History of Construction

40 CFR 257.73(c)

Ash Pond

Cabin Creek Site

Chelyan, West Virginia

February 2026

Prepared for: Appalachian Power Company

Prepared by: American Electric Power Service Corporation

1 Riverside Plaza

Columbus, OH 43215

Cabin Creek Ash Pond

History of Construction

PREPARED BY Dan Murphy Digitally signed by Dan Murphy DN: cn=Dan Murphy, c=US, email=dsmurphy1@aep.com Date: 2026.02.03 08:39:22 -05'00' DATE _____

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APPROVED BY David Anthony Miller DATE 02.02.2026

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DAVID ANTHONY MILLER
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I certify to the best of my knowledge, information, and belief the information contained in this report meets the requirements of 40 CFR § 257.73(c).

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1.0 OBJECTIVE

The "Hazardous and Solid Waste Management System: Disposal of Coal Combustion Residuals From Electric Utilities; Legacy CCR Surface Impoundments", 89 Fed. Reg. 38950 (May 8, 2024) (amending 40 C.F.R. §257) requires owners and operators of facilities with a legacy coal combustion residual (CCR) surface impoundment to prepare a history of construction document for each legacy CCR surface impoundment at the facility.

The Ash Pond at the Cabin Creek Site is subjected to this rule.

2.0 DESCRIPTION OF CCR THE IMPOUNDMENT

The Cabin Creek site is located near Chelyan, West Virginia, near the intersection of MacCorkle Ave SE and Cabin Creek Rd., Cabin Creek, WV 25035. The latitude/longitude of the facility is: 38°11'52"N / 81°29' 6" W. The Ash Pond is approximately 19 acres. The Cabin Creek Power Plant was placed in service in 1914, stopped generating electricity in 1977, retired in 1981 and the site was razed in 1985-1987. The Ash Pond was constructed sometime around 1956.

The Ash Pond is located near the Kanawha River on the west side of the plant property. The Ash Pond was located on the west side of Cabin Creek, and the Power Plant was located on the East side of Cabin Creek.

According to the 1956 U.S. Army Corps Permit application, the ash pond was constructed by building a dike around Cabin Creek Island and filling the former river backchannel with dredged river sediments. To offset the loss of channel volume, approximately 200,000 cubic yards of compensatory dredging was completed adjacent to the Cabin Creek Island within the main river channel. The dike included a 650-foot-long southwest section reinforced with 35-foot-deep wood piling and rockfill, and a similarly long northeast section protecting the shoreline with riprap armor. The exterior slope of the dike was designed at 2H:1V and the interior slope was designed at 1.5H:1V. The 2H:1V slope extends below the navigational pool of the Marmet Lock and Dam (590 ft-msl) to an elevation of 575 ft-msl, 15 below the normal pool.

The former discharge structure is a pipe and riser type structure located at the western end of the Ash Pond. The riser structure is made of concrete and has grooves for receiving stop logs for controlling the pool level when the pond was active. The outlet pipe is a 24-inch-diameter reinforced concrete pipe. The discharge structure no longer functions, and the facility no longer impounds water.

3.0 SUMMARY OF OWNERSHIP 275.73(c)(1)(i)

[The name and address of the person(s) owning or operating the CCR unit: the name associated with the CCR unit: and the identification number of the CCR unit if one has been assigned by the state.]

The name associated with the CCR unit is Ash Pond. Appalachian Power Company is the owner of the Ash Pond at the Cabin Creek Site. There are no known state identification numbers assigned to the facility.

Appalachian Power Company
Attn: Gary Spitznogle
1 Riverside Plaza
Columbus, OH 43215
Phone: 614-716-1774
Email: aepccrhelp@aep.com

4.0 LOCATION OF THE CCR UNIT 275.73 (c)(1)(ii)

[The location of the CCR unit identified on the most recent U.S. Geological Survey (USGS) 7 ½ minute or 15-minute topographic quadrangle map, or a topographic map of equivalent scale if a USGS map is not available.]

A location map is included in Attachment A.

5.0 STATEMENT OF PURPOSE 275.73 (c)(1)(iii)

[A statement of the purpose for which the CCR unit is being used.]

When the Cabin Creek Plant was operational, the Ash Pond was a surface impoundment for settling and storing coal ash. The decant water from the Ash Pond flows into the Kanawha River.

6.0 NAME AND SIZE OF WATERSHED THE CCR UNIT IS LOCATED 275.73 (c)(1)(iv)

[The name and size in acres of the watershed within which the CCR unit is located.]

The Ash Pond is configured such that there are diked embankments on all sides which direct stormwater away from the impoundment and limit runoff to that which falls directly on the surface impoundment. Therefore, the areas surrounding the impoundments do not contribute to any runoff. The watershed for the ponds is equal to the surface areas of the ponds and is approximately 20 acres.

The Ash Pond is located within the Region 5 - Ohio Region Watershed and is part of the subgroup Hydrologic Unit Code = 050500060403 Fields Creek- Kanawha River watershed area.

7.0 DESCRIPTION OF THE FOUNDATION AND ABUTMENT MATERIALS 275.73(c)(1)(v)

[A description of the physical and engineering properties of the foundation and abutment materials on which the CCR unit is located.]

This section is a summary of Geotechnical Data Report included as Attachment B.

The Cabin Creek Ash Pond site lies centrally within the Alleghany Plateau of West Virginia. The terrain in the area is characterized by numerous steep hills and valleys, with the ridges consistently near elevation 1400 ft-msl and the valley bottoms nearly elevation 600 to 800 ft-msl.

The Cabin Creek Ash Pond is located adjacent to the Kanawha River within an area underlain by unconfined alluvial deposits. These deposits primary consist of the silty sands, gravels and clayey silts formed by fluvial processes.

The alluvium consists primarily of silt, silty clay, and lean clays with varying amounts of sand, gravel, and mica.

Field SPT N-values recorded in the alluvial soils ranged from Weight of Hammer (WOH) over 18 inches to 17 blows per foot, indicating very soft to very stiff consistency. Laboratory tests conducted on the alluvial soils indicate in situ moisture contents ranging from 19.7% to 29%. Atterberg Limits testing performed on samples of alluvial soils resulted in Liquid Limits ranging from NP (Non-plastic) to 23% and Plasticity Indices ranging from NP to 5%. Gradation testing performed on these samples showed 19.8% to 67.8% material passing the No. 200 sieve.

8.0 DESCRIPTION OF EACH CONSTRUCTED ZONE OR STAGE OF THE CCR UNIT 275.73 (c)(1)(vi)

[A statement of the type, size, range, and physical and engineering properties of the materials used in constructing each zone or stage of the CCR unit; and the approximate dates of construction of each successive stage of construction of the CCR unit.]

Based on readily available records, the dike was constructed in three stages. The first stage involved the construction of a dike on the east, west and north sides of the ash pond. The elevation of the crest for the first stage is approximately 605 ft-msl. Based on available documentation, this stage was constructed prior to 1957. The first stage of the embankment was constructed from dredged alluvial sediments, commonly consisting of SP-SM soils with SPT blow counts ranging from 2 to 8 blows per foot, indicating consistency from very loose to loose.

When the surface of the ash inside the pond reached elevation 605 ft-msl, a southern leg of the dike would have been constructed. This represents the second stage of construction, and the top of dike elevation is identified as 613 ft-msl. Based on available documentation, this stage was constructed prior to 1963. The

third and final stage of embankment construction raised the crest of the dam to elevation 620 ft-msl. The second and third raisings were constructed with soil and bottom ash.

Prior to 1971, a splitter dike traveling in the east/west direction was constructed two create two cells within the ash pond.

9.0 ENGINEERING STRUCTURES AND APPURTENANCES, 275.73 (c)(1)(vii)

[At a scale that details engineering structures and appurtenances relevant to the design, construction, operation, and maintenance of the CCR unit, detailed dimensional drawings of the CCR unit, including a plan view and cross sections of the length and width of the CCR unit, showing all zones, foundation improvements, drainage provisions, spillways, diversion ditches, outlets, instrument locations, and slope protection…]

AEP performed an extensive review to locate historical files, drawings, and other information for the Cabin Creek Ash Pond. All readily available drawings are included in Attachment C.

10.0 SUMMARY OF POOL SURFACE ELEVATIONS, AND MAXIMUM DEPTH OF CCR, 275.73 (c)(1)(vii)

[…in addition to the normal operating pool surface elevation and the maximum pool elevation following peak discharge from the inflow design flood, the expected maximum depth of CCR within the CCR surface impoundment.]

The Cabin Creek Ash Pond has CCR material roughly 30 feet deep and no longer receives CCR. The Cabin Creek Ash Pond no longer has ponded water, therefore the pool elevation sections are not applicable.

11.0 FEATURES THAT COULD ADVERSELY AFFECT OPERATION DUE TO MALFUNCTION OR MIS-OPERATION (275.73 (c)(1)(vii))

[…and any identifiable natural or manmade features that could adversely affect operations of the CCR unit due to malfunction or mis-operation]

There is a 24-inch-diameter concrete pipe for stormwater conveyance located underneath the western edge of the Cabin Creek Ash Pond. This pipe is roughly 30 feet deep and outlets into the Kanawha River near the northwestern corner of the Cabin Creek Ash Pond. The pipe was constructed to provide a new outlet for drainage structures from the neighboring village that formerly daylighted into the now filled in backchannel of Cabin Creek Island.

There is 24-inch-diameter former sewer pipe that is located underneath the eastern edge of the Cabin Creek Ash Pond. The pipe is roughly 30 feet deep and outlets into a ditch that flows into the Kanawha River along the eastern edge of the Ash Pond. The pipe was extended to provide a new outlet for a sewer system from the neighboring village that formerly daylighted into the now filled in backchannel of Cabin Creek Island.

12.0 DESCRIPTION OF THE TYPE, PURPOSE, AND LOCATION OF EXISTING INSTRUMENTATION 275.73 (c)(1)(VIII)

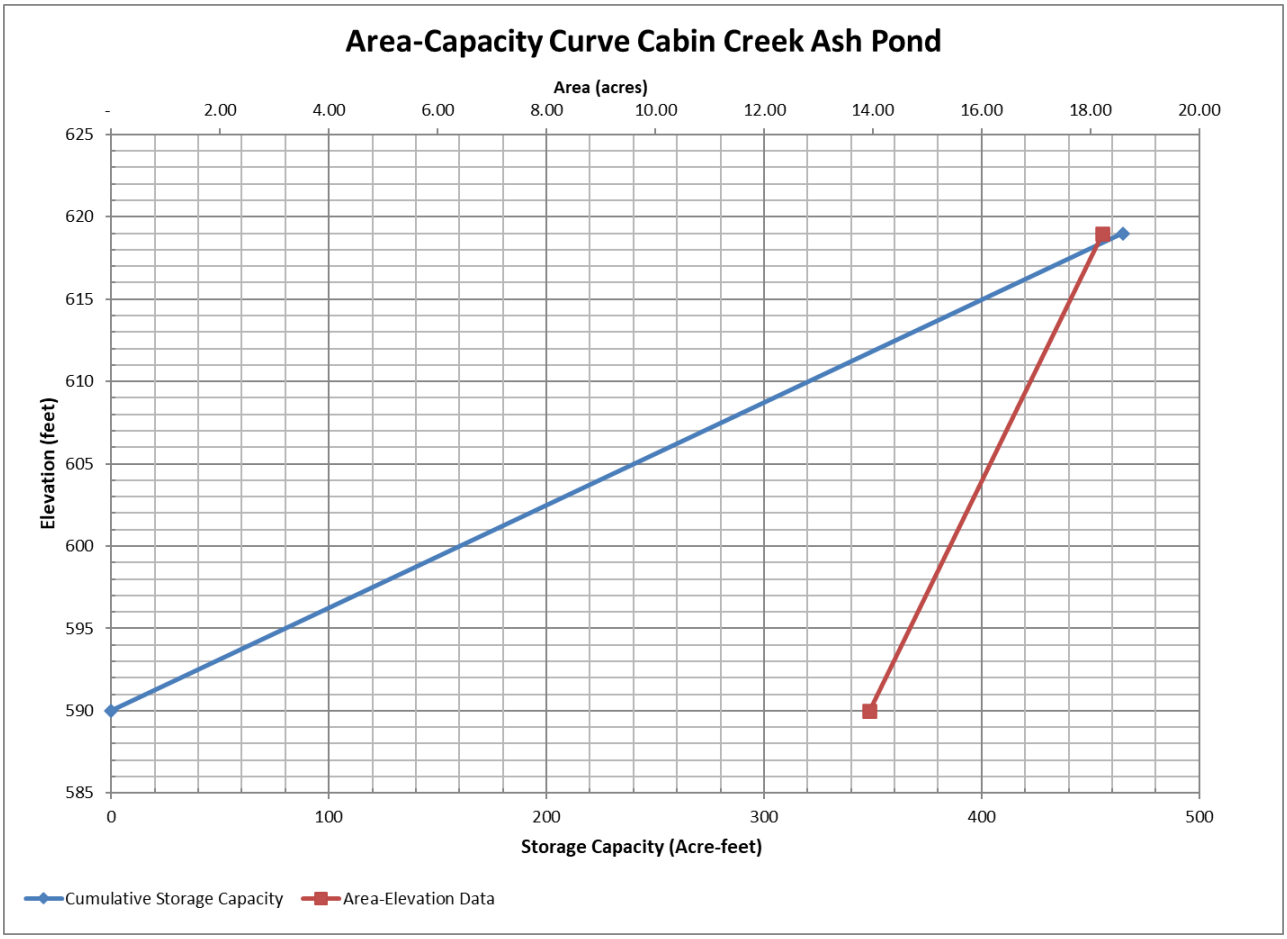
[A description of the type, purpose, and location of existing instrumentation.]

The Cabin Creek Ash Pond does not have any instrumentation.

13.0 AREA – CAPACITY CURVES FOR THE CCR UNIT 275.73 (c)(1)(IX)

[Area-capacity curves for the CCR unit.]

The area capacity curve shown below projects the interior toe of slope based on a 1.75H:1V slope. The assumed toe is located 50 feet to the interior of the pond from the edge of the crest as measured in the drawings in Attachment C. These measurements were also confirmed from observations of historical aerial photographs.



14.0 275.73 (c)(1)(x) DESCRIPTION OF EACH SPILLWAY AND DIVERSION

[A description of each spillway and diversion design features and capacities and calculations used in their determination.]

The former spillway of the Cabin Creek Ash Pond consists of stop-log riser structure and outlet pipe in the northwestern corner of the site. The Cabin Creek Ash Pond no longer has ponded water, the spillway no longer functions, and this section is not applicable.

15.0 SUMMARY CONSTRUCTION SPECIFICATIONS AND PROVISIONS FOR SURVEILLANCE, MAINTENANCE AND REPAIR 275.73 (c)(1)(xi)

[The construction specifications and provisions for surveillance, maintenance, and repair of the CCR unit.]

There are no readily available portions of the original construction specifications.

As required by the CCR rules, the Cabin Creek Ash Pond is inspected at least every 7 days by a qualified person. Also, as a requirement of the CCR rules the impoundment is also inspected annually by a qualified professional engineer.

If repairs are found to be necessary during any inspection they will be completed as soon as feasible.

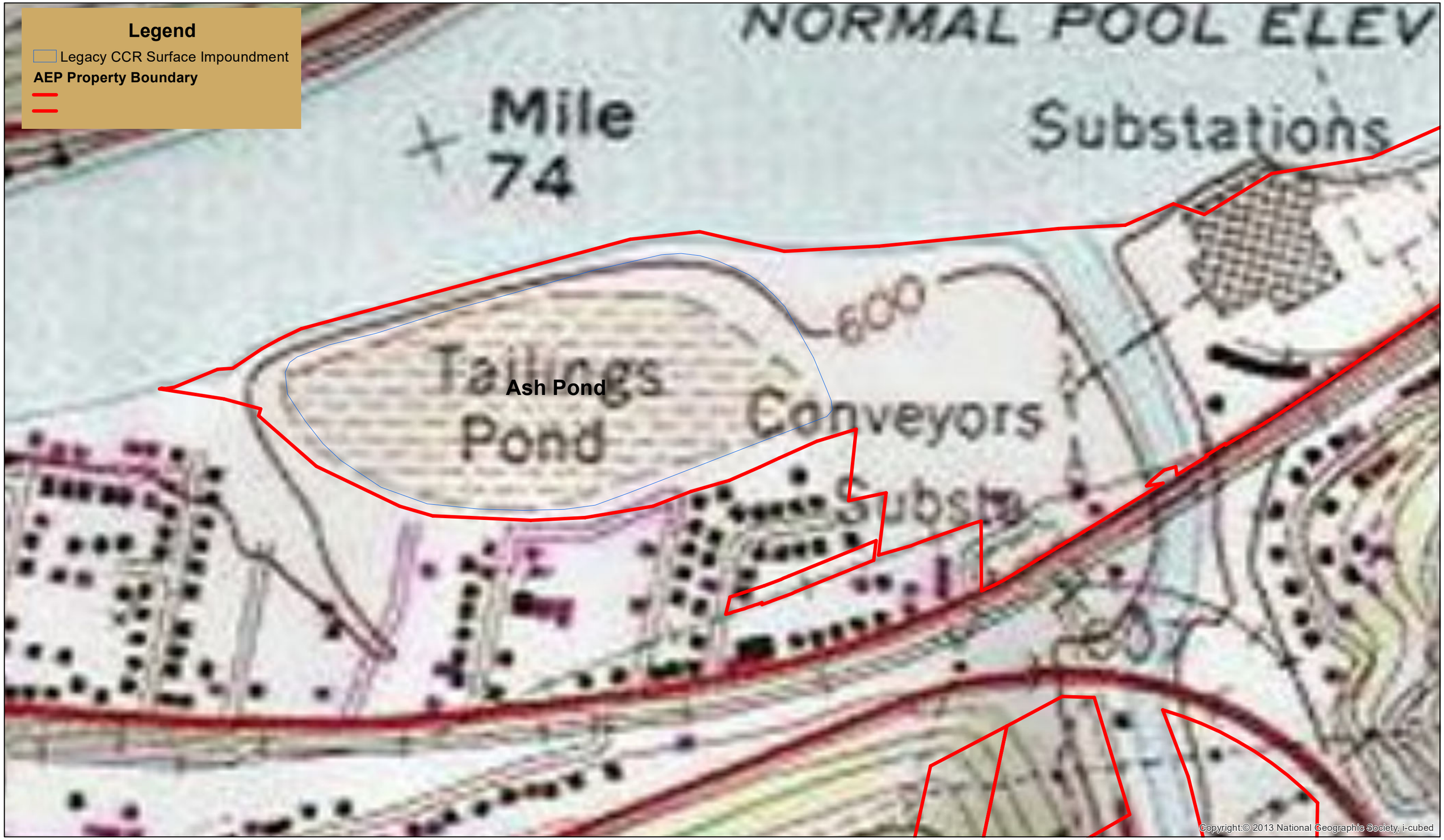
16.0 RECORD OR KNOWLEDGE OF STRUCTURAL INSTABILITY 275.73 (c)(1)(xii)

[Any record or knowledge of the structural instability of the CCR unit.]

To date, there has been no known record of knowledge of the structural instability of the CCR unit.

ATTACHMENT A

LOCATION MAP



Location Map
Cabin Creek Ash Pond
By: Dan Murphy
Date: December 23, 2025

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0 250 500
Feet

ATTACHMENT B

GEOTECHNICAL DATA REPORT

REPORT

Geotechnical Data Report

Cabin Creek Ash Pond, Former Cabin Creek Power Plant, Cabin Creek, West Virginia

Submitted to:

Ms. Jane Petrie

American Electric Power Company, Inc.
Project Manager
1 Riverside Plaza,
Columbus, OH 43215

Submitted by:

WSP USA Inc.

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January 28, 2026

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APPENDICES

1 INTRODUCTION

WSP USA Inc. (WSP) was retained by Appalachian Power Company, a subsidiary to American Electric Power Company, Inc., (AEP) to provide Coal Combustion Residual (CCR) Legacy Unit Engineering Support for AEP's ash pond located at the former Cabin Creek Power Plant in Cabin Creek, West Virginia (Site), as shown in **Figure 1**. The Site is a legacy CCR surface impoundment located in Chelyan, Kanawha County, adjacent to the Kanawha River, and is subject to the requirements of the Federal CCR Rule (40 Code of Federal Regulations (CFR) Part 257, Subpart D).

The purpose of this Geotechnical Data Report (GDR) is to document the field exploration and laboratory testing performed at the Site to support subsequent engineering evaluations required under the Federal CCR rule. As part of the scope of services, WSP performed a geotechnical exploration focused on identifying subsurface stratigraphy, characterizing the shear strengths of the materials encountered, and documenting qualitative groundwater conditions. Prior to WSP's investigation, AEP conducted a geoprobe investigation and a geophysical survey across the Cabin Creek Ash Pond to primarily evaluate the depth of ash within the ash pond.

WSP's field program was developed to supplement previous investigations and to obtain quantitative geotechnical data to support the safety factor assessment and structural stability assessment in compliance with the Federal CCR Rule (40 CFR §§257.73).

This GDR presents a summary of the available data collected from the previous investigations, results of WSP's field and laboratory testing, and the documented subsurface conditions encountered at the Site. This GDR includes descriptions of field exploration, laboratory testing, site geology, subsurface conditions, and geotechnical material properties obtained from the investigation.

2 SITE VISIT

WSP conducted a site visit to the Cabin Creek Ash Pond on July 16, 2025, to observe current site conditions, verify proposed boring locations, evaluate site accessibility for drilling equipment, and identify any logistical constraints. Mr. Steven Moeller and Mr. Naveen Kumar Ganji conducted the site visit on behalf of WSP. WSP personnel performed the following:

- Observed site conditions related to the structural stability of the impoundment, including berms, dikes, erosion protection, vegetation, slopes, stormwater drainage features, etc.
- Reviewed site access routes, working areas, and potential safety hazards
- Confirmed proposed boring locations and access to these locations
- Photographed site features for documentation in the GDR (**APPENDIX A**)

During the site reconnaissance, the site observations were limited to features and structures that could be visually observed at the ground surface, and did not include invasive inspection, investigation, or exploration of the Site, embankments, or structures. WSP noted the following observations at the Site:

- The top of the former impoundment was recently cleared of trees and vegetation
- The principal spillway structure for the former impoundment was not properly abandoned and had been filled with soil and organic materials

- Several pipelines and manholes are located within the limits of the Cabin Creek Ash Pond, primarily related to routing stormwater around the ash pond
- The northern slope of the ash pond along the Kanawha River and the northeastern slope are heavily wooded with trees and vegetation, making it difficult to inspect
- Uprooted fallen trees were observed at the crest of the northern slope of the ash pond along the Kanawha River
- Due to the heavy vegetation observed on the exterior dike slopes, only limited areas of erosion were observed

3 FIELD EXPLORATIONS AND LABORATORY TESTING PROGRAM

3.1 Field Explorations

Triad Engineering performed environmental and geotechnical investigations in the former underground storage tank area located east of the ash pond to evaluate subsurface and groundwater conditions. As part of these investigations, eight monitoring wells were installed in 2006 to depths ranging from approximately 25 to 27 feet below ground surface (bgs), and ten soil borings were advanced in 2013 to depths of about 15 feet bgs. The boring location plan, potentiometric map, and detailed soil boring and well logs are provided in **APPENDIX B.**

Schnabel Engineering performed a geotechnical investigation at the Site in 2019 to evaluate the subsurface conditions for a new transmission line that was proposed to be located slightly east of the existing on-site substation to across the Kanawha River. As part of this investigation, three borings were advanced, two adjacent to the existing substation at the Site and one on the northern side of the Kanawha River. Specific observations, remarks, and logs for the borings; classification criteria; drilling methods; and sampling protocols are included in **APPENDIX B**.

EHS Support (EHS) performed a subsurface investigation in mid-2025 to evaluate the extent of ash in the Cabin Creek Ash Pond and the area east of the ash pond at the Former Cabin Creek Power Plant (Plant). The evaluation included a surface geophysical survey, confirmation soil geoprobe borings, and development of a three-dimensional (3D) model. A technical memorandum, dated September 12, 2025, was prepared by EHS summarizing the findings of the investigations. Excerpts from this memorandum relevant to this GDR are included in **APPENDIX B**. The geoprobe locations from the EHS investigation are shown in **Figure 2**.

In mid to late 2025, EHS installed monitoring wells and piezometers within and outside the footprint of the Cabin Creek impoundment. The location of these monitoring wells and piezometers is shown in **Figure 3**.

WSP used the static groundwater elevation data measured in December 2025 at these monitoring wells and piezometers , to interpret subsurface water levels at the Site. . An interpreted potentiometric map is included in **Figure 3.**

WSP's field exploration included 16 soil borings that were advanced from 25 feet to approximately 50 feet below ground surface (bgs). The location of these borings is shown in **Figure 2**. The borings were advanced as follows:

- 4 borings within the ash deposit areas (A-series)
- 9 borings along the perimeter dike (E-series)
- 3 borings in the former river back-channel area (B-series)

The drilling and sampling program was completed in accordance with ASTM standards and included:

- Standard Penetration Tests (SPT) performed at 2.5-foot intervals to 10 feet bgs, and at 5-foot intervals thereafter to the target termination depth, per ASTM D1586
- Nine undisturbed samples using Shelby tubes were collected from native foundation soils, embankment materials, and representative CCR materials
- Field classification and logging of all recovered samples were performed using the Unified Soil Classification System (USCS)
- Boreholes were advanced using Hollow Stem Auger, Mud Rotary, and Direct Push techniques. Based on a review of the SPT data, it appears that the Direct Push method overestimates the SPT blow counts, as such, SPTs (boring B-3) using this method were not used in the engineering evaluations

3.2 Laboratory Testing Program

WSP coordinated and performed laboratory testing on selected soil and CCR samples collected during the subsurface investigation. The purpose of the testing was to determine index, strength, and compressibility properties required for geotechnical characterization and engineering analysis of the ash, underlying native soils, and embankment materials.

Testing was performed by a certified geotechnical laboratory in accordance with applicable ASTM standards. Laboratory tests included:

- Index Properties:
  - Moisture Content (ASTM D2216)
  - Atterberg Limits (ASTM D4318)
  - Particle Size Distribution (ASTM D6913)
  - Specific Gravity (ASTM D854)
- Unit weight determination (ASTM D7263)
- Consolidated-undrained triaxial shear with pore pressure measurements (CU, ASTM D4767)

Sample selection for testing was based on visual classification/ field logs, SPT values, and undisturbed sample recovery, with a focus on identifying critical layers (CCR materials, embankment materials, foundation soils, potentially liquefiable zones, etc.) in the subsurface.

Boring logs and laboratory data sheets are included in **APPENDIX C** and **APPENDIX D**, respectively.

4 SITE GEOLOGY

The project site lies centrally within the Alleghany Plateau of West Virginia, a more specific region of the larger Appalachian Plateau. The terrain in the area is characterized by numerous steep hills and valleys, with ridges consistently near 1400 feet above mean sea level (MSL) and valleys ranging from 600 feet to 800 feet MSL. The physical geography of the area is most influenced by dendritic drainage and erosion towards the Kanawha River.

Geologic mapping within the county (Windolph 1987) has provided detailed descriptions for subsurface lithology within the area, which is characterized by Pennsylvanian-aged siliclastic and mudrock strata with subdued folding and faulting. The Site sits between the Warfield anticline and Handley syncline that, along with the sedimentary strata, exhibits a general northeast–southwest strike, with very gentle southeast dips.

The most prevalent formations are middle to upper Pennsylvanian sedimentary formations, described below from oldest to youngest:

- Kanawha Formation (Middle Pennsylvanian) - Sandstone, light gray, fine to coarse-grained quartz rich; Siltstone, thin-bedded, gray to black, carbonaceous; Coal, bright to dull, medium cleated; Chert, gray to black, conchoidal fractured.
- Charleston Sandstone (Middle Pennsylvanian) - Sandstone, light gray, very fine to coarse-grained, well-rounded conglomerates; Shale and Siltstone, gray to black, poorly bedded; Coal, bright to dull, coarsely cleated.
- Conemaugh Formation (Upper Pennsylvanian) - Sandstone, medium gray, very fine to coarse-grained, locally conglomeratic with subangular limestone and shale fragments; Siltstone and Shale, medium gray to green, some red, includes hematite nodules; Coal, dull and impure; Limestone, gray to brown, nodular, mudstone to packstone.

The Site is located in the Kanawha River Valley, situated within the Appalachian Plateau, characterised by gently folded sedimentary rocks of Pennsylvanian and Mississippian age. The geologic stratigraphy in this area typically consists of sequences of sandstone, shale, siltstone, claystone, and coal beds. The bedrock is overlain by unconsolidated alluvial deposits, especially along the river floodplain, which include silty sands, gravels, and clayey silts deposited by fluvial processes.

5 SUBSURFACE CONDITIONS

The Site is located adjacent to the Kanawha River within an area underlain by unconfined alluvial deposits. These deposits primarily consist of silty sands, gravels, and clayey silts formed by fluvial processes. Beneath the alluvium lies bedrock that begins at approximately 25 to 35 feet below the natural ground surface prior to fill placement in the area (560 feet MSL to 570 feet MSL). Based on the available data from the multiple site investigations, WSP has identified the following stratigraphy at the Cabin Creek Ash Pond.

5.1 Fill and Embankment Materials

The Cabin Creek Ash Pond was constructed in the 1950s by constructing a perimeter berm around Cabin Creek Island and infilling a back channel that separated the island from the southern riverbank. During construction, the river channel north of the island and northern portions of the island were excavated/dredged, and spoils from the dredging activities were placed into the back channel (identified as Dredge Spoil in this GDR). Additional fill material (identified as Earthfill in this GDR) was placed to construct berms around the perimeter of the island. Prior to filling, the ground surface elevation of the island was approximately 595 feet MSL. Based on boring data along the embankment alignment, it appears that Earthfill material was used to construct the perimeter berm on the north side of the island to an approximate elevation of 605 feet MSL. The berms were further raised over time to an approximate elevation of 620 feet MSL using Earthfill, Earthfill with CCR inclusions (identified as CCR-Soil Mix (Embankment) in the boring logs), and CCR materials (identified as CCR (Embankment) in the boring logs). CCR–Soil Mix refers to Earthfill material that contains inclusions of CCR. It is not meant to imply a uniformily blended mix of CCR and Earthfill.

Dredge Spoils were encountered in borings B-1, B-2, E-1, E-8, and E-9 and were visually classified predominantly as silty sand. Field SPT N-values recorded in this material ranged from 2 to 8 blows per foot (bpf), with an average of SPT-N of 5 bpf, indicating very loose to loose relative density. Laboratory tests indicated the in-situ moisture contents ranging from 20% to 51.4%. Gradation tests performed on two samples showed 22.1% and 96.1% material passing the No. 200 sieve.

Earthfills used to construct the perimeter berms were identified in boreholes E-1 through E-7, and E-9, and were visually classified as silt and silty sand. Field SPT N-values recorded in this material ranged from 0 to 44 bpf, with most of the blow counts ranging between 5 to 25 bpf, indicating loose to compact relative density. The average of SPT-N values for this material was 12 bpf. Laboratory tests indicated the in-situ moisture contents ranging from 6.7% to 29.2%. Gradation tests performed on four samples showed 22.6% to 52.6% material passing the No. 200 sieve.

CCR-Soil Mix (Embankment) and CCR (Embankment) materials used to raise the perimeter berms were identified in boreholes E-1 through E-9 and were also visually classified as silt and silty sand. SPT N-values for these materials ranged from 1 to 24 bpf, with most values between 5 and 15 bpf indicating loose to compact relative density. The average of SPT-N values for these materials was 11 bpf. Laboratory tests showed in-situ moisture contents ranging from 15% to 41.9%. Gradation tests on four samples showed that 18.9% to 78.6% of the material passed the No. 200 sieve.

5.2 Coal Combustion Residuals

CCRs, including fly ash and bottom ash, are byproducts of coal-fired power generation. At the Cabin Creek Ash Pond, CCR materials were used as construction materials for the perimeter embankment, as discussed in the previous section, and were sluiced into the interior of the impoundment. In the impoundments where CCRs are sluiced (identified as sluiced CCR), the materials are generally deposited in a loose, saturated condition. CCR materials sluiced into the impoundment were placed from an approximate elevation of 595 feet MSL to an approximate elevation of 618 to 620 feet MSL. An approximate 3-foot-thick layer of CCR-Soil Mix (identified as CCR-Soil Mix (Impoundment)) was also encountered at the surface within the impoundment area.

CCR-Soil Mix (Impoundment) and the Sluiced CCR were identified in boreholes A-1 through A-4 and B-1 through B-3 and were visually classified as silt and silty sand. Field SPT N-values recorded in these materials ranged from 4 to 14 bpf indicating loose to compact relative density. The average of SPT-N values for these materials was 4 bpf. On the south end of the impoundment, a mound of material similar to CCR-Soil Mix (Impoundment) was encountered (See Figure 4). This localized material is referred to as CCR-Stockpiled as the material had been previously stockpiled at its current location. For engineering evaluations, this material should perform like CCR-Soil Mix (Impoundment).

Laboratory tests conducted on the CCR materials (CCR-Soil Mix (Impoundment) and the Sluiced CCR) indicated in situ moisture contents ranging from 11.2% to 99.2%. Gradation testing performed on the three samples showed 57.5% to 69.6% material passing the No. 200 sieve.

5.3 Alluvium

Alluvial soils deposited by the Kanawha River were encountered in the borings either beneath the Earthfill/ Dredge Spoil materials within the embankment or beneath the CCR materials in the ash pond. Generally, the alluvial soils at the site were encountered at an approximate elevation of 595 feet MSL, which is consistent with earlier drawings showing the elevation of Cabin Creek Island at 595 feet MSL.

The alluvium consists primarily of silt, silty clay, and lean clays with varying amounts of sand, gravel, and mica. Field SPT N-values recorded in the alluvial soils ranged from Weight of Hammer (WOH) over 18 inches to 17 bpf, indicating very soft to very stiff consistency.

Laboratory tests conducted on the alluvial soils indicate in situ moisture contents ranging from 19.7% to 29%. Atterberg Limits testing performed on samples of the alluvial soils resulted in Liquid Limits ranging from NP (Non-Plastic) to 23% and Plasticity Indices ranging from NP to 5%. Gradation testing performed on these samples showed 19.8% to 67.8% material passing the No. 200 sieve.

