8	-3.25	9.51	0.00	0.00	0.00	100.00	
#3.5	-2.50	5.66	0.72	0.37	0.72	99.63	
#4	-2.25	4.76	0.35	0.18	1.07	99.45	
#5	-2.00	4.00	0.59	0.31	1.66	99.14	
#7	-1.50	2.83	1.97	1.02	3.63	98.12	
#10	-1.00	2.00	3.24	1.68	6.87	96.44	
#14	-0.50	1.41	6.67	3.46	13.54	92.98	
#18	0.00	1.00	17.60	9.12	31.14	83.86	
#25	0.50	0.71	34.90	18.08	66.04	65.78	
#35	1.00	0.50	40.55	21.01	106.59	44.77	
#45	1.50	0.35	40.39	20.93	146.98	23.84	
#60	2.00	0.25	31.53	16.34	178.51	7.50	
#80	2.50	0.18	10.51	5.45	189.02	2.05	
#120	3.00	0.13	1.36	0.70	190.38	1.35	
#170	3.50	0.09	0.11	0.06	190.49	1.29	
#200	3.75	0.07	0.06	0.03	190.55	1.26	
#230	4.00	0.06	0.00	0.00	190.55	1.26	
Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95	
2.23	1.74	1.47	0.88	0.25	-0.01	-0.79	
Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis		
Statistics	0.8	0.57	0.9	-0.68	4.03		

SIEVE ANALYSIS CUMMINS CEDERBERG, PHILLIPPI CREEK EXTENSION, FL (2025) GPJ FL DEP ROSS.GDT 8/12/25

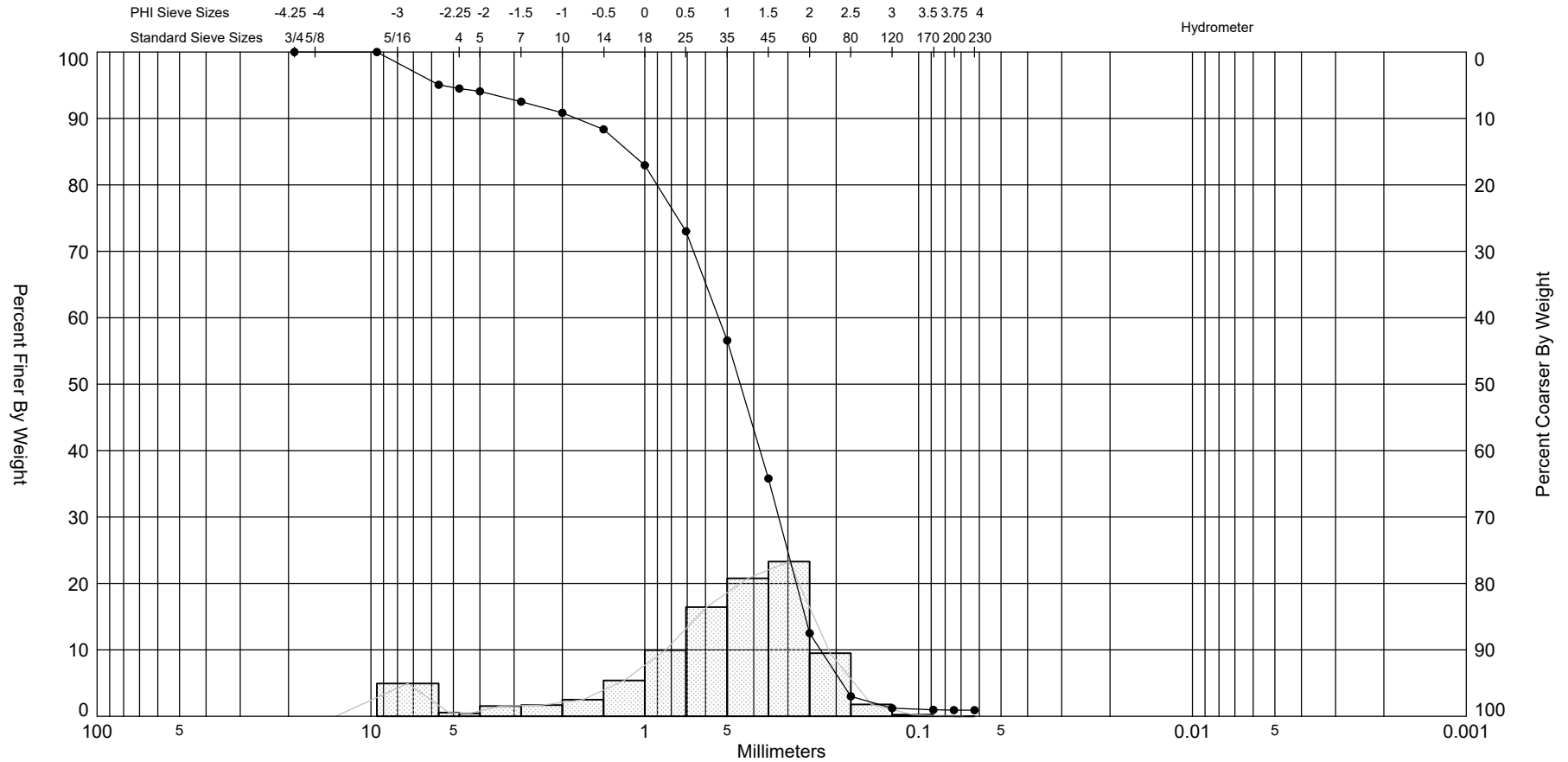


Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort	Sample Information	
PCV-25-02 #S-3		-4.5	SP	#200 - 1.26 #230 - 1.26			0.88	0.8	-0.68	4.03	0.9	Project Name:	Phillippi Creek Maintenance Dredging Feasibility Project
Comments: Sample Interval = -3.2' to -4.5' MLW												Analysis Date:	07-30-25
Depths and elevations based on measured values												Analyzed By:	Terracon Consultants, Inc.
						Athena Technologies, Inc. 1293 Graham Farm Road McClellanville, SC 29458 Office: 843-887-3800						Easting (X, ft):	485,989
												Northing (Y, ft):	1,069,940
												Horizontal System:	NAD 1983
												Vertical System:	MLW

Granularmetric Report				 Athena Technologies, Inc. 1293 Graham Farm Road McClellanville, SC 29458 Office: 843-887-3800			
Depths and elevations based on measured values							
Project Name: Phillippi Creek Maintenance Dredging Feasibility Project							
Sample Name: PCV-25-03 #S-1							
Analysis Date: 07-30-25							
Analyzed By: Terracon Consultants, Inc.				Coordinate System:		Elevation (ft):	
Easting (ft):		Northing (ft):		Florida State Plane West		-5.0 MLW	
USCS:		Munsell:		Comments:			
SP		Wet - 10YR-8/1 Moist - 5Y-7/2		Sample Interval = -1.8' to -5' MLW			
Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
185.25	183.54			#200 - 0.93 #230 - 0.92			
Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	% Passing Sieve	
3/4	-4.25	19.03	0.00	0.00	0.00	100.00	
5/8	-3.25	9.51	0.00	0.00	0.00	100.00	
#3.5	-2.50	5.66	9.13	4.93	9.13	95.07	
#4	-2.25	4.76	1.03	0.56	10.16	94.51	
#5	-2.00	4.00	0.80	0.43	10.96	94.08	
#7	-1.50	2.83	2.88	1.55	13.84	92.53	
#10	-1.00	2.00	3.11	1.68	16.95	90.85	
#14	-0.50	1.41	4.61	2.49	21.56	88.36	
#18	0.00	1.00	10.00	5.40	31.56	82.96	
#25	0.50	0.71	18.43	9.95	49.99	73.01	
#35	1.00	0.50	30.43	16.43	80.42	56.58	
#45	1.50	0.35	38.50	20.78	118.92	35.80	
#60	2.00	0.25	43.15	23.29	162.07	12.51	
#80	2.50	0.18	17.59	9.50	179.66	3.01	
#120	3.00	0.13	3.32	1.79	182.98	1.22	
#170	3.50	0.09	0.46	0.25	183.44	0.97	
#200	3.75	0.07	0.08	0.04	183.52	0.93	
#230	4.00	0.06	0.02	0.01	183.54	0.92	
Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95	
2.40	1.93	1.73	1.16	0.40	-0.10	-2.47	
Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis		
Statistics	0.85	0.55	1.28	-1.39	4.78		

SIEVE ANALYSIS CUMMINS CEDERBERG, PHILLIPPI CREEK EXTENSION, FL (2025) GPU FL DEP ROSS.GDT 8/12/25



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort	Sample Information	
PCV-25-03 #S-1		-5.0	SP	#200 - 0.93 #230 - 0.92			1.16	0.85	-1.39	4.78	1.28	Project Name:	Phillippi Creek Maintenance Dredging Feasibility Project
Comments: Sample Interval = -1.8' to -5' MLW												Analysis Date:	07-30-25
Depths and elevations based on measured values												Analyzed By:	Terracon Consultants, Inc.
						Athena Technologies, Inc. 1293 Graham Farm Road McClellanville, SC 29458 Office: 843-887-3800						Easting (X, ft):	486,493
												Northing (Y, ft):	1,071,835
												Horizontal System:	NAD 1983
												Vertical System:	MLW

Depths and elevations based on measured values



Analyzed By: Terracon Consultants, Inc.

-4.5 MLW

Sample Interval = -3' to -4.5' MLW

Shells (%):

% Passing
Sieve

100.00

100.00

97.26

95.84

94 90

92 54

90 06

86 40

79 50

67 33

52 91

33 73

844

221

1.27

1.01

148

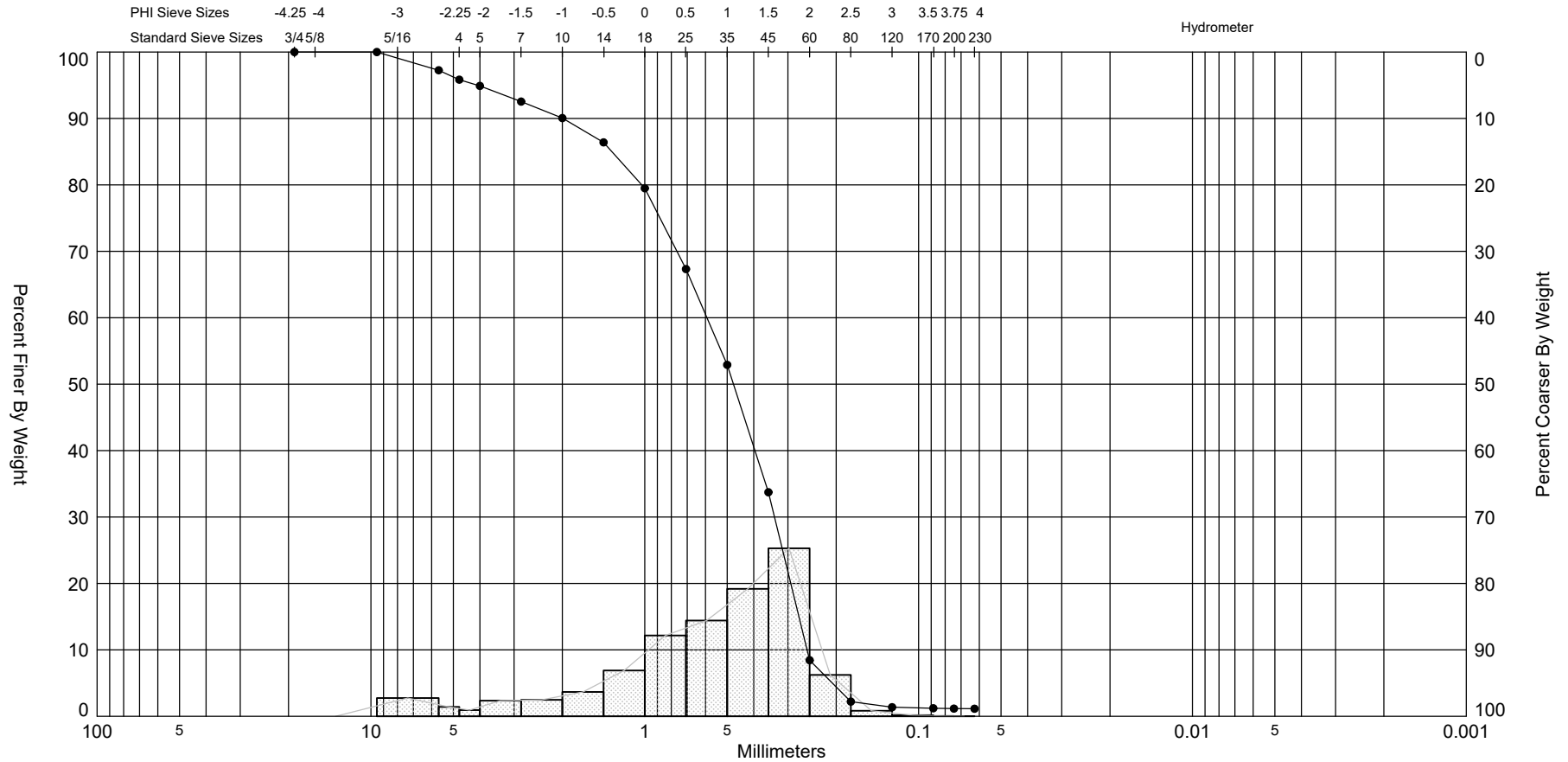
Phi 95

-2 03

Kurtosis

4.04

SIEVE ANALYSIS CUMMINS CEDERBERG, PHILLIPPI CREEK EXTENSION, FL (2025) GPJ FL DEP ROSS.GDT 8/12/25

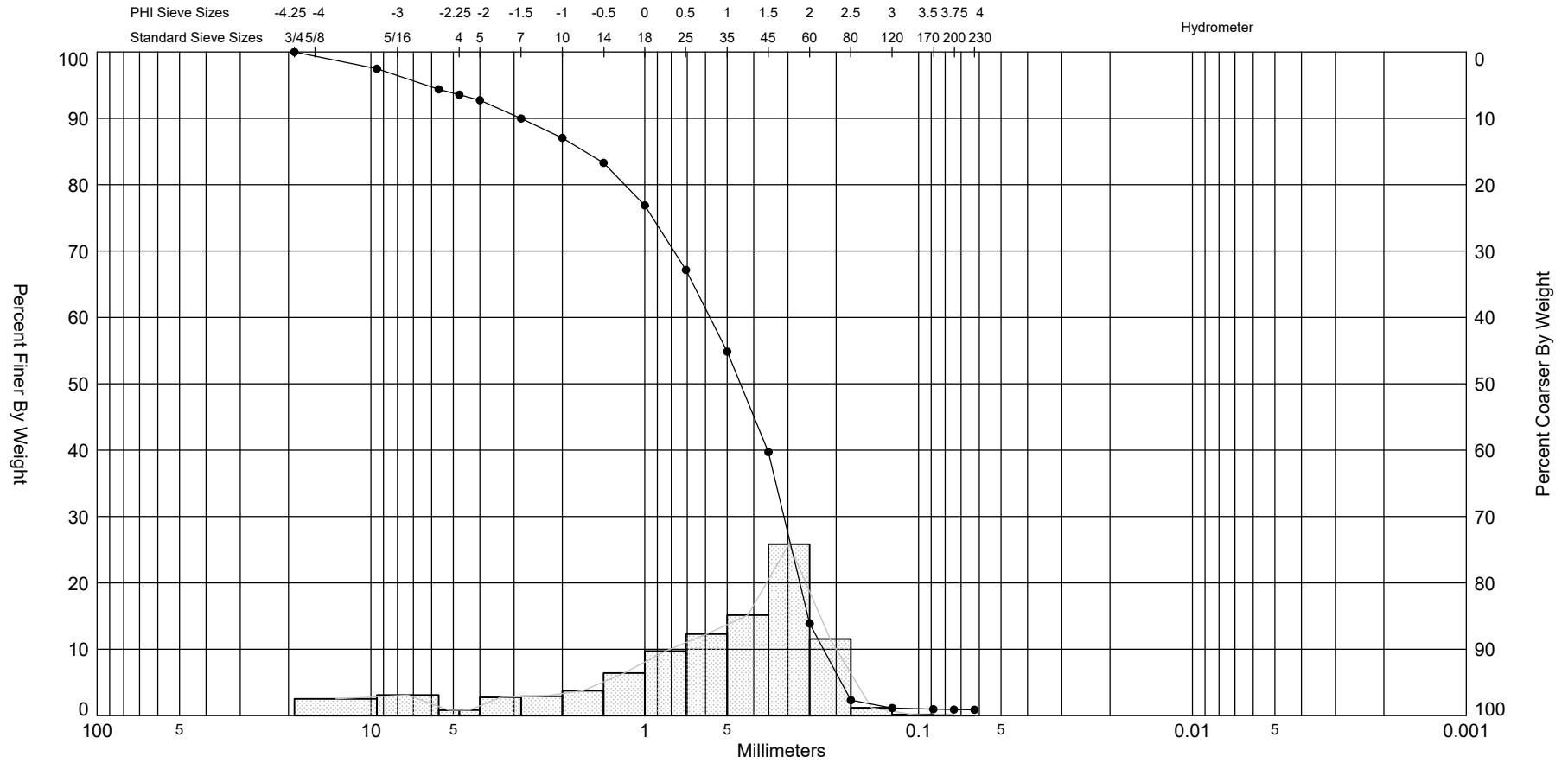


Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort	Sample Information	
PCV-25-04 #S-1	—●—	-4.5	SP	#200 - 1.16 #230 - 1.14			1.08	0.75	-1.17	4.04	1.23	Project Name:	Phillippi Creek Maintenance Dredging Feasibility Project
Comments: Sample Interval = -3' to -4.5' MLW												Analysis Date:	07-30-25
Depths and elevations based on measured values												Analyzed By:	Terracon Consultants, Inc.
							Athena Technologies, Inc. 1293 Graham Farm Road McClellanville, SC 29458 Office: 843-887-3800					Easting (X, ft):	486,606
												Northing (Y, ft):	1,073,344
												Horizontal System:	NAD 1983
												Vertical System:	MLW

Granularmetric Report Depths and elevations based on measured values				 Athena Technologies, Inc. 1293 Graham Farm Road McClellanville, SC 29458 Office: 843-887-3800			
Project Name: Phillippi Creek Maintenance Dredging Feasibility Project							
Sample Name: PCV-25-04 #S-2							
Analysis Date: 07-30-25							
Analyzed By: Terracon Consultants, Inc.							
Easting (ft): 486,606		Northing (ft): 1,073,344		Coordinate System: Florida State Plane West		Elevation (ft): -5.0 MLW	
USCS: SP		Munsell: Wet - 10YR-7/1 Moist - 5Y-6/2		Comments: Sample Interval = -4.5' to -5' MLW			
Dry Weight (g): 245.44	Wash Weight (g): 243.34	Pan Retained (g):	Sieve Loss (%):	Fines (%): #200 - 0.91 #230 - 0.88	Organics (%):	Carbonates (%):	Shells (%):
Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	% Passing Sieve	
3/4	-4.25	19.03	0.00	0.00	0.00	100.00	
5/8	-3.25	9.51	6.22	2.53	6.22	97.47	
#3.5	-2.50	5.66	7.62	3.10	13.84	94.37	
#4	-2.25	4.76	2.00	0.81	15.84	93.56	
#5	-2.00	4.00	2.03	0.83	17.87	92.73	
#7	-1.50	2.83	6.77	2.76	24.64	89.97	
#10	-1.00	2.00	7.16	2.92	31.80	87.05	
#14	-0.50	1.41	9.23	3.76	41.03	83.29	
#18	0.00	1.00	15.73	6.41	56.76	76.88	
#25	0.50	0.71	23.88	9.73	80.64	67.15	
#35	1.00	0.50	30.19	12.30	110.83	54.85	
#45	1.50	0.35	37.17	15.14	148.00	39.71	
#60	2.00	0.25	63.40	25.83	211.40	13.88	
#80	2.50	0.18	28.36	11.55	239.76	2.33	
#120	3.00	0.13	2.93	1.19	242.69	1.14	
#170	3.50	0.09	0.42	0.17	243.11	0.97	
#200	3.75	0.07	0.15	0.06	243.26	0.91	
#230	4.00	0.06	0.08	0.03	243.34	0.88	
Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95	
2.38	1.96	1.78	1.16	0.10	-0.59	-2.65	
Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis		
Statistics	0.72	0.61	1.47	-1.28	4.17		