An isopach illustrating CCR thickness was developed for the Cabin Creek Ash Pond based on subsurface investigations by EHS and WSP and is presented in **Figure 4**. Representative subsurface stratigraphy cross-sections across site-cardinal directions of the pond and along the dike are shown in **Figure 5**.

5.4 Groundwater

Groundwater levels at the Cabin Creek Ash Pond were inferred by observing the saturation of the soils and/or CRR materials sampled during subsurface investigations conducted by EHS and WSP. The estimated groundwater level was observed in the borings at an approximate elevation of 595 feet MSL. No long-term water level readings were recorded at the Site.

The test boring logs in **APPENDIX C** include groundwater observations obtained during our subsurface exploration. The groundwater levels on the logs indicate our estimate of the hydrostatic water table at the time of our subsurface exploration. Additionally, a potentiometric map was developed using data collected during EHS's and WSP's investigations, as presented in **Figure 3**.

6 GEOTECHNICAL MATERIAL PROPERTIES

Consolidated undrained triaxial tests were performed on representative samples collected from the Site to determine shear strength parameters under controlled conditions. The results provide insight into the material behavior under both drained and undrained loading scenarios, which is critical for stability analyses and closure design.

SPT Correlation and Strength Parameters: SPT values were correlated with shear strength parameters using established empirical relationships commonly applied in geotechnical engineering practice. These correlations consider soil type, relative density, and consistency, and were used to estimate cohesion (c) and friction angle (φ). The calculations followed procedures outlined in ASTM D1586 and supplemented by published correlations (Peck, Hanson & Thornburn, 1974). A summary table of SPT-based correlations and corresponding strength parameters is presented in Table 3.

In previous investigations conducted at AEP's Kanawha River Site (located three to four miles upstream of the Cabin Creek Ash Pond on the Kanawha River), triaxial compression tests performed on samples of ash from the East Fly Ash Pond yielded effective shear strengths with friction angle (φ) values ranging from 30.5° to 32.8° and apparent cohesions (c) ranging from 0 to 0.27 kips per square foot (ksf). The effective shear strength obtained from samples of alluvium sampled and tested in 2005 yielded effective shear strengths with φ' values = 32° to 36.4° and c' = 0.1 to 0.46 ksf.

7 LIMITATIONS

The information, data, and interpretations presented in this GDR are based on the conditions encountered at the specific locations and depths of the subsurface explorations performed for this project. Subsurface conditions can

vary significantly between and beyond these exploration points. No warranty is expressed or implied regarding the continuity of soil, rock, or groundwater conditions across the Site.

This report is intended solely to document factual subsurface data obtained during the field and laboratory investigations. It does not provide engineering analyses, design recommendations, or opinions regarding the suitability of the Site for any specific purpose. Any use of this report for purposes other than its intended scope is at the discretion and risk of the user.

Groundwater levels reported herein represent conditions observed at the time of exploration and may fluctuate seasonally or due to construction activities. The data should not be interpreted as absolute or permanent groundwater conditions.

The findings in this report should be considered in conjunction with the limitations inherent in geotechnical investigations, including variability of natural materials and the restricted number of sampling locations. Additional investigations may be warranted if significant changes in Site conditions occur or if the proposed development differs from the assumptions made during this study.

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Signature Page

We appreciate the opportunity to provide CCR Legacy Unit Engineering Support for AEP's Cabin Creek ash pond. If you have questions regarding our report, please contact the undersigned.

Sincerely,

WSP USA Inc.

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Senior Vice President

PG/NG/SM/ng

https://wsponlinenam.sharepoint.com/sites/us-aep-cabin-creek-c/shared documents/5 technical work/gdr/gdr_cabincreek_ashpond_ccr_engsupport.docx

Tables

Table 1: Summary of Subsurface Exploration

Boring ID	Date	Latitude	Longitude	Ground Surface Elevation (feel MSL)	Borehole Depth (feet)	Groundwater Elevation (feet MSL)	Bottom of Ash Elevation (feet MSL)
A-1	9/5/2025	38.1979	-81.4863	616.2	30	597.2	596.4
A-2	9/8/2025	38.1981	-81.4854	618	30	598	598.2
A-3	9/10/2025	38.1981	-81.4839	619.7	30	596.2	600.4
A-4	8/29/2025	38.1974	-81.4853	616.3	35	NA	592.8
B-1	9/4/2025	38.1973	-81.4866	619	35	NA	594.5
B-2	9/10/2025	38.1971	-81.4849	625.9	40	597.4	597.4
B-3	8/27/2025	38.1974	-81.4839	617.4	37	588.9	590.6
E-1	9/12/2025	38.1978	-81.4879	618	50	NA	598.2
E-2	9/15/2025	38.1981	-81.4873	619.4	25	NE	605.2
E-3	9/16/2025	38.1984	-81.4863	617.9	20	NE	609.4
E-4	9/16/2025	38.1985	-81.4854	619	25	NE	604.6
E-5	9/16/2025	38.1987	-81.4847	619	25	NE	604.8
E-6	9/17/2025	38.1988	-81.4836	624.2	30	NE	605.4
E-7	9/17/2025	38.1983	-81.4829	619.9	20	NE	612.4
E-8	9/11/2025	38.1971	-81.4841	618.8	35	589.8	604.3
E-9	9/11/2025	38.1968	-81.4853	617.4	30	593.9	599.6

Notes:

1.NA = Not Available, could not be measured due to the drilling method

2. NE = Not Encountered

3. MSL = Mean Sea Level

Table 2: Summary of Geotechnical Laboratory Test Results

S. No.	Boring ID	Sample Type	Material Type	Depth (feet below ground surface)		Ground Surface Elevation (feet Mean Sea Level)	Soil Classification (Field and Lab observations)	Depth to Water (DTW) at the time of drilling (feet bgs)[1]	Blow Count (SPT N)	Moisture Content (ASTM D2216)	Atterberg Limits (ASTM D4318)			Particle Size Distribution (ASTM D6913)		Unit Weight (ASTM D7263)[2]	Specific Gravity (ASTM D854)	Triaxial CU (ASTM D4767)				Direst Shear (ASTM D3080)	φ from SPT - N (Peck, Hanson, and Thornburn (1974))
				from	to				bpf	%	LL	PL	PI	% Finer No. 4	% Finer No. 200	pcf		c (psf)	φ (°)	c' (psf)	φ' (°)	φ' (°)	φ (°)
1	A-1	SPT	CCR-Impounded	0.0	1.5	616.2	SM	19.0	5														28.60
2	A-1	SPT	Sluiced CCR	3.5	5.0	616.2	ML	19.0	3														28.00
3	A-1	SPT	Sluiced CCR	6.0	7.5	616.2	ML	19.0	3														28.00
4	A-1	SPT	Sluiced CCR	8.5	10.0	616.2	ML	19.0	4														28.30
5	A-1	SPT	Sluiced CCR	13.5	15.0	616.2	ML	19.0	3	70.2													28.00
6	A-1	SPT	Sluiced CCR	18.5	20.0	616.2	ML	19.0	2														27.70
7	A-1	SPT	Alluvium	23.5	25.0	616.2	SM	19.0	5	29.5	NP	NP	NP	100.0	49.7		2.7						28.60
8	A-1	SPT	Alluvium	28.5	30.0	616.2	SM	19.0	3														28.00
9	A-2	SPT	CCR-Impounded	0.0	1.5	618.0	SM	20.0	4	61.8													28.30
10	A-2	SPT	Sluiced CCR	3.5	5.0	618.0	ML	20.0	4														28.30
11	A-2	SPT	Sluiced CCR	6.0	7.5	618.0	ML	20.0	4														28.30
12	A-2	SPT	Sluiced CCR	8.5	10.0	618.0	ML	20.0	2														27.70
13	A-2	Tube	Sluiced CCR	10.0	12.0	618.0	ML	20.0		80.3	NP	NP	NP	100.0	69.6	36.9	2.1	734.4	10.9	0.0	34.2		-
14	A-2	SPT	Sluiced CCR	13.5	15.0	618.0	ML	20.0	8	63.1													29.50
15	A-2	SPT	Sluiced CCR	18.5	20.0	618.0	ML	20.0	6														28.90
16	A-2	SPT	Alluvium	23.5	25.0	618.0	SM	20.0	2	22.8													27.70
17	A-2	Tube	Alluvium	25.0	27.0	618.0	SM	20.0															-
18	A-2	SPT	Alluvium	28.5	30.0	618.0	SM	20.0	6														28.90
19	A-3	SPT	CCR-Impounded	0.0	1.5	619.7	SM	23.5	7	11.2													29.20
20	A-3	SPT	Sluiced CCR	3.5	5.0	619.7	ML	23.5	4														28.30
21	A-3	Tube	Sluiced CCR	5.0	7.0	619.7	ML	23.5		51.8	NP	NP	NP	99.9	57.5	46.4							-
22	A-3	SPT	Sluiced CCR	7.0	8.5	619.7	ML	23.5	4														28.30
23	A-3	SPT	Sluiced CCR	8.5	10.0	619.7	ML	23.5	2														27.70
24	A-3	SPT	Sluiced CCR	13.5	15.0	619.7	ML	23.5	0														27.10
25	A-3	SPT	Sluiced CCR	18.5	20.0	619.7	ML	23.5	14	52.8													31.20
26	A-3	SPT	Alluvium	18.5	20.0	619.7	SM	23.5															-
27	A-3	SPT	Alluvium	23.5	25.0	619.7	SM	23.5	10	19.7													30.00
28	A-3	SPT	Alluvium	28.5	30.0	619.7	SC	23.5	2	21.9	NP	NP	NP										27.70
29	A-4	SPT	CCR-Impounded	0.0	1.5	616.3	SM	NA	3	25.7													28.00
30	A-4	SPT	CCR-Impounded	3.5	5.0	616.3	SM	NA															-
31	A-4	SPT	CCR-Impounded	6.0	7.5	616.3	ML	NA	13														30.90
32	A-4	SPT	Sluiced CCR	8.5	10.0	616.3	ML	NA	6														28.90
33	A-4	SPT	Sluiced CCR	13.5	15.0	616.3	ML	NA	8														29.50
34	A-4	Tube	Sluiced CCR	15.0	17.0	616.3	ML	NA		52.1	NP	NP	NP	92.9	64.0	56.4	2.1	14.4	26.3	0.0	35.0		-
35	A-4	SPT	Sluiced CCR	18.5	20.0	616.3	ML	NA	2														27.70
36	A-4	SPT	Alluvium	23.5	25.0	616.3	ML	NA	1	34.5	NP	NP	NP		60.2		2.6						27.40
37	A-4	SPT	Alluvium	28.5	30.0	616.3	SM	NA	2														27.70
38	A-4	SPT	Alluvium	33.5	35.0	616.3	SM	NA	10														30.00
39	B-1	SPT	CCR-Impounded	0.0	1.5	619.0	SM	NA	6														28.90
40	B-1	SPT	Sluiced CCR	3.5	5.0	619.0	ML	NA	5														28.60
41	B-1	SPT	Sluiced CCR	6.0	7.5	619.0	ML	NA	5	49.2													28.60
42	B-1	SPT	Sluiced CCR	8.5	10.0	619.0	ML	NA	3														28.00
43	B-1	SPT	Sluiced CCR	13.5	15.0	619.0	ML	NA	2														27.70
44	B-1	SPT	Sluiced CCR	18.5	20.0	619.0	ML	NA	0	99.2													27.10
45	B-1	SPT	Sluiced CCR	23.5	25.0	619.0	ML	NA	0														27.10
46	B-1	SPT	Dredge Spoil	28.5	30.0	619.0	CL	NA	4	51.4	45	24	21	100.0	96.1								28.30
47	B-1	SPT	Alluvium	33.5	35.0	619.0	SM	NA	4														28.30
48	B-2	SPT	CCR-Stockpiled	0.0	1.5	625.9	SM	28.5	4														28.30
49	B-2	SPT	CCR-Stockpiled	3.5	5.0	625.9	ML	28.5	2														27.70
50	B-2	SPT	Sluiced CCR	8.5	10.0	625.9	ML	28.5	4														28.30
51	B-2	SPT	Sluiced CCR	13.5	15.0	625.9	ML	28.5	4														28.30
52	B-2	SPT	Sluiced CCR	18.5	20.0	625.9	ML	28.5	7														29.20
53	B-2	SPT	Sluiced CCR	23.5	25.0	625.9	ML	28.5	3	70.6													28.00
54	B-2	SPT	Dredge Spoil	28.5	30.0	625.9	SM	28.5	8	28.5				93.7	22.1								29.50
55	B-2	SPT	Dredge Spoil	33.5	35.0	625.9	SM	28.5	2														27.70
56	B-2	Tube	Dredge Spoil	35.0	37.0	625.9	SM	28.5															-
57	B-2	SPT	Alluvium	38.5	40.0	625.9	ML	28.5	0	30.4				100.0	67.8								27.10
58	B-3	SPT	CCR-Impounded	0.0	1.5	617.4	SM	28.5	5														28.60
59	B-3	SPT	Sluiced CCR	3.5	5.0	617.4	ML	28.5	9	58.5													29.80
60	B-3	SPT	Sluiced CCR	8.5	10.0	617.4	ML	28.5	20														32.90
61	B-3	SPT	Sluiced CCR	13.5	15.0	617.4	ML	28.5	54														41.70
62	B-3	SPT	Sluiced CCR	18.5	20.0	617.4	ML	28.5	9														29.80
63	B-3	SPT	Sluiced CCR	23.5	25.0	617.4	ML	28.5	4														28.30
64	B-3	SPT	Alluvium	28.5	30.0	617.4	SM	28.5	17	27.4				99.7	19.8								32.00
65	B-3	SPT	Alluvium	33.5	35.0	617.4	SM	28.5	17														32.00
66	B-3	Tube	Alluvium	35.0	37.0	617.4	SM	28.5		48.0				98.1	37.6	65.8							-
67	E-1	SPT	CCR-Soil Mix (Embankment)	0.0	1.5	618.0	SM	NA	15	17.8				76.1	18.9								31.50
68	E-1	SPT	CCR-Soil Mix (Embankment)	3.5	5.0	618.0	SM	NA	10														30.00
69	E-1	SPT	CCR (Embankment)	6.0	7.5	618.0	SM	NA	14														31.20
70	E-1	SPT	CCR (Embankment)	8.5	10.0	618.0	ML	NA	12														30.60
71	E-1	SPT	CCR (Embankment)	13.5	15.0	618.0	ML	NA	3														28.00
72	E-1	SPT	CCR (Embankment)	18.5	20.0	618.0	ML	NA	1	29.1													27.40
73	E-1	SPT	Earth Fill	25.0	26.5	618.0	ML	NA	0	29.2				99.1	52.6								27.10
74	E-1	SPT	Dredge Spoil	28.5	30.0	618.0	SM	NA	4														28.30

Table 2: Summary of Geotechnical Laboratory Test Results

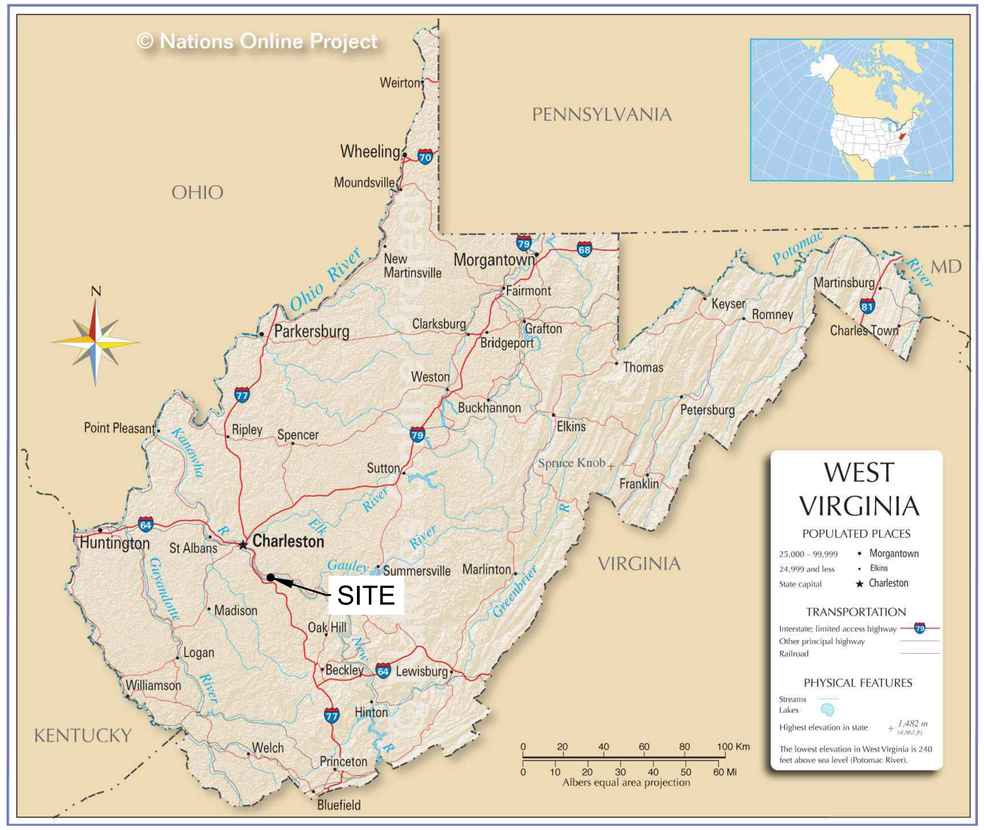
S. No.	Boring ID	Sample Type	Material Type	Depth (feet below ground surface)		Ground Surface Elevation (feet Mean Sea Level)	Soil Classification (Field and Lab observations)	Depth to Water (DTW) at the time of drilling (feet bgs)[1]	Blow Count (SPT N)	Moisture Content (ASTM D2216)	Atterberg Limits (ASTM D4318)			Particle Size Distribution (ASTM D6913)		Unit Weight (ASTM D7263)[2]	Specific Gravity (ASTM D854)	Triaxial CU (ASTM D4767)				Direst Shear (ASTM D3080)	φ from SPT - N (Peck, Hanson, and Thornburn (1974))
				from	to				bpf	%	LL	PL	PI	% Finer No. 4	% Finer No. 200	pcf		c (psf)	φ (°)	c' (psf)	φ' (°)	φ' (°)	φ (°)
75	E-1	SPT	Alluvium	33.5	35.0	618.0	CL-ML	NA	6														28.90
76	E-1	Tube	Alluvium	35.0	37.0	618.0	CL-ML	NA		22.6	23	18	5	99.9	56.6	104.1	2.7	0.0	21.4	0.0	37.5		-
77	E-1	SPT	Alluvium	38.5	40.0	618.0	CL-ML	NA	3														28.00
78	E-1	SPT	Alluvium	43.5	45.0	618.0	SM	NA	6														28.90
75	E-1	SPT	Alluvium	48.5	50.0	618.0	SM	NA	4	32.8													28.30
76	E-2	SPT	CCR-Soil Mix (Embankment)	0.0	1.5	619.4	SM	NE	10	19.7													30.00
77	E-2	SPT	CCR (Embankment)	3.5	5.0	619.4	ML	NE	14														31.20
78	E-2	SPT	CCR (Embankment)	6.0	7.5	619.4	ML	NE	17	39.3													32.00
79	E-2	SPT	CCR (Embankment)	8.5	10.0	619.4	ML	NE	12														30.60
80	E-2	SPT	Earth Fill	13.5	15.0	619.4	SM	NE	10	13.9													30.00
81	E-2	SPT	Earth Fill	18.5	20.0	619.4	SM	NE	6														28.90
82	E-2	SPT	Earth Fill	23.5	25.0	619.4	SM	NE	7	17.7				99.9	47.3								29.20
83	E-3	SPT	CCR-Soil Mix (Embankment)	0.0	1.5	617.9	SM	NE	7														29.20
84	E-3	SPT	CCR (Embankment)	3.5	5.0	617.9	ML	NE	6														28.90
85	E-3	Tube	CCR (Embankment)	5.0	7.0	617.9	ML	NE		35.3	NP	NP	NP	98.9	78.6	60.0							-
86	E-3	SPT	CCR (Embankment)	7.0	8.5	617.9	ML	NE	17														32.00
87	E-3	SPT	Earth Fill	8.5	10.0	617.9	SM	NE	27	8.1													34.80
88	E-3	SPT	Earth Fill	13.5	15.0	617.9	SM	NE	11														30.30
89	E-3	SPT	Earth Fill	18.5	20.0	617.9	SM	NE	9	14.9													29.80
90	E-4	SPT	CCR-Soil Mix (Embankment)	0.0	1.5	619.0	SM	NE	17	19.7													32.00
91	E-4	SPT	CCR (Embankment)	3.5	5.0	619.0	ML	NE	13														30.90
92	E-4	SPT	CCR (Embankment)	6.0	7.5	619.0	ML	NE	15	40.4													31.50
93	E-4	SPT	CCR (Embankment)	8.5	10.0	619.0	ML	NE	5														28.60
94	E-4	SPT	CCR (Embankment)	13.5	15.0	619.0	ML	NE	8														29.50
95	E-4	SPT	Earth Fill	18.5	20.0	619.0	SM	NE	10														30.00
96	E-4	SPT	Earth Fill	23.5	25.0	619.0	SM	NE	5	18.5													28.60
97	E-5	SPT	CCR-Soil Mix (Embankment)	0.0	1.5	619.0	SM	NE	13	15.0													30.90
98	E-5	SPT	CCR (Embankment)	3.5	5.0	619.0	ML	NE	11														30.30
99	E-5	SPT	CCR (Embankment)	6.0	7.5	619.0	ML	NE	9														29.80
100	E-5	SPT	CCR (Embankment)	8.5	10.0	619.0	ML	NE	12	41.9													30.60
101	E-5	SPT	CCR (Embankment)	13.5	15.0	619.0	ML	NE	9														29.80
102	E-5	SPT	Earth Fill	18.5	20.0	619.0	SM	NE	11	13.1													30.30
103	E-5	SPT	Earth Fill	23.5	25.0	619.0	SM	NE	2														27.70
104	E-6	SPT	CCR-Soil Mix (Embankment)	0.0	1.5	624.2	SM	NE	7														29.20
105	E-6	SPT	CCR (Embankment)	3.5	5.0	624.2	ML	NE	3	33.6													28.00
106	E-6	SPT	CCR (Embankment)	6.0	7.5	624.2	ML	NE	3														28.00
107	E-6	SPT	CCR (Embankment)	8.5	10.0	624.2	ML	NE	2														27.70
108	E-6	SPT	CCR (Embankment)	13.5	15.0	624.2	SM	NE	7	35.4													29.20
109	E-6	SPT	Earth Fill	18.5	20.0	624.2	SM	NE	21														33.20
110	E-6	SPT	Earth Fill	23.5	25.0	624.2	SM	NE	8	8.9				97.7	22.6								29.50
111	E-6	SPT	Earth Fill	28.5	30.0	624.2	SM	NE	4														28.30
112	E-7	SPT	Earth Fill	0.0	1.5	619.9	SM	NE	10	15.4													30.00
113	E-7	SPT	CCR (Embankment)	3.5	5.0	619.9	SM	NE	7														29.20
114	E-7	SPT	CCR (Embankment)	6.0	7.5	619.9	SM	NE	23														33.70
115	E-7	SPT	Earth Fill	8.5	10.0	619.9	SM	NE	23														33.70
116	E-7	SPT	Earth Fill	13.5	15.0	619.9	SM	NE	6														28.90
117	E-7	SPT	Earth Fill	18.5	20.0	619.9	SM	NE	9	13.1				100.0	41.4								29.80
118	E-8	SPT	CCR-Soil Mix (Embankment)	0.0	1.5	618.8	SM	29.0	11														30.30
119	E-8	SPT	CCR-Soil Mix (Embankment)	3.5	5.0	618.8	SM	29.0	17														32.00
120	E-8	SPT	CCR-Soil Mix (Embankment)	6.0	7.5	618.8	SM	29.0	21	20.4													33.20
121	E-8	SPT	CCR (Embankment)	8.5	10.0	618.8	ML	29.0	9														29.80
122	E-8	SPT	CCR (Embankment)	13.5	15.0	618.8	ML	29.0	6	40.5													28.90
123	E-8	SPT	Dredge Spoil	18.5	20.0	618.8	SM	29.0	4														28.30
124	E-8	SPT	Alluvium	23.5	25.0	618.8	SM	29.0	14	27.8													31.20
125	E-8	SPT	Alluvium	28.5	30.0	618.8	SM	29.0	2	37.5	NP	NP	NP										27.70
126	E-8	SPT	Alluvium	33.5	35.0	618.8	SM	29.0	7	26.2				99.6	22.7								29.20
127	E-9	SPT	CCR-Soil Mix (Embankment)	0.0	1.5	617.4	SM	23.5	10	30.1				87.4	25.7								30.00
128	E-9	SPT	Earth Fill	3.5	5.0	617.4	SM	23.5	44	6.7													39.30
129	E-9	SPT	CCR (Embankment)	6.0	7.5	617.4	ML	23.5	24														34.00
130	E-9	SPT	CCR (Embankment)	8.5	10.0	617.4	ML	23.5	19	38.5													32.60
131	E-9	SPT	CCR (Embankment)	13.5	15.0	617.4	ML	23.5	5														28.60
132	E-9	Tube	CCR (Embankment)	15.0	17.0	617.4	ML	23.5		28.0	NP	NP	NP	98.6	39.9	72.6	2.3	0.0	16.8	0.0	25.6	25.90	-
133	E-9	SPT	Dredge Spoil	18.5	20.0	617.4	SM	23.5	5	20.0													28.60
134	E-9	SPT	Alluvium	23.5	25.0	617.4	SM	23.5	2														27.70
135	E-9	SPT	Alluvium	28.5	30.0	617.4	SM	23.5	3	45.5				95.8	38.7								28.00

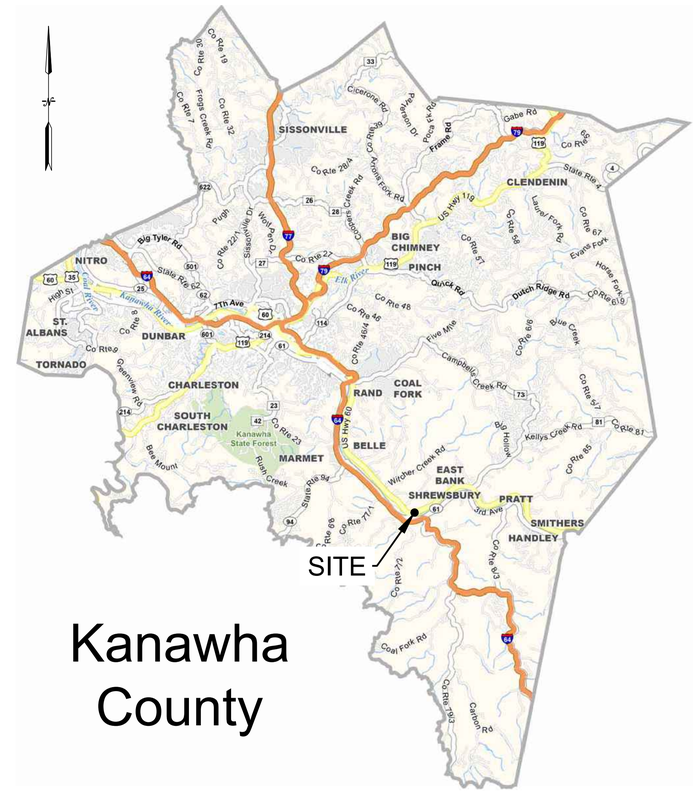
Notes:
1. NA = Not Available, could not be measured due to the drilling method. NE = Not Encountere
2. Unit weights for CCR materials are included for reference only; they should not be used for design purposes. The samples were disturbed during recovery and transport, resulting in n-representative unit weight measurements.

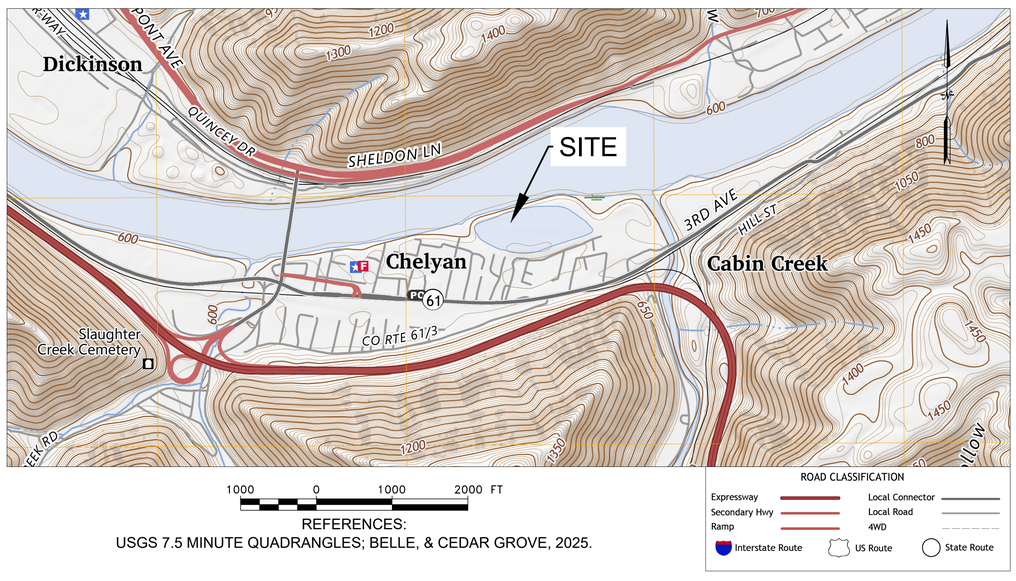
Table 3: Summary of Geotechnical Material Properties

Material	Unit Weight (pcf)	Drained Strength		Undrained Strength	
		Effective Internal Friction φ' (°)	Effective Cohesion c' (psf)	Total Internal Friction φ (°)	Total Cohesion c (psf)
Fill and Embankment Materials					
CCR-Soil Mix (Embankment)	100	30	0	-	-
CCR (Embankment)	85-100	30	0	-	-
Dredge Spoil	100	28	0	-	-
Earthfill	120	30	100	-	-
Coal Combustion Residuals					
CCR-Soil Mix (Impounded)	85-100	28	0	-	-
Sluiced CCR	75	28	0	-	-
Alluvium	105	32	0	0	21

Figures







REFERENCES:
USGS 7.5 MINUTE QUADRANGLES; BELLE, & CEDAR GROVE, 2025.

DATE	NO.	DESCRIPTION	APPD.

REVISIONS

THIS DRAWING IS CLASSIFIED AS:

REFERENCE AEP's CORPORATE INFORMATION SECURITY POLICY

APPALACHIAN POWER COMPANY

CABIN CREEK ASH POND

CABIN CREEK WEST VIRGINIA

SITE LOCATION PLAN

UNIT: FEET	DRAWING NUMBER: 1 OF 5	REV: -

SCALE:
DR: CCP
CH: NG
SUP: NG
ENG: SJM
DATE: 01/27/2026
APPROVED BY

wsp
3348 Peachtree Road NE
Suite 1100
Atlanta, GA 30326

AEP AMERICAN ELECTRIC POWER

AEP SERVICE CORP.
1 RIVERSIDE PLAZA
COLUMBUS, OH 43215

PROJECT NO. 1000005
PLOT TIME: 1:28 PM
PLOT DATE: 1/28/2026
BY: CHRIS POWELL

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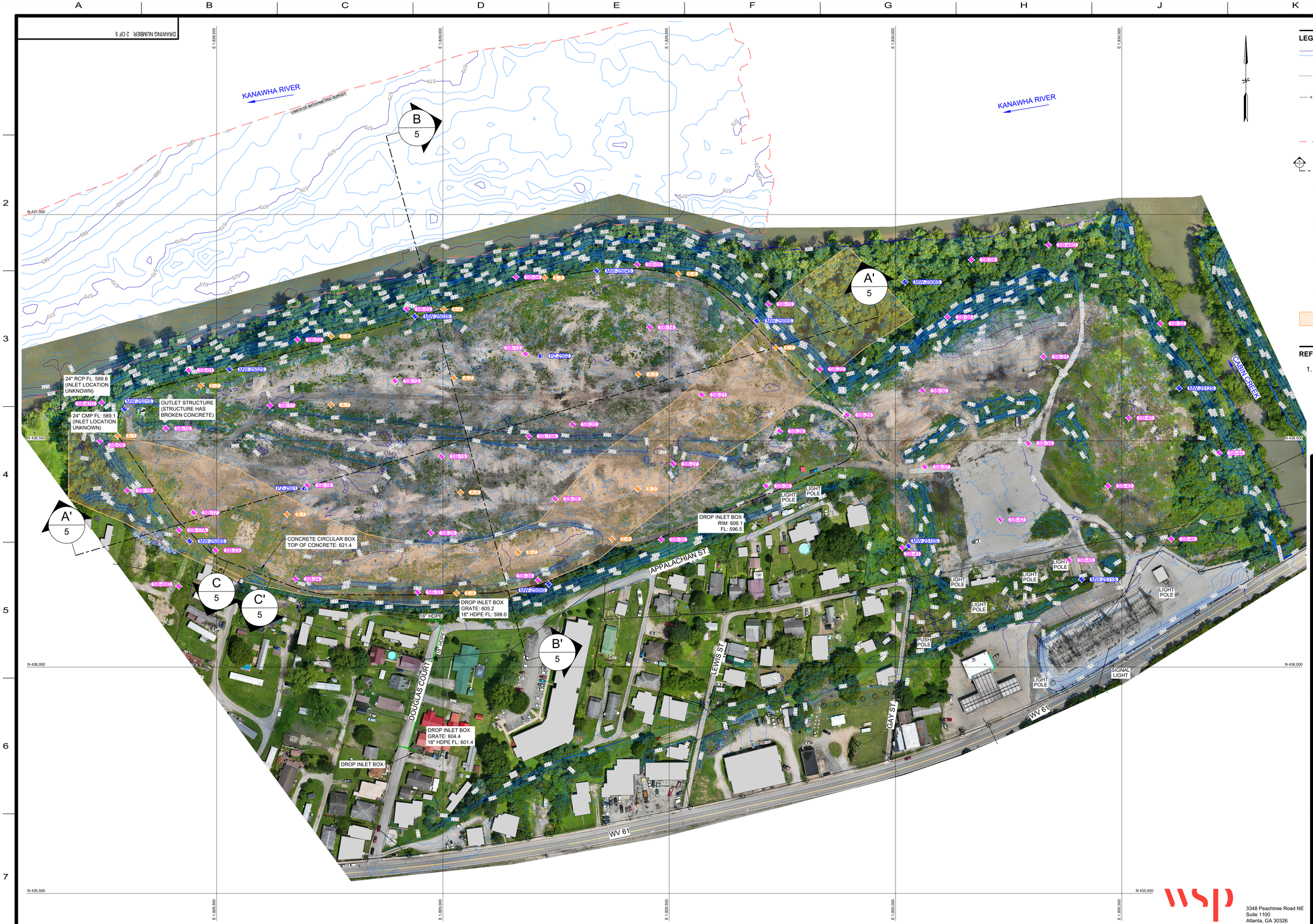
DRAWING NUMBER: 2 OF 5



LEGEND

- EXISTING CONTOURS
- EXISTING ROADS
- EXISTING FENCE
- EXISTING UTILITY POLES
- LIMITS OF BATHYMETRIC SURVEY
- CROSS SECTION LOCATIONS
- WSP BORING LOCATIONS (A-, B-, AND E- SERIES), 2025
- AEP/EHS GEOPROBE LOCATIONS (SB-XX), 2025
- AEP/EHS MONITORING WELLS (MW-25XXS), 2025
- AEP/EHS PIEZOMETERS (SB-XX), 2025
- APPROX. FORMER BACK CHANNEL

REFERENCES

1. EXISTING TOPOGRAPHY, BATHYMETRY AND AERIAL IMAGERY PROVIDED BY AMERICAN ELECTRIC POWER.

100 0 100 200 FT

DATE	NO.	DESCRIPTION	APPD.