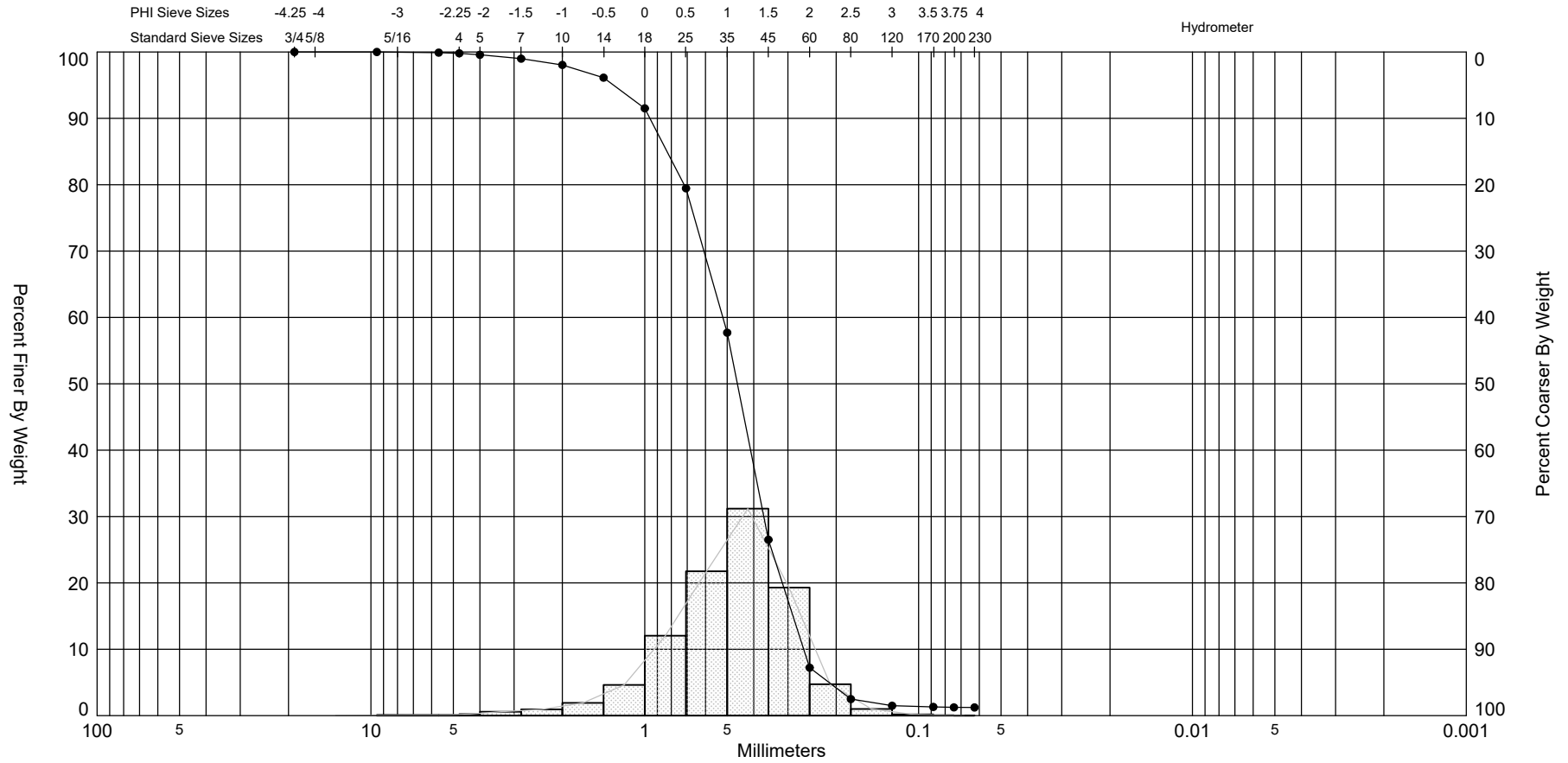
SIEVE ANALYSIS CUMMINS CEDERBERG, PHILLIPPI CREEK EXTENSION, FL (2025) GPU FL DEP ROSS.GDT 8/12/25



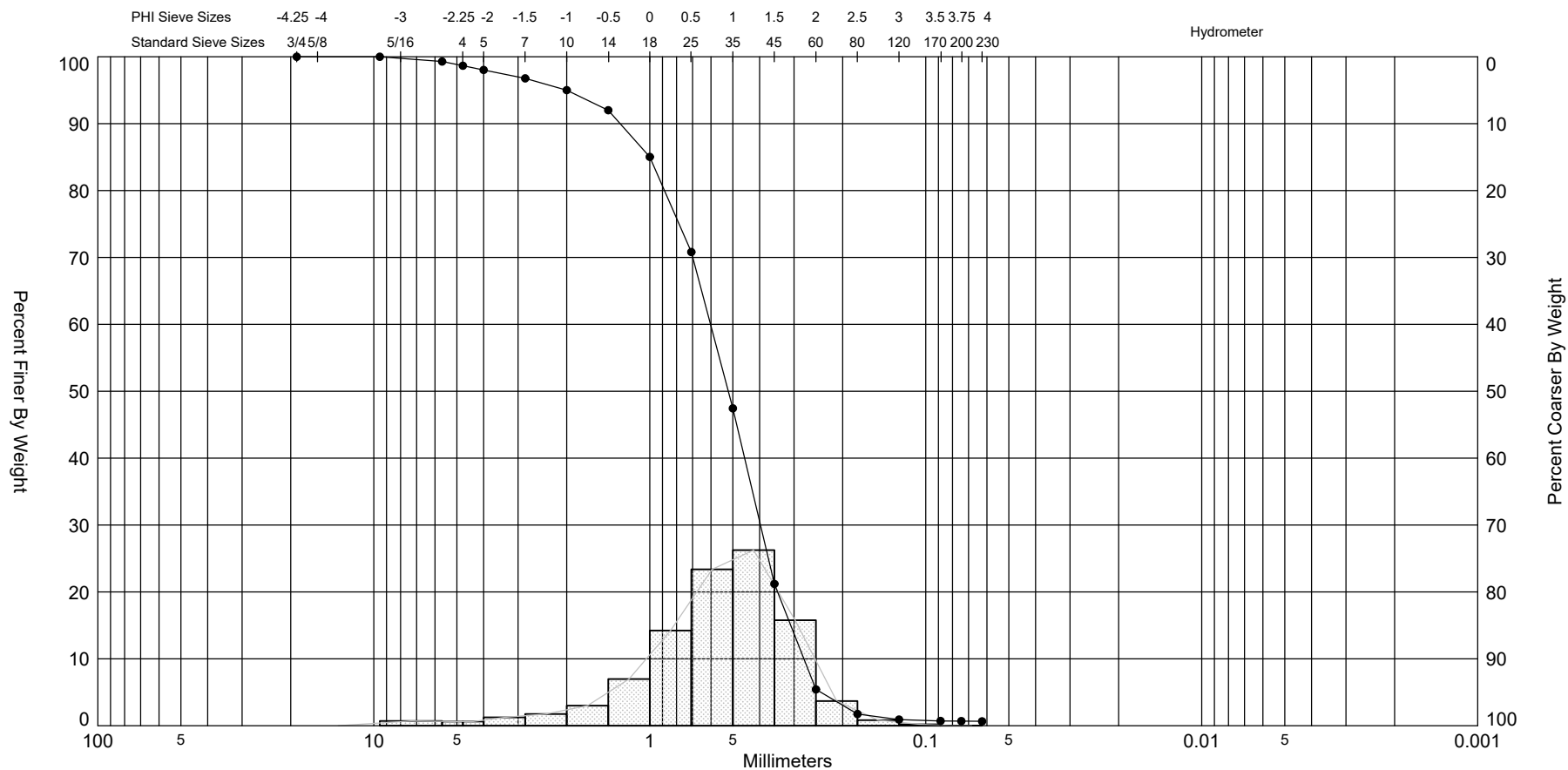
Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort	Sample Information	
PCV-25-04 #S-2	—●—	-5.0	SP	#200 - 0.91 #230 - 0.88			1.16	0.72	-1.28	4.17	1.47	Project Name:	Phillippi Creek Maintenance Dredging Feasibility Project
Comments: Sample Interval = -4.5' to -5' MLW												Analysis Date:	07-30-25
Depths and elevations based on measured values												Analyzed By:	Terracon Consultants, Inc.
							Athena Technologies, Inc. 1293 Graham Farm Road McClellanville, SC 29458 Office: 843-887-3800					Easting (X, ft):	486,606
												Northing (Y, ft):	1,073,344
												Horizontal System:	NAD 1983
												Vertical System:	MLW

Granularmetric Report				 Athena Technologies, Inc. 1293 Graham Farm Road McClellanville, SC 29458 Office: 843-887-3800			
Depths and elevations based on measured values							
Project Name: Phillippi Creek Maintenance Dredging Feasibility Project							
Sample Name: PCV-25-05 #S-1							
Analysis Date: 07-30-25							
Analyzed By: Terracon Consultants, Inc.				Coordinate System:		Elevation (ft):	
Easting (ft):		Northing (ft):		Florida State Plane West		-3.7 MLW	
USCS:		Munsell:		Comments:			
SP		Wet - 10YR-6/2 Moist - 5Y-7/2		Sample Interval = -3' to -3.7' MLW			
Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
211.95	209.37			#200 - 1.24 #230 - 1.23			
Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	% Passing Sieve	
3/4	-4.25	19.03	0.00	0.00	0.00	100.00	
5/8	-3.25	9.51	0.00	0.00	0.00	100.00	
#3.5	-2.50	5.66	0.21	0.10	0.21	99.90	
#4	-2.25	4.76	0.22	0.10	0.43	99.80	
#5	-2.00	4.00	0.46	0.22	0.89	99.58	
#7	-1.50	2.83	1.25	0.59	2.14	98.99	
#10	-1.00	2.00	2.00	0.94	4.14	98.05	
#14	-0.50	1.41	4.06	1.92	8.20	96.13	
#18	0.00	1.00	9.80	4.62	18.00	91.51	
#25	0.50	0.71	25.55	12.05	43.55	79.46	
#35	1.00	0.50	46.11	21.76	89.66	57.70	
#45	1.50	0.35	66.11	31.19	155.77	26.51	
#60	2.00	0.25	40.88	19.29	196.65	7.22	
#80	2.50	0.18	10.03	4.73	206.68	2.49	
#120	3.00	0.13	2.13	1.00	208.81	1.49	
#170	3.50	0.09	0.39	0.18	209.20	1.31	
#200	3.75	0.07	0.14	0.07	209.34	1.24	
#230	4.00	0.06	0.03	0.01	209.37	1.23	
Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95	
2.23	1.77	1.54	1.12	0.60	0.31	-0.38	
Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis		
Statistics	1.02	0.49	0.78	-0.87	5.12		



Granularmetric Report Depths and elevations based on measured values				 Athena Technologies, Inc. 1293 Graham Farm Road McClellanville, SC 29458 Office: 843-887-3800			
Project Name: Phillippi Creek Maintenance Dredging Feasibility Project							
Sample Name: PCV-25-05 #S-2							
Analysis Date: 07-30-25							
Analyzed By: Terracon Consultants, Inc.							
Easting (ft): 486,678		Northing (ft): 1,074,615		Coordinate System: Florida State Plane West		Elevation (ft): -5.0 MLW	
USCS: SP		Munsell: Wet - 10YR-8/1 Moist - 5Y-7/2		Comments: Sample Interval = -3.7' to -5' MLW			
Dry Weight (g): 255.70	Wash Weight (g): 254.00	Pan Retained (g):	Sieve Loss (%):	Fines (%): #200 - 0.69 #230 - 0.66	Organics (%):	Carbonates (%):	Shells (%):
Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	% Passing Sieve	
3/4	-4.25	19.03	0.00	0.00	0.00	100.00	
5/8	-3.25	9.51	0.00	0.00	0.00	100.00	
#3.5	-2.50	5.66	1.81	0.71	1.81	99.29	
#4	-2.25	4.76	1.62	0.63	3.43	98.66	
#5	-2.00	4.00	1.60	0.63	5.03	98.03	
#7	-1.50	2.83	3.22	1.26	8.25	96.77	
#10	-1.00	2.00	4.51	1.76	12.76	95.01	
#14	-0.50	1.41	7.67	3.00	20.43	92.01	
#18	0.00	1.00	17.86	6.98	38.29	85.03	
#25	0.50	0.71	36.36	14.22	74.65	70.81	
#35	1.00	0.50	59.75	23.37	134.40	47.44	
#45	1.50	0.35	67.09	26.24	201.49	21.20	
#60	2.00	0.25	40.32	15.77	241.81	5.43	
#80	2.50	0.18	9.42	3.68	251.23	1.75	
#120	3.00	0.13	2.11	0.83	253.34	0.92	
#170	3.50	0.09	0.54	0.21	253.88	0.71	
#200	3.75	0.07	0.04	0.02	253.92	0.69	
#230	4.00	0.06	0.08	0.03	254.00	0.66	
Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95	
2.06	1.66	1.43	0.95	0.35	0.04	-1.00	
Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis		
Statistics	0.8	0.57	0.94	-1.1	5.16		

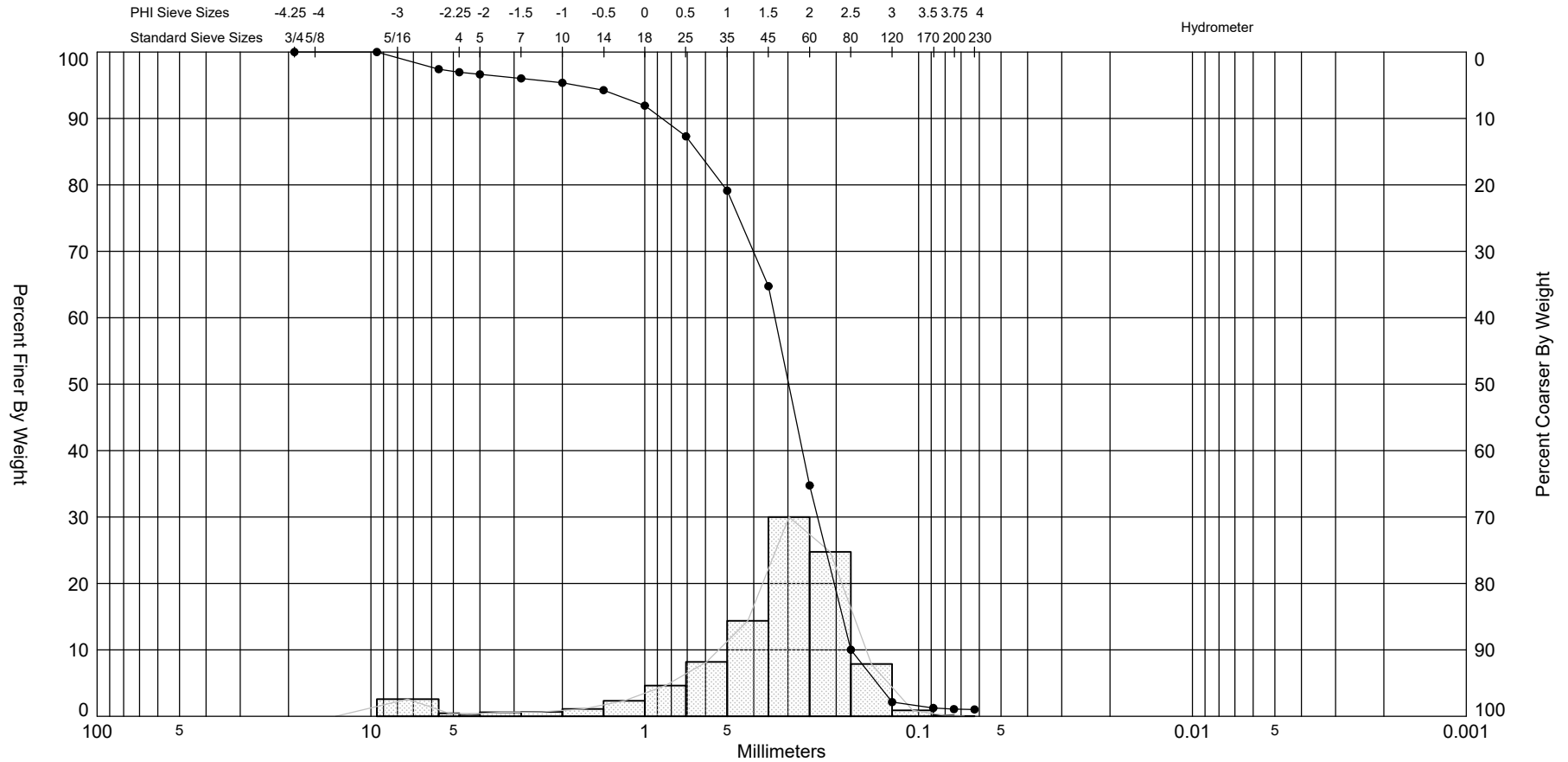


Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort	Sample Information	
PCV-25-05 #S-2		-5.0	SP	#200 - 0.69 #230 - 0.66			0.95	0.8	-1.1	5.16	0.94	Project Name:	Phillippi Creek Maintenance Dredging Feasibility Project
Comments: Sample Interval = -3.7' to -5' MLW												Analysis Date:	07-30-25
Depths and elevations based on measured values												Analyzed By:	Terracon Consultants, Inc.
						Athena Technologies, Inc. 1293 Graham Farm Road McClellanville, SC 29458 Office: 843-887-3800						Easting (X, ft):	486,678
												Northing (Y, ft):	1,074,615
												Horizontal System:	NAD 1983
												Vertical System:	MLW

Granularmetric Report Depths and elevations based on measured values				 Athena Technologies, Inc. 1293 Graham Farm Road McClellanville, SC 29458 Office: 843-887-3800			
Project Name: Phillippi Creek Maintenance Dredging Feasibility Project							
Sample Name: PCV-25-06 #S-1							
Analysis Date: 07-30-25							
Analyzed By: Terracon Consultants, Inc.							
Easting (ft): 487,269		Northing (ft): 1,077,073		Coordinate System: Florida State Plane West		Elevation (ft): -5.0 MLW	
USCS: SP		Munsell: Wet - 10YR-8/1 Moist - 5Y-7/2		Comments: Sample Interval = -3.3' to -5' MLW			
Dry Weight (g): 203.09	Wash Weight (g): 201.00	Pan Retained (g):	Sieve Loss (%):	Fines (%): #200 - 1.08 #230 - 1.03	Organics (%):	Carbonates (%):	Shells (%):
Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	% Passing Sieve	
3/4	-4.25	19.03	0.00	0.00	0.00	100.00	
5/8	-3.25	9.51	0.00	0.00	0.00	100.00	
#3.5	-2.50	5.66	5.24	2.58	5.24	97.42	
#4	-2.25	4.76	0.94	0.46	6.18	96.96	
#5	-2.00	4.00	0.64	0.32	6.82	96.64	
#7	-1.50	2.83	1.23	0.61	8.05	96.03	
#10	-1.00	2.00	1.34	0.66	9.39	95.37	
#14	-0.50	1.41	2.26	1.11	11.65	94.26	
#18	0.00	1.00	4.74	2.33	16.39	91.93	
#25	0.50	0.71	9.39	4.62	25.78	87.31	
#35	1.00	0.50	16.62	8.18	42.40	79.13	
#45	1.50	0.35	29.20	14.38	71.60	64.75	
#60	2.00	0.25	60.90	29.99	132.50	34.76	
#80	2.50	0.18	50.24	24.74	182.74	10.02	
#120	3.00	0.13	16.01	7.88	198.75	2.14	
#170	3.50	0.09	1.80	0.89	200.55	1.25	
#200	3.75	0.07	0.34	0.17	200.89	1.08	
#230	4.00	0.06	0.11	0.05	201.00	1.03	
Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95	
2.82	2.38	2.20	1.75	1.14	0.70	-0.83	
Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis		
Statistics	1.48	0.36	1.14	-1.95	7.64		

SIEVE ANALYSIS CUMMINS CEDERBERG, PHILLIPPI CREEK EXTENSION, FL (2025) GPJ FL DEP ROSS.GDT 8/12/25

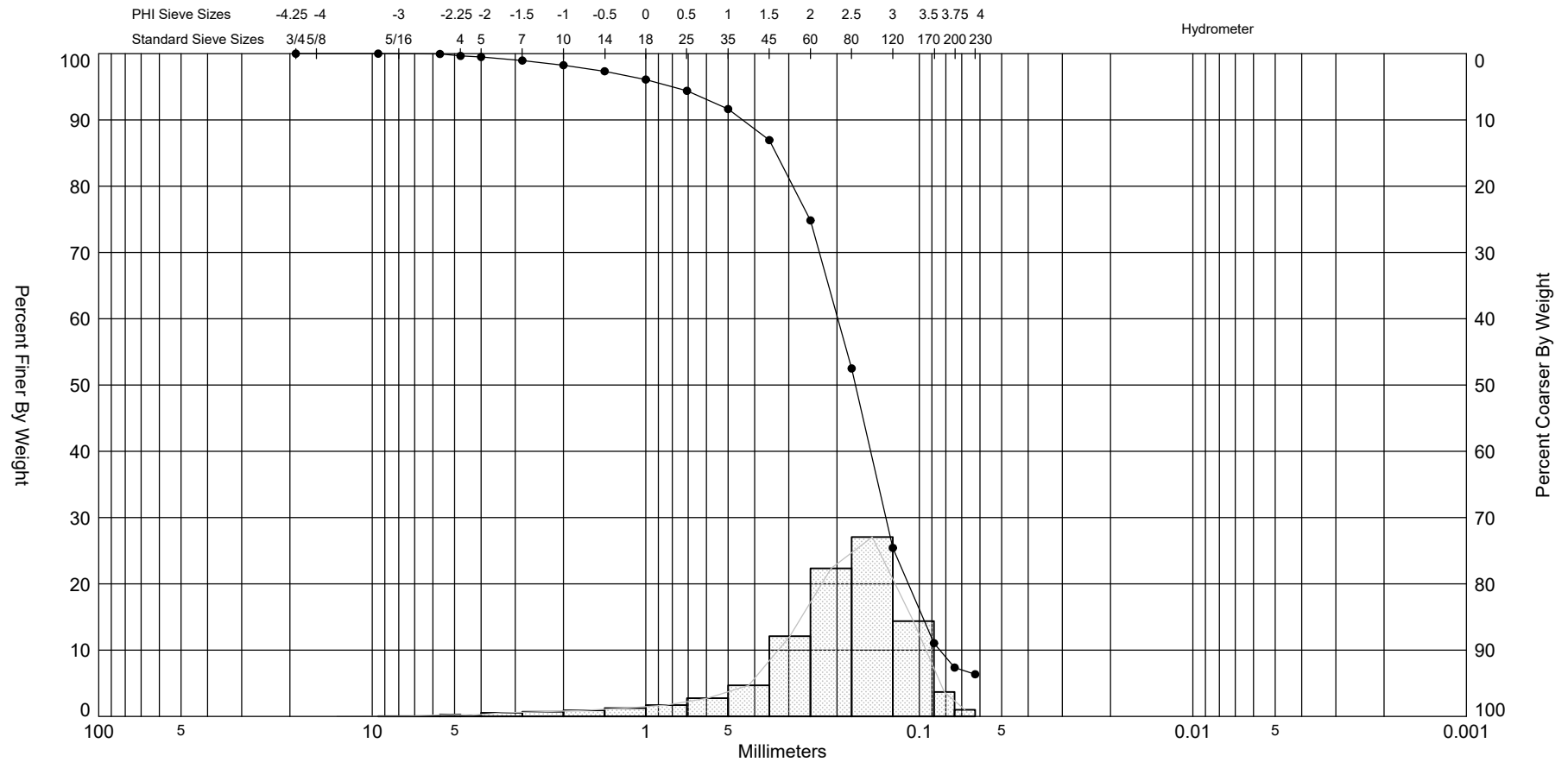


Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort	Sample Information	
PCV-25-06 #S-1		-5.0	SP	#200 - 1.08 #230 - 1.03			1.75	1.48	-1.95	7.64	1.14	Project Name:	Phillippi Creek Maintenance Dredging Feasibility Project
Comments: Sample Interval = -3.3' to -5' MLW												Analysis Date:	07-30-25
Depths and elevations based on measured values												Analyzed By:	Terracon Consultants, Inc.
						Athena Technologies, Inc. 1293 Graham Farm Road McClellanville, SC 29458 Office: 843-887-3800						Easting (X, ft):	487,269
												Northing (Y, ft):	1,077,073
												Horizontal System:	NAD 1983
												Vertical System:	MLW

Granularmetric Report Depths and elevations based on measured values				 Athena Technologies, Inc. 1293 Graham Farm Road McClellanville, SC 29458 Office: 843-887-3800			
Project Name: Phillippi Creek Maintenance Dredging Feasibility Project							
Sample Name: PCV-25-07 #S-1							
Analysis Date: 07-30-25							
Analyzed By: Terracon Consultants, Inc.							
Easting (ft): 487,162		Northing (ft): 1,077,457		Coordinate System: Florida State Plane West		Elevation (ft): -4.8 MLW	
USCS: SP-SM		Munsell: Wet - 10YR-5/1 Moist - 5Y-7/1		Comments: Sample Interval = -3.3' to -4.8' MLW			
Dry Weight (g): 199.04	Wash Weight (g): 186.36	Pan Retained (g):	Sieve Loss (%):	Fines (%): #200 - 7.37 #230 - 6.36	Organics (%):	Carbonates (%):	Shells (%):
Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	% Passing Sieve	
3/4	-4.25	19.03	0.00	0.00	0.00	100.00	
5/8	-3.25	9.51	0.00	0.00	0.00	100.00	
#3.5	-2.50	5.66	0.09	0.05	0.09	99.95	
#4	-2.25	4.76	0.57	0.29	0.66	99.66	
#5	-2.00	4.00	0.31	0.16	0.97	99.50	
#7	-1.50	2.83	1.07	0.54	2.04	98.96	
#10	-1.00	2.00	1.40	0.70	3.44	98.26	
#14	-0.50	1.41	1.83	0.92	5.27	97.34	
#18	0.00	1.00	2.48	1.25	7.75	96.09	
#25	0.50	0.71	3.38	1.70	11.13	94.39	
#35	1.00	0.50	5.47	2.75	16.60	91.64	
#45	1.50	0.35	9.33	4.69	25.93	86.95	
#60	2.00	0.25	24.11	12.11	50.04	74.84	
#80	2.50	0.18	44.47	22.34	94.51	52.50	
#120	3.00	0.13	53.88	27.07	148.39	25.43	
#170	3.50	0.09	28.62	14.38	177.01	11.05	
#200	3.75	0.07	7.33	3.68	184.34	7.37	
#230	4.00	0.06	2.02	1.01	186.36	6.36	
Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95	
	3.33	3.01	2.55	1.99	1.62	0.32	
Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis		
Statistics	2.29	0.20	1.01	-1.72	7.2		

SIEVE ANALYSIS CUMMINS CEDERBERG, PHILLIPPI CREEK EXTENSION, FL (2025) GPJ FL DEP ROSS.GDT 8/12/25

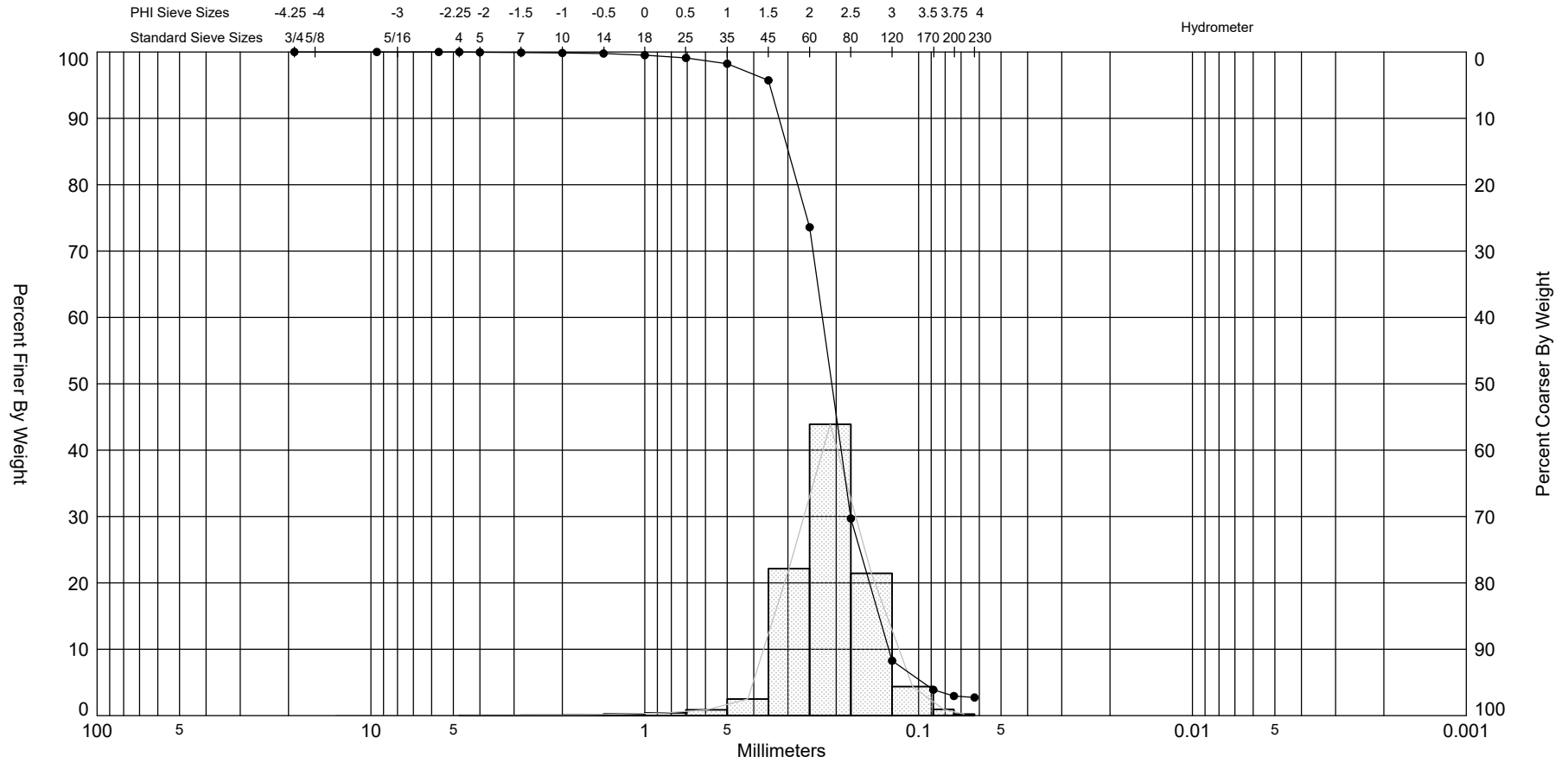


Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort	Sample Information	
PCV-25-07 #S-1		-4.8	SP-SM	#200 - 7.37 #230 - 6.36			2.55	2.29	-1.72	7.2	1.01	Project Name:	Phillippi Creek Maintenance Dredging Feasibility Project
Comments: Sample Interval = -3.3' to -4.8' MLW												Analysis Date:	07-30-25
Depths and elevations based on measured values												Analyzed By:	Terracon Consultants, Inc.
						Athena Technologies, Inc. 1293 Graham Farm Road McClellanville, SC 29458 Office: 843-887-3800						Easting (X, ft):	487,162
												Northing (Y, ft):	1,077,457
												Horizontal System:	NAD 1983
												Vertical System:	MLW

Granularmetric Report Depths and elevations based on measured values				 Athena Technologies, Inc. 1293 Graham Farm Road McClellanville, SC 29458 Office: 843-887-3800			
Project Name: Phillippi Creek Maintenance Dredging Feasibility Project							
Sample Name: PCV-25-07 #S-2							
Analysis Date: 07-30-25							
Analyzed By: Terracon Consultants, Inc.							
Easting (ft): 487,162		Northing (ft): 1,077,457		Coordinate System: Florida State Plane West		Elevation (ft): -5.1 MLW	
USCS: SP		Munsell: Wet - 10YR-8/1 Moist - 5Y-6/1		Comments: Sample Interval = -4.8' to -5.1' MLW			
Dry Weight (g): 219.91	Wash Weight (g): 213.92	Pan Retained (g):	Sieve Loss (%):	Fines (%): #200 - 2.95 #230 - 2.73	Organics (%):	Carbonates (%):	Shells (%):
Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	% Passing Sieve	
3/4	-4.25	19.03	0.00	0.00	0.00	100.00	
5/8	-3.25	9.51	0.00	0.00	0.00	100.00	
#3.5	-2.50	5.66	0.00	0.00	0.00	100.00	
#4	-2.25	4.76	0.00	0.00	0.00	100.00	
#5	-2.00	4.00	0.12	0.05	0.12	99.95	
#7	-1.50	2.83	0.08	0.04	0.20	99.91	
#10	-1.00	2.00	0.14	0.06	0.34	99.85	
#14	-0.50	1.41	0.18	0.08	0.52	99.77	
#18	0.00	1.00	0.54	0.25	1.06	99.52	
#25	0.50	0.71	0.93	0.42	1.99	99.10	
#35	1.00	0.50	1.91	0.87	3.90	98.23	
#45	1.50	0.35	5.50	2.50	9.40	95.73	
#60	2.00	0.25	48.68	22.14	58.08	73.59	
#80	2.50	0.18	96.52	43.89	154.60	29.70	
#120	3.00	0.13	47.13	21.43	201.73	8.27	
#170	3.50	0.09	9.64	4.38	211.37	3.89	
#200	3.75	0.07	2.07	0.94	213.44	2.95	
#230	4.00	0.06	0.48	0.22	213.92	2.73	
Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95	
3.37	2.82	2.61	2.27	1.97	1.76	1.52	
Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis		
Statistics	2.25	0.21	0.54	-1.07	9.66		

SIEVE ANALYSIS CUMMINS CEDERBERG, PHILLIPPI CREEK EXTENSION, FL (2025) GPU FL DEP ROSS.GDT 8/12/25

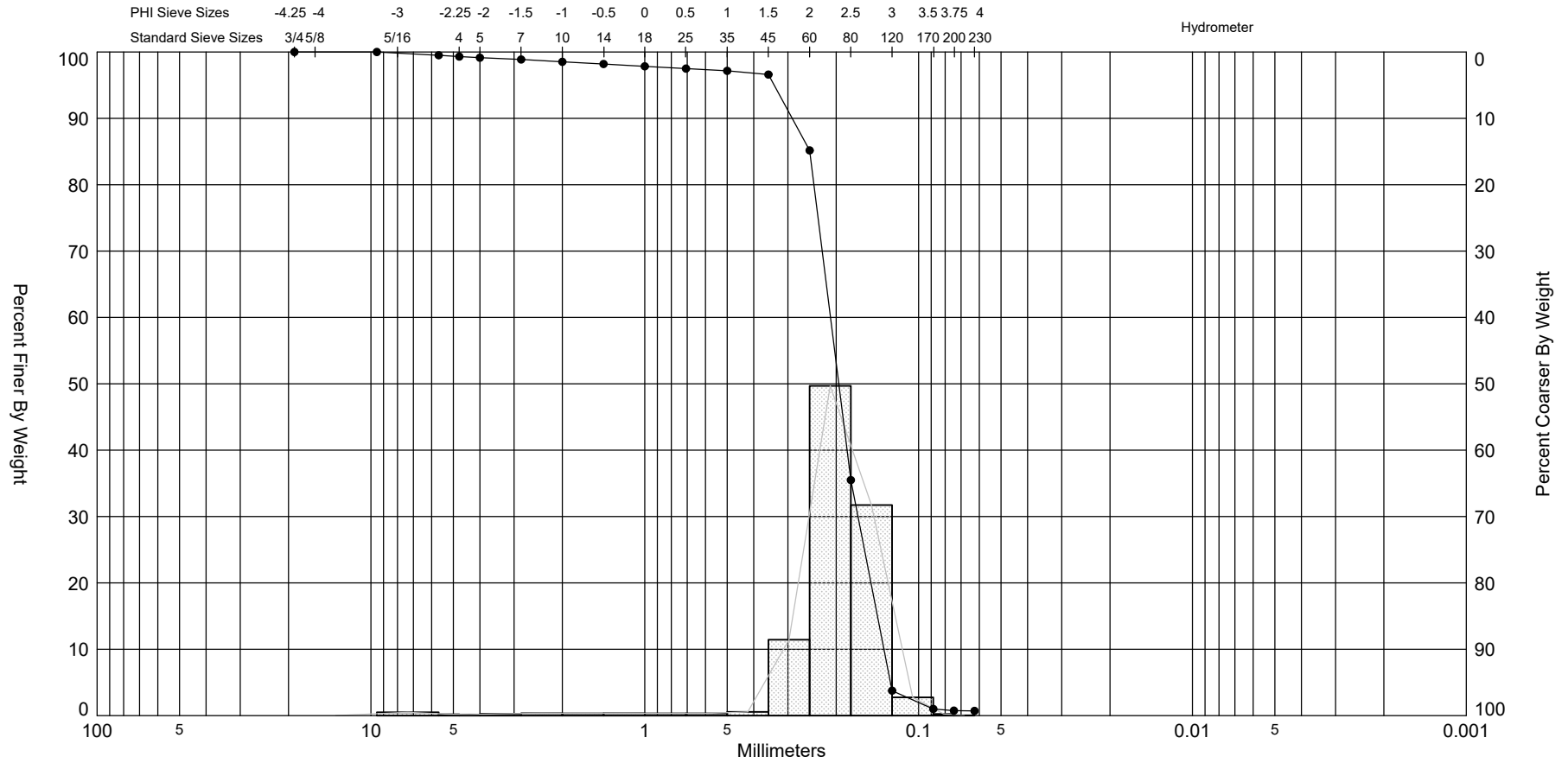


Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort	Sample Information	
PCV-25-07 #S-2	—●—	-5.1	SP	#200 - 2.95 #230 - 2.73			2.27	2.25	-1.07	9.66	0.54	Project Name:	Phillippi Creek Maintenance Dredging Feasibility Project
Comments: Sample Interval = -4.8' to -5.1' MLW												Analysis Date:	07-30-25
Depths and elevations based on measured values												Analyzed By:	Terracon Consultants, Inc.
							Athena Technologies, Inc. 1293 Graham Farm Road McClellanville, SC 29458 Office: 843-887-3800					Easting (X, ft):	487,162
												Northing (Y, ft):	1,077,457
												Horizontal System:	NAD 1983
												Vertical System:	MLW

Granularmetric Report Depths and elevations based on measured values				 Athena Technologies, Inc. 1293 Graham Farm Road McClellanville, SC 29458 Office: 843-887-3800			
Project Name: Phillippi Creek Maintenance Dredging Feasibility Project							
Sample Name: PCV-25-08 #S-1							
Analysis Date: 07-30-25							
Analyzed By: Terracon Consultants, Inc.							
Easting (ft): 488,054		Northing (ft): 1,078,715		Coordinate System: Florida State Plane West		Elevation (ft): -2.6 MLW	
USCS: SP		Munsell: Wet - 10YR-8/1 Moist - 5Y-7/1		Comments: Sample Interval = -1' to -2.6' MLW			
Dry Weight (g): 191.62	Wash Weight (g): 190.31	Pan Retained (g):	Sieve Loss (%):	Fines (%): #200 - 0.75 #230 - 0.71	Organics (%):	Carbonates (%):	Shells (%):
Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	% Passing Sieve	
3/4	-4.25	19.03	0.00	0.00	0.00	100.00	
5/8	-3.25	9.51	0.00	0.00	0.00	100.00	
#3.5	-2.50	5.66	0.93	0.49	0.93	99.51	
#4	-2.25	4.76	0.39	0.20	1.32	99.31	
#5	-2.00	4.00	0.33	0.17	1.65	99.14	
#7	-1.50	2.83	0.52	0.27	2.17	98.87	
#10	-1.00	2.00	0.68	0.35	2.85	98.52	
#14	-0.50	1.41	0.64	0.33	3.49	98.19	
#18	0.00	1.00	0.68	0.35	4.17	97.84	
#25	0.50	0.71	0.66	0.34	4.83	97.50	
#35	1.00	0.50	0.65	0.34	5.48	97.16	
#45	1.50	0.35	1.08	0.56	6.56	96.60	
#60	2.00	0.25	21.91	11.43	28.47	85.17	
#80	2.50	0.18	95.20	49.68	123.67	35.49	
#120	3.00	0.13	60.81	31.73	184.48	3.76	
#170	3.50	0.09	5.26	2.75	189.74	1.01	
#200	3.75	0.07	0.50	0.26	190.24	0.75	
#230	4.00	0.06	0.07	0.04	190.31	0.71	
Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95	
2.98	2.81	2.67	2.35	2.10	2.01	1.57	
Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis		
Statistics	2.28	0.21	0.72	-4.11	26.22		

SIEVE ANALYSIS CUMMINS CEDERBERG, PHILLIPPI CREEK EXTENSION, FL (2025) GPJ FL DEP ROSS.GDT 8/12/25

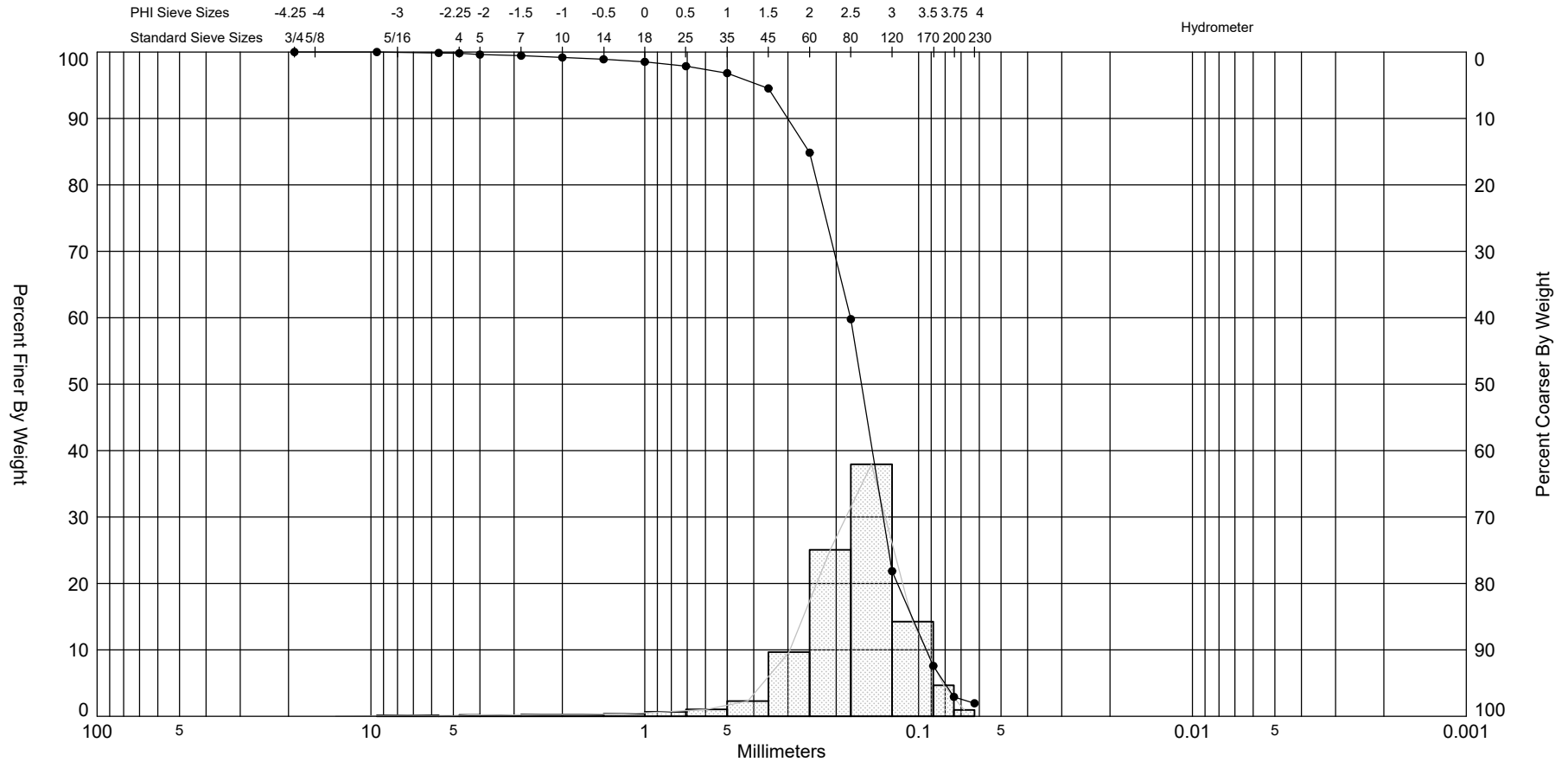


Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort	Sample Information	
PCV-25-08 #S-1		-2.6	SP	#200 - 0.75 #230 - 0.71			2.35	2.28	-4.11	26.22	0.72	Project Name:	Phillippi Creek Maintenance Dredging Feasibility Project
Comments: Sample Interval = -1' to -2.6' MLW												Analysis Date:	07-30-25
Depths and elevations based on measured values												Analyzed By:	Terracon Consultants, Inc.
						Athena Technologies, Inc. 1293 Graham Farm Road McClellanville, SC 29458 Office: 843-887-3800						Easting (X, ft):	488,054
												Northing (Y, ft):	1,078,715
												Horizontal System:	NAD 1983
												Vertical System:	MLW