REVISIONS

THIS DRAWING IS CLASSIFIED AS:

REFERENCE AEP's CORPORATE INFORMATION SECURITY POLICY

APPALACHIAN POWER COMPANY

CABIN CREEK ASH POND

CABIN CREEK WEST VIRGINIA

GEOTECHNICAL EXPLORATION LOCATIONS PLAN

UNIT:	DRAWING NUMBER:	REV:
FEET	2 OF 5	–

SCALE: 1" = 100'
DR: CCP
CH: NG
SUP: NG
ENG: SJM
DATE: 01/27/2026
APPROVED BY

wsp
3348 Peachtree Road NE
Suite 1100
Atlanta, GA 30326

AEP AMERICAN ELECTRIC POWER
AEP SERVICE CORP.
1 RIVERSIDE PLAZA
COLUMBUS, OH 43215

PLOT DATE: 1/29/2026
PLOT TIME: 10:55 AM
PLOTTED BY: POWELL, CHRIS
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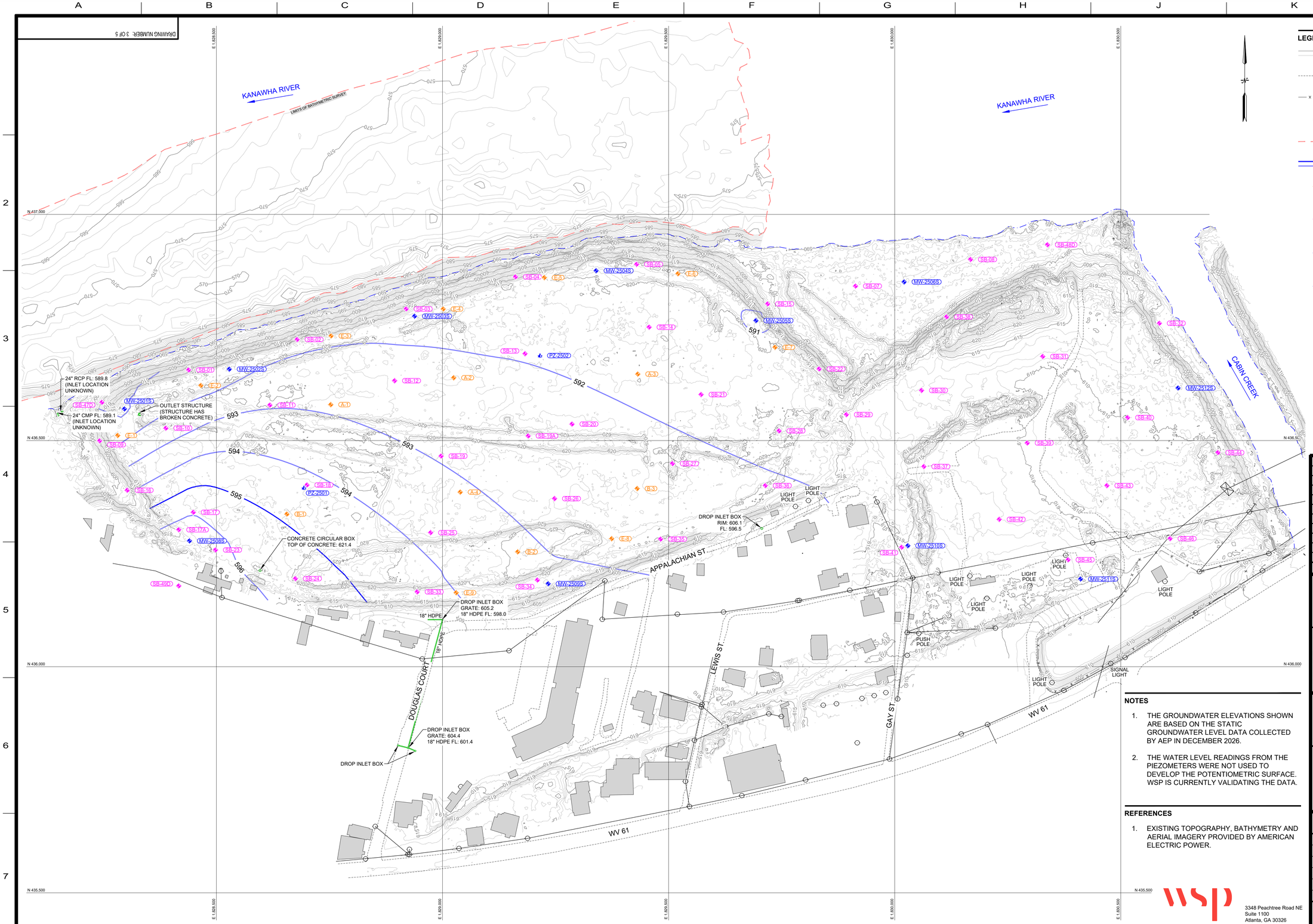

LEGEND

- EXISTING CONTOURS
- EXISTING ROADS
- EXISTING FENCE
- EXISTING UTILITY POLES
- LIMITS OF BATHYMETRIC SURVEY
- GROUNDWATER CONTOURS
- WSP BORING LOCATIONS (A-, B-, AND E- SERIES), 2025
- AEP/EHS GEOPROBE LOCATIONS (SB-XX), 2025
- AEP/EHS MONITORING WELLS (MW-25XXS), 2025
- AEP/EHS PIEZOMETERS (SB-XX), 2025

NOTES

1. THE GROUNDWATER ELEVATIONS SHOWN ARE BASED ON THE STATIC GROUNDWATER LEVEL DATA COLLECTED BY AEP IN DECEMBER 2026.
2. THE WATER LEVEL READINGS FROM THE PIEZOMETERS WERE NOT USED TO DEVELOP THE POTENTIOMETRIC SURFACE. WSP IS CURRENTLY VALIDATING THE DATA.

REFERENCES

1. EXISTING TOPOGRAPHY, BATHYMETRY AND AERIAL IMAGERY PROVIDED BY AMERICAN ELECTRIC POWER.

wsp
3348 Peachtree Road NE
Suite 1100
Atlanta, GA 30326

DATE	NO.	DESCRIPTION	APPD.

REVISIONS

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REFERENCE AEP's CORPORATE INFORMATION SECURITY POLICY

APPALACHIAN POWER COMPANY

CABIN CREEK ASH POND

CABIN CREEK — WEST VIRGINIA

POTENTIOMETRIC MAP

UNIT:	DRAWING NUMBER:	REV:
FEET	3 OF 5	-

SCALE: 1" = 100'
DR: CCP
CH: NG
SUP: NG
ENG: SJM
DATE: 01/27/2026
APPROVED BY

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DRAWING NUMBER: 3 OF 5
G:\American Electric Power\Cabin Creek Site\Geotechnical Data Report\Production\3 - Potentiometric Map.dwg LAYOUT: 3 SAVED: 1/29/2026 11:09 AM PAGESETUP: ---- PLOTTED: 1/29/2026 POWELL, CHRIS
PLOT SCALE: 1:20000
PLOT DATE: 1/29/2026
BY: POWELL, CHRIS

DRAWING NUMBER: 4 OF 5

KANAWHA RIVER

LIMITS OF BATHYMETRIC SURVEY

24" RCP FL: 589.8 (INLET LOCATION UNKNOWN)

24" CMP FL: 589.1 (INLET LOCATION UNKNOWN)

OUTLET STRUCTURE (STRUCTURE HAS BROKEN CONCRETE)

CONCRETE CIRCULAR BOX TOP OF CONCRETE: 621.4

DROP INLET BOX GRATE: 605.2 18" HDPE FL: 598.0

18" HDPE

DROP INLET BOX RIM: 606.1 FL: 596.5

DROP INLET BOX GRATE: 604.4 18" HDPE FL: 601.4

DROP INLET BOX

APPALACHIAN ST

DOUGLAS COURT

LEWIS ST

GAY ST

WV 61

CABIN CREEK

LIGHT POLE

PUSH POLE

SIGNAL LIGHT

N 437,000

N 436,500

N 436,000

N 435,500

E 1,828,500

E 1,829,000

E 1,829,500

E 1,830,000

E 1,830,500

CCR THICKNESS TABLE

RANGE	COLOR
0.0' to 5.0'	
5.0' to 10.0'	
10.0' to 15.0'	
15.0' to 20.0'	
20.0' to 25.0'	
25.0' to 30.0'	
30.0' to 33.4'	

LEGEND

- EXISTING CONTOURS
- EXISTING ROADS
- EXISTING FENCE
- EXISTING UTILITY POLES
- LIMITS OF BATHYMETRIC SURVEY
- WSP BORING LOCATIONS
- AEP/EHS GEOPROBE LOCATIONS

NOTES

1. THE BOTTOM OF THE CCR MATERIALS WAS DETERMINED BASED ON THE DEPTH TO THE UNDERLYING ALLUVIAL SOILS OR DREDGE SPOILS.

REFERENCES

1. EXISTING TOPOGRAPHY, BATHYMETRY AND AERIAL IMAGERY PROVIDED BY AMERICAN ELECTRIC POWER.

100 0 100 200 FT

DATE	NO.	DESCRIPTION	APPD.

REVISIONS

THIS DRAWING IS CLASSIFIED AS:

REFERENCE AEP's CORPORATE INFORMATION SECURITY POLICY

APPALACHIAN POWER COMPANY

CABIN CREEK ASH POND

CABIN CREEK WEST VIRGINIA

ISOPACH MAP OF CCR THICKNESS

UNIT:	DRAWING NUMBER:	REV:
FEET	4 OF 5	–

SCALE: 1" = 100'

DR: CCP

CH: NG

SUP: NG

ENG: SJM

DATE: 01/27/2026

APPROVED BY

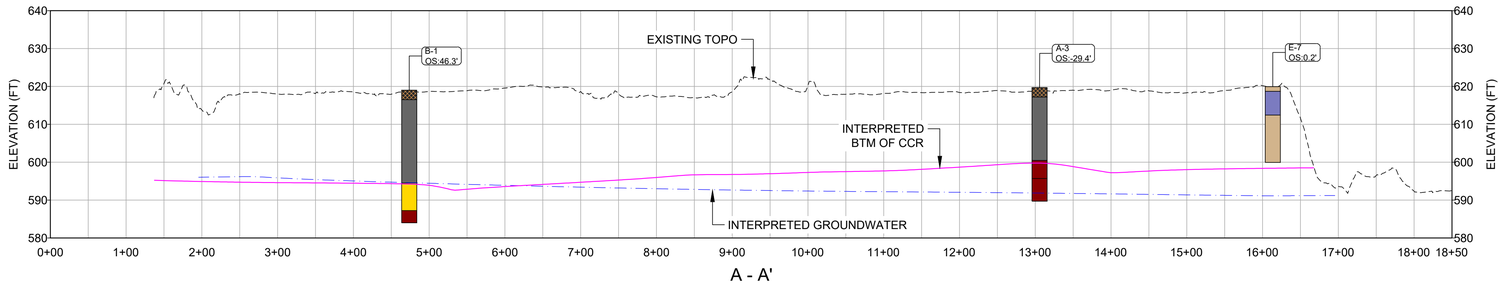
wsp
3348 Peachtree Road NE
Suite 1100
Atlanta, GA 30326

AEP AMERICAN ELECTRIC POWER
AEP SERVICE CORP.
1 RIVERSIDE PLAZA
COLUMBUS, OH 43215

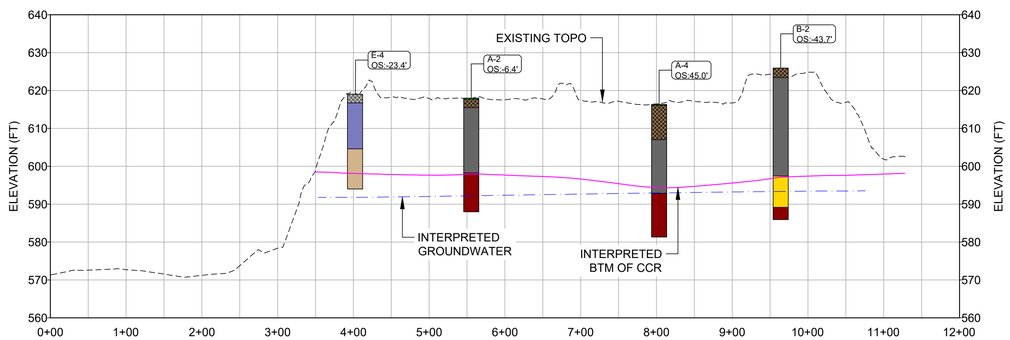
PLOT DATE: 1/28/2026
PLOT TIME: 10:15 AM
PLOTTED BY: POWELL, CHRIS

G:\American Electric Power\Cabin Creek Site\Geotechnical Data Report\Production\4 - Isopach Map of CCR Thickness.dwg LAYOUT: 4 SAVED: 1/27/2026 4:55 PM PAGESETUP: ---- PLOTTED: 1/28/2026 POWELL, CHRIS

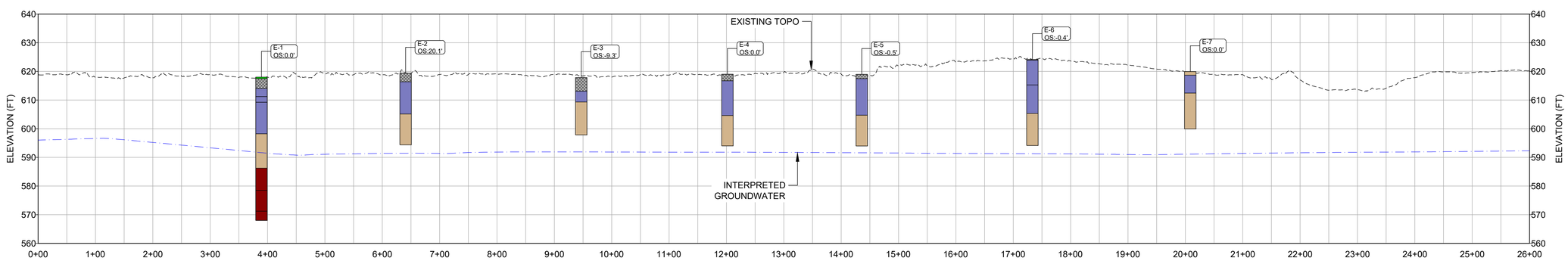
DRAWING NUMBER: 5 OF 5



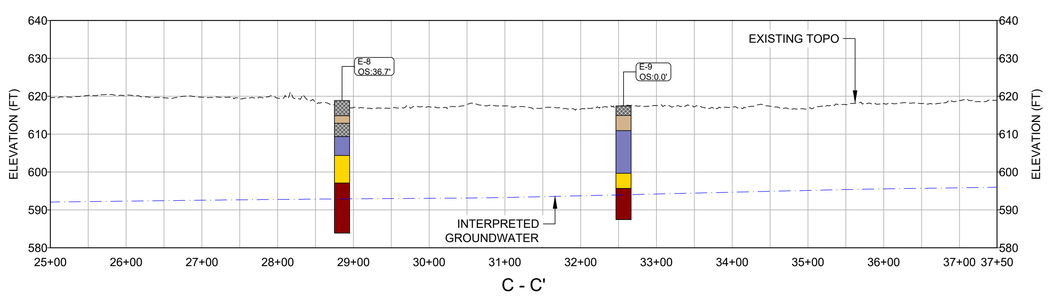
A - A'



B - B'



C - C'



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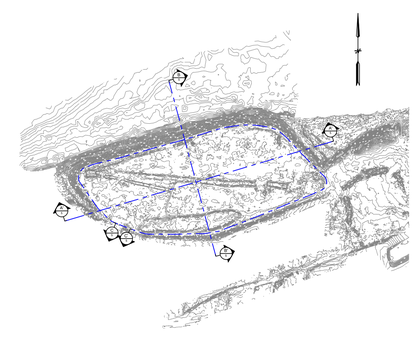

GEOPROBE / BORING LEGEND

TOPSOIL	CCR (EMBANKMENT)
EARTH FILL	CCR - SOIL MIX (IMPOUNDED)
DREDGE SPOIL	CCR - SOIL MIX (EMBANKMENT)
SLUICED CCR	ALLUVIUM

NOTES

1. THE GROUNDWATER ELEVATIONS SHOWN ARE BASED ON THE STATIC GROUNDWATER LEVEL DATA COLLECTED BY AEP IN DECEMBER 2026.
2. THE BOTTOM OF THE CCR MATERIALS WAS DETERMINED BASED ON THE DEPTH TO THE UNDERLYING ALLUVIAL SOILS OR DREDGE SPOILS.

REFERENCES

1. EXISTING TOPOGRAPHY, BATHYMETRY AND AERIAL IMAGERY PROVIDED BY AMERICAN ELECTRIC POWER.

100 0 100 200 FT

5X VERTICALLY EXAGGERATED

DATE	NO.	DESCRIPTION	APPD.

REVISIONS

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APPALACHIAN POWER COMPANY

CABIN CREEK ASH POND

CABIN CREEK WEST VIRGINIA

SUBSURFACE CROSS SECTIONS AND INTERPRETED STRATIGRAPHY

UNIT:	DRAWING NUMBER:	REV:
FEET	5 OF 5	-

SCALE: 1" = 100'
DR: CCP
CH: NG
SUP: NG
ENG: SJM
DATE: 01/27/2026
APPROVED BY

AEP AMERICAN ELECTRIC POWER

AEP SERVICE CORP.
1 RIVERSIDE PLAZA
COLUMBUS, OH 43215

wsp
3348 Peachtree Road NE
Suite 1100
Atlanta, GA 30326

PROJECT: 0300026
PLOTTED: 1/29/2026
PLOTTED BY: POWELL, CHRIS
PAPER SIZE: ANSI D

G:\American Electric Power\Cabin Creek Site\Geotechnical Data Report\Production\5 - Subsurface Cross Sections and Interpreted Stratigraphy.dwg LAYOUT: 5 SAVED: 1/29/2026 11:09 AM PAGESETUP: ---- PLOTTED: 1/29/2026 POWELL, CHRIS

APPENDIX A

Site Reconnaissance Photo Log

wsp	Project Name: AEP Cabin Creek	
	Project Location: Cabin Creek Ash Pond, Former Cabin Creek Power Plant, Cabin Creek, WV	
	Client: AEP	Project Code: US0041868.3924
	Preparer: Naveen Kumar Ganji	Reviewer: Steven Moeller
	Report Date: 2025-12-08	Page Number: 1 of 28

Media 1: Road adjacent to the ash pond

Latitude: 38.1979
Longitude: -81.4823
Bearing: W

Weather: Patchy light rain with thunder
Date Taken: 07/16/2025
Taken By: Naveen Kumar Ganji

Tags: NA

Media 2: Drainage pipe from the former power plant area

Latitude: 38.1982
Longitude: -81.4822
Bearing: SE

Weather: Patchy light rain with thunder
Date Taken: 07/16/2025
Taken By: Naveen Kumar Ganji

Tags: NA

Project Name: AEP Cabin Creek	
Project Location: Cabin Creek Ash Pond, Former Cabin Creek Power Plant, Cabin Creek, WV	
Client: AEP	Project Code: US0041868.3924
Preparer: Naveen Kumar Ganji	Reviewer: Steven Moeller
Report Date: 2025-12-08	Page Number: 2 of 28

Media 3: Potential drainage outlet pipe at the downstream toe of the perimeter dike

Latitude: 38.1982
Longitude: -81.4823
Bearing: SW

Weather: Patchy light rain with thunder
Date Taken: 07/16/2025
Taken By: Naveen Kumar Ganji

Tags: NA

Media 4: Drainage way near perimeter dike

Latitude: 38.1984
Longitude: -81.4826
Bearing: NW

Weather: Patchy light rain with thunder
Date Taken: 07/16/2025
Taken By: Naveen Kumar Ganji

Tags: NA

Project Name: AEP Cabin Creek	
Project Location: Cabin Creek Ash Pond, Former Cabin Creek Power Plant, Cabin Creek, WV	
Client: AEP	Project Code: US0041868.3924
Preparer: Naveen Kumar Ganji	Reviewer: Steven Moeller
Report Date: 2025-12-08	Page Number: 3 of 28

Media 5: Floodplain area located to the east of the ash pond near the perimeter dike toe of slope

Latitude: 38.1986
Longitude: -81.4828
Bearing: NW

Weather: Patchy light rain with thunder
Date Taken: 07/16/2025
Taken By: Naveen Kumar Ganji

Tags: NA

Media 6: Floodplain area located to the east of the ash pond near the perimeter dike toe of slope

Latitude: 38.1987
Longitude: -81.4829
Bearing: SE

Weather: Patchy light rain with thunder
Date Taken: 07/16/2025
Taken By: Naveen Kumar Ganji

Tags: NA

Media 7: Perimeter dike at the northeast corner of the ash pond

Latitude: 38.1988
Longitude: -81.4831
Bearing: SW

Weather: Patchy light rain with thunder
Date Taken: 07/16/2025
Taken By: Naveen Kumar Ganji

Tags: NA

Media 8: Erosion control measures on perimeter dike

Latitude: 38.1988
Longitude: -81.4832
Bearing: SW

Weather: Patchy light rain with thunder
Date Taken: 07/16/2025
Taken By: Naveen Kumar Ganji

Tags: NA

Project Name: AEP Cabin Creek	
Project Location: Cabin Creek Ash Pond, Former Cabin Creek Power Plant, Cabin Creek, WV	
Client: AEP	Project Code: US0041868.3924
Preparer: Naveen Kumar Ganji	Reviewer: Steven Moeller
Report Date: 2025-12-08	Page Number: 5 of 28

Media 9: Erosion control measures on perimeter dike

Latitude: 38.1987
Longitude: -81.4833
Bearing: W

Weather: Patchy light rain with thunder
Date Taken: 07/16/2025
Taken By: Naveen Kumar Ganji

Tags: NA

Media 10: Access road on the north side of the ash pond (top of ash pond)

Latitude: 38.1987
Longitude: -81.4834
Bearing: NW

Weather: Patchy light rain with thunder
Date Taken: 07/16/2025
Taken By: Naveen Kumar Ganji

Tags: NA

Project Name: AEP Cabin Creek	
Project Location: Cabin Creek Ash Pond, Former Cabin Creek Power Plant, Cabin Creek, WV	
Client: AEP	Project Code: US0041868.3924
Preparer: Naveen Kumar Ganji	Reviewer: Steven Moeller
Report Date: 2025-12-08	Page Number: 6 of 28

Media 11: Top of ash pond looking from north to south

Latitude: 38.1986
Longitude: -81.4835
Bearing: S

Weather: Patchy light rain with thunder
Date Taken: 07/16/2025
Taken By: Naveen Kumar Ganji

Tags: NA

Media 12: Top of ash pond looking southwest

Latitude: 38.1986
Longitude: -81.4844
Bearing: SW

Weather: Patchy light rain with thunder
Date Taken: 07/16/2025
Taken By: Naveen Kumar Ganji

Tags: NA

Project Name: AEP Cabin Creek	
Project Location: Cabin Creek Ash Pond, Former Cabin Creek Power Plant, Cabin Creek, WV	
Client: AEP	Project Code: US0041868.3924
Preparer: Naveen Kumar Ganji	Reviewer: Steven Moeller
Report Date: 2025-12-08	Page Number: 7 of 28

Media 13: Access road along the north side of the ash pond (top of ash pond)

Latitude: 38.1987
Longitude: -81.4845
Bearing: W

Weather: Patchy light rain with thunder
Date Taken: 07/16/2025
Taken By: Naveen Kumar Ganji

Tags: NA

Media 14: Access road along north side of ash pond (top of ash pond)

Latitude: 38.1986
Longitude: -81.4850
Bearing: W

Weather: Patchy light rain with thunder
Date Taken: 07/16/2025
Taken By: Naveen Kumar Ganji

Tags: NA

Project Name: AEP Cabin Creek	
Project Location: Cabin Creek Ash Pond, Former Cabin Creek Power Plant, Cabin Creek, WV	
Client: AEP	Project Code: US0041868.3924
Preparer: Naveen Kumar Ganji	Reviewer: Steven Moeller
Report Date: 2025-12-08	Page Number: 8 of 28

Media 15: Looking north towards the Kanawha River down the perimeter dike (heavy vegetation)

Latitude: 38.1986
Longitude: -81.4855
Bearing: N

Weather: Patchy light rain with thunder
Date Taken: 07/16/2025
Taken By: Naveen Kumar Ganji

Tags: NA

Media 16: Top of ash pond looking from north to south

Latitude: 38.1984
Longitude: -81.4859
Bearing: S

Weather: Patchy light rain with thunder
Date Taken: 07/16/2025
Taken By: Naveen Kumar Ganji

Tags: NA

Project Name: AEP Cabin Creek	
Project Location: Cabin Creek Ash Pond, Former Cabin Creek Power Plant, Cabin Creek, WV	
Client: AEP	Project Code: US0041868.3924
Preparer: Naveen Kumar Ganji	Reviewer: Steven Moeller
Report Date: 2025-12-08	Page Number: 9 of 28

Media 17: Looking north towards the Kanawha River down the perimeter dike (heavy vegetation)

Latitude: 38.1985
Longitude: -81.4862
Bearing: NW

Weather: Patchy light rain with thunder
Date Taken: 07/16/2025
Taken By: Naveen Kumar Ganji

Tags: NA

Media 18: Looking north towards the Kanawha River down the perimeter dike (heavy vegetation)

Latitude: 38.1983
Longitude: -81.4867
Bearing: NW

Weather: Patchy light rain with thunder
Date Taken: 07/16/2025
Taken By: Naveen Kumar Ganji

Tags: NA

Project Name: AEP Cabin Creek	
Project Location: Cabin Creek Ash Pond, Former Cabin Creek Power Plant, Cabin Creek, WV	
Client: AEP	Project Code: US0041868.3924
Preparer: Naveen Kumar Ganji	Reviewer: Steven Moeller
Report Date: 2025-12-08	Page Number: 10 of 28

Media 19: Access road along the north side of the ash pond (top of ash pond)

Latitude: 38.1982
Longitude: -81.4868
Bearing: W

Weather: Patchy light rain with thunder
Date Taken: 07/16/2025
Taken By: Naveen Kumar Ganji

Tags: NA

Media 20: Top of ash pond looking from north to south

Latitude: 38.1981
Longitude: -81.4872
Bearing: SE

Weather: Patchy light rain with thunder
Date Taken: 07/16/2025
Taken By: Naveen Kumar Ganji

Tags: NA

Project Name: AEP Cabin Creek	
Project Location: Cabin Creek Ash Pond, Former Cabin Creek Power Plant, Cabin Creek, WV	
Client: AEP	Project Code: US0041868.3924
Preparer: Naveen Kumar Ganji	Reviewer: Steven Moeller
Report Date: 2025-12-08	Page Number: 11 of 28

Media 21: Access road along the north side of the ash pond (top of ash pond)

Latitude: 38.1980
Longitude: -81.4876
Bearing: W

Weather: Patchy light rain with thunder
Date Taken: 07/16/2025
Taken By: Naveen Kumar Ganji

Tags: NA

Media 22: Looking up the perimeter dike slope from the Kanawha River (heavy vegetation)

Latitude: 38.1983
Longitude: -81.4874
Bearing: S

Weather: Patchy light rain with thunder
Date Taken: 07/16/2025
Taken By: Naveen Kumar Ganji

Tags: NA

Project Name: AEP Cabin Creek	
Project Location: Cabin Creek Ash Pond, Former Cabin Creek Power Plant, Cabin Creek, WV	
Client: AEP	Project Code: US0041868.3924
Preparer: Naveen Kumar Ganji	Reviewer: Steven Moeller
Report Date: 2025-12-08	Page Number: 12 of 28

Media 23: Perimeter dike at the northwest end of the ash pond

Latitude: 38.1982
Longitude: -81.4877
Bearing: S

Weather: Patchy light rain with thunder
Date Taken: 07/16/2025
Taken By: Naveen Kumar Ganji

Tags: NA

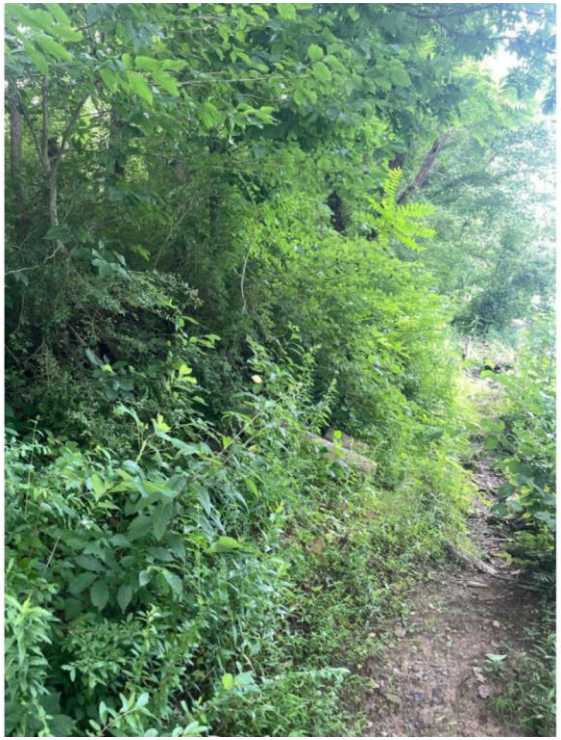
Media 24: Heavy vegetation is shown on the perimeter dike at the northwest end of the ash pond adjacent to the Kanawha River

Latitude: 38.1982
Longitude: -81.4877
Bearing: S

Weather: Patchy light rain with thunder
Date Taken: 07/16/2025
Taken By: Naveen Kumar Ganji

Tags: NA

Project Name: AEP Cabin Creek	
Project Location: Cabin Creek Ash Pond, Former Cabin Creek Power Plant, Cabin Creek, WV	
Client: AEP	Project Code: US0041868.3924
Preparer: Naveen Kumar Ganji	Reviewer: Steven Moeller
Report Date: 2025-12-08	Page Number: 13 of 28



Media 25: Heavy vegetation shown on the perimeter dike at the northwest end of the ash pond adjacent to the Kanawha River

Latitude: 38.1982
Longitude: -81.4877
Bearing: SW

Weather: Patchy light rain with thunder
Date Taken: 07/16/2025
Taken By: Naveen Kumar Ganji

Tags: NA

Media 26: Floodplain area shown to the northwest of the ash pond

Latitude: 38.1979
Longitude: -81.4886
Bearing: W

Weather: Patchy light rain with thunder
Date Taken: 07/16/2025
Taken By: Naveen Kumar Ganji

Tags: NA

Project Name: AEP Cabin Creek	
Project Location: Cabin Creek Ash Pond, Former Cabin Creek Power Plant, Cabin Creek, WV	
Client: AEP	Project Code: US0041868.3924
Preparer: Naveen Kumar Ganji	Reviewer: Steven Moeller
Report Date: 2025-12-08	Page Number: 14 of 28

Media 27: Corrugated metal storm water pipe by the concrete outlet pipe

Latitude: 38.1979
Longitude: -81.4884
Bearing: E

Weather: Patchy light rain with thunder
Date Taken: 07/16/2025
Taken By: Naveen Kumar Ganji

Tags: NA

Media 28: Concrete spillway outlet pipe

Latitude: 38.1979
Longitude: -81.4884
Bearing: W

Weather: Patchy light rain with thunder
Date Taken: 07/16/2025
Taken By: Naveen Kumar Ganji

Tags: NA

Project Name: AEP Cabin Creek	
Project Location: Cabin Creek Ash Pond, Former Cabin Creek Power Plant, Cabin Creek, WV	
Client: AEP	Project Code: US0041868.3924
Preparer: Naveen Kumar Ganji	Reviewer: Steven Moeller
Report Date: 2025-12-08	Page Number: 15 of 28

Media 29: Corrugated metal storm drain outlet

Latitude: 38.1979
Longitude: -81.4884
Bearing: SW

Weather: Patchy light rain with thunder
Date Taken: 07/16/2025
Taken By: Naveen Kumar Ganji

Tags: NA

Media 30: View of perimeter dike adjacent to the Kanawha River

Latitude: 38.1979
Longitude: -81.4884
Bearing: NE

Weather: Patchy light rain with thunder
Date Taken: 07/16/2025
Taken By: Naveen Kumar Ganji