Granularmetric Report Depths and elevations based on measured values				 Athena Technologies, Inc. 1293 Graham Farm Road McClellanville, SC 29458 Office: 843-887-3800			
Project Name: Phillippi Creek Maintenance Dredging Feasibility Project							
Sample Name: PCV-25-08 #S-2							
Analysis Date: 07-30-25							
Analyzed By: Terracon Consultants, Inc.							
Easting (ft): 488,054		Northing (ft): 1,078,715		Coordinate System: Florida State Plane West		Elevation (ft): -5.0 MLW	
USCS: SP		Munsell: Wet - 10YR-7/1 Moist - 5Y-8/1		Comments: Sample Interval = -2.6' to -5' MLW			
Dry Weight (g): 221.15	Wash Weight (g): 216.78	Pan Retained (g):	Sieve Loss (%):	Fines (%): #200 - 2.92 #230 - 1.96	Organics (%):	Carbonates (%):	Shells (%):
Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	% Passing Sieve	
3/4	-4.25	19.03	0.00	0.00	0.00	100.00	
5/8	-3.25	9.51	0.00	0.00	0.00	100.00	
#3.5	-2.50	5.66	0.30	0.14	0.30	99.86	
#4	-2.25	4.76	0.09	0.04	0.39	99.82	
#5	-2.00	4.00	0.44	0.20	0.83	99.62	
#7	-1.50	2.83	0.37	0.17	1.20	99.45	
#10	-1.00	2.00	0.60	0.27	1.80	99.18	
#14	-0.50	1.41	0.60	0.27	2.40	98.91	
#18	0.00	1.00	0.83	0.38	3.23	98.53	
#25	0.50	0.71	1.46	0.66	4.69	97.87	
#35	1.00	0.50	2.32	1.05	7.01	96.82	
#45	1.50	0.35	5.08	2.30	12.09	94.52	
#60	2.00	0.25	21.38	9.67	33.47	84.85	
#80	2.50	0.18	55.43	25.06	88.90	59.79	
#120	3.00	0.13	83.90	37.94	172.80	21.85	
#170	3.50	0.09	31.53	14.26	204.33	7.59	
#200	3.75	0.07	10.32	4.67	214.65	2.92	
#230	4.00	0.06	2.13	0.96	216.78	1.96	
Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95	
3.64	3.21	2.96	2.63	2.20	2.02	1.40	
Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis		
Statistics	2.52	0.17	0.76	-2.28	13.45		

SIEVE ANALYSIS CUMMINS CEDERBERG, PHILLIPPI CREEK EXTENSION, FL (2025) GPJ FL DEP ROSS.GDT 8/12/25

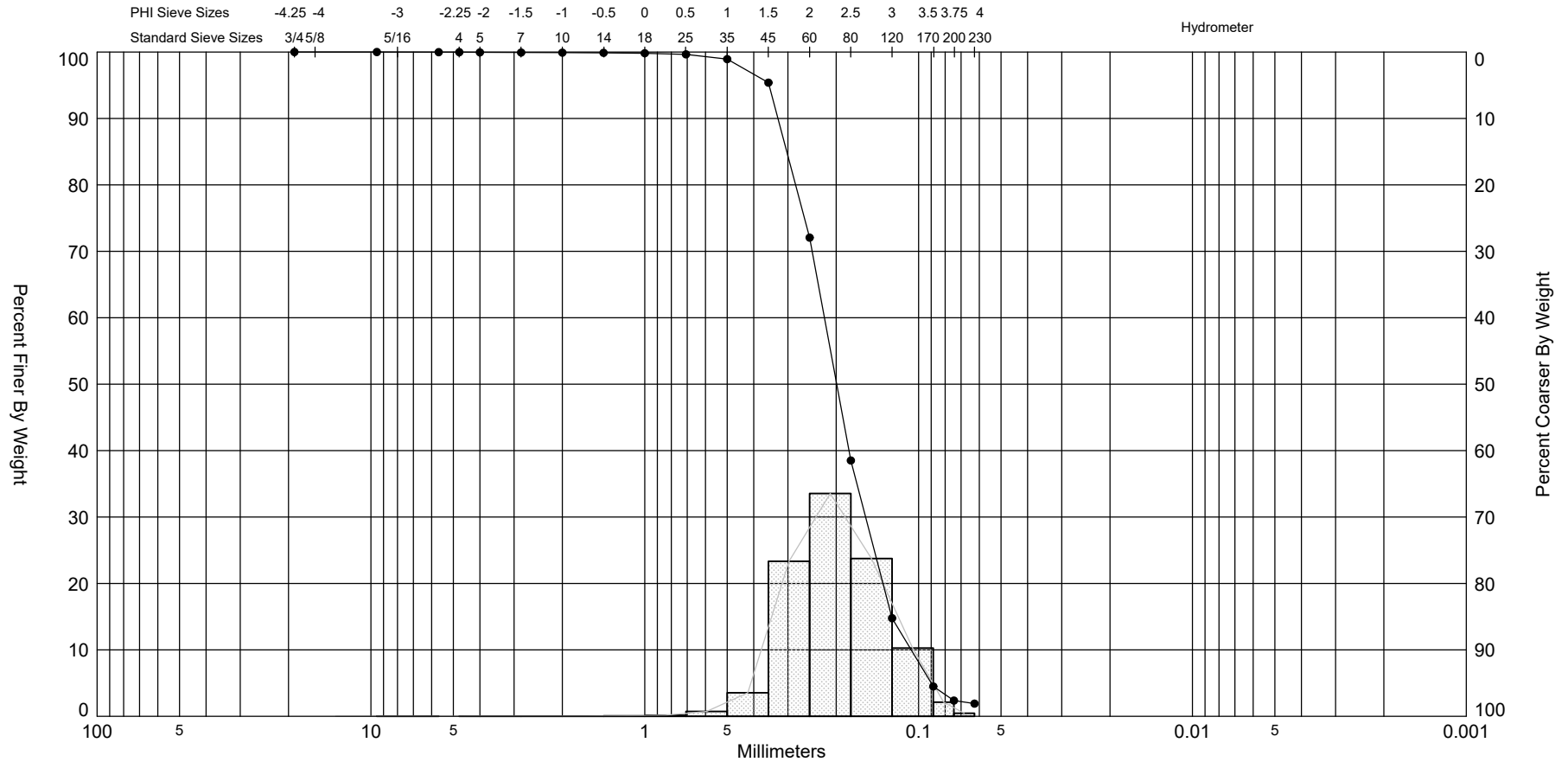


Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort	Sample Information	
PCV-25-08 #S-2		-5.0	SP	#200 - 2.92 #230 - 1.96			2.63	2.52	-2.28	13.45	0.76	Project Name:	Phillippi Creek Maintenance Dredging Feasibility Project
Comments: Sample Interval = -2.6' to -5' MLW												Analysis Date:	07-30-25
Depths and elevations based on measured values												Analyzed By:	Terracon Consultants, Inc.
						Athena Technologies, Inc. 1293 Graham Farm Road McClellanville, SC 29458 Office: 843-887-3800						Easting (X, ft):	488,054
												Northing (Y, ft):	1,078,715
												Horizontal System:	NAD 1983
												Vertical System:	MLW

Granularmetric Report Depths and elevations based on measured values				 Athena Technologies, Inc. 1293 Graham Farm Road McClellanville, SC 29458 Office: 843-887-3800			
Project Name: Phillippi Creek Maintenance Dredging Feasibility Project							
Sample Name: PCV-25-09 #S-1							
Analysis Date: 07-30-25							
Analyzed By: Terracon Consultants, Inc.							
Easting (ft): 488,328		Northing (ft): 1,079,121		Coordinate System: Florida State Plane West		Elevation (ft): -1.7 MLW	
USCS: SP		Munsell: Wet - 10YR-8/1 Moist - 5Y-7/1		Comments: Sample Interval = 0' to -1.7' MLW			
Dry Weight (g): 256.07	Wash Weight (g): 251.16	Pan Retained (g):	Sieve Loss (%):	Fines (%): #200 - 2.37 #230 - 1.91	Organics (%):	Carbonates (%):	Shells (%):
Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	% Passing Sieve	
3/4	-4.25	19.03	0.00	0.00	0.00	100.00	
5/8	-3.25	9.51	0.00	0.00	0.00	100.00	
#3.5	-2.50	5.66	0.05	0.02	0.05	99.98	
#4	-2.25	4.76	0.00	0.00	0.05	99.98	
#5	-2.00	4.00	0.08	0.03	0.13	99.95	
#7	-1.50	2.83	0.05	0.02	0.18	99.93	
#10	-1.00	2.00	0.04	0.02	0.22	99.91	
#14	-0.50	1.41	0.08	0.03	0.30	99.88	
#18	0.00	1.00	0.15	0.06	0.45	99.82	
#25	0.50	0.71	0.44	0.17	0.89	99.65	
#35	1.00	0.50	1.84	0.72	2.73	98.93	
#45	1.50	0.35	9.07	3.54	11.80	95.39	
#60	2.00	0.25	59.75	23.33	71.55	72.06	
#80	2.50	0.18	85.91	33.55	157.46	38.51	
#120	3.00	0.13	60.78	23.74	218.24	14.77	
#170	3.50	0.09	26.33	10.28	244.57	4.49	
#200	3.75	0.07	5.42	2.12	249.99	2.37	
#230	4.00	0.06	1.17	0.46	251.16	1.91	
Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95	
3.48	2.97	2.78	2.33	1.94	1.74	1.51	
Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis		
Statistics	2.34	0.20	0.59	-0.37	5.9		

SIEVE ANALYSIS CUMMINS CEDERBERG, PHILLIPPI CREEK EXTENSION, FL (2025) GPJ FL DEP ROSS.GDT 8/12/25

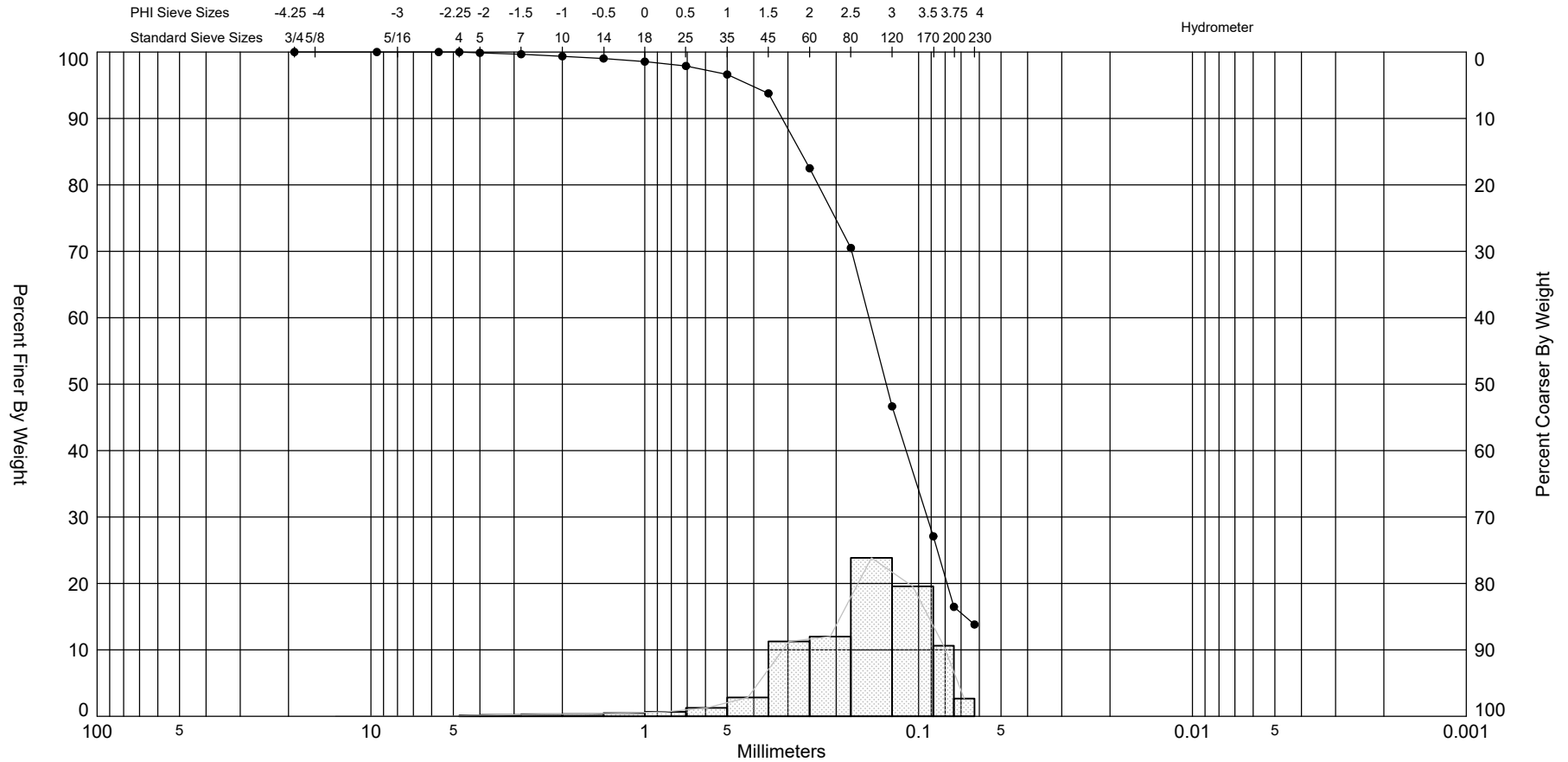


Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort	Sample Information	
PCV-25-09 #S-1	—●—	-1.7	SP	#200 - 2.37 #230 - 1.91			2.33	2.34	-0.37	5.9	0.59	Project Name:	Phillippi Creek Maintenance Dredging Feasibility Project
Comments: Sample Interval = 0' to -1.7' MLW												Analysis Date:	07-30-25
Depths and elevations based on measured values												Analyzed By:	Terracon Consultants, Inc.
							Athena Technologies, Inc. 1293 Graham Farm Road McClellanville, SC 29458 Office: 843-887-3800					Easting (X, ft):	488,328
												Northing (Y, ft):	1,079,121
												Horizontal System:	NAD 1983
												Vertical System:	MLW

Granularmetric Report Depths and elevations based on measured values				 Athena Technologies, Inc. 1293 Graham Farm Road McClellanville, SC 29458 Office: 843-887-3800			
Project Name: Phillippi Creek Maintenance Dredging Feasibility Project							
Sample Name: PCV-25-09 #S-2							
Analysis Date: 07-30-25							
Analyzed By: Terracon Consultants, Inc.							
Easting (ft): 488,328		Northing (ft): 1,079,121		Coordinate System: Florida State Plane West		Elevation (ft): -2.6 MLW	
USCS: SM		Munsell: Wet - 10YR-5/1 Moist - 5Y-8/1		Comments: Sample Interval = -1.7' to -2.6' MLW			
Dry Weight (g): 238.74	Wash Weight (g): 205.69	Pan Retained (g):	Sieve Loss (%):	Fines (%): #200 - 16.48 #230 - 13.82	Organics (%):	Carbonates (%):	Shells (%):
Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	% Passing Sieve	
3/4	-4.25	19.03	0.00	0.00	0.00	100.00	
5/8	-3.25	9.51	0.00	0.00	0.00	100.00	
#3.5	-2.50	5.66	0.00	0.00	0.00	100.00	
#4	-2.25	4.76	0.00	0.00	0.00	100.00	
#5	-2.00	4.00	0.28	0.12	0.28	99.88	
#7	-1.50	2.83	0.49	0.21	0.77	99.67	
#10	-1.00	2.00	0.73	0.31	1.50	99.36	
#14	-0.50	1.41	0.79	0.33	2.29	99.03	
#18	0.00	1.00	1.13	0.47	3.42	98.56	
#25	0.50	0.71	1.57	0.66	4.99	97.90	
#35	1.00	0.50	3.05	1.28	8.04	96.62	
#45	1.50	0.35	6.77	2.84	14.81	93.78	
#60	2.00	0.25	26.92	11.28	41.73	82.50	
#80	2.50	0.18	28.62	11.99	70.35	70.51	
#120	3.00	0.13	56.93	23.85	127.28	46.66	
#170	3.50	0.09	46.69	19.56	173.97	27.10	
#200	3.75	0.07	25.36	10.62	199.33	16.48	
#230	4.00	0.06	6.36	2.66	205.69	13.82	
Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95	
	3.80	3.55	2.93	2.31	1.93	1.29	
Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis		
Statistics	2.65	0.16	0.87	-1.54	7.24		

SIEVE ANALYSIS CUMMINS CEDERBERG, PHILLIPPI CREEK EXTENSION, FL (2025) GPJ FL DEP ROSS.GDT 8/12/25

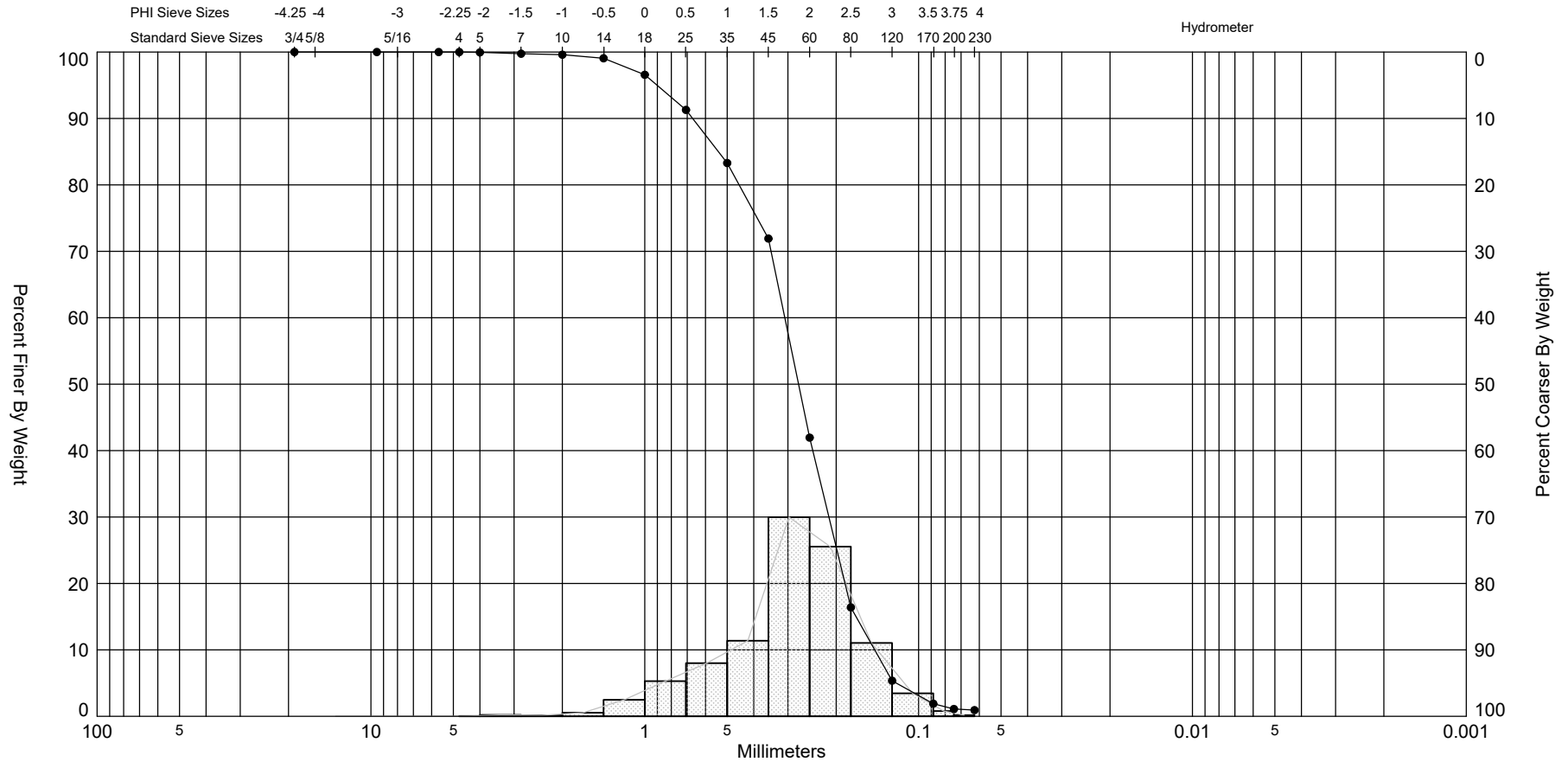


Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort	Sample Information	
PCV-25-09 #S-2		-2.6	SM	#200 - 16.48 #230 - 13.82			2.93	2.65	-1.54	7.24	0.87	Project Name:	Phillippi Creek Maintenance Dredging Feasibility Project
Comments: Sample Interval = -1.7' to -2.6' MLW												Analysis Date:	07-30-25
Depths and elevations based on measured values												Analyzed By:	Terracon Consultants, Inc.
						Athena Technologies, Inc. 1293 Graham Farm Road McClellanville, SC 29458 Office: 843-887-3800						Easting (X, ft):	488,328
												Northing (Y, ft):	1,079,121
												Horizontal System:	NAD 1983
												Vertical System:	MLW

Granularmetric Report				 Athena Technologies, Inc. 1293 Graham Farm Road McClellanville, SC 29458 Office: 843-887-3800			
Depths and elevations based on measured values							
Project Name: Phillippi Creek Maintenance Dredging Feasibility Project							
Sample Name: PCV-25-09 #S-3							
Analysis Date: 07-30-25							
Analyzed By: Terracon Consultants, Inc.				Coordinate System:		Elevation (ft):	
Easting (ft):		Northing (ft):		Florida State Plane West		-3.7 MLW	
USCS:		Munsell:		Comments:			
SP		Wet - 10YR-8/1 Moist - 5Y-8/2		Sample Interval = -2.6' to -3.7' MLW			
Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
266.34	263.82			#200 - 1.10 #230 - 0.93			
Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	% Passing Sieve	
3/4	-4.25	19.03	0.00	0.00	0.00	100.00	
5/8	-3.25	9.51	0.00	0.00	0.00	100.00	
#3.5	-2.50	5.66	0.00	0.00	0.00	100.00	
#4	-2.25	4.76	0.00	0.00	0.00	100.00	
#5	-2.00	4.00	0.12	0.05	0.12	99.95	
#7	-1.50	2.83	0.52	0.20	0.64	99.75	
#10	-1.00	2.00	0.39	0.15	1.03	99.60	
#14	-0.50	1.41	1.44	0.54	2.47	99.06	
#18	0.00	1.00	6.61	2.48	9.08	96.58	
#25	0.50	0.71	14.08	5.29	23.16	91.29	
#35	1.00	0.50	21.30	8.00	44.46	83.29	
#45	1.50	0.35	30.28	11.37	74.74	71.92	
#60	2.00	0.25	79.81	29.97	154.55	41.95	
#80	2.50	0.18	68.06	25.55	222.61	16.40	
#120	3.00	0.13	29.40	11.04	252.01	5.36	
#170	3.50	0.09	9.22	3.46	261.23	1.90	
#200	3.75	0.07	2.13	0.80	263.36	1.10	
#230	4.00	0.06	0.46	0.17	263.82	0.93	
Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95	
3.05	2.52	2.33	1.87	1.36	0.96	0.15	
Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis		
Statistics	1.77	0.29	0.84	-0.71	4.01		

SIEVE ANALYSIS CUMMINS CEDERBERG, PHILLIPPI CREEK EXTENSION, FL (2025) GPJ FL DEP ROSS.GDT 8/12/25

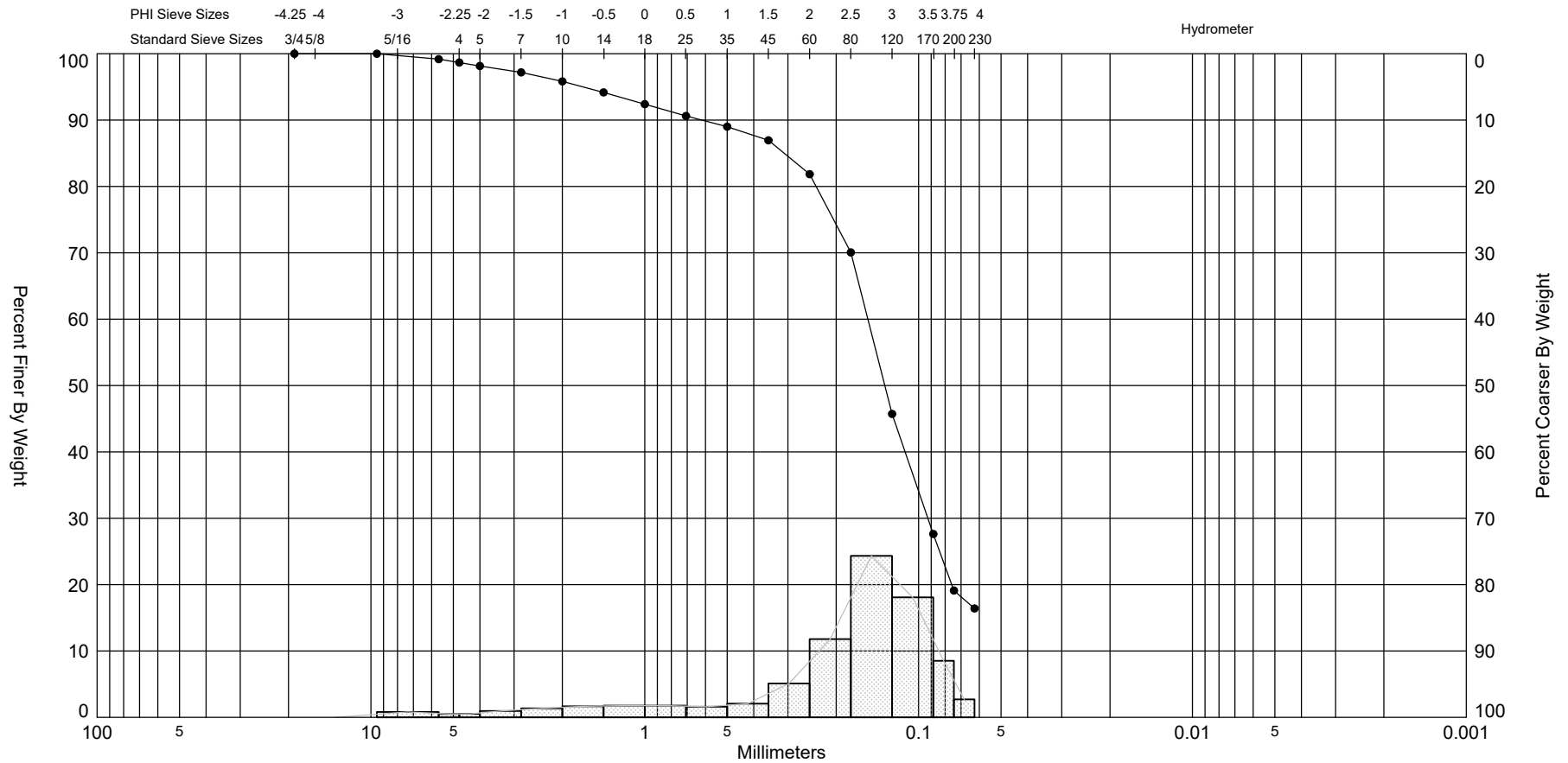


Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort	Sample Information	
PCV-25-09 #S-3	—●—	-3.7	SP	#200 - 1.10 #230 - 0.93			1.87	1.77	-0.71	4.01	0.84	Project Name:	Phillippi Creek Maintenance Dredging Feasibility Project
Comments: Sample Interval = -2.6' to -3.7' MLW												Analysis Date:	07-30-25
Depths and elevations based on measured values												Analyzed By:	Terracon Consultants, Inc.
							Athena Technologies, Inc. 1293 Graham Farm Road McClellanville, SC 29458 Office: 843-887-3800					Easting (X, ft):	488,328
												Northing (Y, ft):	1,079,121
												Horizontal System:	NAD 1983
												Vertical System:	MLW

Granularmetric Report				 Athena Technologies, Inc. 1293 Graham Farm Road McClellanville, SC 29458 Office: 843-887-3800			
Depths and elevations based on measured values							
Project Name: Phillippi Creek Maintenance Dredging Feasibility Project							
Sample Name: PCV-25-10 #S-1							
Analysis Date: 07-30-25							
Analyzed By: Terracon Consultants, Inc.				Coordinate System:		Elevation (ft):	
Easting (ft):		Northing (ft):		Florida State Plane West		-2.2 MLW	
USCS:		Munsell:		Comments:			
SM		Wet - 10YR-5/1 Moist - 5Y-6/2		Sample Interval = -0.2' to -2.2' MLW			
Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
155.31	129.83			#200 - 19.11 #230 - 16.41			
Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	% Passing Sieve	
3/4	-4.25	19.03	0.00	0.00	0.00	100.00	
5/8	-3.25	9.51	0.00	0.00	0.00	100.00	
#3.5	-2.50	5.66	1.27	0.82	1.27	99.18	
#4	-2.25	4.76	0.79	0.51	2.06	98.67	
#5	-2.00	4.00	0.80	0.52	2.86	98.15	
#7	-1.50	2.83	1.49	0.96	4.35	97.19	
#10	-1.00	2.00	2.11	1.36	6.46	95.83	
#14	-0.50	1.41	2.58	1.66	9.04	94.17	
#18	0.00	1.00	2.75	1.77	11.79	92.40	
#25	0.50	0.71	2.77	1.78	14.56	90.62	
#35	1.00	0.50	2.50	1.61	17.06	89.01	
#45	1.50	0.35	3.20	2.06	20.26	86.95	
#60	2.00	0.25	7.92	5.10	28.18	81.85	
#80	2.50	0.18	18.31	11.79	46.49	70.06	
#120	3.00	0.13	37.81	24.34	84.30	45.72	
#170	3.50	0.09	28.10	18.09	112.40	27.63	
#200	3.75	0.07	13.24	8.52	125.64	19.11	
#230	4.00	0.06	4.19	2.70	129.83	16.41	
Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95	
		3.58	2.91	2.29	1.79	-0.75	
Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis		
Statistics	2.36	0.19	1.39	-1.86	6.19		

SIEVE ANALYSIS CUMMINS CEDERBERG, PHILLIPPI CREEK EXTENSION, FL (2025) GPJ FL DEP ROSS.GDT 8/12/25



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort	Sample Information	
PCV-25-10 #S-1		-2.2	SM	#200 - 19.11 #230 - 16.41			2.91	2.36	-1.86	6.19	1.39	Project Name:	Phillippi Creek Maintenance Dredging Feasibility Project
Comments: Sample Interval = -0.2' to -2.2' MLW												Analysis Date:	07-30-25
Depths and elevations based on measured values												Analyzed By:	Terracon Consultants, Inc.
						Athena Technologies, Inc. 1293 Graham Farm Road McClellanville, SC 29458 Office: 843-887-3800						Easting (X, ft):	488,907
												Northing (Y, ft):	1,079,792
												Horizontal System:	NAD 1983
												Vertical System:	MLW

Depths and elevations based on measured values



Analyzed By: Terracon Consultants, Inc.

-2.6 MLW

Sample Interval = -2.2' to -2.6' MLW

% Passing
Sieve

100.00

100.00

99.96

99.95

99.94

99.90

99.86

99.76

99 67

99.50

99 12

97 85

85 78

53 74

30.04

603

4.00

242

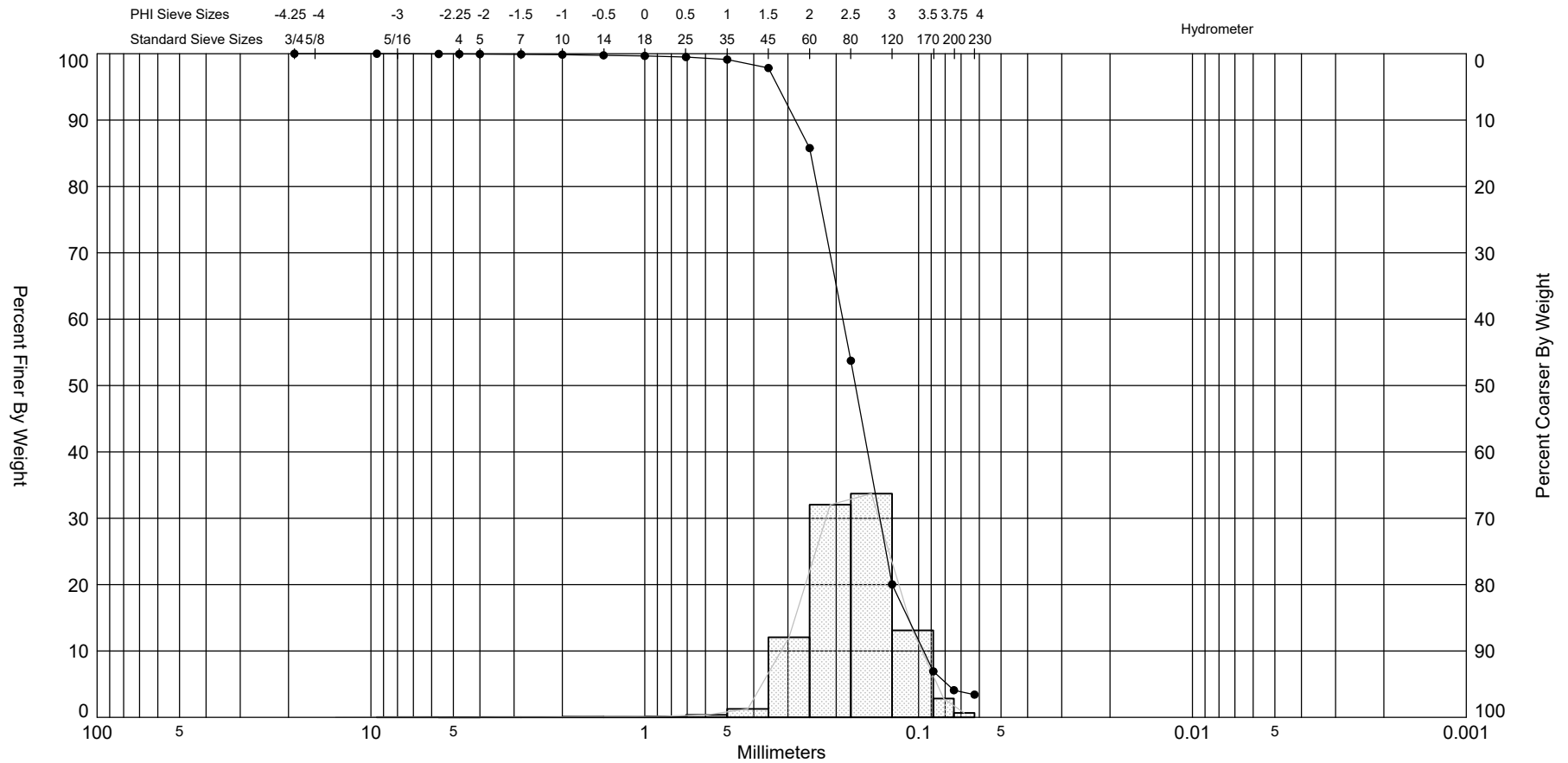
Phi 95

162

Kurtosis

10.77

SIEVE ANALYSIS CUMMINS CEDERBERG, PHILLIPPI CREEK EXTENSION, FL (2025) GPJ FL DEP ROSS.GDT 8/12/25

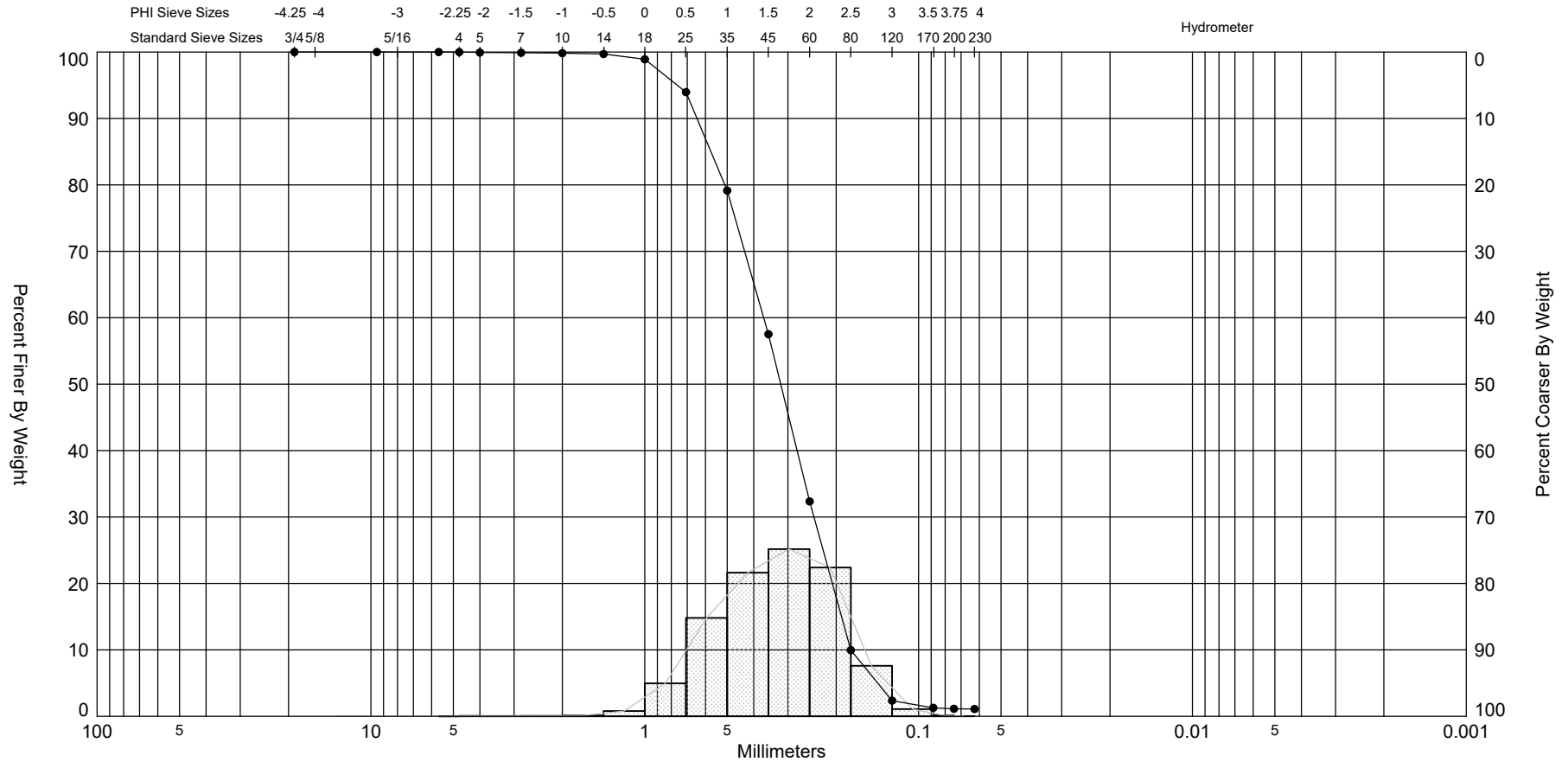


Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort	Sample Information	
PCV-25-10 #S-2		-2.6	SP	#200 - 4.09 #230 - 3.42			2.56	2.51	-1.18	10.77	0.58	Project Name:	Phillippi Creek Maintenance Dredging Feasibility Project
Comments: Sample Interval = -2.2' to -2.6' MLW												Analysis Date:	07-30-25
Depths and elevations based on measured values												Analyzed By:	Terracon Consultants, Inc.
						Athena Technologies, Inc. 1293 Graham Farm Road McClellanville, SC 29458 Office: 843-887-3800						Easting (X, ft):	488,907
												Northing (Y, ft):	1,079,792
												Horizontal System:	NAD 1983
												Vertical System:	MLW

Granularmetric Report Depths and elevations based on measured values				 Athena Technologies, Inc. 1293 Graham Farm Road McClellanville, SC 29458 Office: 843-887-3800			
Project Name: Phillippi Creek Maintenance Dredging Feasibility Project							
Sample Name: PCV-25-10 #S-3							
Analysis Date: 07-30-25							
Analyzed By: Terracon Consultants, Inc.							
Easting (ft): 488,907		Northing (ft): 1,079,792		Coordinate System: Florida State Plane West		Elevation (ft): -4.1 MLW	
USCS: SP		Munsell: Wet - 10YR-8/1 Moist - 5Y-8/1		Comments: Sample Interval = -2.6' to -4.1' MLW			
Dry Weight (g): 301.55	Wash Weight (g): 298.26	Pan Retained (g):	Sieve Loss (%):	Fines (%): #200 - 1.13 #230 - 1.10	Organics (%):	Carbonates (%):	Shells (%):
Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	% Passing Sieve	
3/4	-4.25	19.03	0.00	0.00	0.00	100.00	
5/8	-3.25	9.51	0.00	0.00	0.00	100.00	
#3.5	-2.50	5.66	0.00	0.00	0.00	100.00	
#4	-2.25	4.76	0.02	0.01	0.02	99.99	
#5	-2.00	4.00	0.17	0.06	0.19	99.93	
#7	-1.50	2.83	0.13	0.04	0.32	99.89	
#10	-1.00	2.00	0.19	0.06	0.51	99.83	
#14	-0.50	1.41	0.40	0.13	0.91	99.70	
#18	0.00	1.00	2.39	0.79	3.30	98.91	
#25	0.50	0.71	14.94	4.95	18.24	93.96	
#35	1.00	0.50	44.68	14.82	62.92	79.14	
#45	1.50	0.35	65.19	21.62	128.11	57.52	
#60	2.00	0.25	75.91	25.17	204.02	32.35	
#80	2.50	0.18	67.53	22.39	271.55	9.96	
#120	3.00	0.13	22.91	7.60	294.46	2.36	
#170	3.50	0.09	3.25	1.08	297.71	1.28	
#200	3.75	0.07	0.46	0.15	298.17	1.13	
#230	4.00	0.06	0.09	0.03	298.26	1.10	
Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95	
2.83	2.37	2.16	1.65	1.10	0.84	0.39	
Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis		
Statistics	1.6	0.33	0.72	-0.3	3.3		