Tags: NA

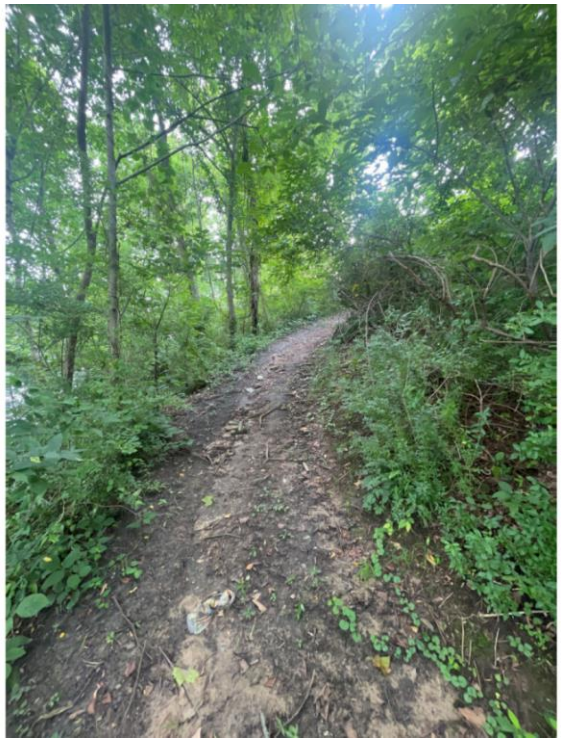
Project Name: AEP Cabin Creek	
Project Location: Cabin Creek Ash Pond, Former Cabin Creek Power Plant, Cabin Creek, WV	
Client: AEP	Project Code: US0041868.3924
Preparer: Naveen Kumar Ganji	Reviewer: Steven Moeller
Report Date: 2025-12-08	Page Number: 16 of 28

Media 31: Floodplain area adjacent to the ash pond (northwest end of ash pond)

Latitude: 38.1980
Longitude: -81.4882
Bearing: NW

Weather: Patchy light rain with thunder
Date Taken: 07/16/2025
Taken By: Naveen Kumar Ganji

Tags: NA



Media 32: ATV trail on perimeter dike at the northwest end of the ash pond

Latitude: 38.1980
Longitude: -81.4882
Bearing: E

Weather: Patchy light rain with thunder
Date Taken: 07/16/2025
Taken By: Naveen Kumar Ganji

Tags: NA

Project Name: AEP Cabin Creek	
Project Location: Cabin Creek Ash Pond, Former Cabin Creek Power Plant, Cabin Creek, WV	
Client: AEP	Project Code: US0041868.3924
Preparer: Naveen Kumar Ganji	Reviewer: Steven Moeller
Report Date: 2025-12-08	Page Number: 17 of 28

Media 33: Perimeter dike at the northwest end of the ash pond

Latitude: 38.1979
Longitude: -81.4880
Bearing: NW

Weather: Patchy light rain with thunder
Date Taken: 07/16/2025
Taken By: Naveen Kumar Ganji

Tags: NA

Media 34: Remnants of old concrete outlet structure used when the ash pond was active

Latitude: 38.1979
Longitude: -81.4878
Bearing: NE

Weather: Patchy light rain with thunder
Date Taken: 07/16/2025
Taken By: Naveen Kumar Ganji

Tags: NA

Project Name: AEP Cabin Creek	
Project Location: Cabin Creek Ash Pond, Former Cabin Creek Power Plant, Cabin Creek, WV	
Client: AEP	Project Code: US0041868.3924
Preparer: Naveen Kumar Ganji	Reviewer: Steven Moeller
Report Date: 2025-12-08	Page Number: 18 of 28

Media 35: Remnants of an old concrete outlet structure used when the ash pond was active

Latitude: 38.1979
Longitude: -81.4878
Bearing: NE

Weather: Patchy light rain with thunder
Date Taken: 07/16/2025
Taken By: Naveen Kumar Ganji

Tags: NA

Media 36: Cleared area on the top of the ash pond with in-place erosion control measures (recently cleared)

Latitude: 38.1979
Longitude: -81.4878
Bearing: NW

Weather: Patchy light rain with thunder
Date Taken: 07/16/2025
Taken By: Naveen Kumar Ganji

Tags: NA

Project Name: AEP Cabin Creek	
Project Location: Cabin Creek Ash Pond, Former Cabin Creek Power Plant, Cabin Creek, WV	
Client: AEP	Project Code: US0041868.3924
Preparer: Naveen Kumar Ganji	Reviewer: Steven Moeller
Report Date: 2025-12-08	Page Number: 19 of 28

Media 37: Top of ash pond near the northwest corner of the pond

Latitude: 38.1976
Longitude: -81.4877
Bearing: SW

Weather: Patchy light rain with thunder
Date Taken: 07/16/2025
Taken By: Naveen Kumar Ganji

Tags: NA

Media 38: Looking west to east on top of the ash pond (area recently cleared)

Latitude: 38.1976
Longitude: -81.4877
Bearing: NE

Weather: Patchy light rain with thunder
Date Taken: 07/16/2025
Taken By: Naveen Kumar Ganji

Tags: NA

Project Name: AEP Cabin Creek	
Project Location: Cabin Creek Ash Pond, Former Cabin Creek Power Plant, Cabin Creek, WV	
Client: AEP	Project Code: US0041868.3924
Preparer: Naveen Kumar Ganji	Reviewer: Steven Moeller
Report Date: 2025-12-08	Page Number: 20 of 28

Media 39: Looking northwest across the top of the ash pond towards the Kanawha River

Latitude: 38.1973
Longitude: -81.4872
Bearing: W

Weather: Patchy light rain with thunder
Date Taken: 07/16/2025
Taken By: Naveen Kumar Ganji

Tags: NA

Media 40: Looking northeast across the top of the ash pond

Latitude: 38.1973
Longitude: -81.4872
Bearing: NE

Weather: Patchy light rain with thunder
Date Taken: 07/16/2025
Taken By: Naveen Kumar Ganji

Tags: NA

Project Name: AEP Cabin Creek	
Project Location: Cabin Creek Ash Pond, Former Cabin Creek Power Plant, Cabin Creek, WV	
Client: AEP	Project Code: US0041868.3924
Preparer: Naveen Kumar Ganji	Reviewer: Steven Moeller
Report Date: 2025-12-08	Page Number: 21 of 28

Media 41: Looking southeast across the top of the ash pond towards the neighborhood to the south

Latitude: 38.1973
Longitude: -81.4872
Bearing: SE

Weather: Patchy light rain with thunder
Date Taken: 07/16/2025
Taken By: Naveen Kumar Ganji

Tags: NA

Media 42: Top of concrete stormwater manhole. Access point for stormwater drainage pipes that traverse the ash pond

Latitude: 38.1970
Longitude: -81.4868
Bearing: S

Weather: Patchy light rain with thunder
Date Taken: 07/16/2025
Taken By: Naveen Kumar Ganji

Tags: NA

Project Name: AEP Cabin Creek	
Project Location: Cabin Creek Ash Pond, Former Cabin Creek Power Plant, Cabin Creek, WV	
Client: AEP	Project Code: US0041868.3924
Preparer: Naveen Kumar Ganji	Reviewer: Steven Moeller
Report Date: 2025-12-08	Page Number: 22 of 28

Media 43: Top of concrete stormwater manhole. Access point for stormwater drainage pipes that traverse the ash pond

Latitude: 38.1970
Longitude: -81.4868
Bearing: SW

Weather: Patchy light rain with thunder
Date Taken: 07/16/2025
Taken By: Naveen Kumar Ganji

Tags: NA

Media 44: Top of concrete stormwater manhole. Access point for stormwater drainage pipes that traverse the ash pond

Latitude: 38.1969
Longitude: -81.4869
Bearing: NE

Weather: Patchy light rain with thunder
Date Taken: 07/16/2025
Taken By: Naveen Kumar Ganji

Tags: NA

Project Name: AEP Cabin Creek	
Project Location: Cabin Creek Ash Pond, Former Cabin Creek Power Plant, Cabin Creek, WV	
Client: AEP	Project Code: US0041868.3924
Preparer: Naveen Kumar Ganji	Reviewer: Steven Moeller
Report Date: 2025-12-08	Page Number: 23 of 28

Media 45: Looking towards the northeast across the top of the ash pond (area recently cleared)

Latitude: 38.1969
Longitude: -81.4867
Bearing: N

Weather: Patchy light rain with thunder
Date Taken: 07/16/2025
Taken By: Naveen Kumar Ganji

Tags: NA

Media 46: Looking east along the top of the perimeter dike south of the ash pond

Latitude: 38.1969
Longitude: -81.4865
Bearing: E

Weather: Patchy light rain with thunder
Date Taken: 07/16/2025
Taken By: Naveen Kumar Ganji

Tags: NA

Project Name: AEP Cabin Creek	
Project Location: Cabin Creek Ash Pond, Former Cabin Creek Power Plant, Cabin Creek, WV	
Client: AEP	Project Code: US0041868.3924
Preparer: Naveen Kumar Ganji	Reviewer: Steven Moeller
Report Date: 2025-12-08	Page Number: 24 of 28

Media 47: Looking west along the top of the perimeter dike south of the ash pond

Latitude: 38.1968
Longitude: -81.4858
Bearing: W

Weather: Patchy light rain with thunder
Date Taken: 07/16/2025
Taken By: Naveen Kumar Ganji

Tags: NA

Media 48: Looking west along the top of the perimeter dike south of the ash pond

Latitude: 38.1968
Longitude: -81.4852
Bearing: W

Weather: Patchy light rain with thunder
Date Taken: 07/16/2025
Taken By: Naveen Kumar Ganji

Tags: NA

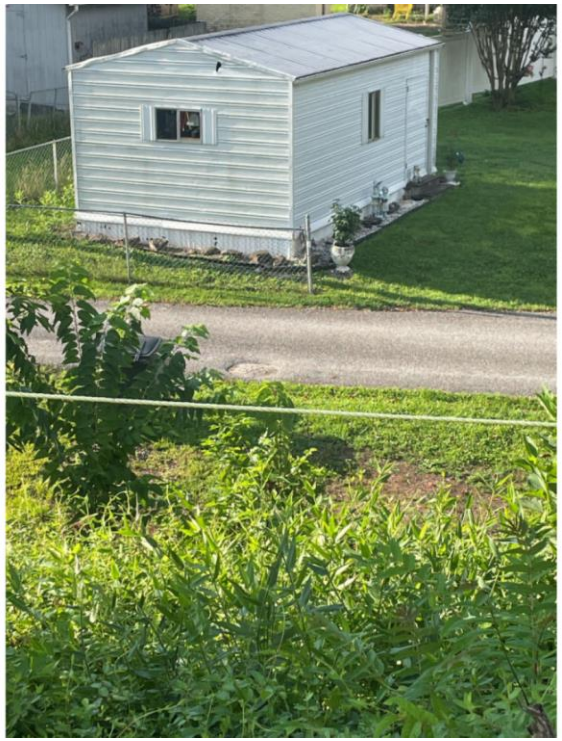
Project Name: AEP Cabin Creek	
Project Location: Cabin Creek Ash Pond, Former Cabin Creek Power Plant, Cabin Creek, WV	
Client: AEP	Project Code: US0041868.3924
Preparer: Naveen Kumar Ganji	Reviewer: Steven Moeller
Report Date: 2025-12-08	Page Number: 25 of 28

Media 49: Looking east along the top of the perimeter dike south of the ash pond

Latitude: 38.1969
Longitude: -81.4846
Bearing: E

Weather: Patchy light rain with thunder
Date Taken: 07/16/2025
Taken By: Naveen Kumar Ganji

Tags: NA



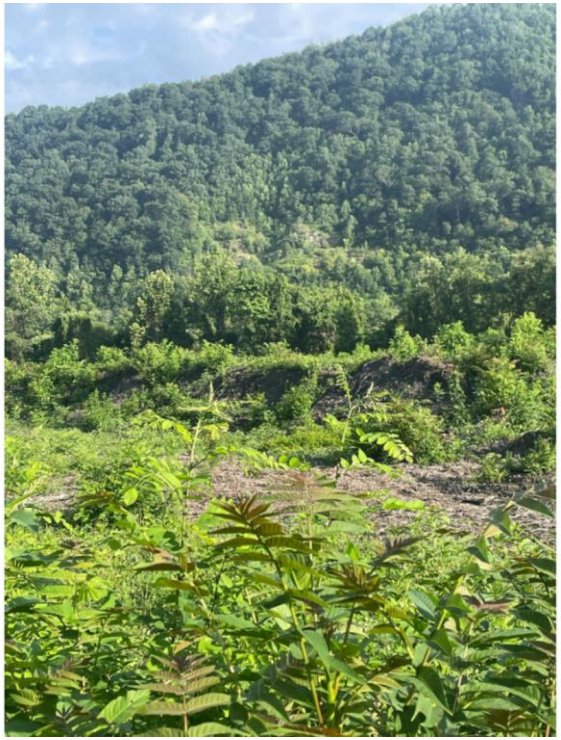
Media 50: Looking south from the top of the perimeter dike, showing manhole location in the adjacent street

Latitude: 38.1974
Longitude: -81.4831
Bearing: SE

Weather: Patchy light rain with thunder
Date Taken: 07/16/2025
Taken By: Naveen Kumar Ganji

Tags: NA

Project Name: AEP Cabin Creek	
Project Location: Cabin Creek Ash Pond, Former Cabin Creek Power Plant, Cabin Creek, WV	
Client: AEP	Project Code: US0041868.3924
Preparer: Naveen Kumar Ganji	Reviewer: Steven Moeller
Report Date: 2025-12-08	Page Number: 26 of 28

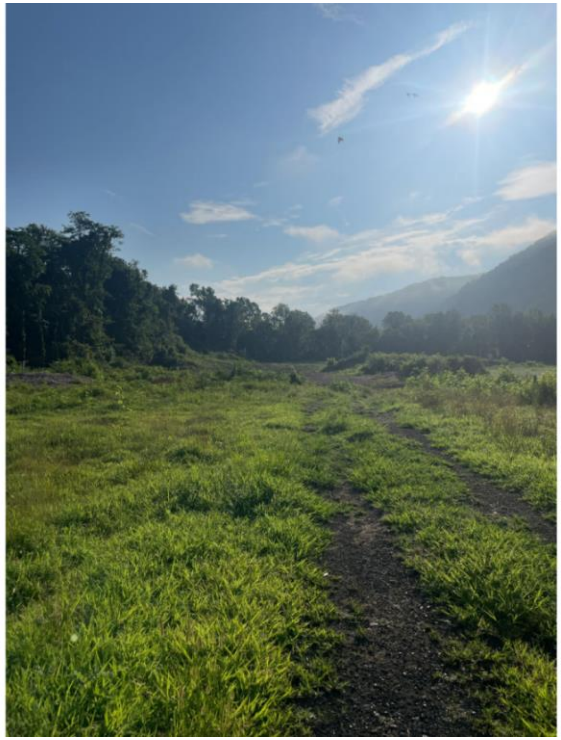


Media 51: Splitter dike running through the middle of the ash pond

Latitude: 38.1974
Longitude: -81.4830
Bearing: NW

Weather: Patchy light rain with thunder
Date Taken: 07/16/2025
Taken By: Naveen Kumar Ganji

Tags: NA



Media 52: Looking west on the south side of the ash pond

Latitude: 38.1975
Longitude: -81.4828
Bearing: NE

Weather: Patchy light rain with thunder
Date Taken: 07/16/2025
Taken By: Naveen Kumar Ganji

Tags: NA

Project Name: AEP Cabin Creek	
Project Location: Cabin Creek Ash Pond, Former Cabin Creek Power Plant, Cabin Creek, WV	
Client: AEP	Project Code: US0041868.3924
Preparer: Naveen Kumar Ganji	Reviewer: Steven Moeller
Report Date: 2025-12-08	Page Number: 27 of 28

Media 53: South side of ash pond on top of perimeter dike looking west

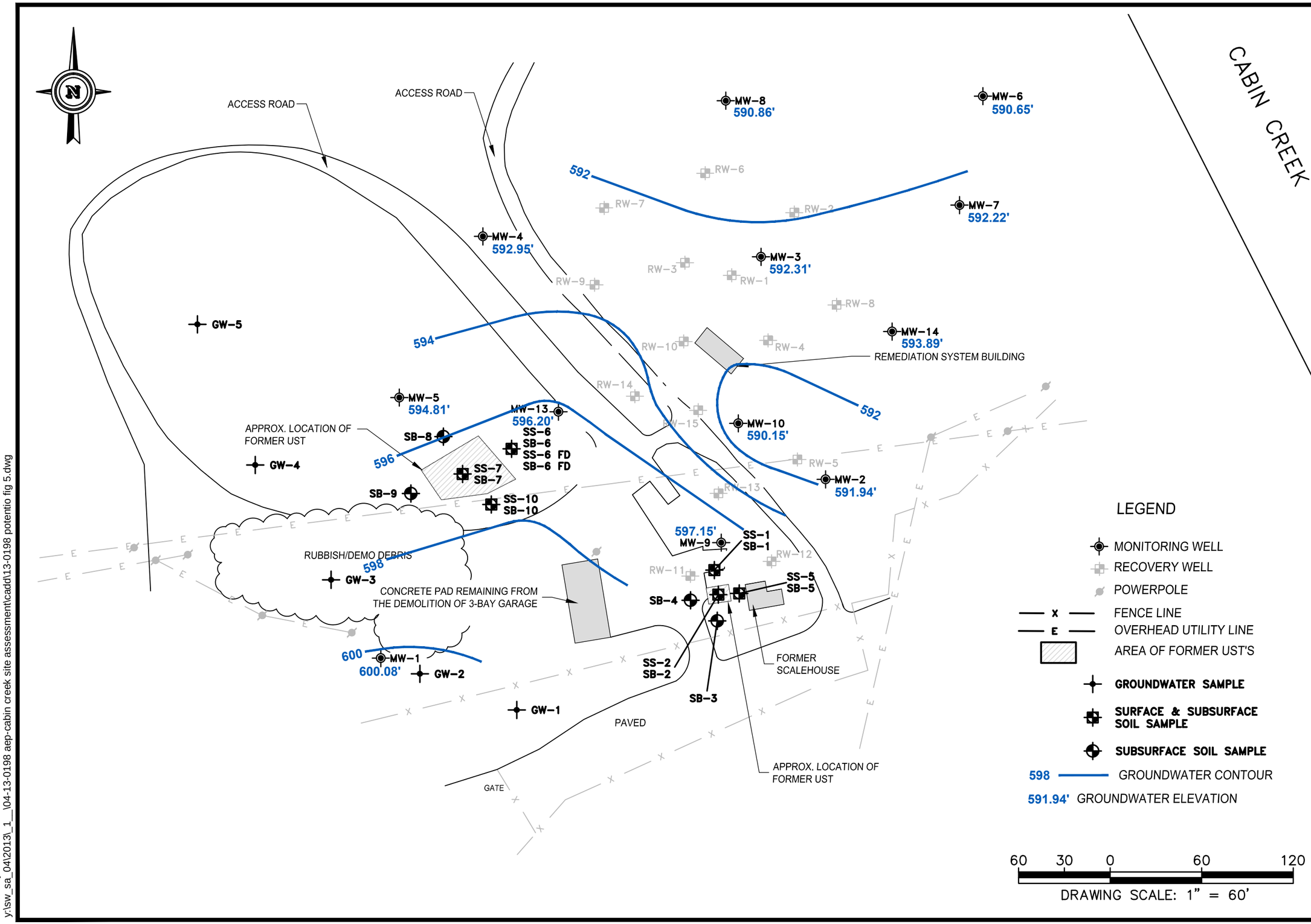
Latitude: 38.1974 Longitude: -81.4829 Bearing: SW	Weather: Patchy light rain with thunder Date Taken: 07/16/2025 Taken By: Naveen Kumar Ganji

Tags: NA

wsp	Project Name: AEP Cabin Creek	
	Project Location: Cabin Creek Ash Pond, Former Cabin Creek Power Plant, Cabin Creek, WV	
	Client: AEP	Project Code: US0041868.3924
	Preparer: Naveen Kumar Ganji	Reviewer: Steven Moeller
	Report Date: 2025-12-08	Page Number: 28 of 28

APPENDIX B

Previous Geotechnical Investigations



TRIAD ENGINEERING, INC.
4980 TEAYS VALLEY ROAD
SCOTT DEPOT, WV 25560
PH: 304.755.0721 FAX: 304.755.1880
OFFICE LOCATIONS
MARYLAND ○ PENNSYLVANIA ○ VIRGINIA ○ WEST VIRGINIA ○ OHIO

CADD FILE: 13-0198 Potentio Fig 5.dwg	PROJECT No.: 04-13-0198	CHECKED BY: DS	SCALE: 1" = 60'
		DRAWN BY: LA/SJF	DATE: 6/27/2013

AEP - CABIN CREEK SITE ASSESSMENT
CHELYAN, KANAWHA COUNTY, WV
05/01/13

POTENTIOMETRIC SURFACE MAP

TRIAD ENGINEERING, INC.
www.triadeng.com

FIGURE No.:
5

PROJECT No.: 04-13-0198

Plotted by: sfore
y:\sw_sa_04\2013_1__\04-13-0198 aep-cabin creek site assessment\cadd\13-0198 potentio fig 5.dwg

Project Name: AEP Cabin Creek	TRIAD ENGINEERING, INC.	**BORING LOG SB1**
Project Number: 04-13-0198		

Location:

Depth, feet	Symbol/USCS	Lithologic Description	PID (ppm)	Sample ID	Observations
		TOPSOIL			
		black COAL	0.0	SS1 0-2 ft	
			0.0		
			0.0		
		brown to black, sandy, silty, CLAY, moist	0.0		
			0.0		
5			0.0		
			0.0		
			0.0		
			0.0		
			0.0		
10		brown to black, sandy, CLAY, moist	0.0		
			0.0	SB1 10-12 ft	
			0.0		
			0.0		
			0.0		
15			0.0		
		Boring terminated at 15.0			
20					

Completion Depth:	15.00	Remarks:
Date Started:	5/1/2013	Subsurface Soil
Date Completed:	5/1/2013	Sample Collected at:
Scientist	BAF	0900
Driller:	Direct Push	

The stratification lines represent approximate strata boundaries.
Transition may be gradual.

Project Name: AEP Cabin Creek	TRIAD ENGINEERING, INC.	BORING LOG SB2
Project Number: 04-13-0198		

Location:

Depth, feet	Symbol/USCS	Lithologic Description	PID (ppm)	Sample ID	Observations
		TOPSOIL			
		brown, sandy, CLAY, with coal	0.0	SS2 0-2 ft	
			0.0		
			0.0		
			0.0		
5			0.0		
			0.0		
			0.0		
			0.0		
			0.0		
10			0.0		
			0.0	SB2 10-12 ft	
			0.0		
			0.0		
			0.0		
15			0.0		
		Boring terminated at 15.0			
20					

		Remarks:
Completion Depth:	15.00	Subsurface Soil Sample Collected at: 0945
Date Started:	5/1/2013	
Date Completed:	5/1/2013	
Scientist	BAF	
Driller:	Direct Push	

The stratification lines represent approximate strata boundaries.
Transition may be gradual.

Project Name: AEP Cabin Creek	TRIAD ENGINEERING, INC.	BORING LOG SB3
Project Number: 04-13-0198		

Location:

Depth, feet	Symbol/USCS	Lithologic Description	PID (ppm)	Sample ID	Observations
		TOPSOIL			
			0.0		
			0.0		
			2.0		
			0.0		
5			0.0		
			0.0		
			0.0		
		black, sandy, CLAY, moist	0.0		
			0.0		
10			0.0		
			0.0	SB3 10-12 ft	
			0.0		
			0.0		
			0.0		
15			0.0		
		Boring terminated at 15.0			
20					

Completion Depth:	15.00	Remarks:
Date Started:	5/1/2013	Subsurface Soil
Date Completed:	5/1/2013	Sample Collected at:
Scientist	BAF	1000
Driller:	Direct Push	

The stratification lines represent approximate strata boundaries.
Transition may be gradual.

Project Name: AEP Cabin Creek	TRIAD ENGINEERING, INC.	BORING LOG SB4
Project Number: 04-13-0198		

Location:

Depth, feet	Symbol/USCS	Lithologic Description	PID (ppm)	Sample ID	Observations
		TOPSOIL			
			0.0		
			0.0		
			0.0		
			0.0		
5			0.0		
			0.0		
			0.0		
		brown, silty, sandy, CLAY	0.0		
			0.0		
			0.0		
10			0.0		
			0.0	SB4 10-12 ft	
			0.0		
			0.0		
			0.0		
15			0.0		
		Boring terminated at 15.0			
20					

Completion Depth:	15.00	Remarks:
Date Started:	5/1/2013	Subsurface Soil
Date Completed:	5/1/2013	Sample Collected at:
Scientist	BAF	1015
Driller:	Direct Push	

The stratification lines represent approximate strata boundaries.
Transition may be gradual.

Project Name: AEP Cabin Creek	TRIAD ENGINEERING, INC.	BORING LOG SB5
Project Number: 04-13-0198		

Location:

Depth, feet	Symbol/USCS	Lithologic Description	PID (ppm)	Sample ID	Observations
		TOPSOIL			
		brown to black, sandy, CLAY, moist	0.0	SS5 0-2 ft	
			0.0		
			0.0		
			0.0		
5			0.0		
			0.0	SB5 5-8 ft	
			0.0		
			0.0		
			0.0		
10			0.0		
			0.0		
			0.0		
			0.0		
			0.0		
15			0.0		
		Boring terminated at 15.0			
20					

Completion Depth:	15.00	Remarks:
Date Started:	5/1/2013	Subsurface Soil
Date Completed:	5/1/2013	Sample Collected at:
Scientist	BAF	1100
Driller:	Direct Push	

The stratification lines represent approximate strata boundaries.
Transition may be gradual.

Project Name: AEP Cabin Creek	TRIAD ENGINEERING, INC.	**BORING LOG SB6**
Project Number: 04-13-0198		

Location:

Depth, feet	Symbol/USCS	Lithologic Description	PID (ppm)	Sample ID	Observations
		TOPSOIL			
		brown and blakc, sandy, CLAY, with rock fragments	0.0	SS6 0-2 ft	
			0.0		
			0.0		
			0.0		
5			0.0		
			0.0		
			0.0		
			0.0		
			0.0		
10			0.0		
		black SAND, moist	10.5		petroleum-like odor
			22.5		
			33.5		
			20.5	SB6 13-15 ft	
15			15.0		
		Boring terminated at 15.0			
20					

Completion Depth:	15.00	Remarks:
Date Started:	5/1/2013	Subsurface Soil
Date Completed:	5/1/2013	Sample Collected at:
Scientist	BAF	1130
Driller:	Direct Push	

The stratification lines represent approximate strata boundaries.
Transition may be gradual.

Project Name: AEP Cabin Creek	TRIAD ENGINEERING, INC.	BORING LOG SB7
Project Number: 04-13-0198		

Location:

Depth, feet	Symbol/USCS	Lithologic Description	PID (ppm)	Sample ID	Observations
		TOPSOIL			
		brown, sandy, CLAY	0.0	SS7 0-2 ft	
			0.0		
			0.0		
			0.0		
5			0.0		
		black and brown, sandy, CLAY, with rock and brick fragments	0.0		
			0.0		
			0.0		
			0.0		
10			0.0		
			0.0		
			0.0		
			0.0		
			0.0	SB7 13-15 ft	
15			0.0		
		Boring terminated at 15.0			
20					

Completion Depth:	15.00	Remarks:
Date Started:	5/1/2013	Subsurface Soil Sample Collected at: 1115
Date Completed:	5/1/2013	
Scientist	BAF	
Driller:	Direct Push	

The stratification lines represent approximate strata boundaries.
Transition may be gradual.

Project Name: AEP Cabin Creek	TRIAD ENGINEERING, INC.	BORING LOG SB8
Project Number: 04-13-0198		

Location:

Depth, feet	Symbol/USCS	Lithologic Description	PID (ppm)	Sample ID	Observations
		TOPSOIL			
		GRAVEL	0.0		
			0.0		
			0.0		
			0.0		
5			0.0		
			0.0		
			0.0		
		brown, sandy, CLAY, moist	0.0		
			0.0		
10			0.0		
			0.0		
			0.0		
			0.0		
			0.0	SB8 13-15 ft	
15			0.0		
		Boring terminated at 15.0			
20					

		Remarks:
Completion Depth:	15.00	Subsurface Soil Sample Collected at: 1200
Date Started:	5/1/2013	
Date Completed:	5/1/2013	
Scientist	BAF	
Driller:	Direct Push	

The stratification lines represent approximate strata boundaries.
Transition may be gradual.

Project Name: AEP Cabin Creek	TRIAD ENGINEERING, INC.	**BORING LOG SB9**
Project Number: 04-13-0198		

Location:

Depth, feet	Symbol/USCS	Lithologic Description	PID (ppm)	Sample ID	Observations
		TOPSOIL			
			0.0		
			0.0		
			0.0		
			0.0		
5			0.0		
			0.0		
			0.0		
		black, sandy, CLAY	0.0		
			0.0		
10			0.0		
			0.0		
			0.0		
			0.0		
			0.0	SB9 13-15 ft	
15			0.0		
		Boring terminated at 15.0			
20					

Completion Depth:	15.00	Remarks:
Date Started:	5/1/2013	Subsurface Soil
Date Completed:	5/1/2013	Sample Collected at:
Scientist	BAF	1330
Driller:	Direct Push	

The stratification lines represent approximate strata boundaries.
Transition may be gradual.

Project Name: AEP Cabin Creek	TRIAD ENGINEERING, INC.	**BORING LOG SB10**
Project Number: 04-13-0198		

Location:

Depth, feet	Symbol/USCS	Lithologic Description	PID (ppm)	Sample ID	Observations
		TOPSOIL			
		brown to black, sandy, CLAY	0.0	SS10 0-2 ft	
			0.0		
			0.0		
			0.0		
5			0.0		
			0.0		
			0.0	SB10 6-8 ft	
			0.0		
			0.0		
10			0.0		
			0.0		
			0.0		
			0.0		
			0.0		
15			0.0		
		Boring terminated at 15.0			
20					

		Remarks:
Completion Depth:	15.00	Subsurface Soil Sample Collected at: 1400
Date Started:	5/1/2013	
Date Completed:	5/1/2013	
Scientist	BAF	
Driller:	Direct Push	

The stratification lines represent approximate strata boundaries.
Transition may be gradual.

Project Name: **AEP**
Cabin Creek

Project Number: **04-05-0370**

triadeng.com

BORING LOG

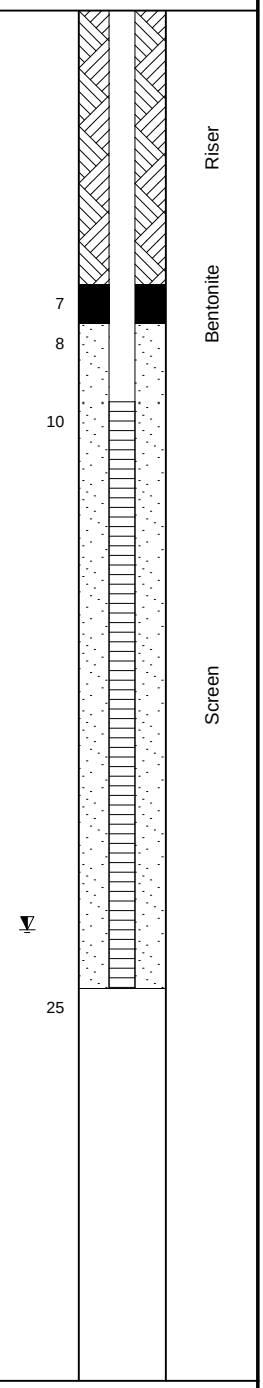
RW- 6

Location: **38 11' 51.86"N 81 28' 49.39"W**
Well Elev.: **502.0 ft.**

Depth, feet	Symbol / USCS	MATERIAL DESCRIPTION	PID Reading	Sample I.D.
		FLY ASH and GRAVEL		
5		5.0		
		FLY ASH		No odor observed
10				
15				
20		20.0		
		Greyish brown SANDY CLAY, very moist		
25		25.0		
		Bottom of Test Boring at 25.0 ft.		
30				
35				

Well Registration Number:

Well Construction



Completion Depth:	**25.0 ft.**
Date Boring Started:	**1/10/06**
Date Boring Completed:	**1/10/06**
Engineer/Geologist:	**SLC**
Driller:	**Triad**

Remarks: **Water was noted at a depth of 23.5 ft. below the ground surface upon drilling completion.**

ND - Not Detected
(Absence of analytical data indicates sample was not tested.)

The stratification lines represent approximate strata boundaries. In situations, the transition may be gradual.

TRIAD Engineering, Inc.

Figure **1**

Project Name: **AEP**
Cabin Creek

Project Number: **04-05-0370**

triadeng.com

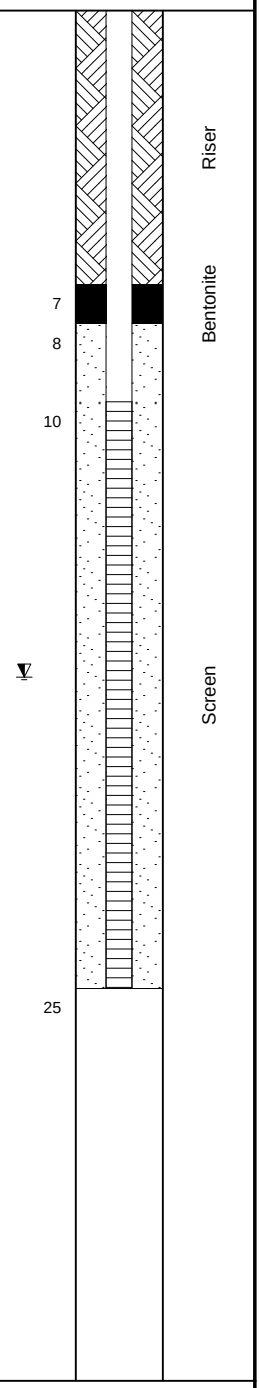
BORING LOG

RW- 7

Location: **38 11' 51.14"N 81 28' 50.27"W**
Well Elev.: **505.5 ft.**

Well Registration Number:

Depth, feet	Symbol / USCS	MATERIAL DESCRIPTION	PID Reading	Sample I.D.	Well Construction
		FLY ASH and GRAVEL 2.0			
		FLY ASH, moist			
5					
		- more moist with depth			
10					
				No odor observed	
15					
20		20.0			
		Greyish brown SAND and CLAY, moist			
25		27.0			
		Bottom of Test Boring at 27.0 ft.			
30					
35					



Completion Depth:	**27.0 ft.**
Date Boring Started:	**1/10/06**
Date Boring Completed:	**1/10/06**
Engineer/Geologist:	**SLC**
Driller:	**Triad**

Remarks: **Water was noted at a depth of 17.0 ft. below the ground surface upon drilling completion.**

ND - Not Detected
(Absence of analytical data indicates sample was not tested.)

The stratification lines represent approximate strata boundaries. In situations, the transition may be gradual.

TRIAD Engineering, Inc.

Figure **2**

Project Name: **AEP**
Cabin Creek

Project Number: **04-05-0370**

triadeng.com

BORING LOG

RW- 8

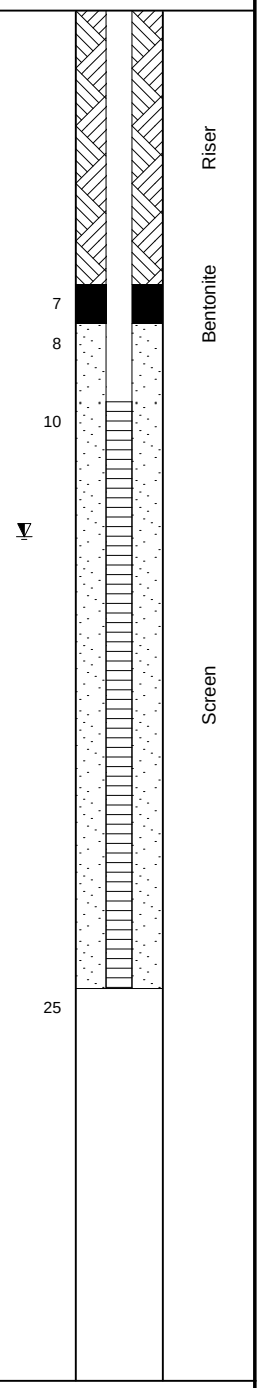
Location: **38 11' 50.91"N 81 28' 48.29"W**

Well Elev.: **501.0 ft.**

Well Registration Number:

Depth, feet	Symbol / USCS	MATERIAL DESCRIPTION	PID Reading	Sample I.D.
		FLY ASH and GRAVEL 1.0		
		Brown SANDY CLAY, moist		
5		- greyish brown and very moist at 5 ft.		
10		10.0 Brown SAND and CLAY, moist		No odor observed
15				
20				
25		27.0		
		Bottom of Test Boring at 27.0 ft.		
30				
35				

Well Construction



Completion Depth:	**27.0 ft.**
Date Boring Started:	**1/10/06**
Date Boring Completed:	**1/10/06**
Engineer/Geologist:	**SLC**
Driller:	**Triad**

Remarks: **Water was noted at a depth of 13.5 ft. below the ground surface upon drilling completion.**

ND - Not Detected
(Absence of analytical data indicates sample was not tested.)

The stratification lines represent approximate strata boundaries. In situations, the transition may be gradual.

TRIAD Engineering, Inc.

Figure **3**

Project Name: **AEP**
Cabin Creek

Project Number: **04-05-0370**

triadeng.com

BORING LOG

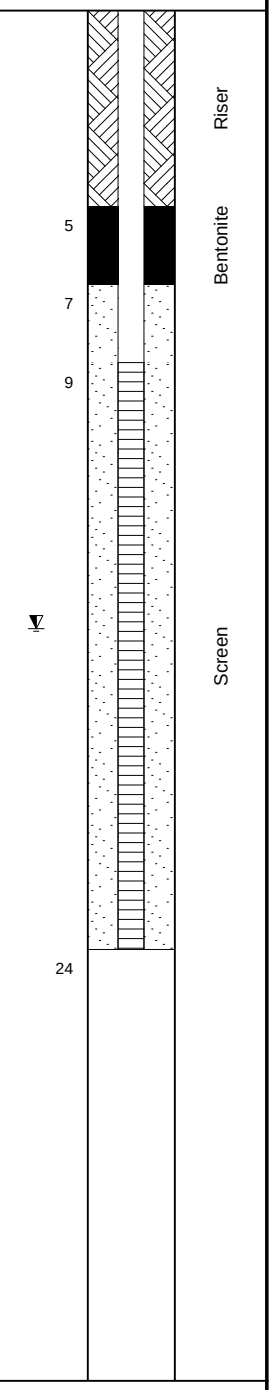
RW- 9

Location: **38 11' 51.14"N 81 28' 50.27"W**
Well Elev.: **501.5 ft.**

Well Registration Number:

Depth, feet	Symbol / USCS	MATERIAL DESCRIPTION	PID Reading	Sample I.D.
		FLY ASH and GRAVEL, moist		
5		- with some sand, very moist		
10		10.0		
		Grey SANDY CLAY, very moist		
15				Strong diesel odor
		- wet at 18 ft.		
20		- brown at 20 ft.		
				Diesel odor
25		27.0		
		Bottom of Test Boring at 27.0 ft.		
30				
35				

Well Construction



Completion Depth:	**27.0 ft.**
Date Boring Started:	**1/10/06**
Date Boring Completed:	**1/10/06**
Engineer/Geologist:	**SLC**
Driller:	**Triad**

Remarks: **Water was noted at a depth of 15.8 ft. below the ground surface upon drilling completion.**

ND - Not Detected
(Absence of analytical data indicates sample was not tested.)

The stratification lines represent approximate strata boundaries. In situations, the transition may be gradual.

Triad Engineering, Inc.

Figure **4**

WELL 2 WELL LOGS.GPJ 8/3/06

jrs

Project Name: **AEP**
Cabin Creek

Project Number: **04-05-0370**

triadeng.com TRIAD

BORING LOG

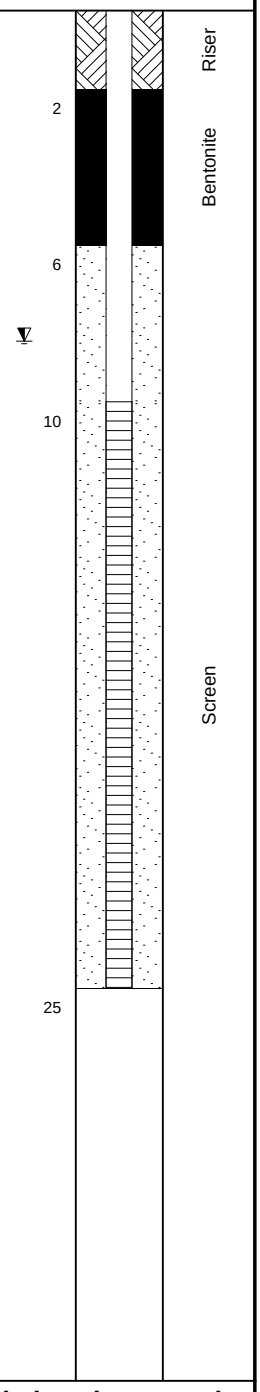
RW-10

Location: **38 11' 50.86"N 81 28' 49.54"W**
Well Elev.: **505.7 ft.**

Depth, feet	Symbol / USCS	MATERIAL DESCRIPTION	PID Reading	Sample I.D.
		FLY ASH and GRAVEL (2.0)		
		FLY ASH (6.0)		
5		Grey SANDY CLAY and GRAVEL, wet		
10		- brown at 12.0 ft.		
15		(18.0)		
20		Grey SILTY TO SANDY CLAY, very moist		Water upwelling from boring at 12 ft.
25				
30		(33.0)		
35		**Bottom of Test Boring at 33.0 ft.**		

Well Registration Number:

Well Construction



Completion Depth:	**33.0 ft.**
Date Boring Started:	**1/9/06**
Date Boring Completed:	**1/9/06**
Engineer/Geologist:	**SLC**
Driller:	**Triad**

Remarks: **Water was noted at a depth of 8.5 ft. below the ground surface upon drilling completion.**

ND - Not Detected
(Absence of analytical data indicates sample was not tested.)

The stratification lines represent approximate strata boundaries. In situations, the transition may be gradual.

TRIAD Engineering, Inc.

Figure **5**

Project Name: **AEP Cabin Creek**

Project Number: **04-05-0370**

triadeng.com TRIAD

BORING LOG

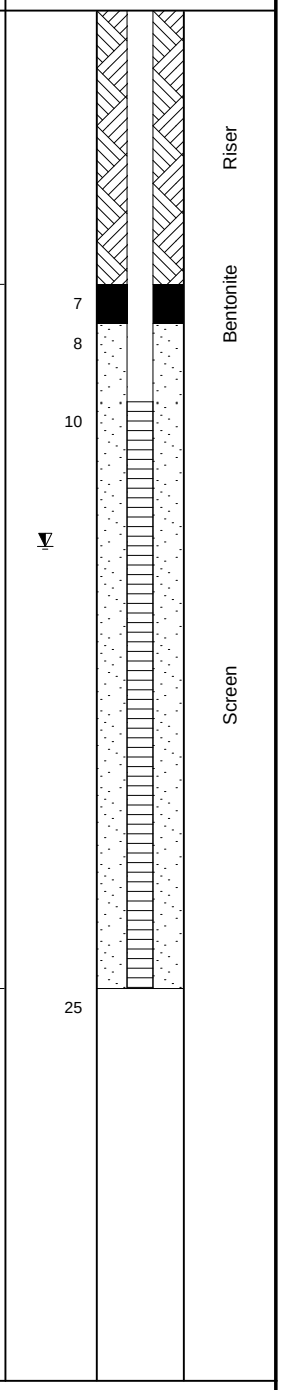
RW-13

Location: **38 11' 49.96"N 81 28' 49.38"W**

Well Elev.: **503.0 ft.**

Well Registration Number:

Depth, feet	Symbol / USCS	MATERIAL DESCRIPTION	PID Reading	Sample I.D.	Well Construction
		FLY ASH and GRAVEL			
5					
		7.0			
		Dark grey SANDY CLAY, moist			
10					
15				Strong diesel odor	
20					
		- brown and very moist at 23 ft.			
		25.0			
25		**Bottom of Test Boring at 25.0 ft.**			
30					
35					



Completion Depth:	**25.0 ft.**
Date Boring Started:	**1/10/06**
Date Boring Completed:	**1/10/06**
Engineer/Geologist:	**SLC**
Driller:	**Triad**

Remarks: **Water was noted at a depth of 13.7 ft. below the ground surface upon drilling completion.**

ND - Not Detected

(Absence of analytical data indicates sample was not tested.)

The stratification lines represent approximate strata boundaries. In situations, the transition may be gradual.

TRIAD Engineering, Inc.

Figure 6

Project Name: **AEP**
Cabin Creek

Project Number: **04-05-0370**

triadeng.com

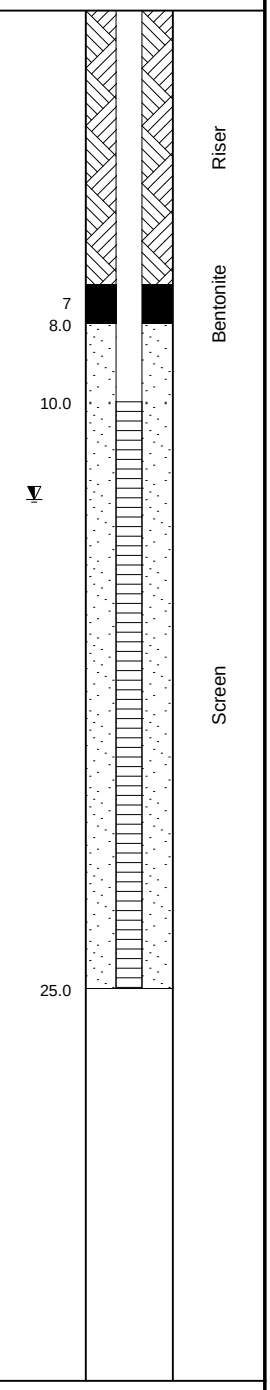
BORING LOG

RW-14

Location: **38 11' 50.38"N 81 28' 49.91"W**
Well Elev.: **502.3 ft.**

Well Registration Number:

Depth, feet	Symbol / USCS	MATERIAL DESCRIPTION	PID Reading	Sample I.D.	Well Construction
		FLY ASH 1.0			
		Dark brown SILTY TO SANDY CLAY, moist			
5					
		- very moist at 7 ft.			
10					
15		18.0			
		Grey SANDY CLAY, very moist 20.0		Strong petroleum odor	
20		Brown SANDY CLAY, moist			
25		27.0			
		Bottom of Test Boring at 27.0 ft.			
30					
35					



Completion Depth:	**27.0 ft.**
Date Boring Started:	**1/9/06**
Date Boring Completed:	**1/9/06**
Engineer/Geologist:	**SLC**
Driller:	**Triad**

Remarks: **Water was noted at a depth of 12.5 ft. below the ground surface upon drilling completion.**

ND - Not Detected
(Absence of analytical data indicates sample was not tested.)

The stratification lines represent approximate strata boundaries. In situations, the transition may be gradual.

TRIAD Engineering, Inc.

Figure **7**

Project Name: **AEP**
Cabin Creek

Project Number: **04-05-0370**

triadeng.com

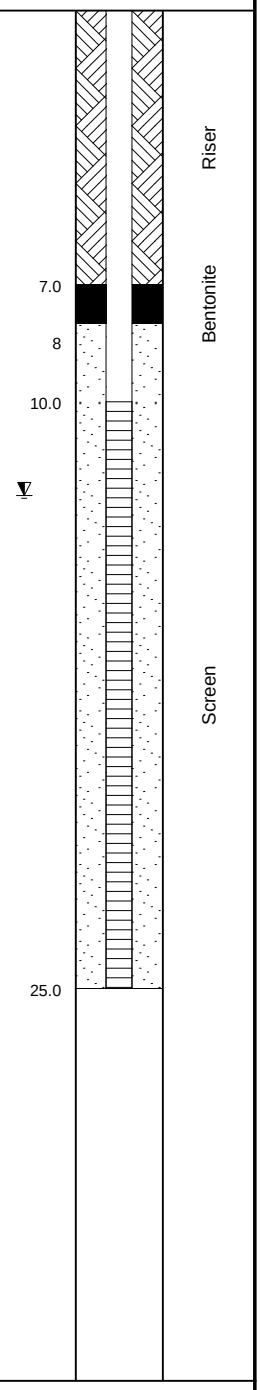
BORING LOG

RW-15

Location: **38 11' 50.41"N 81 28' 49.53"W**
Well Elev.: **502.2 ft.**

Depth, feet	Symbol / USCS	MATERIAL DESCRIPTION	PID Reading	Sample I.D.	Well Construction
		FLY ASH 2.0			
		Brown SANDY CLAY, moist			
5					
10		- grey (10-20 ft.)			
15				Strong diesel odor	
20		23.0			
		Brown SILTY TO SANDY CLAY, wet			
25		27.0			
		Bottom of Test Boring at 27.0 ft.			
30					
35					

Well Registration Number:



Completion Depth:	**27.0 ft.**
Date Boring Started:	**1/9/06**
Date Boring Completed:	**1/9/06**
Engineer/Geologist:	**SLC**
Driller:	**Triad**

Remarks: **Water was noted at a depth of 12.4 ft. below the ground surface upon drilling completion.**

ND - Not Detected
(Absence of analytical data indicates sample was not tested.)

The stratification lines represent approximate strata boundaries. In situations, the transition may be gradual.

TRIAD Engineering, Inc.

Figure **8**

APPENDIX A
SUBSURFACE EXPLORATION DATA

Subsurface Exploration Procedures
General Notes for Subsurface Exploration Logs
Identification of Soil
Boring Logs, B-03, B-05, and B-06

SUBSURFACE EXPLORATION PROCEDURES

Test Borings – Hollow Stem Augers

The borings are advanced by turning a continuous flight auger with a center opening of 2¼ or 3¼ inches. A plug device blocks off the center opening while augers are advanced. Cuttings are brought to the surface by the auger flights. Sampling is performed through the center opening in the hollow stem auger, by standard methods, after removal of the plug. Usually, no water is introduced into the boring using this procedure.

Standard Penetration Test Results

The numbers in the Sampling Data column of the boring logs represent Standard Penetration Test (SPT) results. Each number represents the blows needed to drive a 2-inch O.D., 1⅜-inch I.D. split-spoon sampler 6 inches, using a 140-pound hammer falling 30 inches. The sampler is typically driven a total of 18 or 24 inches. The first 6 inches are considered a seating interval. The total of the number of blows for the second and third 6-inch intervals is the SPT "N-value." The SPT is performed according to ASTM D1586.

The SPT samples were obtained using a hydraulically driven automatic trip hammer (ATH). Most correlations with SPT data are based on N-values collected with a safety hammer. The energy applied to the split-spoon sampler using the ATH is about 30 percent greater than that applied using the safety hammer, resulting in lower N-values. The hammer blows shown on the boring logs are uncorrected for the higher energy. However, we correct SPT N-values for the higher energy when using N-values in our analyses.

Soil Classification Criteria

The group symbols on the logs represent the Unified Soil Classification System Group Symbols (ASTM D2487) based on visual observation and limited laboratory testing of the samples. Criteria for visual identification of soil samples are included in this appendix. Some variation can be expected between samples visually classified and samples classified in the laboratory.

Residual soils are derived through the in-place physical and chemical weathering of the underlying rock. Disintegrated rock is defined as residual material with SPT N-values between 60 blows per foot and refusal. Refusal is defined as an N-value of 50 blows for a penetration of one inch or less.

Pocket Penetrometer Results

The values following "PP=" in the sampling data column of the logs represent pocket penetrometer readings. Pocket penetrometer readings provide an estimate of the unconfined compressive strength of fine-grained soils.

Boring Locations and Elevations

Boring locations were staked and collected after drilling using sub-meter GPS equipment. Approximate boring locations are shown on Figures 2 and 3. Ground surface elevations at the boring locations were provided by AEP and are indicated on the boring logs. Locations and elevations should be considered no more accurate than the methods used to determine them.

GENERAL NOTES FOR SUBSURFACE EXPLORATION LOGS

1. Numbers in sampling data column next to Standard Penetration Test (SPT) symbols indicate blows required to drive a 2-inch O.D., 1⅜-inch I.D. sampling spoon 6 inches using a 140 pound hammer falling 30 inches. The Standard Penetration Test (SPT) N-value is the number of blows required to drive the sampler 12 inches, after a 6 inch seating interval. The Standard Penetration Test is performed in general accordance with ASTM D1586.
2. Visual classification of soil is in accordance with terminology set forth in “Identification of Soil.” The ASTM D2487 group symbols (e.g., CL) shown in the classification column are based on visual observations.
3. Estimated water levels indicated on the logs are only estimates from available data and may vary with precipitation, porosity of the soil, site topography, and other factors.
4. Refusal at the surface of rock, boulder, or other obstruction is defined as an SPT resistance of 50 blows for 1 inch or less of penetration.
5. The logs and related information depict subsurface conditions only at the specific locations and at the particular time when drilled or excavated. Soil conditions at other locations may differ from conditions occurring at these locations. Also, the passage of time may result in a change in the subsurface soil and water level conditions at the subsurface exploration location.
6. The stratification lines represent the approximate boundary between soil and rock types as obtained from the subsurface exploration. Some variation may also be expected vertically between samples taken. The soil profile, water level observations and penetration resistances presented on these logs have been made with reasonable care and accuracy and must be considered only an approximate representation of subsurface conditions to be encountered at the particular location.
7. Key to symbols and abbreviations:

	S-1, SPT 5+10+1	Sample No., Standard Penetration Test Number of blows in each 6-inch increment
	UD-1, UNDIST Rec=24", 100%	Sample No., 2" or 3" Undisturbed Tube Sample Recovery in inches, Percent Recovery

LL	Liquid Limit
MC	Moisture Content (percent)
PL	Plastic Limit
PP	Pocket Penetrometer Reading (tsf)
%Passing#200	Percent by weight passing a No. 200 Sieve

IDENTIFICATION OF SOIL

I. DEFINITION OF SOIL GROUP NAMES (ASTM D2487)

			SYMBOL	GROUP NAME
Coarse-Grained Soils More than 50% retained on No. 200 sieve	Gravels – More than 50% of coarse fraction retained on No. 4 sieve Coarse, ¾" to 3" Fine, No. 4 to ¾"	Clean Gravels Less than 5% fines	GW	WELL GRADED GRAVEL
			GP	POORLY GRADED GRAVEL
		Gravels with fines More than 12% fines	GM	SILTY GRAVEL
			GC	CLAYEY GRAVEL
	Sands – 50% or more of coarse Fraction passes No. 4 sieve Coarse, No. 10 to No. 4 Medium, No. 40 to No. 10 Fine, No. 200 to No. 40	Clean Sands Less than 5% fines	SW	WELL GRADED SAND
			SP	POORLY GRADED SAND
		Sands with fines More than 12% fines	SM	SILTY SAND
			SC	CLAYEY SAND
Fine-Grained Soils 50% or more passes the No. 200 sieve	Silts and Clays – Liquid Limit less than 50 Low to medium plasticity	Inorganic	CL	LEAN CLAY
			ML	SILT
		Organic	OL	ORGANIC CLAY
				ORGANIC SILT
	Silts and Clays – Liquid Limit 50 or more Medium to high plasticity	Inorganic	CH	FAT CLAY
			MH	ELASTIC SILT
		Organic	OH	ORGANIC CLAY
				ORGANIC SILT
Highly Organic Soils	Primarily organic matter, dark in color and organic odor		PT	PEAT

II. DEFINITION OF SOIL COMPONENT PROPORTIONS (ASTM D2487)

			Examples
Adjective Form	GRAVELLY SANDY	>30% to <50% coarse grained component in a fine-grained soil	GRAVELLY LEAN CLAY
	CLAYEY SILTY	>12% to <50% fine grained component in a coarse-grained soil	SILTY SAND
"With"	WITH GRAVEL WITH SAND	>15% to <30% coarse grained component in a fine-grained soil	FAT CLAY WITH GRAVEL
	WITH GRAVEL WITH SAND	>15% to <50% coarse grained component in a coarse-grained soil	POORLY GRADED GRAVEL WITH SAND
	WITH SILT WITH CLAY	>5% to <12% fine grained component in a coarse-grained soil	POORLY GRADED SAND WITH SILT

III. GLOSSARY OF MISCELLANEOUS TERMS

SYMBOLS ..... Unified Soil Classification Symbols are shown above as group symbols. A dual symbol "-" indicates the soil belongs to two groups. A borderline symbol "/" indicates the soil belongs to two possible groups.

FILL ..... Man-made deposit containing soil, rock and often foreign matter.

PROBABLE FILL ..... Soils which contain no visually detected foreign matter but which are suspect with regard to origin.

DISINTEGRATED ROCK (DR) ..... Residual materials with a standard penetration resistance (SPT) between 60 blows per foot and refusal. Refusal is defined as an SPT of 100 blows for 2" or less penetration.

BOULDERS & COBBLES ..... Boulders are considered rounded pieces of rock larger than 12 inches, while cobbles range from 3 to 12-inch size.

LENSES ..... 0 to ½-inch seam within a material in a test pit.

LAYERS ..... ½ to 12-inch seam within a material in a test pit.

POCKET ..... Discontinuous body within a material in a test pit.

MOISTURE CONDITIONS ..... Wet, moist or dry to indicate visual appearance of specimen.

COLOR ..... Overall color, with modifiers such as light to dark or variation in coloration.

Schnabel ENGINEERING	TEST BORING LOG	Project: AEP Work Order 42703738-02 Cabin Creek - London 46kV Kanawha County, West Virginia	Boring Number: **B-03** Contract Number: 19C16020.00 Sheet: 1 of 3

Contractor: Total Depth Drilling, Inc
Knoxville, Tennessee

Contractor Foreman: J. Chambless

Schnabel Representative: John Krell

Equipment: CME-550X (ATV)

Method: 3-1/4" ID Hollow Stem Auger

Hammer Type: Auto Hammer (140 lb)

Dates Started: 8/21/19 **Finished:** 8/21/19

Latitude: 38.20231° _ **Longitude:** -81.47789°

Coordinate System: Lat-Long (Decimal Degrees)

Plunge: -90 **Bearing:**

Ground Surface Elevation: 644± (ft) **Total Depth:** 80.0 ft

Water Level Observations

	Date	Time	Depth	Casing	Caved
Encountered	8/21	---	58.5'	60.0'	---
Completion	8/21	---	58.5'	80.0'	---
Casing Pulled	8/21	---	57.0'	---	71.0'

DEPTH (ft)	MATERIAL DESCRIPTION	SYMBOL	ELEV (ft)	STRATUM	SAMPLING DEPTH	SAMPLING DATA	TESTS	REMARKS
	FILL, sampled as silty sand with gravel, fine to coarse; moist, black and brown, contains coal fragments, loose to medium dense, (mine spoil fill, material mostly comprised of coal and shale fragments)	FILL		A		S-01, SPT 1+1+3 REC=12", 67%	MC = 13.0%	Fill
						S-02, SPT 3+5+5 REC=12", 67%	MC = 5.6%	
						S-03, SPT 3+3+4 REC=12", 67%	MC = 25.0%	
					5	S-04, SPT 3+3+6 REC=12", 67%	MC = 16.1%	
						S-05, SPT 3+5+5 REC=15", 83%	MC = 11.1%	
						S-06, SPT 2+3+2 REC=12", 67%	MC = 10.7%	
					10	S-07, SPT 2+2+2 REC=6", 33%	MC = 13.3%	
					15	S-08, SPT 2+3+3 REC=15", 83%	MC = 17.0% % Passing #200 = 31.3	
					20	S-09, SPT 3+4+3 REC=12", 67%	MC = 15.0%	
						S-10, SPT 4+6+7 REC=18", 100%	MC = 17.9%	

(continued)

Schnabel ENGINEERING	TEST BORING LOG	Project: AEP Work Order 42703738-02 Cabin Creek - London 46kV Kanawha County, West Virginia	Boring Number: **B-03** Contract Number: 19C16020.00 Sheet: 2 of 3

DEPTH (ft)	MATERIAL DESCRIPTION	SYMBOL	ELEV (ft)	STRATUM	SAMPLING DEPTH	SAMPLING DATA	TESTS	REMARKS
	FILL, sampled as silty sand with gravel, fine to coarse; moist, black and brown, contains coal fragments, loose to medium dense, (mine spoil fill, material mostly comprised of coal and shale fragments) *(continued)*	FILL		A		S-11, SPT 2+4+2 REC=18", 100%	MC = 25.3%	Fill
29.5	SANDY LEAN CLAY; moist, gray, contains root fragments, and mica, medium stiff, potential old topsoil layer	CL	614.0		30			Alluvial
32.0	LEAN CLAY WITH SAND; moist, brown, contains mica, stiff		611.5					
					35	S-12, SPT 4+4+5 REC=18", 100%	MC = 21.2% PP = 3.00 tsf	
						ST-1, UNDIST REC=24", 100% (UD)	LL = 32 PL = 22 MC = 22.7% % Passing #200 = 84.5 PP = 2.50 tsf	
					40	S-13, SPT 3+3+4 REC=18", 100%	MC = 22.4% PP = 2.50 tsf	
		CL						
	Change: medium stiff, 3" pocket of clayey sand at 44.5			B	45	S-14, SPT 1+3+3 REC=18", 100%	MC = 26.2% PP = 2.00 tsf	
					50	S-15, SPT WOH+1+3 REC=18", 100%	MC = 23.0% PP = 1.50 tsf	
52.0	SANDY SILTY CLAY; moist to wet, brown, contains mica, very soft		591.5					
					55	S-16, SPT WOH/18" REC=18", 100%	LL = 25 PL = 20 MC = 22.2% % Passing #200 = 60.6 PP = 1.00 tsf	
		CL-ML						
	Change: no recovery					ST-2, UNDIST REC=0", 0% (UD)		Shelby tube pushed under weight of rods for 12"

(continued)

Schnabel ENGINEERING	TEST BORING LOG	Project: AEP Work Order 42703738-02 Cabin Creek - London 46kV Kanawha County, West Virginia	Boring Number: **B-03** Contract Number: 19C16020.00 Sheet: 3 of 3

DEPTH (ft)	MATERIAL DESCRIPTION	SYMBOL	ELEV (ft)	STRATUM	SAMPLING DEPTH	SAMPLING DATA	TESTS	REMARKS
59.0	CLAYEY SAND, fine; wet, brown, contains mica, loose, (sampler full of material, indicative of heaving sands)	SC	584.5	B	60	S-17, SPT WOH/12"+3 REC=18", 100%	MC = 22.0%	Heaving sands noted in augers; attempting to auger without center bit to prevent sandlock Alluvial
					65	S-18, SPT WOH+1+2 REC=18", 100%	MC = 23.8%	Approx. 2 ft of heaving sand in auger, resuming use of center bit to advance boring
	Change: gray, few gravel				70	S-19, SPT 1+2+6 REC=18", 100%	MC = 32.6%	
72.0	SILTY SAND WITH GRAVEL, fine to coarse; wet, brown, contains mica, medium dense	SM	571.5		75	S-20, SPT 10+8+9 REC=12", 67%	MC = 12.4% % Passing #200 = 18.0	
80.0	Change: may contain shell fragments		563.5		80	S-21, SPT 6+11+7 REC=18", 100%	MC = 15.0%	

Bottom of Boring at 80.0 ft.
Boring terminated at selected depth.
Boring backfilled with cuttings upon completion.

Schnabel ENGINEERING	TEST BORING LOG	Project: AEP Work Order 42703738-02 Cabin Creek - London 46kV Kanawha County, West Virginia	Boring Number: **B-05** Contract Number: 19C16020.00 Sheet: 1 of 3

Contractor: Total Depth Drilling, Inc
Knoxville, Tennessee

Contractor Foreman: D. Hamilton

Schnabel Representative: John Krell

Equipment: CME-75 (Truck)

Method: 3-1/4" ID Hollow Stem Auger

Hammer Type: Auto Hammer (140 lb)

Dates Started: 8/20/19 **Finished:** 8/20/19

Latitude: 38.19951° _ **Longitude:** -81.47603°

Coordinate System: Lat-Long (Decimal Degrees)

Plunge: -90 **Bearing:**

Ground Surface Elevation: 625± (ft) **Total Depth:** 59.9 ft

Water Level Observations

	Date	Time	Depth	Casing	Caved
Encountered	8/20	---	34.5'	35.0'	---
Completion	8/20	---	34.0'	59.9'	---
Casing Pulled	8/20	---	33.0'	---	35.0'

DEPTH (ft)	MATERIAL DESCRIPTION	SYMBOL	ELEV (ft)	STRATUM	SAMPLING DEPTH	SAMPLING DATA	TESTS	REMARKS
0.2	Topsoil		624.5					
	SANDY SILT; moist, brown and gray, contains mica, medium stiff to very stiff	ML		B		S-01, SPT 9+7+9 REC=15", 83%	MC = 15.6% PP >4.50 tsf	Alluvial
						S-02, SPT 5+5+5 REC=18", 100%	MC = 14.9%	
						S-03, SPT 2+4+4 REC=18", 100%	MC = 17.6% PP = 2.50 tsf	
					5	S-04, SPT 3+4+5 REC=18", 100%	MC = 17.3% PP = 2.50 tsf	
						S-05, SPT 3+3+4 REC=15", 83%	MC = 17.1% PP = 2.75 tsf	
						S-06, SPT 1+2+2 REC=18", 100%	LL = 23 PL = 21 MC = 18.9% % Passing #200 = 63.2	
					10	S-07, SPT 1+2+3 REC=18", 100%	PP = 2.00 tsf MC = 20.7% PP = 3.00 tsf	
						S-08, SPT 1+2+3 REC=18", 100%	MC = 19.0%	
					15			
17.0	SANDY SILTY CLAY; moist, brown, contains mica, medium stiff	CL-ML	607.7					
						S-09, SPT 1+2+3 REC=18", 100%	MC = 21.0% PP = 2.00 tsf	
					20			
						ST-1, UNDIST REC=24", 100%	LL = 27 PL = 20 MC = 20.8% % Passing #200 = 57.8	
23.5	CLAYEY SAND, fine; moist, brown, contains mica, loose	SC	601.2			S-10, SPT WOH+3+3 REC=18", 100%	PP = 2.50 tsf MC = 19.6% PP = 1.00 tsf	

(continued)

Schnabel ENGINEERING	TEST BORING LOG	Project: AEP Work Order 42703738-02 Cabin Creek - London 46kV Kanawha County, West Virginia	Boring Number: **B-05** Contract Number: 19C16020.00 Sheet: 2 of 3

DEPTH (ft)	MATERIAL DESCRIPTION	SYMBOL	ELEV (ft)	STRATUM	SAMPLING DEPTH	SAMPLING DATA	TESTS	REMARKS
	CLAYEY SAND, fine; moist, brown, contains mica, loose *(continued)*	SC						Alluvial
27.0	SILTY SAND, fine; moist, brown, contains mica, trace gravel, loose		597.7					
					30	S-11, SPT 3+4+3 REC=18", 100%	MC = 15.3%	
	Change: wet, medium dense	SM			35	S-12, SPT 5+5+5 REC=18", 100%	MC = 26.0% % Passing #200 = 34.0	
	Change: brown and black, few gravel, dense				40	S-13, SPT 7+11+18 REC=18", 100%	MC = 20.4%	
42.0	POORLY GRADED SAND WITH GRAVEL, fine to coarse; wet, brown and black, contains mica, medium dense		582.7	B	45	S-14, SPT WOH+2+9 REC=18", 100%	MC = 21.7%	
	Change: no gravel	SP			50	S-15, SPT 7+5+6 REC=9", 50%	MC = 26.1%	
	Change: loose				55	S-16, SPT WOH/12"+3 REC=5", 28%	MC = 30.6%	

(continued)

Schnabel ENGINEERING	TEST BORING LOG	Project: AEP Work Order 42703738-02 Cabin Creek - London 46kV Kanawha County, West Virginia	Boring Number: **B-05** Contract Number: 19C16020.00 Sheet: 3 of 3

DEPTH (ft)	MATERIAL DESCRIPTION	SYMBOL	ELEV (ft)	STRATUM	SAMPLING DEPTH	SAMPLING DATA	TESTS	REMARKS
		SP		B				Alluvial
59.5	Change: dark brown, few gravel, dense	DR	565.2	C		S-17, SPT 10+18+50/5" REC=17", 100%	MC = 10.5%	
59.9	DISINTEGRATED ROCK, sampled as poorly graded sand with gravel, fine to coarse; wet, mottled light brown and gray, contains mica, very dense		564.8					Residual

Bottom of Boring at 59.9 ft.
Boring terminated at selected depth.
Boring backfilled with cuttings upon completion.
Offset approximately 5 ft east of proposed location for access issues (clearing, working space).