SIEVE ANALYSIS CUMMINS CEDERBERG, PHILLIPPI CREEK EXTENSION, FL (2025) GPU FL DEP ROSS.GDT 8/12/25

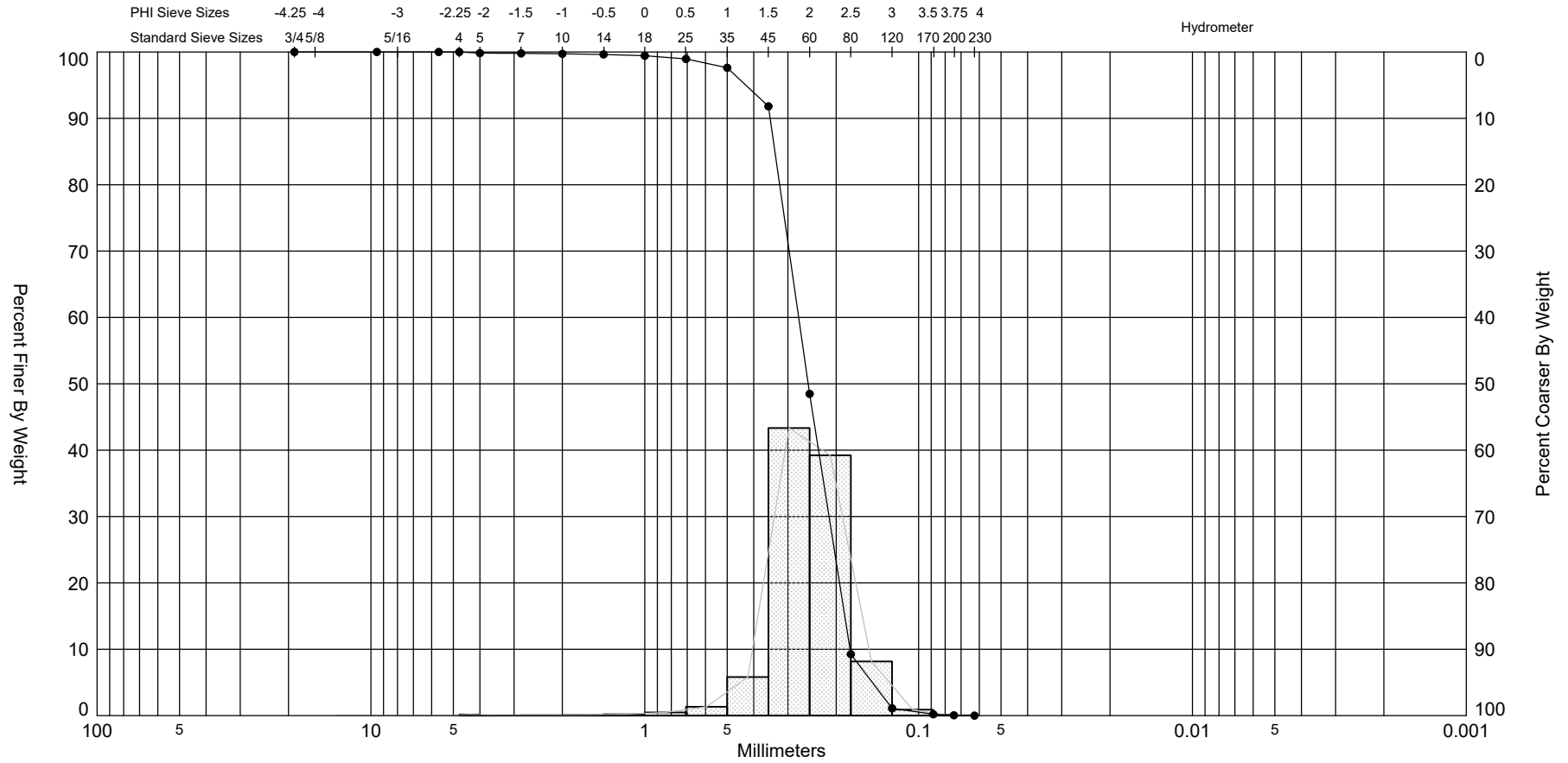


Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort	Sample Information	
PCV-25-10 #S-3	—●—	-4.1	SP	#200 - 1.13 #230 - 1.10			1.65	1.6	-0.3	3.3	0.72	Project Name:	Phillippi Creek Maintenance Dredging Feasibility Project
Comments: Sample Interval = -2.6' to -4.1' MLW												Analysis Date:	07-30-25
Depths and elevations based on measured values												Analyzed By:	Terracon Consultants, Inc.
							Athena Technologies, Inc. 1293 Graham Farm Road McClellanville, SC 29458 Office: 843-887-3800					Easting (X, ft):	488,907
												Northing (Y, ft):	1,079,792
												Horizontal System:	NAD 1983
												Vertical System:	MLW

Granularmetric Report Depths and elevations based on measured values				 Athena Technologies, Inc. 1293 Graham Farm Road McClellanville, SC 29458 Office: 843-887-3800			
Project Name: Phillippi Creek Maintenance Dredging Feasibility Project							
Sample Name: PCG-25-11							
Analysis Date: 08-11-25							
Analyzed By: Terracon Consultants, Inc.							
Easting (ft): 489,355		Northing (ft): 1,080,113		Coordinate System: Florida State Plane West		Elevation (ft): -2.1 MLW	
USCS: SP		Munsell: Wet - 5Y-5/1 Moist - 5Y-8/1		Comments: Sample Interval = -1.8' to -2.1' MLW			
Dry Weight (g): 178.27	Wash Weight (g): 178.25	Pan Retained (g):	Sieve Loss (%):	Fines (%): #200 - 0.05 #230 - 0.00	Organics (%):	Carbonates (%):	Shells (%):
Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	% Passing Sieve	
3/4	-4.25	19.03	0.00	0.00	0.00	100.00	
5/8	-3.25	9.51	0.00	0.00	0.00	100.00	
#3.5	-2.50	5.66	0.00	0.00	0.00	100.00	
#4	-2.25	4.76	0.00	0.00	0.00	100.00	
#5	-2.00	4.00	0.30	0.17	0.30	99.83	
#7	-1.50	2.83	0.07	0.04	0.37	99.79	
#10	-1.00	2.00	0.12	0.07	0.49	99.72	
#14	-0.50	1.41	0.16	0.09	0.65	99.63	
#18	0.00	1.00	0.35	0.20	1.00	99.43	
#25	0.50	0.71	0.86	0.48	1.86	98.95	
#35	1.00	0.50	2.37	1.33	4.23	97.62	
#45	1.50	0.35	10.36	5.81	14.59	91.81	
#60	2.00	0.25	77.25	43.33	91.84	48.48	
#80	2.50	0.18	69.91	39.22	161.75	9.26	
#120	3.00	0.13	14.55	8.16	176.30	1.10	
#170	3.50	0.09	1.60	0.90	177.90	0.20	
#200	3.75	0.07	0.26	0.15	178.16	0.05	
#230	4.00	0.06	0.09	0.05	178.25	0.00	
Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95	
2.76	2.41	2.30	1.98	1.69	1.59	1.23	
Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis		
Statistics	1.98	0.25	0.49	-1.7	15.04		

SIEVE ANALYSIS CUMMINS CEDERBERG, PHILLIPPI CREEK EXTENSION, FL (2025) GPJ FL DEP ROSS.GDT 8/12/25

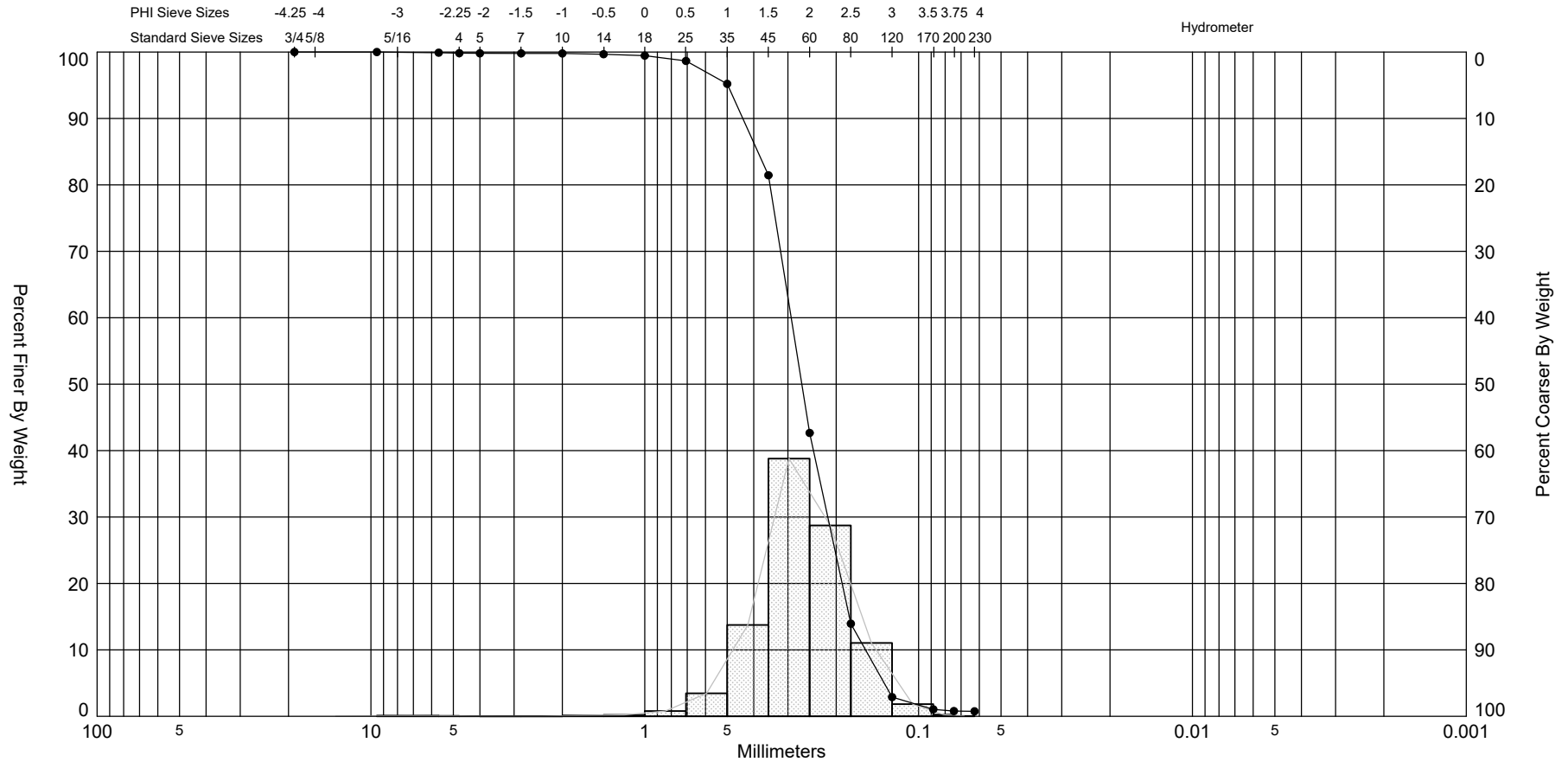


Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort	Sample Information	
PCG-25-11	—●—	-2.1	SP	#200 - 0.05 #230 - 0.00			1.98	1.98	-1.7	15.04	0.49	Project Name:	Phillippi Creek Maintenance Dredging Feasibility Project
Comments: Sample Interval = -1.8' to -2.1' MLW												Analysis Date:	08-11-25
Depths and elevations based on measured values												Analyzed By:	Terracon Consultants, Inc.
							Athena Technologies, Inc. 1293 Graham Farm Road McClellanville, SC 29458 Office: 843-887-3800					Easting (X, ft):	489,355
												Northing (Y, ft):	1,080,113
												Horizontal System:	NAD 1983
												Vertical System:	MLW

Granularmetric Report				 Athena Technologies, Inc. 1293 Graham Farm Road McClellanville, SC 29458 Office: 843-887-3800																			
Depths and elevations based on measured values																							
Project Name: Phillippi Creek Maintenance Dredging Feasibility Project																							
Sample Name: PCG-25-12																							
Analysis Date: 08-11-25																							
Analyzed By: Terracon Consultants, Inc.				Easting (ft):		Northing (ft):		Coordinate System:		Elevation (ft):													
490,013		1,080,794		Florida State Plane West		-1.6 MLW																	
USCS:		Munsell:		Comments:																			
SP		Wet - 5Y-5/1 Moist - 5Y-8/1		Sample Interval = -1.3' to -1.6' MLW																			
Dry Weight (g):		Wash Weight (g):		Pan Retained (g):		Sieve Loss (%):		Fines (%):		Organics (%):		Carbonates (%):		Shells (%):									
160.67		159.45						#200 - 0.79 #230 - 0.75															
Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	% Passing Sieve																	
3/4	-4.25	19.03	0.00	0.00	0.00	100.00																	
5/8	-3.25	9.51	0.00	0.00	0.00	100.00																	
#3.5	-2.50	5.66	0.16	0.10	0.16	99.90																	
#4	-2.25	4.76	0.11	0.07	0.27	99.83																	
#5	-2.00	4.00	0.03	0.02	0.30	99.81																	
#7	-1.50	2.83	0.02	0.01	0.32	99.80																	
#10	-1.00	2.00	0.02	0.01	0.34	99.79																	
#14	-0.50	1.41	0.19	0.12	0.53	99.67																	
#18	0.00	1.00	0.34	0.21	0.87	99.46																	
#25	0.50	0.71	1.28	0.80	2.15	98.66																	
#35	1.00	0.50	5.55	3.45	7.70	95.21																	
#45	1.50	0.35	22.11	13.76	29.81	81.45																	
#60	2.00	0.25	62.32	38.79	92.13	42.66																	
#80	2.50	0.18	46.15	28.72	138.28	13.94																	
#120	3.00	0.13	17.75	11.05	156.03	2.89																	
#170	3.50	0.09	2.95	1.84	158.98	1.05																	
#200	3.75	0.07	0.41	0.26	159.39	0.79																	
#230	4.00	0.06	0.06	0.04	159.45	0.75																	
Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95																	
2.90	2.46	2.31	1.91	1.58	1.41	1.01																	
Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis																		
Statistics	1.91	0.27	0.59	-1.06	9.95																		

SIEVE ANALYSIS CUMMINS CEDERBERG, PHILLIPPI CREEK EXTENSION, FL (2025) GPJ FL DEP ROSS.GDT 8/12/25



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort	Sample Information	
PCG-25-12	—●—	-1.6	SP	#200 - 0.75 #230 - 0.75			1.91	1.91	-1.06	9.95	0.59	Project Name:	Phillippi Creek Maintenance Dredging Feasibility Project
Comments: Sample Interval = -1.3' to -1.6' MLW												Analysis Date:	08-11-25
Depths and elevations based on measured values												Analyzed By:	Terracon Consultants, Inc.
							Athena Technologies, Inc. 1293 Graham Farm Road McClellanville, SC 29458 Office: 843-887-3800					Easting (X, ft):	490,013
												Northing (Y, ft):	1,080,794
												Horizontal System:	NAD 1983
												Vertical System:	MLW

Depths and elevations based on measured values



Analyzed By: Terracon Consultants, Inc.

-1.1 MLW

Sample Interval = -0.8' to -1.1' MLW

Shells (%):

% Passing
Sieve

100.00

100.00

100.00

100.00

99.98

99.89

99.82

99.63

99 34

98.43

94 52

75 37

23 52

867

4 22

2.27

0.07

0.70

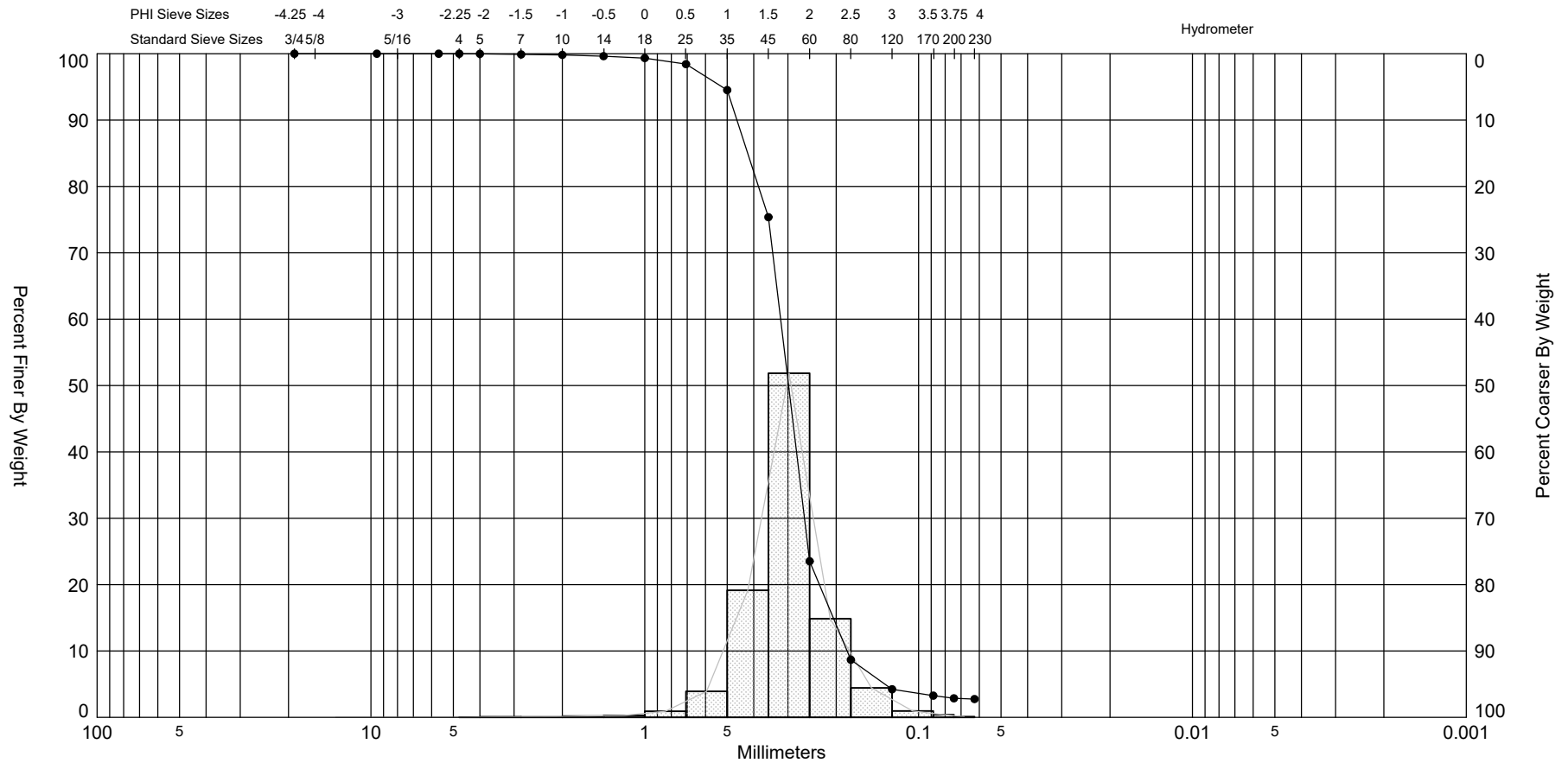
Phi 95

0.94

Kurtosis

8.1

SIEVE ANALYSIS CUMMINS CEDERBERG, PHILLIPPI CREEK EXTENSION, FL (2025) GPJ FL DEP ROSS.GDT 8/12/25



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort	Sample Information	
PCG-25-13		-1.1	SP	#200 - 2.87 #230 - 2.76			1.74	1.73	-0.44	8.1	0.53	Project Name:	Phillippi Creek Maintenance Dredging Feasibility Project
Comments: Sample Interval = -0.8' to -1.1' MLW												Analysis Date:	08-11-25
Depths and elevations based on measured values												Analyzed By:	Terracon Consultants, Inc.
						Athena Technologies, Inc. 1293 Graham Farm Road McClellanville, SC 29458 Office: 843-887-3800						Easting (X, ft):	490,613
												Northing (Y, ft):	1,081,695
												Horizontal System:	NAD 1983
												Vertical System:	MLW

Depths and elevations based on measured values



Analyzed By: Terracon Consultants, Inc.