Schnabel ENGINEERING	TEST BORING LOG	Project: AEP Work Order 42703738-02 Cabin Creek - London 46kV Kanawha County, West Virginia	Boring Number: **B-06** Contract Number: 19C16020.00 Sheet: 1 of 2

Contractor: Total Depth Drilling, Inc
Knoxville, Tennessee
Contractor Foreman: T. Hall
Schnabel Representative: John Krell
Equipment: CME-75 (Truck)
Method: 3-1/4" ID Hollow Stem Auger
Hammer Type: Auto Hammer (140 lb)
Dates Started: 8/20/19 **Finished:** 8/20/19
Latitude: 38.19960° _ **Longitude:** -81.47599°
Coordinate System: Lat-Long (Decimal Degrees)
Plunge: -90 **Bearing:**
Ground Surface Elevation: 624± (ft) **Total Depth:** 55.0 ft

Water Level Observations

	Date	Time	Depth	Casing	Caved
Encountered	8/20	---	34.0'	35.0'	---
Completion	8/20	---	34.0'	55.0'	---
Casing Pulled	8/20	---	32.0'	---	34.0'

DEPTH (ft)	MATERIAL DESCRIPTION	SYMBOL	ELEV (ft)	STRATUM	SAMPLING DEPTH	SAMPLING DATA	TESTS	REMARKS
0.4	Topsoil		623.6			S-01, SPT WOH+2+4 REC=10", 56%	MC = 12.8%	Alluvial
	SANDY LEAN CLAY; moist, brown, contains root fragments, and mica, medium stiff to stiff	CL				S-02, SPT 5+5+6 REC=3", 17%	MC = 25.4%	
3.0	Change: root in shoe of sampler likely cause of low recovery		621.0			S-03, SPT 3+5+4 REC=18", 100%	MC = 16.3% PP = 2.50 tsf	
	SILTY SAND, fine; moist, brown, contains mica, loose to medium dense	SM			5	S-04, SPT 4+5+5 REC=18", 100%	LL = NP MC = 15.0% % Passing #200 = 44.5 PP = 2.00 tsf	
						S-05, SPT 3+5+5 REC=18", 100%	MC = 17.9%	
						S-06, SPT 3+3+3 REC=18", 100%	MC = 18.3% PP = 2.50 tsf	
					10	S-07, SPT 1+4+3 REC=6", 33%	MC = 17.6%	
12.0	SANDY SILT; moist, brown, contains mica, medium stiff		612.0	B				
		ML			15	S-08, SPT 2+3+3 REC=18", 100%	LL = 21 PL = 18 MC = 19.1% % Passing #200 = 56.1 PP = 2.00 tsf	
					20	S-09, SPT WOH+1+3 REC=18", 100%	MC = 20.8%	
22.0	CLAYEY SAND, fine; moist, brown, contains mica, medium dense	SC	602.0			S-10, SPT 3+5+4 REC=18", 100%	MC = 16.4% PP = 2.00 tsf	

(continued)

Schnabel ENGINEERING	TEST BORING LOG	Project: AEP Work Order 42703738-02 Cabin Creek - London 46kV Kanawha County, West Virginia	Boring Number: **B-06** Contract Number: 19C16020.00 Sheet: 2 of 2

DEPTH (ft)	MATERIAL DESCRIPTION	SYMBOL	ELEV (ft)	STRATUM	SAMPLING DEPTH	SAMPLING DATA	TESTS	REMARKS
	CLAYEY SAND, fine; moist, brown, contains mica, medium dense *(continued)*							Alluvial
	Change: recovery, N-value indicative of sampling on gravel/cobble	SC			30	S-11, SPT 8+10+13 REC=4", 22%	MC = 16.6%	
34.0	POORLY GRADED SAND WITH CLAY, fine to medium; wet, brown and black, contains mica, medium dense	SP-SC	590.0		35	S-12, SPT 9+5+7 REC=18", 100%	MC = 24.6%	
39.0	POORLY GRADED GRAVEL WITH SAND, fine to coarse; wet, brown, contains mica, dense	GP	585.0	B	40	S-13, SPT 4+8+16 REC=15", 83%	MC = 15.7%	
42.0	SILTY SAND, fine to medium; wet, brown, few gravel, contains mica, medium dense	SM	582.0		45	S-14, SPT 7+7+7 REC=18", 100%	MC = 18.8% % Passing #200 = 23.5	
					50	S-15, SPT 6+5+7 REC=18", 100%	MC = 26.7%	thin (~1" to 2") layers of alternating colors (light brown, to reddish brown, to dark brown, to light brown, etc.)
52.0	POORLY GRADED SAND WITH GRAVEL, fine to coarse; wet, light brown, contains mica, dense	SP	572.0					
55.0			569.0		55	S-16, SPT 4+11+11 REC=18", 100%	MC = 18.0%	

Bottom of Boring at 55.0 ft.
Boring terminated at selected depth.
Boring backfilled with cuttings upon completion.

APPENDIX B
LABORATORY TEST DATA

Summary of Laboratory Tests (2 pages)
Atterberg Limits (1 page)
Gradation Curves (10 pages)
Soil UCS Test Reports (2 pages)

Summary Of Laboratory Tests

Project Number: 19C16020.00

Boring No.	Sample Depth ft / Elevation ft	Sample Type	Description of Soil Specimen	Wet Natural Density (pcf)	Natural Moisture (%)	Liquid Limit	Plasticity Index	% Passing No. 200 Sieve	Percent Sand	Percent Gravel	Testing Laboratory
B-03	13.5 - 15.0 / 630.0 - 628.5	Jar	SILTY SAND WITH GRAVEL (SM), f-c, black (Visual Class., Sample consists of coal and shale fragments)	--	17.0	--	--	31.3	46.8	21.9	BLAC
B-03	36.0 - 38.0 / 607.5 - 605.5	Tube	LEAN CLAY WITH SAND (CL), contains mica, brown	128.3	22.7	32	10	84.5	15.5	0.0	BLAC
B-03	53.5 - 55.0 / 590.0 - 588.5	Jar	SANDY SILTY CLAY (CL-ML), contains mica, brown	--	22.2	25	5	60.6	39.4	0.0	BLAC
B-03	73.5 - 75.0 / 570.0 - 568.5	Jar	SILTY SAND WITH GRAVEL (SM), fine to coarse, contains mica, brown (Visual Classification)	--	12.4	--	--	18.0	53.2	28.8	BLAC
B-05	7.5 - 9.0 / 617.2 - 615.7	Jar	SANDY SILT (ML), contains mica, brown	--	18.9	23	2	63.2	36.8	0.0	BLAC
B-05	21.0 - 23.0 / 603.7 - 601.7	Tube	SANDY SILTY CLAY (CL-ML), contains mica, brown	128.8	20.8	27	7	57.8	42.2	0.0	BLAC
B-05	33.5 - 35.0 / 591.2 - 589.7	Jar	SILTY SAND (SM), fine, trace gravel, contains mica, brown (Visual Classification)	--	26.0	--	--	34.0	65.9	0.1	BLAC

Notes:
1. Soil tests in general accordance with ASTM standards.
2. Soil classifications are in general accordance with ASTM D2487(as applicable), based on testing indicated and visual classification.
3. Key to abbreviations: NP=Non-Plastic; -- indicates no test performed

Schnabel ENGINEERING

Project: AEP Work Order 42703738-02
Cabin Creek - London 46kV
Kanawha County, WV

Summary Of Laboratory Tests

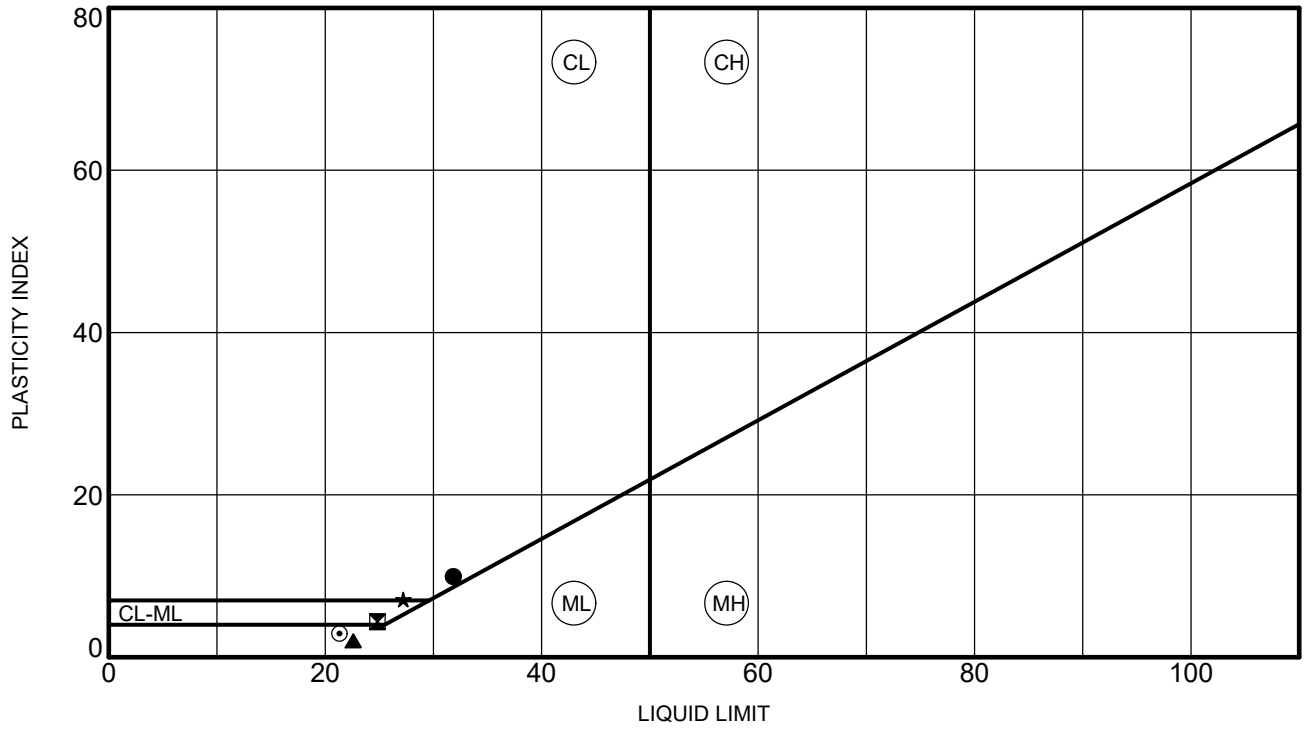
Project Number: 19C16020.00

Boring No.	Sample Depth ft / Elevation ft	Sample Type	Description of Soil Specimen	Wet Natural Density (pcf)	Natural Moisture (%)	Liquid Limit	Plasticity Index	% Passing No. 200 Sieve	Percent Sand	Percent Gravel	Testing Laboratory
B-06	4.5 - 6.0 619.5 - 618.0	Jar	SILTY SAND (SM), fine, contains mica, brown	--	15.0	NP	NP	44.5	55.5	0.0	BLAC
B-06	13.5 - 15.0 610.5 - 609.0	Jar	SANDY SILT (ML), contains mica, brown	--	19.1	21	3	56.1	43.9	0.0	BLAC
B-06	43.5 - 45.0 580.5 - 579.0	Jar	SILTY SAND (SM), fine to medium, few gravel, contains mica, brown (Visual Classification)	--	18.8	--	--	23.5	65.9	10.6	BLAC

Notes:
1. Soil tests in general accordance with ASTM standards.
2. Soil classifications are in general accordance with ASTM D2487(as applicable), based on testing indicated and visual classification.
3. Key to abbreviations: NP=Non-Plastic; -- indicates no test performed

Schnabel ENGINEERING

Project: AEP Work Order 42703738-02
Cabin Creek - London 46kV
Kanawha County, WV



PLOTTED DATA REPRESENTS SOIL PASSING NO. 40 SIEVE

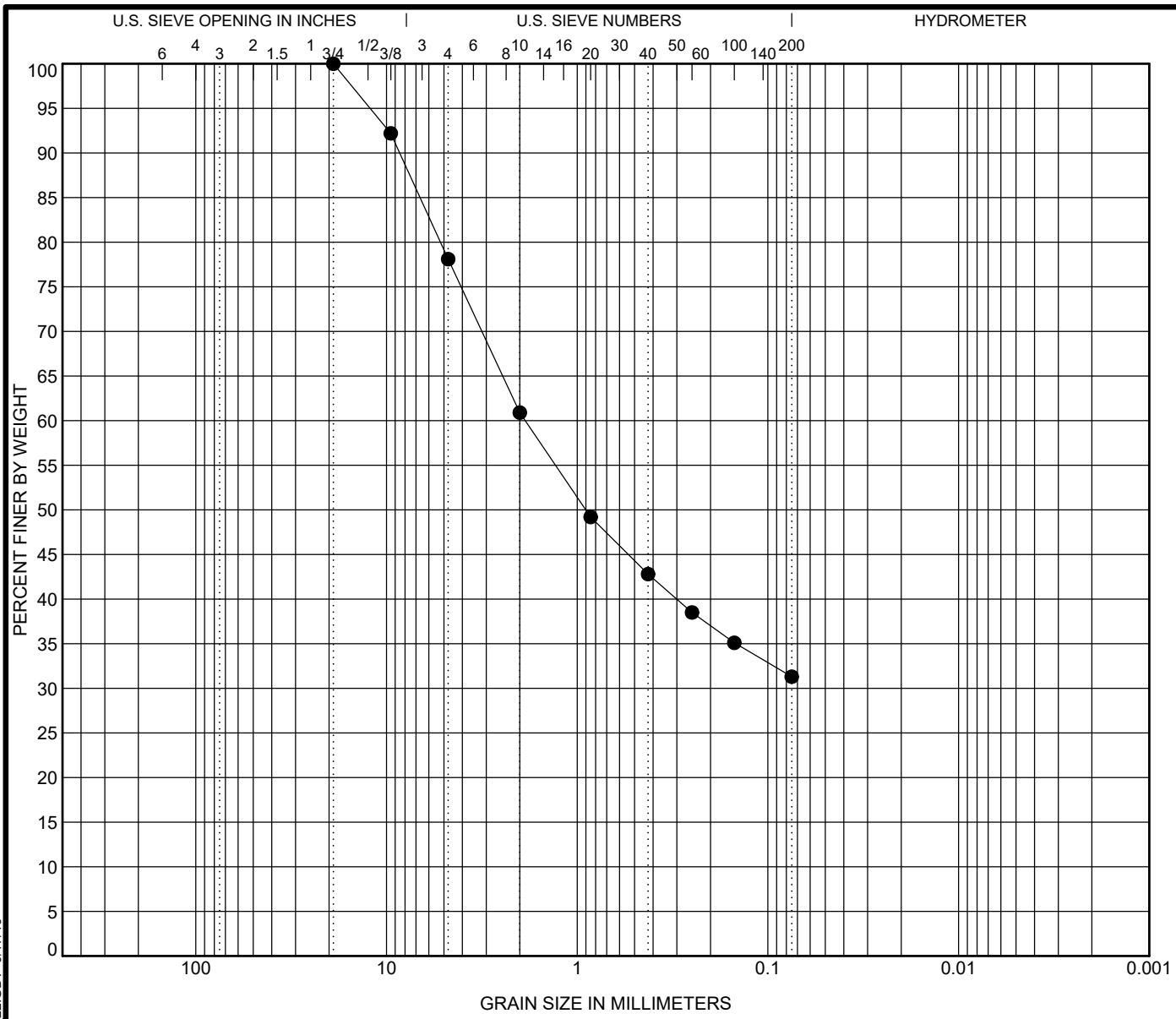
	Specimen		LL	PL	PI	Fines	Testing Lab	Description
●	B-03	36.0 ft	32	22	10	85	BLAC	LEAN CLAY WITH SAND (CL), contains mica, brown
⧗	B-03	53.5 ft	25	20	5	61	BLAC	SANDY SILTY CLAY (CL-ML), contains mica, brown
▲	B-05	7.5 ft	23	21	2	63	BLAC	SANDY SILT (ML), contains mica, brown
★	B-05	21.0 ft	27	20	7	58	BLAC	SANDY SILTY CLAY (CL-ML), contains mica, brown
⊙	B-06	13.5 ft	21	18	3	56	BLAC	SANDY SILT (ML), contains mica, brown

Schnabel ENGINEERING

ATTERBERG LIMITS

Project: AEP Work Order 42703738-02
Cabin Creek - London 46kV
Kanawha County, WV

Contract: 19C16020.00



COBBLES	GRAVEL		SAND			SILT OR CLAY
	coarse	fine	coarse	medium	fine	

Specimen		Sample Description	LL	PL	PI
● B-03	13.5 ft	**SILTY SAND WITH GRAVEL (SM), f-c, black (Visual Class., Sample consists of coal and shale fragments)**	--	--	--

Test Method	D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
ASTM D422	**19**	**1.873**			**21.9**	**46.8**	**31.3**	

Percent Finer

Sieve Size	No. 200	No. 100	No. 60	No. 40	No. 20	No. 10	No. 4	3/8 in.	3/4 in.
% Finer	31.3	35.1	38.5	42.8	49.2	60.9	78.1	92.2	100.0

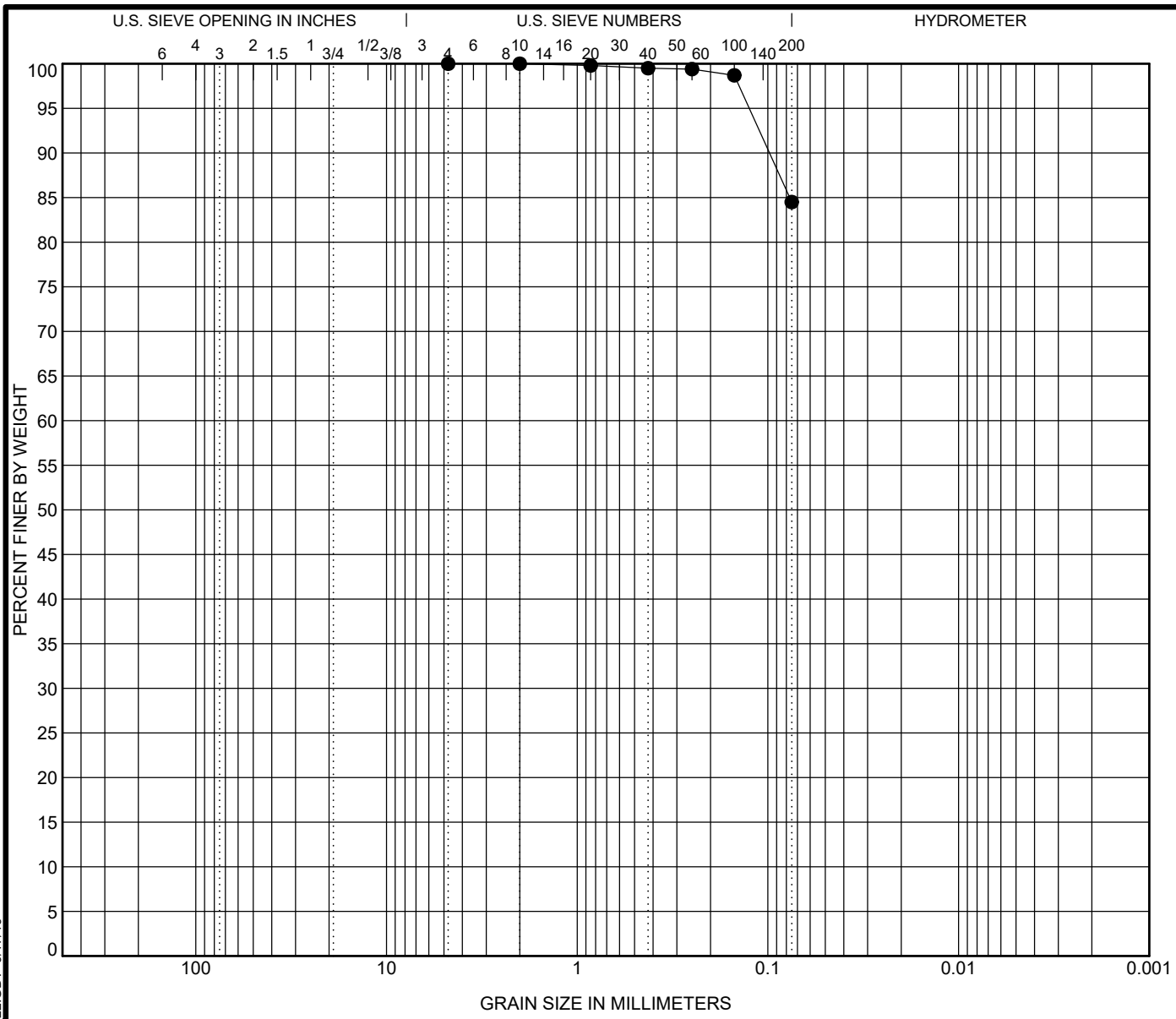
Tested By	Tested Date	Reviewed By	Calc By
MJF	8/26/19	TTM	MJF

Schnabel ENGINEERING

GRADATION CURVE

Project: AEP Work Order 42703738-02
Cabin Creek - London 46kV
Kanawha County, WV

Contract: 19C16020.00 **Testing Lab:** BLAC



COBBLES	GRAVEL		SAND			SILT OR CLAY
	coarse	fine	coarse	medium	fine	

Specimen		Sample Description	LL	PL	PI		
● B-03	36.0 ft	**LEAN CLAY WITH SAND (CL), contains mica, brown**	**32**	**22**	**10**		

Test Method	D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
ASTM D422	**2**				**0.0**	**15.5**	**84.5**	

Percent Finer

Sieve Size	No. 200	No. 100	No. 60	No. 40	No. 20	No. 10	No. 4
% Finer	84.5	98.7	99.4	99.5	99.8	100.0	100.0

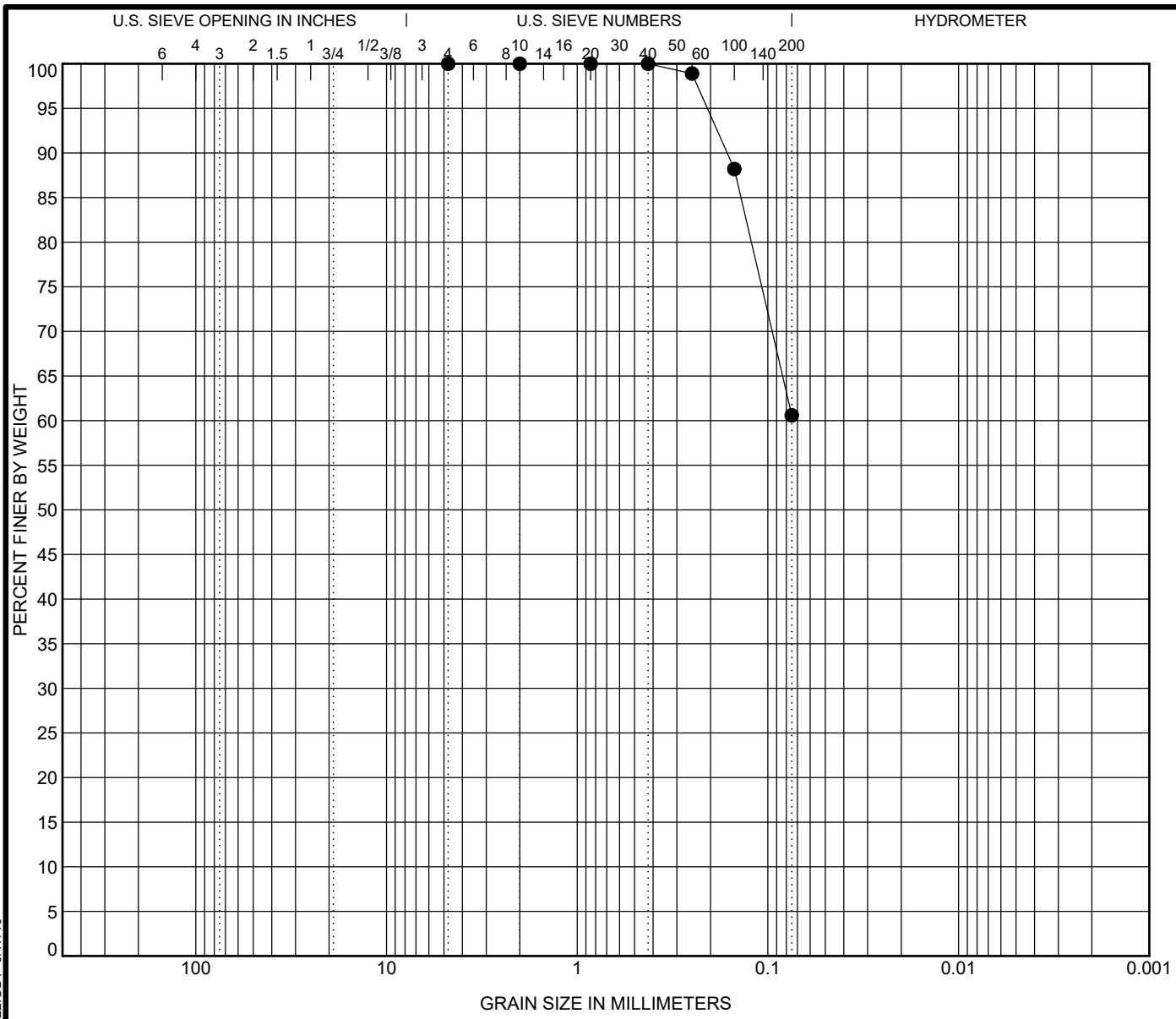
Tested By	Tested Date	Reviewed By	Calc By
MJF	8/26/19	TTM	MJF

Schnabel ENGINEERING

GRADATION CURVE

Project: AEP Work Order 42703738-02
Cabin Creek - London 46kV
Kanawha County, WV

Contract: 19C16020.00 **Testing Lab:** BLAC



COBBLES	GRAVEL		SAND			SILT OR CLAY
	coarse	fine	coarse	medium	fine	

Specimen		Sample Description	LL	PL	PI		
● B-03	53.5 ft	**SANDY SILTY CLAY (CL-ML), contains mica, brown**	**25**	**20**	**5**		

Test Method	D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
ASTM D422	**0.425**				**0.0**	**39.4**	**60.6**	

Percent Finer

Sieve Size	No. 200	No. 100	No. 60	No. 40	No. 20	No. 10	No. 4
% Finer	60.6	88.2	98.9	100.0	100.0	100.0	100.0

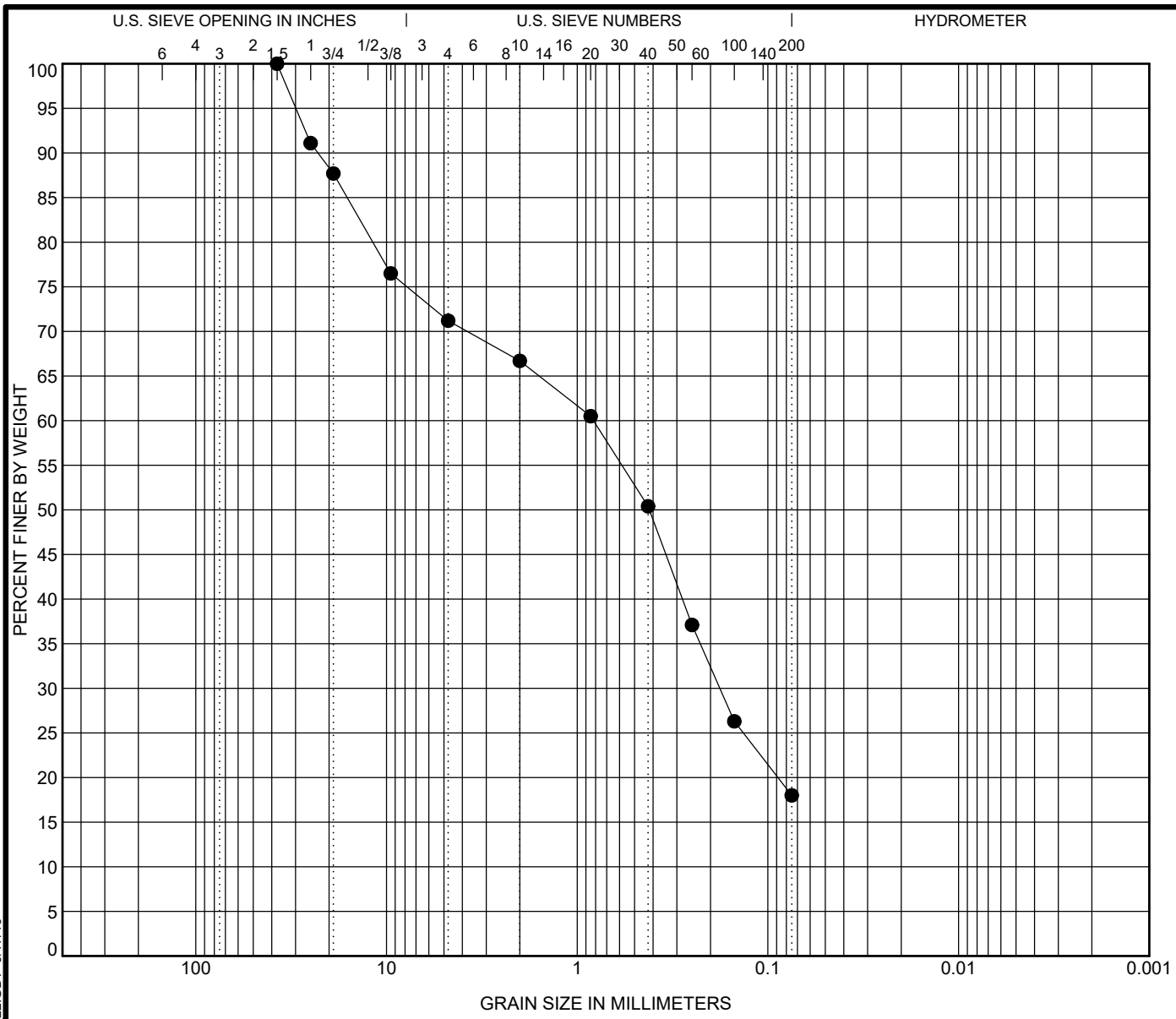
Tested By	Tested Date	Reviewed By	Calc By
MJF	8/26/19	TTM	MJF

Schnabel ENGINEERING

GRADATION CURVE

Project: AEP Work Order 42703738-02
Cabin Creek - London 46kV
Kanawha County, WV

Contract: 19C16020.00 **Testing Lab:** BLAC



COBBLES	GRAVEL		SAND			SILT OR CLAY
	coarse	fine	coarse	medium	fine	

Specimen		Sample Description	LL	PL	PI
● B-03	73.5 ft	**SILTY SAND WITH GRAVEL (SM), fine to coarse, contains mica, brown (Visual Classification)**	--	--	--

Test Method	D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
ASTM D422	**37.5**	**0.821**	**0.179**		**28.8**	**53.2**	**18.0**	

Percent Finer

Sieve Size	No. 200	No. 100	No. 60	No. 40	No. 20	No. 10	No. 4	3/8 in.	3/4 in.	1 in.	1.5 in.
% Finer	18.0	26.3	37.1	50.4	60.5	66.7	71.2	76.5	87.7	91.1	100.0

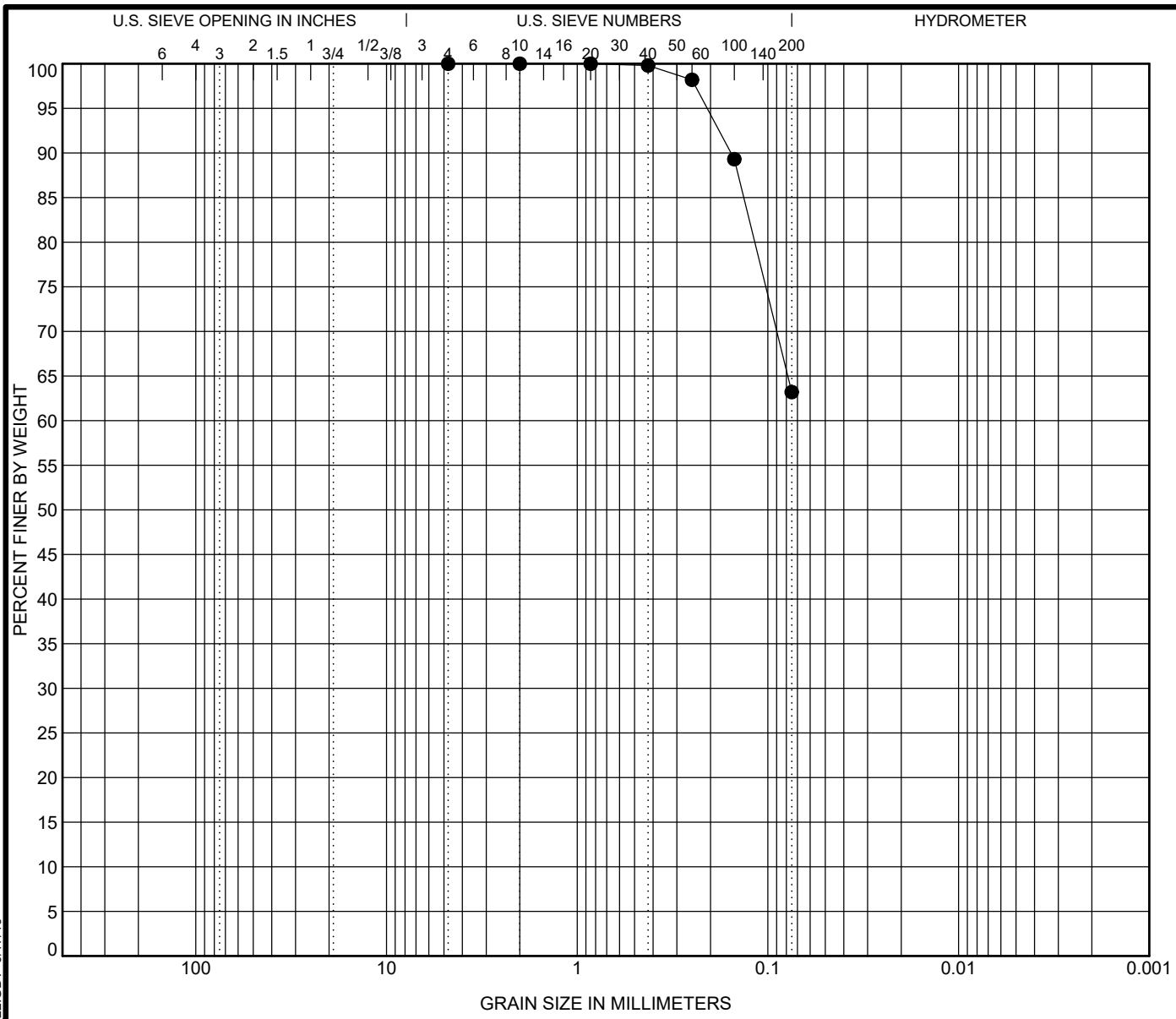
Tested By	Tested Date	Reviewed By	Calc By
MJF	8/26/19	TTM	MJF