-1.0 MLW

Sample Interval = -0.7' to -1' MLW

Shells (%):

% Passing
Sieve

100.00

100.00

99.95

99.83

99 77

99 69

99 50

99 38

99 01

97 99

93 33

81 67

51 13

13 08

236

134

1.02

0.00

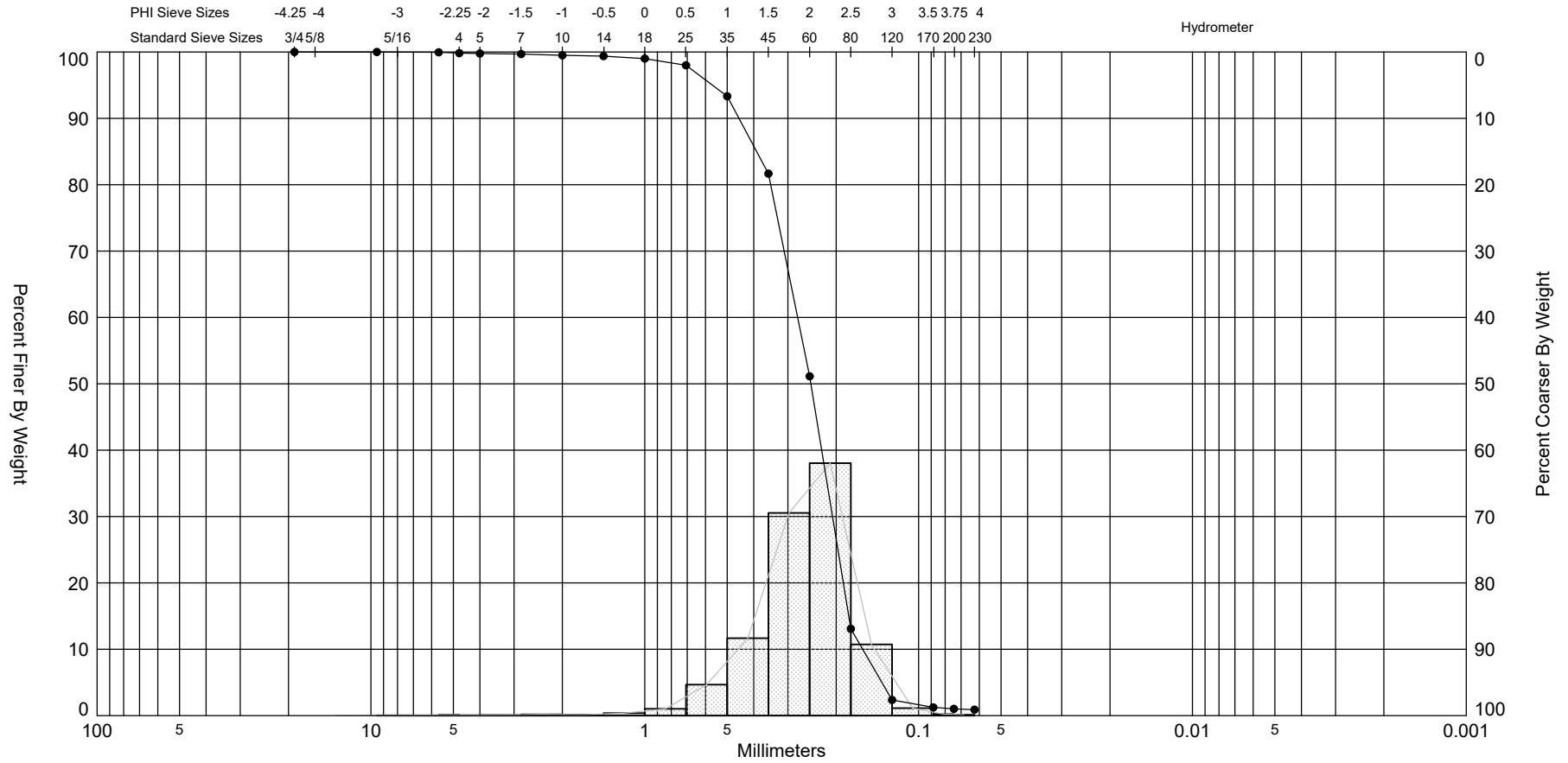
Phi 95

0.82

Kurtosis

10.27

SIEVE ANALYSIS CUMMINS CEDERBERG, PHILLIPPI CREEK EXTENSION, FL (2025) GPJ FL DEP ROSS.GDT 8/12/25

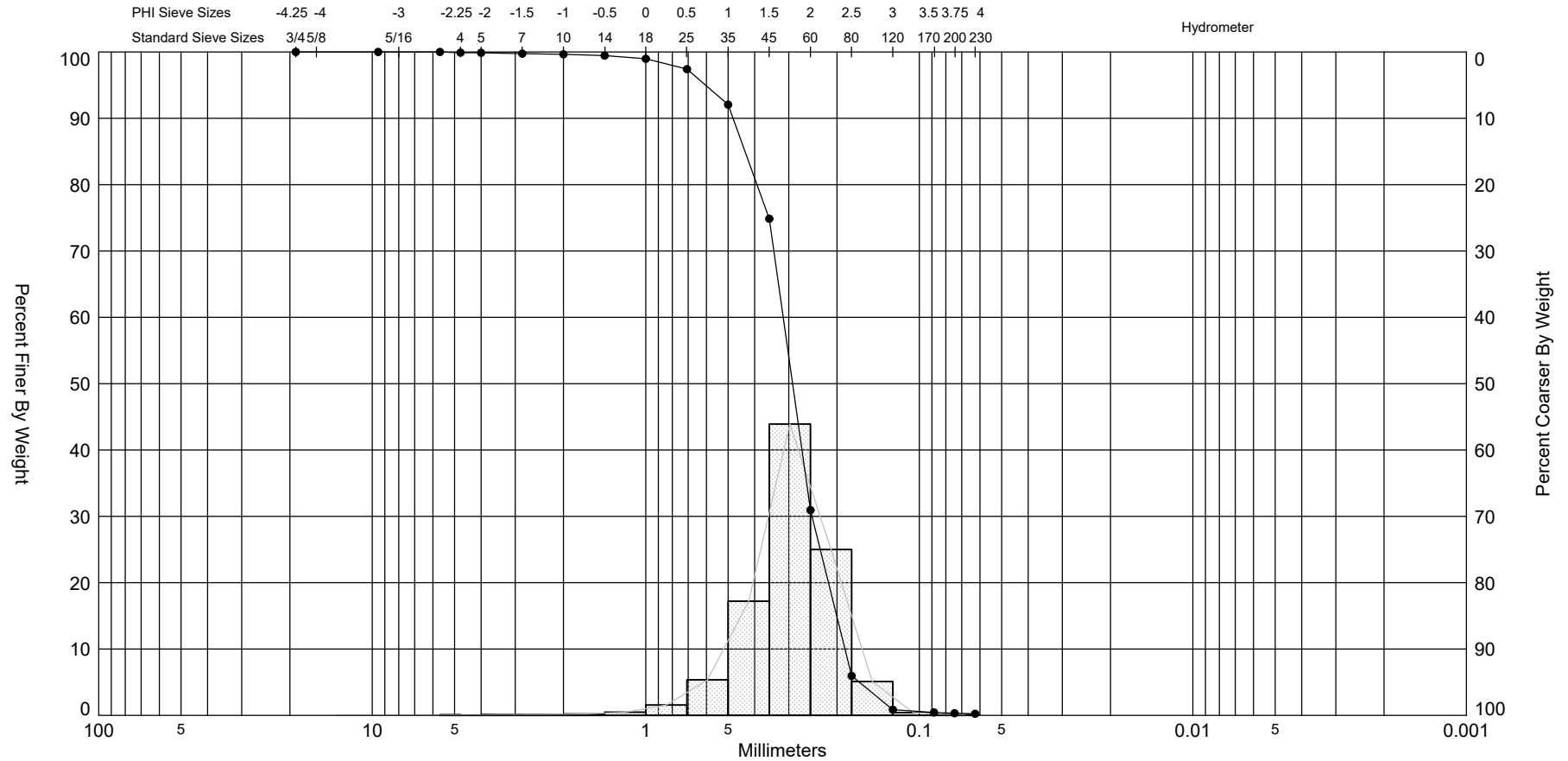


Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort	Sample Information	
PCG-25-14		-1.0	SP	#200 - 1.02 #230 - 0.90			2.01	1.92	-1.57	10.27	0.64	Project Name:	Phillippi Creek Maintenance Dredging Feasibility Project
Comments: Sample Interval = -0.7' to -1' MLW												Analysis Date:	08-11-25
Depths and elevations based on measured values												Analyzed By:	Terracon Consultants, Inc.
						Athena Technologies, Inc. 1293 Graham Farm Road McClellanville, SC 29458 Office: 843-887-3800						Easting (X, ft):	490,819
												Northing (Y, ft):	1,082,416
												Horizontal System:	NAD 1983
												Vertical System:	MLW

Granularmetric Report				 Athena Technologies, Inc. 1293 Graham Farm Road McClellanville, SC 29458 Office: 843-887-3800																			
Depths and elevations based on measured values																							
Project Name: Phillippi Creek Maintenance Dredging Feasibility Project																							
Sample Name: PCG-25-15																							
Analysis Date: 08-11-25																							
Analyzed By: Terracon Consultants, Inc.				Easting (ft):		Northing (ft):		Coordinate System:		Elevation (ft):													
		491,036				1,083,439		Florida State Plane West		-1.4 MLW													
USCS:		Munsell:		Comments:																			
SP		Wet - 5Y-6/2 Moist - 5Y-8/1		Sample Interval = -1.1' to -1.4' MLW																			
Dry Weight (g):		Wash Weight (g):		Pan Retained (g):		Sieve Loss (%):		Fines (%):		Organics (%):		Carbonates (%):		Shells (%):									
178.45		178.06						#200 - 0.32 #230 - 0.24															
Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	% Passing Sieve																	
3/4	-4.25	19.03	0.00	0.00	0.00	100.00																	
5/8	-3.25	9.51	0.00	0.00	0.00	100.00																	
#3.5	-2.50	5.66	0.00	0.00	0.00	100.00																	
#4	-2.25	4.76	0.18	0.10	0.18	99.90																	
#5	-2.00	4.00	0.04	0.02	0.22	99.88																	
#7	-1.50	2.83	0.24	0.13	0.46	99.75																	
#10	-1.00	2.00	0.18	0.10	0.64	99.65																	
#14	-0.50	1.41	0.36	0.20	1.00	99.45																	
#18	0.00	1.00	0.86	0.48	1.86	98.97																	
#25	0.50	0.71	2.79	1.56	4.65	97.41																	
#35	1.00	0.50	9.55	5.35	14.20	92.06																	
#45	1.50	0.35	30.70	17.20	44.90	74.86																	
#60	2.00	0.25	78.37	43.92	123.27	30.94																	
#80	2.50	0.18	44.60	24.99	167.87	5.95																	
#120	3.00	0.13	9.10	5.10	176.97	0.85																	
#170	3.50	0.09	0.74	0.41	177.71	0.44																	
#200	3.75	0.07	0.21	0.12	177.92	0.32																	
#230	4.00	0.06	0.14	0.08	178.06	0.24																	
Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95																	
2.59	2.30	2.12	1.78	1.50	1.23	0.73																	
Moment	Mean Phi	Mean mm	Sorting		Skewness		Kurtosis																
Statistics	1.75	0.30	0.58		-1.26		8.96																

SIEVE ANALYSIS CUMMINS CEDERBERG, PHILLIPPI CREEK EXTENSION, FL (2025) GPJ FL DEP ROSS.GDT 8/12/25



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort	Sample Information	
PCG-25-15	—●—	-1.4	SP	#200 - 0.32 #230 - 0.24			1.78	1.75	-1.26	8.96	0.58	Project Name:	Phillippi Creek Maintenance Dredging Feasibility Project
Comments: Sample Interval = -1.1' to -1.4' MLW												Analysis Date:	08-11-25
Depths and elevations based on measured values												Analyzed By:	Terracon Consultants, Inc.
							Athena Technologies, Inc. 1293 Graham Farm Road McClellanville, SC 29458 Office: 843-887-3800					Easting (X, ft):	491,036
												Northing (Y, ft):	1,083,439
												Horizontal System:	NAD 1983
												Vertical System:	MLW

Depths and elevations based on measured values



Analyzed By: Terracon Consultants, Inc.

-1.6 MLW

Sample Interval = -1.3' to -1.6' MLW

Shells (%):

% Passing
Sieve

100.00

100.00

99.78

99.50

99 22

98 62

97 74

96 62

93.85

86 03

69 30

43 13

11 05

257

121

0.00

000

• • •

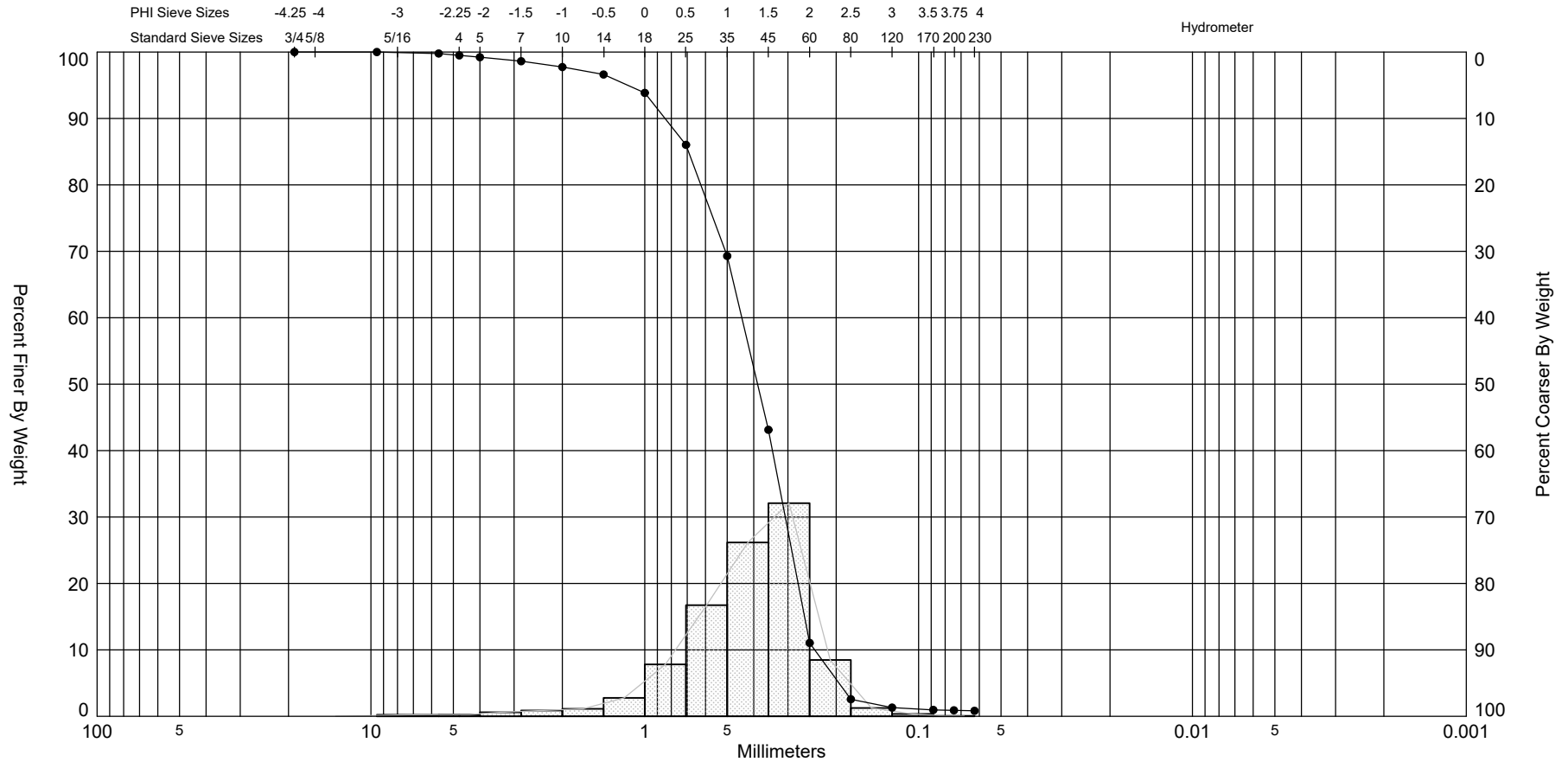
Phi 95

-0.21

Kurtosis

6.75

SIEVE ANALYSIS CUMMINS CEDERBERG, PHILLIPPI CREEK EXTENSION, FL (2025) GPU FL DEP ROSS.GDT 8/12/25



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort	Sample Information	
PCG-25-16	—●—	-1.6	SP	#200 - 0.90 #230 - 0.83			1.37	1.23	-1.35	6.75	0.81	Project Name:	Phillippi Creek Maintenance Dredging Feasibility Project
Comments: Sample Interval = -1.3' to -1.6' MLW												Analysis Date:	08-11-25
Depths and elevations based on measured values												Analyzed By:	Terracon Consultants, Inc.
							Athena Technologies, Inc. 1293 Graham Farm Road McClellanville, SC 29458 Office: 843-887-3800					Easting (X, ft):	491,787
												Northing (Y, ft):	1,084,709
												Horizontal System:	NAD 1983
												Vertical System:	MLW

Depths and elevations based on measured values



Analyzed By: Terracon Consultants, Inc.

-2.6 MLW

Sample Interval = -2.3' to -2.6' MLW

Shells (%):

% Passing
Sieve

100.00

100.00

99.95

99.91

99 90

99 77

99.55

99 22

98 17

93.37

79 46

51 18

17 54

4 13

1 16

0.77

0.64

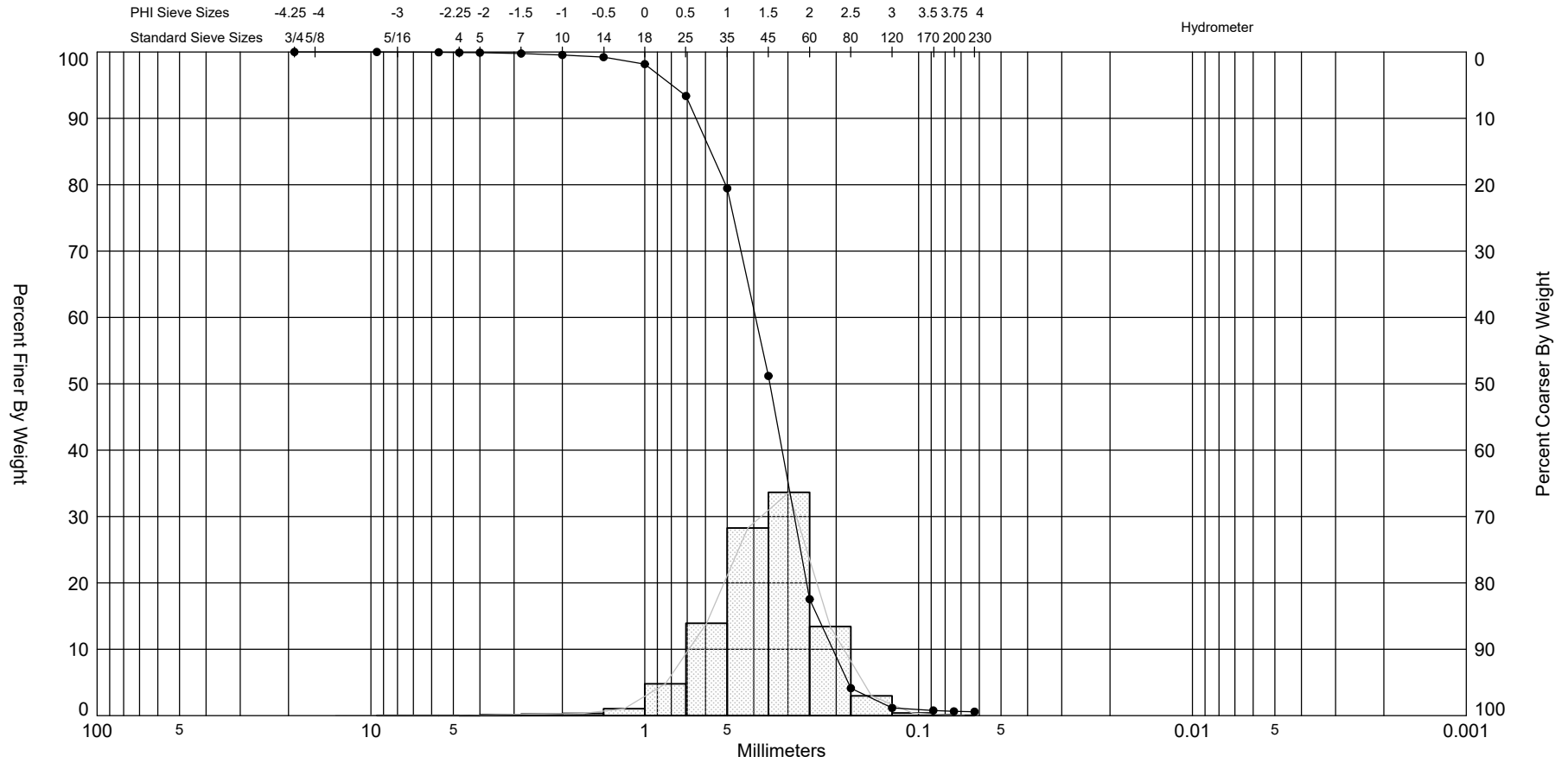
0.50

Phi 95

0.33

Kurtosis

5.69

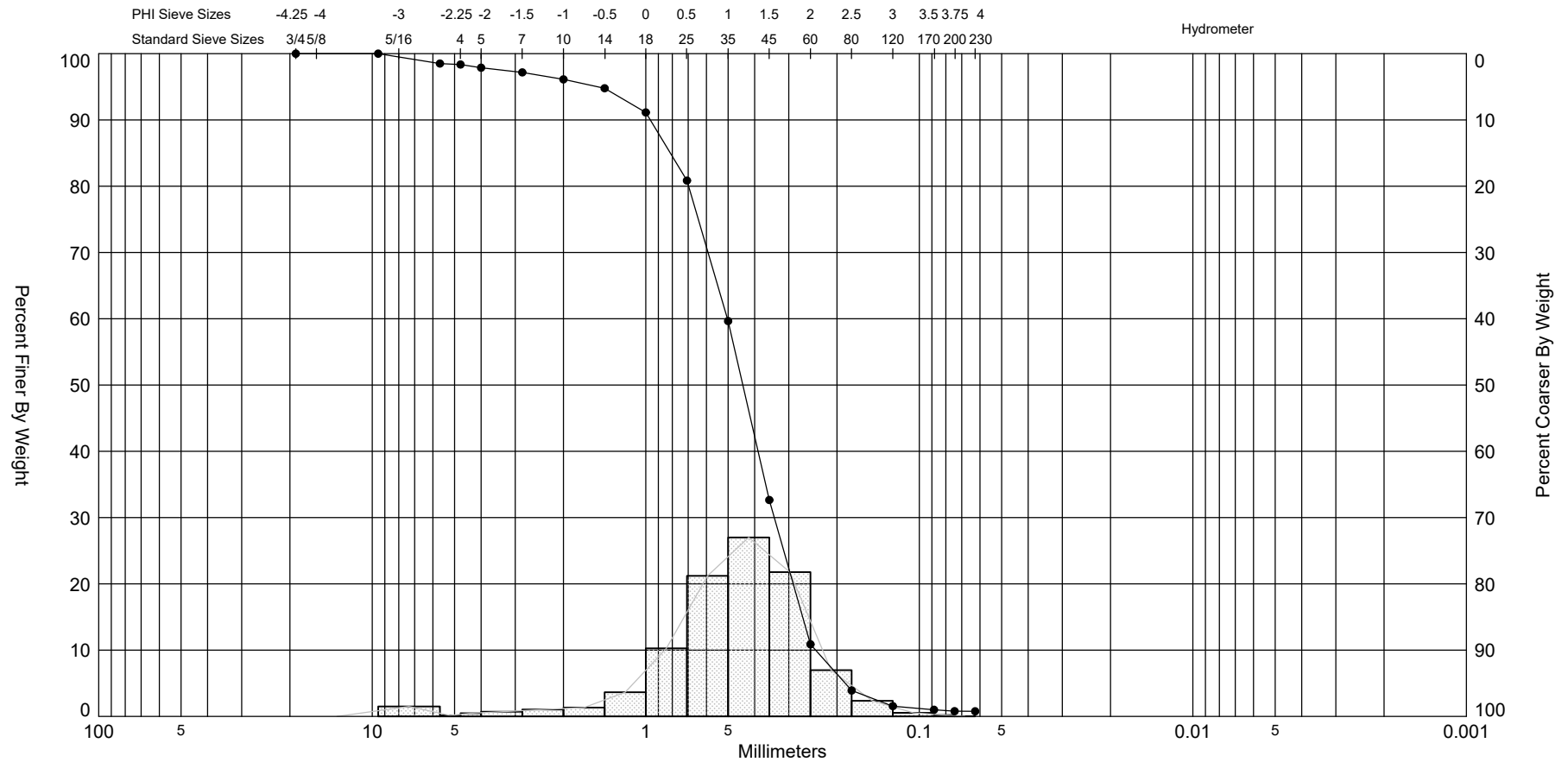


Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort	Sample Information	
PCG-25-17	—●—	-2.6	SP	#200 - 0.64 #230 - 0.59			1.52	1.46	-0.68	5.69	0.66	Project Name:	Phillippi Creek Maintenance Dredging Feasibility Project
Comments: Sample Interval = -2.3' to -2.6' MLW												Analysis Date:	08-11-25
Depths and elevations based on measured values												Analyzed By:	Terracon Consultants, Inc.
							Athena Technologies, Inc. 1293 Graham Farm Road McClellanville, SC 29458 Office: 843-887-3800					Easting (X, ft):	492,200
												Northing (Y, ft):	1,086,130
												Horizontal System:	NAD 1983
												Vertical System:	MLW

Granularmetric Report Depths and elevations based on measured values				 Athena Technologies, Inc. 1293 Graham Farm Road McClellanville, SC 29458 Office: 843-887-3800			
Project Name: Phillippi Creek Maintenance Dredging Feasibility Project							
Sample Name: PCG-25-18							
Analysis Date: 08-11-25							
Analyzed By: Terracon Consultants, Inc.							
Easting (ft): 492,243		Northing (ft): 1,087,099		Coordinate System: Florida State Plane West		Elevation (ft): -2.3 MLW	
USCS: SP		Munsell: Wet - 5Y-5/1 Moist - 5Y-7/2		Comments: Sample Interval = -2' to -2.3' MLW			
Dry Weight (g): 163.61	Wash Weight (g): 162.33	Pan Retained (g):	Sieve Loss (%):	Fines (%): #200 - 0.79 #230 - 0.77	Organics (%):	Carbonates (%):	Shells (%):
Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	% Passing Sieve	
3/4	-4.25	19.03	0.00	0.00	0.00	100.00	
5/8	-3.25	9.51	0.00	0.00	0.00	100.00	
#3.5	-2.50	5.66	2.44	1.49	2.44	98.51	
#4	-2.25	4.76	0.24	0.15	2.68	98.36	
#5	-2.00	4.00	0.78	0.48	3.46	97.88	
#7	-1.50	2.83	1.16	0.71	4.62	97.17	
#10	-1.00	2.00	1.71	1.05	6.33	96.12	
#14	-0.50	1.41	2.20	1.34	8.53	94.78	
#18	0.00	1.00	5.97	3.65	14.50	91.13	
#25	0.50	0.71	16.82	10.28	31.32	80.85	
#35	1.00	0.50	34.68	21.20	66.00	59.65	
#45	1.50	0.35	44.17	27.00	110.17	32.65	
#60	2.00	0.25	35.62	21.77	145.79	10.88	
#80	2.50	0.18	11.41	6.97	157.20	3.91	
#120	3.00	0.13	3.86	2.36	161.06	1.55	
#170	3.50	0.09	0.90	0.55	161.96	1.00	
#200	3.75	0.07	0.34	0.21	162.30	0.79	
#230	4.00	0.06	0.03	0.02	162.33	0.77	
Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95	
2.42	1.88	1.68	1.18	0.64	0.35	-0.58	
Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis		
Statistics	1.06	0.48	0.96	-1.37	6.87		

SIEVE ANALYSIS CUMMINS CEDERBERG, PHILLIPPI CREEK EXTENSION, FL (2025) GPU FL DEP ROSS.GDT 8/12/25

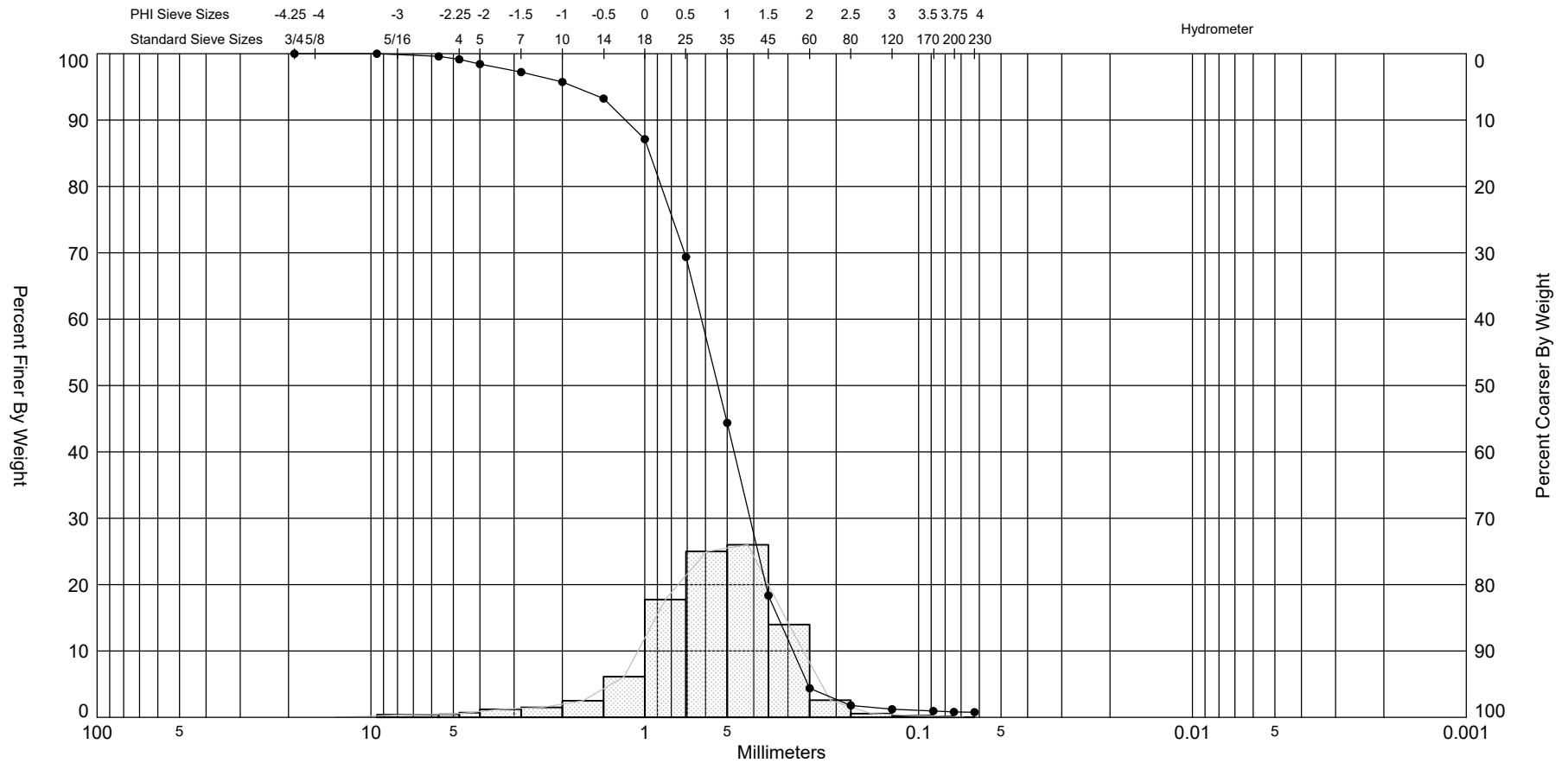


Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort	Sample Information	
PCG-25-18	—●—	-2.3	SP	#200 - 0.79 #230 - 0.77			1.18	1.06	-1.37	6.87	0.96	Project Name:	Phillippi Creek Maintenance Dredging Feasibility Project
Comments: Sample Interval = -2' to -2.3' MLW												Analysis Date:	08-11-25
Depths and elevations based on measured values												Analyzed By:	Terracon Consultants, Inc.
							Athena Technologies, Inc. 1293 Graham Farm Road McClellanville, SC 29458 Office: 843-887-3800					Easting (X, ft):	492,243
												Northing (Y, ft):	1,087,099
												Horizontal System:	NAD 1983
												Vertical System:	MLW

Granularmetric Report Depths and elevations based on measured values				 Athena Technologies, Inc. 1293 Graham Farm Road McClellanville, SC 29458 Office: 843-887-3800			
Project Name: Phillippi Creek Maintenance Dredging Feasibility Project							
Sample Name: PCG-25-19							
Analysis Date: 08-11-25							
Analyzed By: Terracon Consultants, Inc.							
Easting (ft): 492,794		Northing (ft): 1,087,590		Coordinate System: Florida State Plane West		Elevation (ft): -3.1 MLW	
USCS: SP		Munsell: Wet - 5Y-6/1 Moist - 5Y-7/2		Comments: Sample Interval = -2.8' to -3.1' MLW			
Dry Weight (g): 153.85	Wash Weight (g): 152.66	Pan Retained (g):	Sieve Loss (%):	Fines (%): #200 - 0.81 #230 - 0.78	Organics (%):	Carbonates (%):	Shells (%):
Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	% Passing Sieve	
3/4	-4.25	19.03	0.00	0.00	0.00	100.00	
5/8	-3.25	9.51	0.00	0.00	0.00	100.00	
#3.5	-2.50	5.66	0.62	0.40	0.62	99.60	
#4	-2.25	4.76	0.70	0.45	1.32	99.15	
#5	-2.00	4.00	1.10	0.71	2.42	98.44	
#7	-1.50	2.83	1.86	1.21	4.28	97.23	
#10	-1.00	2.00	2.29	1.49	6.57	95.74	
#14	-0.50	1.41	3.84	2.50	10.41	93.24	
#18	0.00	1.00	9.41	6.12	19.82	87.12	
#25	0.50	0.71	27.31	17.75	47.13	69.37	
#35	1.00	0.50	38.47	25.00	85.60	44.37	
#45	1.50	0.35	40.01	26.01	125.61	18.36	
#60	2.00	0.25	21.51	13.98	147.12	4.38	
#80	2.50	0.18	3.98	2.59	151.10	1.79	
#120	3.00	0.13	0.88	0.57	151.98	1.22	
#170	3.50	0.09	0.42	0.27	152.40	0.95	
#200	3.75	0.07	0.21	0.14	152.61	0.81	
#230	4.00	0.06	0.05	0.03	152.66	0.78	
Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95	
1.98	1.58	1.37	0.89	0.34	0.09	-0.85	
Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis		
Statistics	0.79	0.58	0.88	-0.99	5.41		

SIEVE ANALYSIS CUMMINS CEDERBERG, PHILLIPPI CREEK EXTENSION, FL (2025) GPJ FL DEP ROSS.GDT 8/12/25

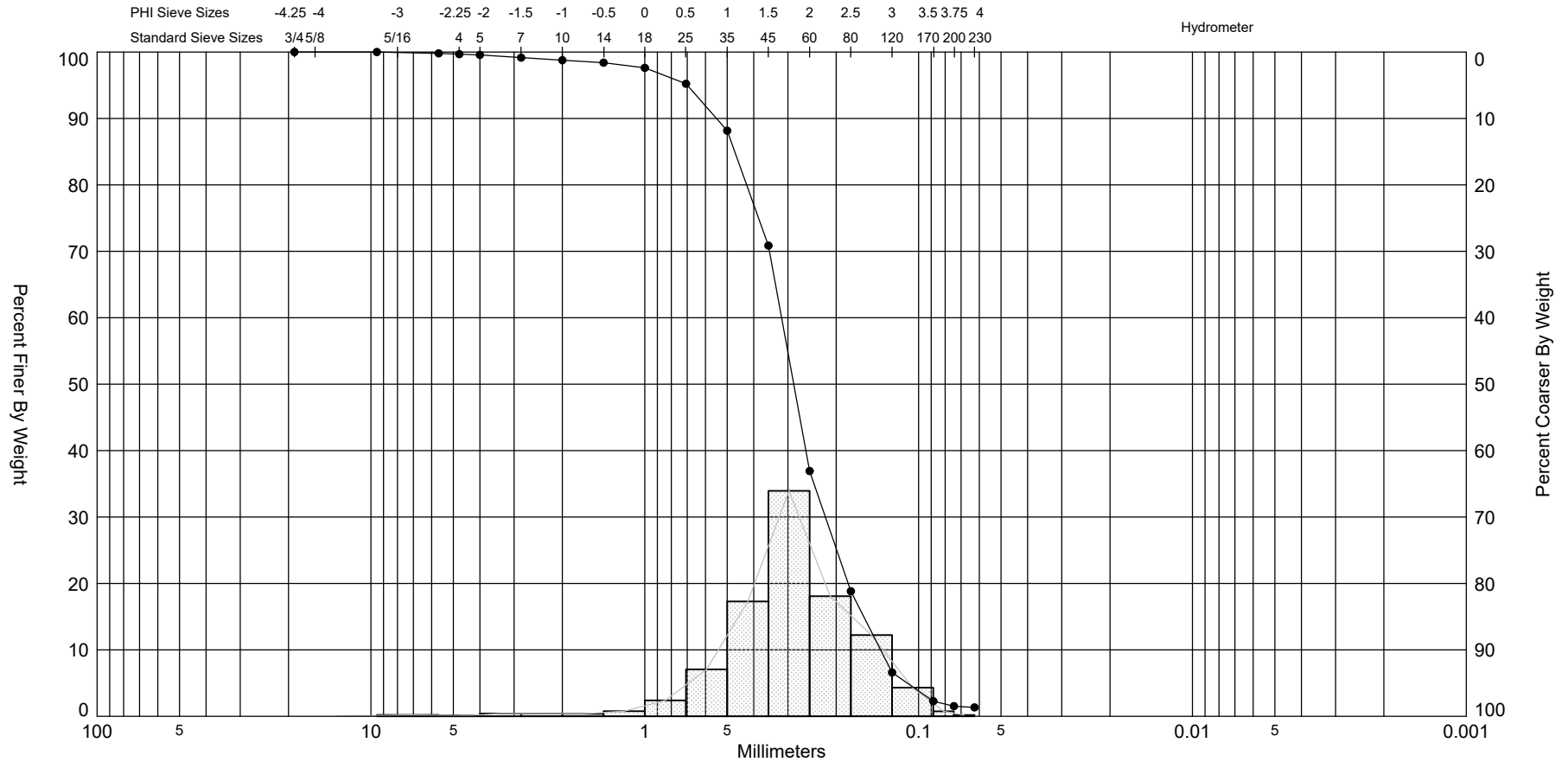


Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort	Sample Information	
PCG-25-19		-3.1	SP	#200 - 0.81 #230 - 0.78			0.89	0.79	-0.99	5.41	0.88	Project Name:	Phillippi Creek Maintenance Dredging Feasibility Project
Comments: Sample Interval = -2.8' to -3.1' MLW												Analysis Date:	08-11-25
Depths and elevations based on measured values												Analyzed By:	Terracon Consultants, Inc.
						Athena Technologies, Inc. 1293 Graham Farm Road McClellanville, SC 29458 Office: 843-887-3800						Easting (X, ft):	492,794
												Northing (Y, ft):	1,087,590
												Horizontal System:	NAD 1983
												Vertical System:	MLW

Granularmetric Report				 Athena Technologies, Inc. 1293 Graham Farm Road McClellanville, SC 29458 Office: 843-887-3800			
Depths and elevations based on measured values							
Project Name: Phillippi Creek Maintenance Dredging Feasibility Project							
Sample Name: PCG-25-20							
Analysis Date: 08-11-25							
Analyzed By: Terracon Consultants, Inc.				Coordinate System:		Elevation (ft):	
Easting (ft):		Northing (ft):		Florida State Plane West		-3.0 MLW	
USCS:		Munsell:		Comments:			
SP		Wet - 5Y-6/1 Moist - 5Y-7/2		Sample Interval = -2.7' to -3' MLW			
Dry Weight (g):	Wash Weight (g):	Pan Retained (g):	Sieve Loss (%):	Fines (%):	Organics (%):	Carbonates (%):	Shells (%):
171.61	169.30			#200 - 1.53 #230 - 1.34			
Sieve Number	Sieve Size (Phi)	Sieve Size (Millimeters)	Grams Retained	% Weight Retained	Cum. Grams Retained	% Passing Sieve	
3/4	-4.25	19.03	0.00	0.00	0.00	100.00	
5/8	-3.25	9.51	0.00	0.00	0.00	100.00	
#3.5	-2.50	5.66	0.34	0.20	0.34	99.80	
#4	-2.25	4.76	0.20	0.12	0.54	99.68	
#5	-2.00	4.00	0.19	0.11	0.73	99.57	
#7	-1.50	2.83	0.71	0.41	1.44	99.16	
#10	-1.00	2.00	0.67	0.39	2.11	98.77	
#14	-0.50	1.41	0.64	0.37	2.75	98.40	
#18	0.00	1.00	1.33	0.78	4.08	97.62	
#25	0.50	0.71	4.12	2.40	8.20	95.22	
#35	1.00	0.50	12.12	7.06	20.32	88.16	
#45	1.50	0.35	29.68	17.30	50.00	70.86	
#60	2.00	0.25	58.24	33.94	108.24	36.92	
#80	2.50	0.18	31.04	18.09	139.28	18.83	
#120	3.00	0.13	20.99	12.23	160.27	6.60	
#170	3.50	0.09	7.42	4.32	167.69	2.28	
#200	3.75	0.07	1.29	0.75	168.98	1.53	
#230	4.00	0.06	0.32	0.19	169.30	1.34	
Phi 5	Phi 16	Phi 25	Phi 50	Phi 75	Phi 84	Phi 95	
3.19	2.62	2.33	1.81	1.38	1.12	0.52	
Moment	Mean Phi	Mean mm	Sorting	Skewness	Kurtosis		
Statistics	1.78	0.29	0.83	-1.1	7.28		

SIEVE ANALYSIS CUMMINS CEDERBERG, PHILLIPPI CREEK EXTENSION, FL (2025) GPJ FL DEP ROSS.GDT 8/12/25



Gravel		Sand			Silt and Clay
Coarse	Fine	Coarse	Medium	Fine	

Sample	Symbol	Elev. (ft)	USCS	% Fines	% Organics	% Carbonates	Median	Mean	Skew	Kurt	Sort	Sample Information	
PCG-25-20	—●—	-3.0	SP	#200 - 1.53 #230 - 1.34			1.81	1.78	-1.1	7.28	0.83	Project Name:	Phillippi Creek Maintenance Dredging Feasibility Project
Comments: Sample Interval = -2.7' to -3' MLW												Analysis Date:	08-11-25
Depths and elevations based on measured values												Analyzed By:	Terracon Consultants, Inc.
							Athena Technologies, Inc. 1293 Graham Farm Road McClellanville, SC 29458 Office: 843-887-3800					Easting (X, ft):	493,828
												Northing (Y, ft):	1,088,018
												Horizontal System:	NAD 1983
												Vertical System:	MLW