Schnabel ENGINEERING

GRADATION CURVE

Project: AEP Work Order 42703738-02
Cabin Creek - London 46kV
Kanawha County, WV

Contract: 19C16020.00 **Testing Lab:** BLAC



COBBLES	GRAVEL		SAND			SILT OR CLAY
	coarse	fine	coarse	medium	fine	

Specimen		Sample Description	LL	PL	PI		
● B-05	7.5 ft	**SANDY SILT (ML), contains mica, brown**	**23**	**21**	**2**		

Test Method	D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
ASTM D422	**0.85**				**0.0**	**36.8**	**63.2**	

Percent Finer

Sieve Size	No. 200	No. 100	No. 60	No. 40	No. 20	No. 10	No. 4
% Finer	63.2	89.3	98.2	99.8	100.0	100.0	100.0

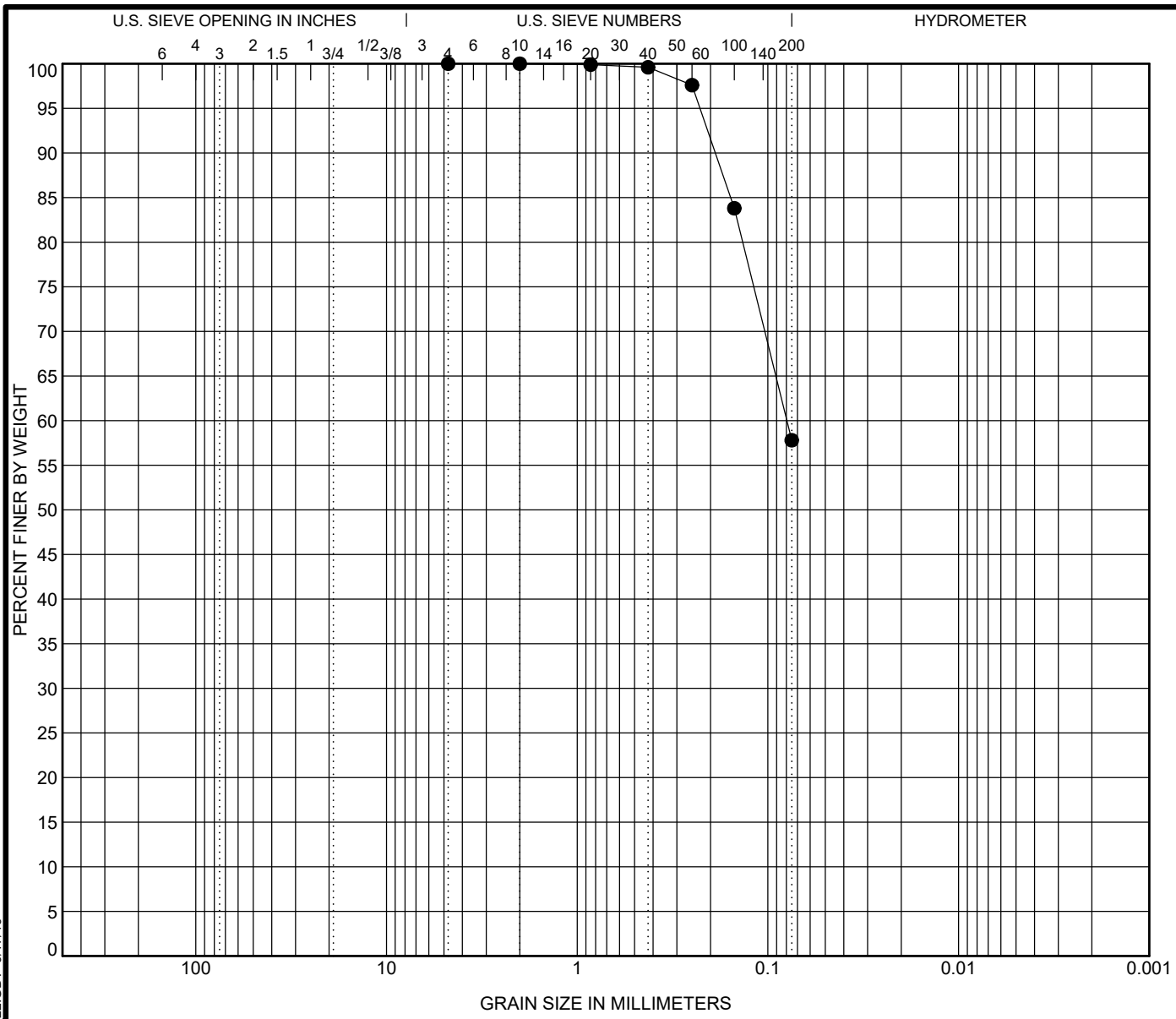
Tested By	Tested Date	Reviewed By	Calc By
MJF	8/26/19	TTM	MJF

Schnabel ENGINEERING

GRADATION CURVE

Project: AEP Work Order 42703738-02
Cabin Creek - London 46kV
Kanawha County, WV

Contract: 19C16020.00 **Testing Lab:** BLAC



COBBLES	GRAVEL		SAND			SILT OR CLAY
	coarse	fine	coarse	medium	fine	

Specimen		Sample Description	LL	PL	PI		
● B-05	21.0 ft	**SANDY SILTY CLAY (CL-ML), contains mica, brown**	**27**	**20**	**7**		

Test Method	D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
ASTM D422	**2**	**0.08**			**0.0**	**42.2**	**57.8**	

Percent Finer

Sieve Size	No. 200	No. 100	No. 60	No. 40	No. 20	No. 10	No. 4
% Finer	57.8	83.8	97.6	99.6	99.9	100.0	100.0

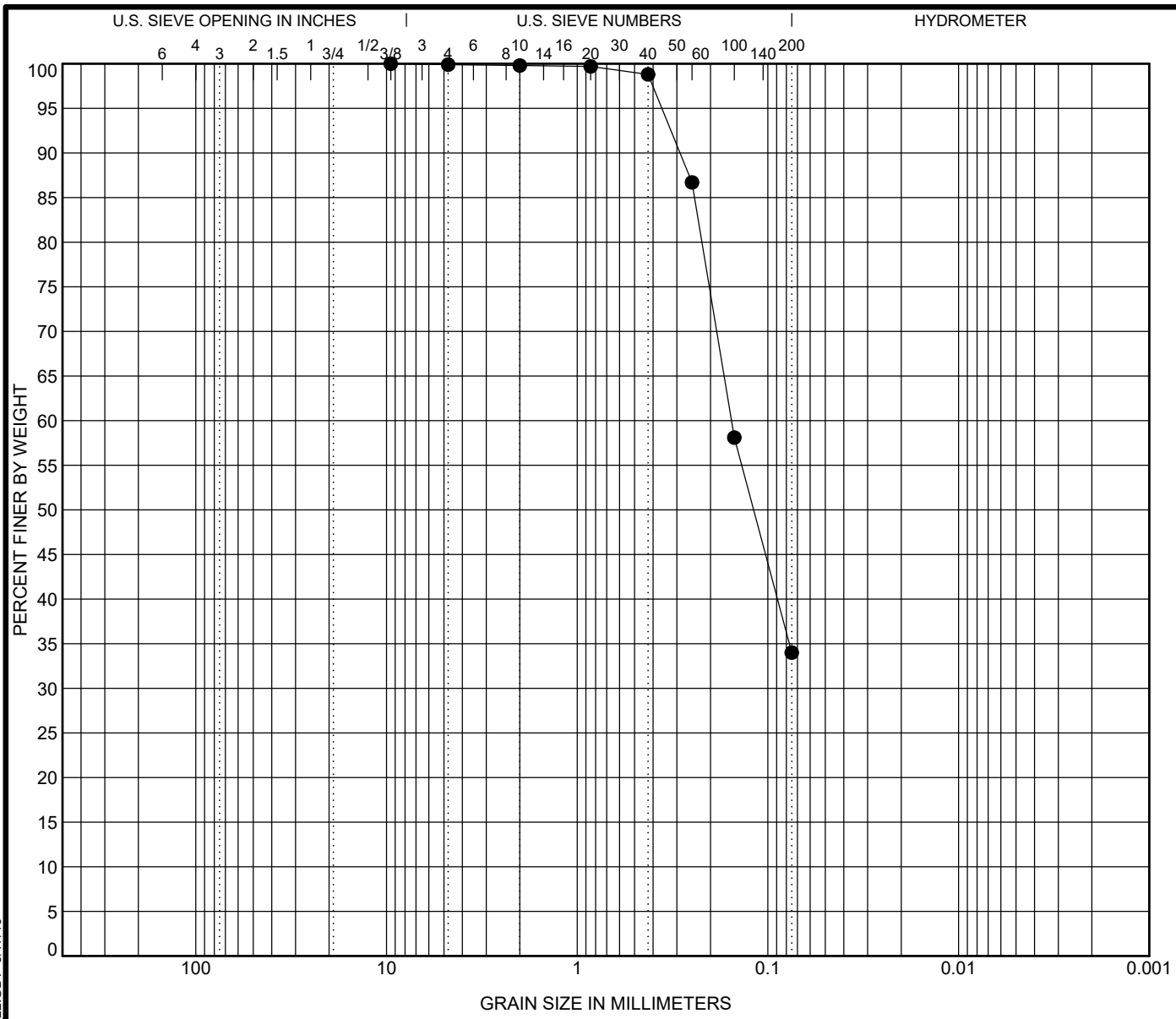
Tested By	Tested Date	Reviewed By	Calc By
MJF	8/27/19	TTM	MJF

Schnabel ENGINEERING

GRADATION CURVE

Project: AEP Work Order 42703738-02
Cabin Creek - London 46kV
Kanawha County, WV

Contract: 19C16020.00 **Testing Lab:** BLAC



COBBLES	GRAVEL		SAND			SILT OR CLAY
	coarse	fine	coarse	medium	fine	

Specimen		Sample Description	LL	PL	PI		
● B-05	33.5 ft	**SILTY SAND (SM), fine, trace gravel, contains mica, brown (Visual Classification)**	--	--	--		

Test Method	D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
ASTM D422	**9.5**	**0.155**			**0.1**	**65.9**	**34.0**	

Percent Finer

Sieve Size	No. 200	No. 100	No. 60	No. 40	No. 20	No. 10	No. 4	3/8 in.
% Finer	34.0	58.1	86.7	98.8	99.7	99.8	99.9	100.0

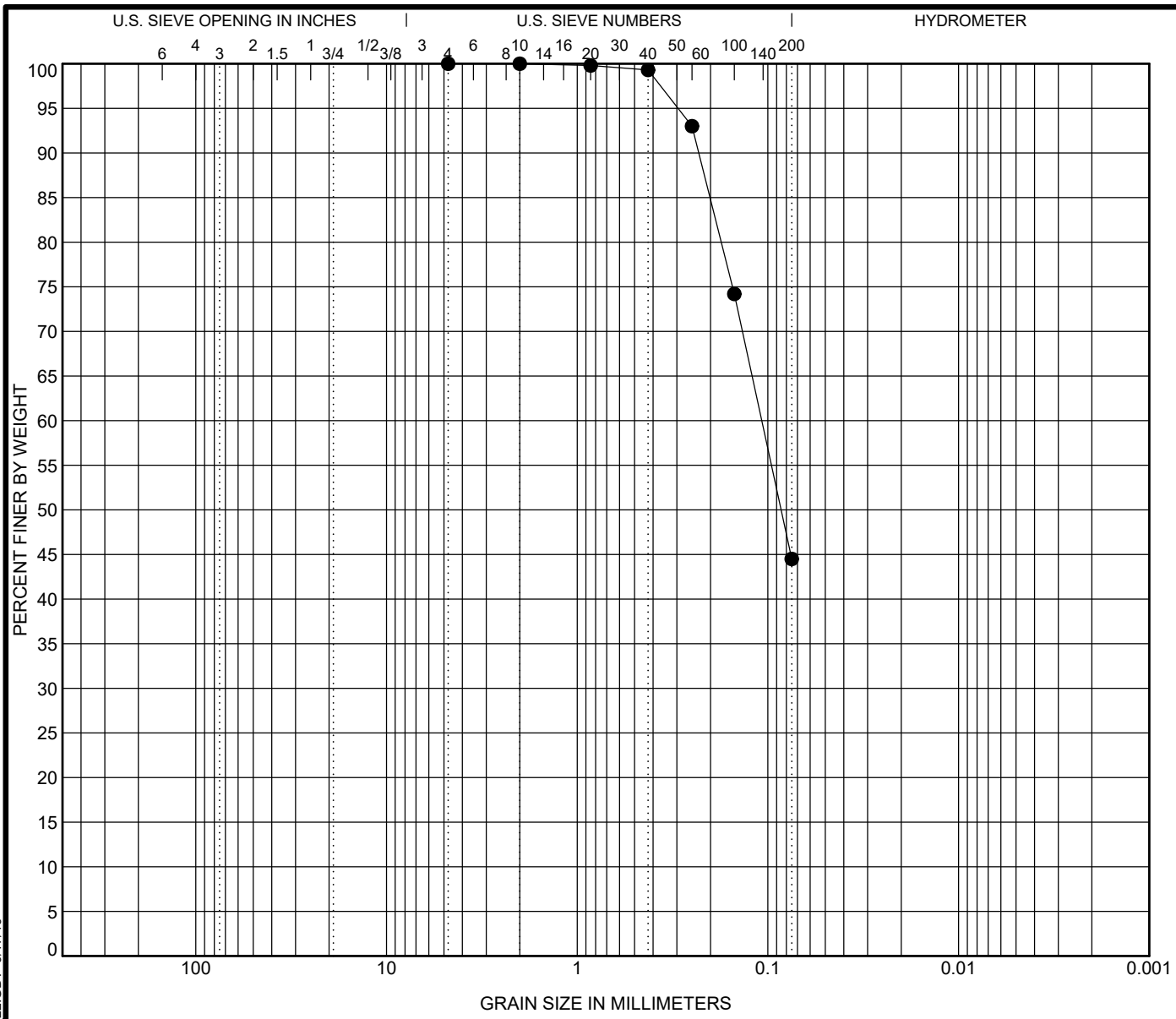
Tested By	Tested Date	Reviewed By	Calc By
MJF	8/26/19	TTM	MJF

Schnabel ENGINEERING

GRADATION CURVE

Project: AEP Work Order 42703738-02
Cabin Creek - London 46kV
Kanawha County, WV

Contract: 19C16020.00 **Testing Lab:** BLAC



COBBLES	GRAVEL		SAND			SILT OR CLAY
	coarse	fine	coarse	medium	fine	

Specimen		Sample Description	LL	PL	PI		
● B-06	4.5 ft	**SILTY SAND (SM), fine, contains mica, brown**	**NP**	**NP**	**NP**		

Test Method	D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
ASTM D422	**2**	**0.108**			**0.0**	**55.5**	**44.5**	

Percent Finer

Sieve Size	No. 200	No. 100	No. 60	No. 40	No. 20	No. 10	No. 4
% Finer	44.5	74.2	93.0	99.3	99.8	100.0	100.0

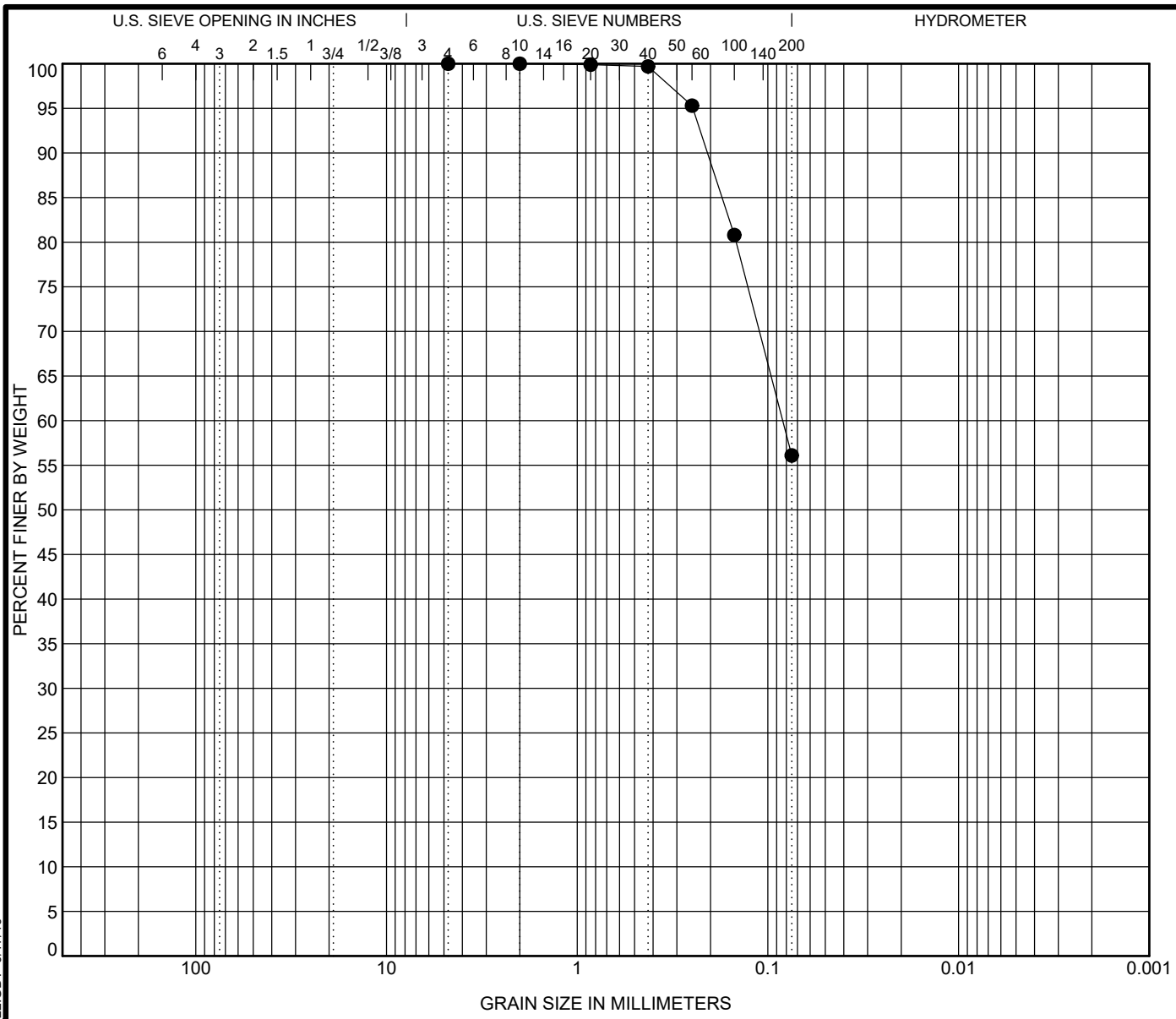
Tested By	Tested Date	Reviewed By	Calc By
MJF	8/26/19	TTM	MJF

Schnabel ENGINEERING

GRADATION CURVE

Project: AEP Work Order 42703738-02
Cabin Creek - London 46kV
Kanawha County, WV

Contract: 19C16020.00 **Testing Lab:** BLAC



COBBLES	GRAVEL		SAND			SILT OR CLAY
	coarse	fine	coarse	medium	fine	

Specimen		Sample Description	LL	PL	PI		
● B-06	13.5 ft	**SANDY SILT (ML), contains mica, brown**	**21**	**18**	**3**		

Test Method	D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
ASTM D422	**2**	**0.084**			**0.0**	**43.9**	**56.1**	

Percent Finer

Sieve Size	No. 200	No. 100	No. 60	No. 40	No. 20	No. 10	No. 4
% Finer	56.1	80.8	95.3	99.7	99.9	100.0	100.0

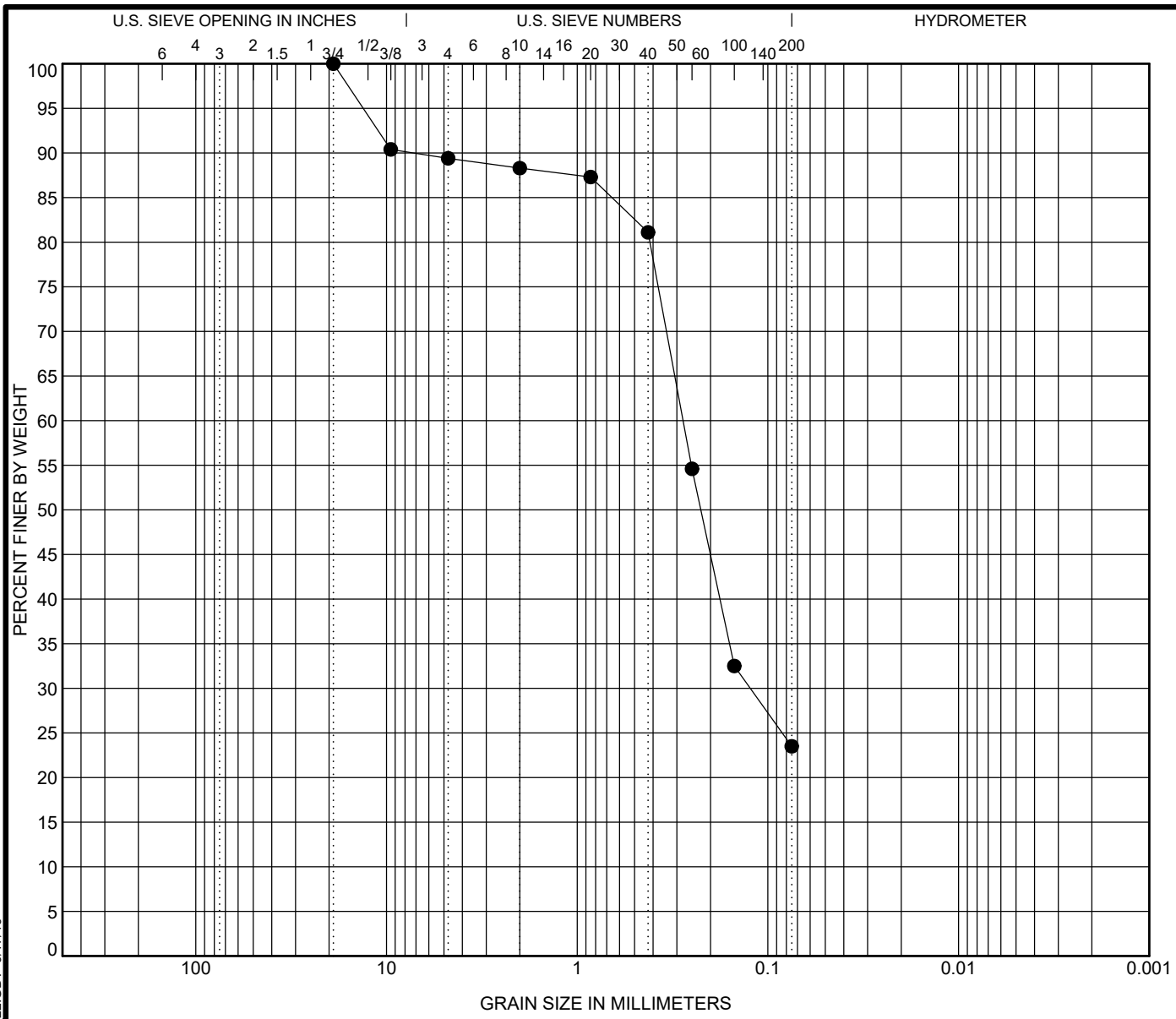
Tested By	Tested Date	Reviewed By	Calc By
MJF	5/26/19	TTM	MJF

Schnabel ENGINEERING

GRADATION CURVE

Project: AEP Work Order 42703738-02
Cabin Creek - London 46kV
Kanawha County, WV

Contract: 19C16020.00 **Testing Lab:** BLAC



COBBLES	GRAVEL		SAND			SILT OR CLAY
	coarse	fine	coarse	medium	fine	

Specimen		Sample Description	LL	PL	PI
● B-06	43.5 ft	**SILTY SAND (SM), fine to medium, few gravel, contains mica, brown (Visual Classification)**	--	--	--

Test Method	D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
ASTM D422	**19**	**0.279**	**0.124**		**10.6**	**65.9**	**23.5**	

Percent Finer

Sieve Size	No. 200	No. 100	No. 60	No. 40	No. 20	No. 10	No. 4	3/8 in.	3/4 in.
% Finer	23.5	32.5	54.6	81.1	87.3	88.3	89.4	90.4	100.0

Tested By	Tested Date	Reviewed By	Calc By
MJF	8/26/19	TTM	MJF

Schnabel ENGINEERING

GRADATION CURVE

Project: AEP Work Order 42703738-02
Cabin Creek - London 46kV
Kanawha County, WV

Contract: 19C16020.00 **Testing Lab:** BLAC

Schnabel ENGINEERING

Unconfined Compression Test Report

ASTM D2166

Date: *9/18/2019*

Project: *AEP Work Order 42703738-02*
Cabin Creek - London 46kV
Location: *Kanawha County, WV*

Schnabel No.: *19C16020.00*
Boring No.: *B-03*
Depth: *36-38 ft.*
Elevation: *607.5-605.5 ft.*

Test Specimen Data	
Initial Diameter, in:	*2.881*
Initial Area, in^2:	*6.522*
Initial Height, in:	*5.819*
H/D Ratio:	*2.0*
Moisture Content, %:	*22.7*
Wet Unit Weight, pcf:	*128.5*
Dry Unit Weight, pcf:	*104.7*

Testing Information	
Test Procedure:	*ASTM D2166*
Type of Specimen:	*Tube Sample*
Load Cell No.:	*1352472*
Strain Rate, %/min.:	*1.0*

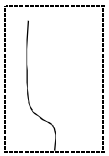
Remarks: *Gs assumed.*

Specimen Type: *Tube Sample*

Strength Data	
Strain at Failure, %:	*5.4*
Unconfined Strength (Qu), tsf:	*1.12*
Shear Strength (Su), tsf:	*0.56*

Reviewed by: *CJS*

Failure Sketch

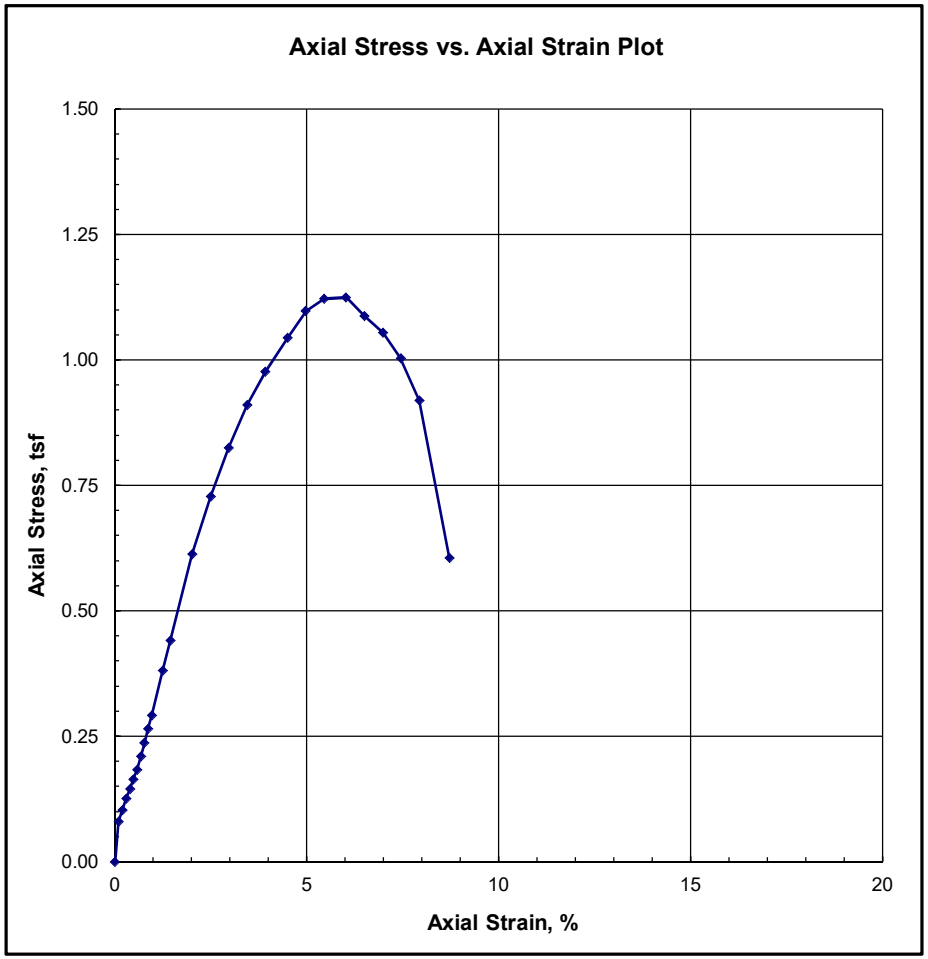


Soil Desc.: *LEAN CLAY WITH SAND (CL), contains mica, brown*

LL, %:	*32*	% < 200:	*84.5*
PI, %:	*10*	Gs:	*2.70*

Test Data

Reading No.	Axial Load (lbs)	Axial Displ. (in.)	Axial Strain (%)	Corrected Area[1] (in^2)	Axial Stress (psi)	Axial Stress (tsf)
Zero	0.0	0.000	0.0	6.52	0.0	0.00
1	7.3	0.006	0.1	6.53	1.1	0.08
2	9.3	0.012	0.2	6.53	1.4	0.10
3	11.4	0.017	0.3	6.54	1.7	0.13
4	13.2	0.023	0.4	6.55	2.0	0.15
5	15.0	0.028	0.5	6.55	2.3	0.16
6	16.8	0.034	0.6	6.56	2.6	0.18
7	19.2	0.039	0.7	6.57	2.9	0.21
8	21.6	0.045	0.8	6.57	3.3	0.24
9	24.3	0.050	0.9	6.58	3.7	0.27
10	26.8	0.056	1.0	6.58	4.1	0.29
11	35.0	0.073	1.2	6.60	5.3	0.38
12	40.5	0.084	1.4	6.62	6.1	0.44
13	56.7	0.117	2.0	6.66	8.5	0.61
14	67.7	0.145	2.5	6.69	10.1	0.73
15	77.0	0.173	3.0	6.72	11.5	0.83
16	85.5	0.200	3.4	6.75	12.7	0.91
17	92.1	0.228	3.9	6.79	13.6	0.98
18	99.1	0.262	4.5	6.83	14.5	1.05
19	104.7	0.289	5.0	6.86	15.3	1.10
20	107.6	0.317	5.4	6.90	15.6	1.12
21	108.4	0.350	6.0	6.94	15.6	1.12
22	105.4	0.378	6.5	6.97	15.1	1.09
23	102.8	0.406	7.0	7.01	14.7	1.06
24	98.2	0.434	7.5	7.05	13.9	1.00
25	90.4	0.462	7.9	7.08	12.8	0.92
26	60.1	0.507	8.7	7.14	8.4	0.61



Notes: 1. Right Cylinder Area Correction Method

Testing Lab: BLAC
UC 8/2006 Rev. 1

Schnabel ENGINEERING

Unconfined Compression Test Report

ASTM D2166

Date: *9/18/2019*

Project: *AEP Work Order 42703738-02*
Cabin Creek - London 46kV
Location: *Kanawha County, WV*

Schnabel No.: *19C16020.00*
Boring No.: *B-05*
Depth: *21-23 ft.*
Elevation: *603.7-601.7 ft.*

Test Specimen Data	
Initial Diameter, in:	*2.882*
Initial Area, in^2:	*6.524*
Initial Height, in:	*5.728*
H/D Ratio:	*2.0*
Moisture Content, %:	*20.8*
Wet Unit Weight, pcf:	*129.7*
Dry Unit Weight, pcf:	*107.4*

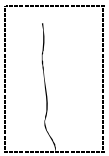
Testing Information	
Test Procedure:	*ASTM D2166*
Type of Specimen:	*Tube Sample*
Load Cell No.:	*1352472*
Strain Rate, %/min.:	*1.0*

Remarks: *Gs assumed.*

Specimen Type:	*Tube Sample*

Strength Data	
Strain at Failure, %:	*6.5*
Unconfined Strength (Qu), tsf:	*0.74*
Shear Strength (Su), tsf:	*0.37*

Failure Sketch



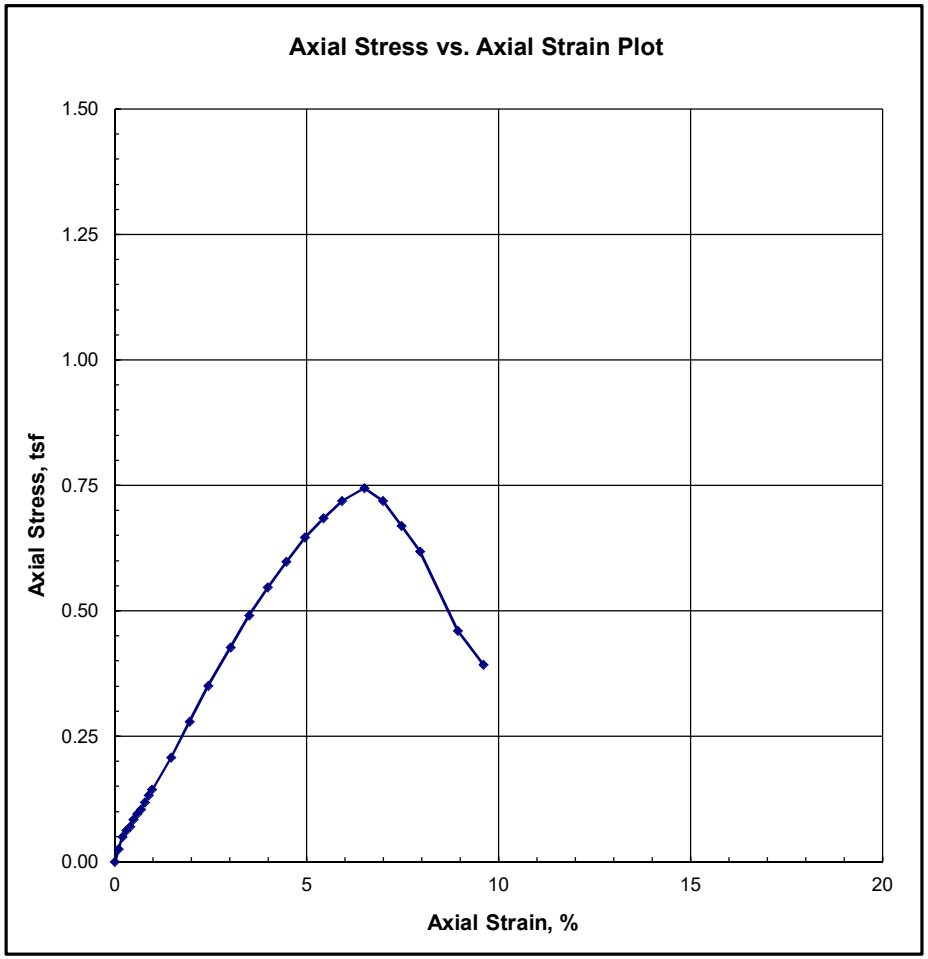
Reviewed by: *CJS*

Soil Desc.: *SANDY SILTY CLAY (CL-ML), contains mica, brown*

LL, %:	*27*	% < 200:	*57.8*
PI, %:	*7*	Gs:	*2.70*

Test Data

Reading No.	Axial Load (lbs)	Axial Displ. (in.)	Axial Strain (%)	Corrected Area[1] (in^2)	Axial Stress (psi)	Axial Stress (tsf)
Zero	0.0	0.000	0.0	6.52	0.0	0.00
1	2.3	0.006	0.1	6.53	0.4	0.03
2	4.5	0.011	0.2	6.54	0.7	0.05
3	5.6	0.017	0.3	6.54	0.9	0.06
4	6.4	0.022	0.4	6.55	1.0	0.07
5	7.6	0.028	0.5	6.56	1.2	0.08
6	8.7	0.033	0.6	6.56	1.3	0.09
7	9.6	0.039	0.7	6.57	1.5	0.11
8	10.8	0.045	0.8	6.57	1.6	0.12
9	12.1	0.050	0.9	6.58	1.8	0.13
10	13.2	0.056	1.0	6.59	2.0	0.14
11	19.1	0.083	1.5	6.62	2.9	0.21
12	25.8	0.111	1.9	6.65	3.9	0.28
13	32.6	0.139	2.4	6.69	4.9	0.35
14	39.9	0.172	3.0	6.73	5.9	0.43
15	46.1	0.200	3.5	6.76	6.8	0.49
16	51.6	0.228	4.0	6.79	7.6	0.55
17	56.7	0.256	4.5	6.83	8.3	0.60
18	61.6	0.283	4.9	6.86	9.0	0.65
19	65.7	0.311	5.4	6.90	9.5	0.69
20	69.3	0.339	5.9	6.93	10.0	0.72
21	72.2	0.372	6.5	6.98	10.3	0.74
22	70.1	0.400	7.0	7.01	10.0	0.72
23	65.6	0.428	7.5	7.05	9.3	0.67
24	60.9	0.456	8.0	7.09	8.6	0.62
25	45.8	0.511	8.9	7.16	6.4	0.46
26	39.3	0.550	9.6	7.22	5.4	0.39



Notes: 1. Right Cylinder Area Correction Method

Testing Lab: BLAC
UC 8/2006 Rev. 1

EHS Support, LLC

Monitoring Well Log - Borehole

SB-1

Easting (ft)	: 379768.96	Drill Rig	: Geoprobe 3230DT	Job Number	: LLC.06149.0000
Northing (ft)	: 6565629.19	Driller Supplier	: Enviroprobe Integrated Solutions	Client	: American Electric Power (AEP)
Ground Elevation	: 612.56 (Ft)	Logged By	: Greg Sowder	Project	: Cabin Creek
Total Depth	: 35 Ft BGL	Reviewed By	: Andrew Fowler	Location	: 15225 MacCorkle Ave SE, Cabin Creek, WV 25035, USA
		Date	: 06/02/2025	Loc Comment	: Ground elevation and coordinates extracted from 2018 LIDAR

Elevation(NAVD88)	Depth (ft)	Lithologic Column	Lithological Description	Recovery (Inches)	Water	Notes
612.0			0.00 - 3.30: Fill: Bottom ash, moist.			
	1					
611.0						
	2					
610.0				36		
	3					
609.26			3.30 - 12.20: Fill: Fly ash, moist.			
609.0						
	4					
608.0						
	5					
607.0						
	6					
606.0						
	7					
605.0				41		
	8					
604.0						
	9					
603.0						

EHS Support, LLC

Monitoring Well Log - Borehole

SB-1

Easting (ft)	: 379768.96	Drill Rig	: Geoprobe 3230DT	Job Number	: LLC.06149.0000
Northing (ft)	: 6565629.19	Driller Supplier	: Enviroprobe Integrated Solutions	Client	: American Electric Power (AEP)
Ground Elevation	: 612.56 (Ft)	Logged By	: Greg Sowder	Project	: Cabin Creek
Total Depth	: 35 Ft BGL	Reviewed By	: Andrew Fowler	Location	: 15225 MacCorkle Ave SE, Cabin Creek, WV 25035, USA
		Date	: 06/02/2025	Loc Comment	: Ground elevation and coordinates extracted from 2018 LIDAR

Elevation(NAVD88)	Depth (ft)	Lithologic Column	Lithological Description	Recovery (Inches)	Water	Notes
			3.30 - 12.20: Fill: Fly ash, moist. (continued)			
602.0						
	11					
601.0						
	12					
			12.20 - 17.60: Alluvium: SILT (ML), brown, moist.	37		
600.0						
	13					
599.0						
	14					
598.0						
	15					
597.0						
	16					
596.0						
	17					
595.0				34		
			17.60 - 25.00: Gray.			
	18					
594.0						
	19					
593.0						

EHS Support, LLC

Monitoring Well Log - Borehole

SB-1

Easting (ft)	: 379768.96	Drill Rig	: Geoprobe 3230DT	Job Number	: LLC.06149.0000
Northing (ft)	: 6565629.19	Driller Supplier	: Enviroprobe Integrated Solutions	Client	: American Electric Power (AEP)
Ground Elevation	: 612.56 (Ft)	Logged By	: Greg Sowder	Project	: Cabin Creek
Total Depth	: 35 Ft BGL	Reviewed By	: Andrew Fowler	Location	: 15225 MacCorkle Ave SE, Cabin Creek, WV 25035, USA
		Date	: 06/02/2025	Loc Comment	: Ground elevation and coordinates extracted from 2018 LIDAR

Elevation(NAVD88)	Depth (ft)	Lithologic Column	Lithological Description	Recovery (Inches)	Water	Notes
			17.60 - 25.00: Gray. (continued)			
592.0						
	21					
591.0						
	22					
590.0				29		
	23					
589.0						
	24					
588.0						
587.56	25		25.00 - 28.00: Wet.			
587.0						
	26					
586.0						
	27					
585.0				57		
584.56	28		28.00 - 29.30: Alluvium: SILT (ML), brown, wet.			
584.0						
	29					
583.26			29.30 - 35.00: Alluvium: SILT with sand (ML), brown, wet.			
583.0						

EHS Support

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Monitoring Well Log - Borehole

SB-1

Easting (ft)	: 379768.96	Drill Rig	: Geoprobe 3230DT	Job Number	: LLC.06149.0000
Northing (ft)	: 6565629.19	Driller Supplier	: Enviroprobe Integrated Solutions	Client	: American Electric Power (AEP)
Ground Elevation	: 612.56 (Ft)	Logged By	: Greg Sowder	Project	: Cabin Creek
Total Depth	: 35 Ft BGL	Reviewed By	: Andrew Fowler	Location	: 15225 MacCorkle Ave SE, Cabin Creek, WV 25035, USA
		Date	: 06/02/2025	Loc Comment	: Ground elevation and coordinates extracted from 2018 LIDAR

Elevation(NAVD88)	Depth (ft)	Lithologic Column	Lithological Description	Recovery (Inches)	Water	Notes
582.0			29.30 - 35.00: Alluvium: SILT with sand (ML), brown, wet. (continued)			
	31					
581.0						
	32					
580.0				44		
	33					
579.0						
	34					
578.0						
			SB - 1 Terminated at 35 Ft			

EHS Support, LLC

Monitoring Well Log - Borehole

SB-2

Easting (ft)	: 457395.92	Drill Rig	: Geoprobe 3230DT	Job Number	: LLC.06149.0000
Northing (ft)	: 4227933.31	Driller Supplier	: Enviroprobe Integrated Solutions	Client	: American Electric Power (AEP)
Ground Elevation	: 614.47 (Ft)	Logged By	: Greg Sowder	Project	: Cabin Creek
Total Depth	: 30 Ft BGL	Reviewed By	: Andrew Fowler	Location	: 15225 MacCorkle Ave SE, Cabin Creek, WV 25035, USA
		Date	: 06/02/2025	Loc Comment	: Ground elevation and coordinates extracted from 2018 LIDAR

Elevation(NAVD88)	Depth (ft)	Lithologic Column	Lithological Description	Recovery (Inches)	Water	Notes
614.0			0.00 - 7.50: Fill: Bottom ash, moist.			
	1					
613.0						
	2					
612.0				31		
	3					
611.0						
	4					
610.0						
	5					
609.0						
	6					
608.0						
	7					
607.0 606.97			7.50 - 9.00: Fill: Fly ash, moist.	35		
	8					
606.0						
605.47	9		9.00 - 20.00: Alluvium: SILT (ML), brown, moist.			
605.0						

EHS Support, LLC

Monitoring Well Log - Borehole

SB-2

Easting (ft)	: 457395.92	Drill Rig	: Geoprobe 3230DT	Job Number	: LLC.06149.0000
Northing (ft)	: 4227933.31	Driller Supplier	: Enviroprobe Integrated Solutions	Client	: American Electric Power (AEP)
Ground Elevation	: 614.47 (Ft)	Logged By	: Greg Sowder	Project	: Cabin Creek
Total Depth	: 30 Ft BGL	Reviewed By	: Andrew Fowler	Location	: 15225 MacCorkle Ave SE, Cabin Creek, WV 25035, USA
		Date	: 06/02/2025	Loc Comment	: Ground elevation and coordinates extracted from 2018 LIDAR

Elevation(NAVD88)	Depth (ft)	Lithologic Column	Lithological Description	Recovery (Inches)	Water	Notes
			9.00 - 20.00: Alluvium: SILT (ML), brown, moist. (continued)			
604.0						
	11					
603.0						
	12					
602.0				38		
	13					
601.0						
	14					
600.0						
	15					
599.0						
	16					
598.0						
	17					
597.0				32		
	18					
596.0						
	19					
595.0						

EHS Support, LLC

Monitoring Well Log - Borehole

SB-2

Easting (ft)	: 457395.92	Drill Rig	: Geoprobe 3230DT	Job Number	: LLC.06149.0000
Northing (ft)	: 4227933.31	Driller Supplier	: Enviroprobe Integrated Solutions	Client	: American Electric Power (AEP)
Ground Elevation	: 614.47 (Ft)	Logged By	: Greg Sowder	Project	: Cabin Creek
Total Depth	: 30 Ft BGL	Reviewed By	: Andrew Fowler	Location	: 15225 MacCorkle Ave SE, Cabin Creek, WV 25035, USA
		Date	: 06/02/2025	Loc Comment	: Ground elevation and coordinates extracted from 2018 LIDAR

Elevation(NAVD88)	Depth (ft)	Lithologic Column	Lithological Description	Recovery (Inches)	Water	Notes
594.47			20.00 - 25.00: Red and brown.			
594.0						
	21					
593.0						
	22					
592.0				36		
	23					
591.0						
	24					
590.0						
589.47	25		25.00 - 30.00: Wet.		▼	
589.0						
	26					
588.0						
	27					
587.0				51		
	28					
586.0						
	29					
585.0						
			SB - 2 Terminated at 30 Ft			

EHS Support, LLC

Monitoring Well Log - Borehole

SB-3

Easting (ft)	: 457469.37	Drill Rig	: Geoprobe 3230DT	Job Number	: LLC.06149.0000
Northing (ft)	: 4227953.92	Driller Supplier	: Enviroprobe Integrated Solutions	Client	: American Electric Power (AEP)
Ground Elevation	: 612.49 (Ft)	Logged By	: Greg Sowder	Project	: Cabin Creek
Total Depth	: 30 Ft BGL	Reviewed By	: Andrew Fowler	Location	: 15225 MacCorkle Ave SE, Cabin Creek, WV 25035, USA
		Date	: 06/02/2025	Loc Comment	: Ground elevation and coordinates extracted from 2018 LIDAR

Elevation(NAVD88)	Depth (ft)	Lithologic Column	Lithological Description	Recovery (Inches)	Water	Notes
612.0			0.00 - 2.00: Fill: Bottom ash, moist.			
	1					
611.0						
610.49	2					
610.29			2.00 - 2.20: Fill: SAND (SP), brown, moist.			
			2.20 - 8.20: Fill: Fly ash, moist.			
610.0				48		
	3					
609.0						
	4					
608.0						
	5					
607.0						
	6					
606.0						
	7					
605.0				36		
	8					
604.29			8.20 - 13.80: Alluvium: SILT (ML), brown, moist.			
604.0						
	9					
603.0						

EHS Support, LLC

Monitoring Well Log - Borehole

SB-3

Easting (ft)	: 457469.37	Drill Rig	: Geoprobe 3230DT	Job Number	: LLC.06149.0000
Northing (ft)	: 4227953.92	Driller Supplier	: Enviroprobe Integrated Solutions	Client	: American Electric Power (AEP)
Ground Elevation	: 612.49 (Ft)	Logged By	: Greg Sowder	Project	: Cabin Creek
Total Depth	: 30 Ft BGL	Reviewed By	: Andrew Fowler	Location	: 15225 MacCorkle Ave SE, Cabin Creek, WV 25035, USA
		Date	: 06/02/2025	Loc Comment	: Ground elevation and coordinates extracted from 2018 LIDAR

Elevation(NAVD88)	Depth (ft)	Lithologic Column	Lithological Description	Recovery (Inches)	Water	Notes
602.0			8.20 - 13.80: Alluvium: SILT (ML), brown, moist. (continued)			
	11					
601.0						
	12					
600.0				36		
	13					
599.0						
598.69			13.80 - 15.00: Alluvium: SILT with sand (ML), wet.			
	14					
598.0						
597.49	15		15.00 - 20.00: Alluvium: SILT (ML), gray, moist.			
597.0						
	16					
596.0						
	17					
595.0				38		
	18					
594.0						
	19					
593.0						

EHS Support

EHS Support, LLC

Monitoring Well Log - Borehole

SB-3

Easting (ft)	: 457469.37	Drill Rig	: Geoprobe 3230DT	Job Number	: LLC.06149.0000
Northing (ft)	: 4227953.92	Driller Supplier	: Enviroprobe Integrated Solutions	Client	: American Electric Power (AEP)
Ground Elevation	: 612.49 (Ft)	Logged By	: Greg Sowder	Project	: Cabin Creek
Total Depth	: 30 Ft BGL	Reviewed By	: Andrew Fowler	Location	: 15225 MacCorkle Ave SE, Cabin Creek, WV 25035, USA
		Date	: 06/02/2025	Loc Comment	: Ground elevation and coordinates extracted from 2018 LIDAR

Elevation(NAVD88)	Depth (ft)	Lithologic Column	Lithological Description	Recovery (Inches)	Water	Notes
			20.00 - 24.80: Alluvium: SILT (ML), brown, moist.			
592.0						
	21					
591.0						
	22					
590.0				38		
	23					
589.0						
	24					
588.0						
587.69					▼	
587.49	25		24.80 - 25.00: Wet.			
			25.00 - 30.00: Alluvium: SILT with fine sand (ML), brown, wet.			
587.0						
	26					
586.0						
	27					
585.0				60		
	28					
584.0						
	29					
583.0						
			SB - 3 Terminated at 30 Ft			

EHS Support, LLC

Monitoring Well Log - Borehole

SB-4

Easting (ft)	: 457543.04	Drill Rig	: Geoprobe 3230DT	Job Number	: LLC.06149.0000
Northing (ft)	: 4227975.50	Driller Supplier	: Enviroprobe Integrated Solutions	Client	: American Electric Power (AEP)
Ground Elevation	: 613.21 (Ft)	Logged By	: Greg Sowder	Project	: Cabin Creek
Total Depth	: 30 Ft BGL	Reviewed By	: Andrew Fowler	Location	: 15225 MacCorkle Ave SE, Cabin Creek, WV 25035, USA
		Date	: 06/02/2025	Loc Comment	: Ground elevation and coordinates extracted from 2018 LIDAR

Elevation(NAVD88)	Depth (ft)	Lithologic Column	Lithological Description	Recovery (Inches)	Water	Notes
613.0			0.00-0.30: Fill: CLAY with gravel (CL), brown.			
			0.30-2.50: Fill: Bottom ash, moist.			
612.0	1					
	2					
611.0						
610.71			2.50-5.00: Fill: Fly ash, moist	46		
610.0	3					
609.0	4					
608.21	5		5.00-8.30: Wet.		▼	
608.0						
607.0	6					
606.0	7			37		
605.0	8		8.30-13.40: Fill: Moist, fly ash with brown silt.			
604.0	9					

EHS Support, LLC

Monitoring Well Log - Borehole

SB-4

Easting (ft)	: 457543.04	Drill Rig	: Geoprobe 3230DT	Job Number	: LLC.06149.0000
Northing (ft)	: 4227975.50	Driller Supplier	: Enviroprobe Integrated Solutions	Client	: American Electric Power (AEP)
Ground Elevation	: 613.21 (Ft)	Logged By	: Greg Sowder	Project	: Cabin Creek
Total Depth	: 30 Ft BGL	Reviewed By	: Andrew Fowler	Location	: 15225 MacCorkle Ave SE, Cabin Creek, WV 25035, USA
		Date	: 06/02/2025	Loc Comment	: Ground elevation and coordinates extracted from 2018 LIDAR

Elevation(NAVD88)	Depth (ft)	Lithologic Column	Lithological Description	Recovery (Inches)	Water	Notes
603.0			8.30-13.40: Fill: Moist, fly ash with brown silt. (continued)			
602.0	11					
601.0	12			36		
600.0	13					
			13.40-15.00: Alluvium: SILT with sand (ML), loose, brown, moist.			
599.0	14					
598.21	15		15.00-19.10: Alluvium: SILT (ML), gray and brown, moist.			
598.0						
597.0	16					
596.0	17			35		
595.0	18					
594.11	19					
594.0			19.10-20.00: Alluvium: SAND (SP), very fine, loose, brown, moist.			

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EHS Support, LLC

Monitoring Well Log - Borehole

SB-4

Easting (ft)	: 457543.04	Drill Rig	: Geoprobe 3230DT	Job Number	: LLC.06149.0000
Northing (ft)	: 4227975.50	Driller Supplier	: Enviroprobe Integrated Solutions	Client	: American Electric Power (AEP)
Ground Elevation	: 613.21 (Ft)	Logged By	: Greg Sowder	Project	: Cabin Creek
Total Depth	: 30 Ft BGL	Reviewed By	: Andrew Fowler	Location	: 15225 MacCorkle Ave SE, Cabin Creek, WV 25035, USA
		Date	: 06/02/2025	Loc Comment	: Ground elevation and coordinates extracted from 2018 LIDAR

Elevation(NAVD88)	Depth (ft)	Lithologic Column	Lithological Description	Recovery (Inches)	Water	Notes
593.0			20.00-25.00: Alluvium: SILT (ML), brown, moist.			
	21					
592.0						
	22					
591.0				32		
	23					
590.0						
	24					
589.0						
588.21	25		25.00-30.00: Wet.		▼	
588.0						
	26					
587.0						
	27					
586.0				60		
	28					
585.0						
	29					
584.0						
			SB-4 Terminated at 30 Ft			

EHS Support, LLC

Monitoring Well Log - Borehole

SB-5

Easting (ft)	: 457624.65	Drill Rig	: Geoprobe 3230DT	Job Number	: LLC.06149.0000
Northing (ft)	: 4227983.97	Driller Supplier	: Enviroprobe Integrated Solutions	Client	: American Electric Power (AEP)
Ground Elevation	: 624.48 (Ft)	Logged By	: Greg Sowder	Project	: Cabin Creek
Total Depth	: 35 Ft BGL	Reviewed By	: Andrew Fowler	Location	: 15225 MacCorkle Ave SE, Cabin Creek, WV 25035, USA
		Date	: 06/02/2025	Loc Comment	: Ground elevation and coordinates extracted from 2018 LIDAR

Elevation(NAVD88)	Depth (ft)	Lithologic Column	Lithological Description	Recovery (Inches)	Water	Notes
624.0			0.00-2.40: Fill: Bottom ash, moist.			
	1					
623.0						
	2					
622.08						
622.0			2.40-8.80: Fill: Fly ash, moist.	37		
	3					
621.0						
	4					
620.0						
	5					
619.0						
	6					
618.0						
	7			29		
617.0						
	8					
616.0						
	9		8.80-12.10: Fill: Bottom ash, moist.			
615.0						

EHS Support, LLC

Monitoring Well Log - Borehole

SB-5

Easting (ft)	: 457624.65	Drill Rig	: Geoprobe 3230DT	Job Number	: LLC.06149.0000
Northing (ft)	: 4227983.97	Driller Supplier	: Enviroprobe Integrated Solutions	Client	: American Electric Power (AEP)
Ground Elevation	: 624.48 (Ft)	Logged By	: Greg Sowder	Project	: Cabin Creek
Total Depth	: 35 Ft BGL	Reviewed By	: Andrew Fowler	Location	: 15225 MacCorkle Ave SE, Cabin Creek, WV 25035, USA
		Date	: 06/02/2025	Loc Comment	: Ground elevation and coordinates extracted from 2018 LIDAR

Elevation(NAVD88)	Depth (ft)	Lithologic Column	Lithological Description	Recovery (Inches)	Water	Notes
614.0			8.80-12.10: Fill: Bottom ash, moist. (continued)			
	11					
613.0						
612.38	12		12.10-14.20: Fill: Fly ash, moist.			
612.0				36		
	13					
611.0						
610.28	14		14.20-18.40: Fill: Bottom ash, moist.			
610.0						
	15					
609.0						
	16					
608.0						
	17					
607.0				34		
	18					
606.08						
606.0			18.40-20.00: Alluvium: SAND (SP), brown with black mottles, moist, sandstone fragments.			
	19					
605.0						

EHS Support, LLC

Monitoring Well Log - Borehole

SB-5

Easting (ft)	: 457624.65	Drill Rig	: Geoprobe 3230DT	Job Number	: LLC.06149.0000
Northing (ft)	: 4227983.97	Driller Supplier	: Enviroprobe Integrated Solutions	Client	: American Electric Power (AEP)
Ground Elevation	: 624.48 (Ft)	Logged By	: Greg Sowder	Project	: Cabin Creek
Total Depth	: 35 Ft BGL	Reviewed By	: Andrew Fowler	Location	: 15225 MacCorkle Ave SE, Cabin Creek, WV 25035, USA
		Date	: 06/02/2025	Loc Comment	: Ground elevation and coordinates extracted from 2018 LIDAR

Elevation(NAVD88)	Depth (ft)	Lithologic Column	Lithological Description	Recovery (Inches)	Water	Notes
604.0			20.00-24.10: Alluvium: SAND (SP), yellowish brown, moist, sandstone fragments.			
	21					
603.0						
	22					
602.0				36		
	23					
601.0						
600.38	24					
			24.10-27.60: Alluvium: SILT (ML), reddish brown, moist.			
600.0						
	25					
599.0						
	26					
598.0						
	27					
597.0				32		
596.88			27.60-29.80: Rock: CONGLOMERATE, gray, black, and brown.			
	28					
596.0						
	29					
595.0						
			29.80-30.00: Silt, sand, and gravel.			

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Monitoring Well Log - Borehole

SB-5

Easting (ft)	: 457624.65	Drill Rig	: Geoprobe 3230DT	Job Number	: LLC.06149.0000
Northing (ft)	: 4227983.97	Driller Supplier	: Enviroprobe Integrated Solutions	Client	: American Electric Power (AEP)
Ground Elevation	: 624.48 (Ft)	Logged By	: Greg Sowder	Project	: Cabin Creek
Total Depth	: 35 Ft BGL	Reviewed By	: Andrew Fowler	Location	: 15225 MacCorkle Ave SE, Cabin Creek, WV 25035, USA
		Date	: 06/02/2025	Loc Comment	: Ground elevation and coordinates extracted from 2018 LIDAR

Elevation(NAVD88)	Depth (ft)	Lithologic Column	Lithological Description	Recovery (Inches)	Water	Notes
594.0			30.00-35.00: Alluvium: SILT (ML), brown, wet.		▼	
	31					
593.0						
	32					
592.0				60		
	33					
591.0						
	34					
590.0						
			SB-5 Terminated at 35 Ft			

EHS Support, LLC

Monitoring Well Log - Borehole

SB-7

Easting (ft)	: 457772.15	Drill Rig	: Geoprobe 7822DT	Job Number	: LLC.06149.0000
Northing (ft)	: 4227969.29	Driller Supplier	: Enviroprobe Integrated Solutions	Client	: American Electric Power (AEP)
Ground Elevation	: 593.37 (Ft)	Logged By	: Greg Sowder	Project	: Cabin Creek
Total Depth	: 10 Ft BGL	Reviewed By	: Andrew Fowler	Location	: 15225 MacCorkle Ave SE, Cabin Creek, WV 25035, USA
		Date	: 06/02/2025	Loc Comment	: Ground elevation and coordinates extracted from 2018 LIDAR

Elevation(NAVD88)	Depth (ft)	Lithologic Column	Lithological Description	Recovery (Inches)	Water	Notes
593.0			0.00 - 3.90: Alluvium: SILT (ML), brown, wet, rootlets.			
	1					
592.0						
	2					
591.0				49		
	3					
590.0						
589.47					▼	
	4		3.90 - 5.00: Alluvium: SILT with fine sand (ML), dark grey, rootlets, wet.			
589.0						
588.37	5		5.00 - 10.00: Same as above, no roots.			
588.0						
	6					
587.0						
	7					
586.0				49		
	8					
585.0						
	9					
584.0						
			SB - 7 Terminated at 10 Ft			

EHS Support, LLC

Monitoring Well Log - Borehole

SB-8

Easting (ft)	: 457849.69	Drill Rig	: Geoprobe 7822DT	Job Number	: LLC.06149.0000
Northing (ft)	: 4227987.21	Driller Supplier	: Enviroprobe Integrated Solutions	Client	: American Electric Power (AEP)
Ground Elevation	: 592.59 (Ft)	Logged By	: Greg Sowder	Project	: Cabin Creek
Total Depth	: 15 Ft BGL	Reviewed By	: Andrew Fowler	Location	: 15225 MacCorkle Ave SE, Cabin Creek, WV 25035, USA
		Date	: 06/02/2025	Loc Comment	: Ground elevation and coordinates extracted from 2018 LIDAR

Elevation(NAVD88)	Depth (ft)	Lithologic Column	Lithological Description	Recovery (Inches)	Water	Notes
592.0			0.00 - 3.60: Alluvium: SILT with sand (ML), brown, wet.			
	1					
591.0						
	2					
590.0				52		
	3					
589.0 588.99			3.60 - 15.00: Alluvium: SILT with sand (ML), dark gray, wet.		▼	
	4					
588.0						
	5					
587.0						
	6					
586.0						
	7					
585.0				60		
	8					
584.0						
	9					
583.0						

EHS Support, LLC

Monitoring Well Log - Borehole

SB-8

Easting (ft)	: 457849.69	Drill Rig	: Geoprobe 7822DT	Job Number	: LLC.06149.0000
Northing (ft)	: 4227987.21	Driller Supplier	: Enviroprobe Integrated Solutions	Client	: American Electric Power (AEP)
Ground Elevation	: 592.59 (Ft)	Logged By	: Greg Sowder	Project	: Cabin Creek
Total Depth	: 15 Ft BGL	Reviewed By	: Andrew Fowler	Location	: 15225 MacCorkle Ave SE, Cabin Creek, WV 25035, USA
		Date	: 06/02/2025	Loc Comment	: Ground elevation and coordinates extracted from 2018 LIDAR

Elevation(NAVD88)	Depth (ft)	Lithologic Column	Lithological Description	Recovery (Inches)	Water	Notes
582.0 581.0 580.0 579.0 578.0	11 12 13 14		3.60 - 15.00: Alluvium: SILT with sand (ML), dark gray, wet. (continued)	50		
			SB - 8 Terminated at 15 Ft			

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Monitoring Well Log - Borehole

SB-9

Easting (ft)	: 457262.80	Drill Rig	: Geoprobe 3230DT	Job Number	: LLC.06149.0000
Northing (ft)	: 4227865.05	Driller Supplier	: Enviroprobe Integrated Solutions	Client	: American Electric Power (AEP)
Ground Elevation	: 604.63 (Ft)	Logged By	: Greg Sowder	Project	: Cabin Creek
Total Depth	: 40 Ft BGL	Reviewed By	: Andrew Fowler	Location	: 15225 MacCorkle Ave SE, Cabin Creek, WV 25035, USA
		Date	: 06/10/2025	Loc Comment	: Ground elevation and coordinates extracted from 2018 LIDAR

Elevation(NAVD88)	Depth (ft)	Lithologic Column	Lithological Description	Recovery (Inches)	Water	Notes
604.0			0.00-2.70: Fill: Bottom ash, moist.			
	1					
603.0						
	2					
602.0				43		
601.93			2.70-7.00: Fill: Fly ash, moist.			
	3					
601.0						
	4					
600.0						
	5					
599.0						
	6					
598.0						
597.63	7		7.00-7.40: Fill: Bottom ash, moist.			
597.23			7.40-10.00: Fill: Fly ash, moist.	41		
597.0						
	8					
596.0						
	9					
595.0						

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Monitoring Well Log - Borehole

SB-9

Easting (ft)	: 457262.80	Drill Rig	: Geoprobe 3230DT	Job Number	: LLC.06149.0000
Northing (ft)	: 4227865.05	Driller Supplier	: Enviroprobe Integrated Solutions	Client	: American Electric Power (AEP)
Ground Elevation	: 604.63 (Ft)	Logged By	: Greg Sowder	Project	: Cabin Creek
Total Depth	: 40 Ft BGL	Reviewed By	: Andrew Fowler	Location	: 15225 MacCorkle Ave SE, Cabin Creek, WV 25035, USA
		Date	: 06/10/2025	Loc Comment	: Ground elevation and coordinates extracted from 2018 LIDAR

Elevation(NAVD88)	Depth (ft)	Lithologic Column	Lithological Description	Recovery (Inches)	Water	Notes
			10.00-16.40: Wet.			
594.0						
	11					
593.0						
	12					
				42		
592.0						
	13					
591.0						
	14					
590.0						
	15					
589.0						
	16					
588.23						
			16.40-25.00: Alluvium: SILT (ML), brown, wet.			
588.0						
	17					
				60		
587.0						
	18					
586.0						
	19					
585.0						

EHS Support, LLC

Monitoring Well Log - Borehole

SB-9

Easting (ft)	: 457262.80	Drill Rig	: Geoprobe 3230DT	Job Number	: LLC.06149.0000
Northing (ft)	: 4227865.05	Driller Supplier	: Enviroprobe Integrated Solutions	Client	: American Electric Power (AEP)
Ground Elevation	: 604.63 (Ft)	Logged By	: Greg Sowder	Project	: Cabin Creek
Total Depth	: 40 Ft BGL	Reviewed By	: Andrew Fowler	Location	: 15225 MacCorkle Ave SE, Cabin Creek, WV 25035, USA
		Date	: 06/10/2025	Loc Comment	: Ground elevation and coordinates extracted from 2018 LIDAR

Elevation(NAVD88)	Depth (ft)	Lithologic Column	Lithological Description	Recovery (Inches)	Water	Notes
584.0			16.40-25.00: Alluvium: SILT (ML), brown, wet. (continued)			
	21					
583.0						
	22			60		
582.0						
	23					
581.0						
	24					
580.0						
579.63	25		25.00-30.00: Moist.			
579.0						
	26					
578.0						
	27			60		
577.0						
	28					
576.0						
	29					
575.0						

EHS Support, LLC

Monitoring Well Log - Borehole

SB-9

Easting (ft)	: 457262.80	Drill Rig	: Geoprobe 3230DT	Job Number	: LLC.06149.0000
Northing (ft)	: 4227865.05	Driller Supplier	: Enviroprobe Integrated Solutions	Client	: American Electric Power (AEP)
Ground Elevation	: 604.63 (Ft)	Logged By	: Greg Sowder	Project	: Cabin Creek
Total Depth	: 40 Ft BGL	Reviewed By	: Andrew Fowler	Location	: 15225 MacCorkle Ave SE, Cabin Creek, WV 25035, USA
		Date	: 06/10/2025	Loc Comment	: Ground elevation and coordinates extracted from 2018 LIDAR

Elevation(NAVD88)	Depth (ft)	Lithologic Column	Lithological Description	Recovery (Inches)	Water	Notes
574.0			30.00-33.40: Little fine grained gravel			
	31					
573.0						
	32					
572.0				48		
	33					
571.23			33.40-34.60: Alluvium: SILT with gravel (ML), dark gray, wet.			
571.0						
	34					
570.03						
570.0			34.60-35.00: Alluvium: SAND (SP): fine, brown, moist.			
569.63	35		35.00-38.10: Wet.			
569.0						
	36					
568.0						
	37			26		
567.0						
566.53	38		38.10-40.00: Alluvium: SILT with gravel (ML), black, wet.			
566.0						
	39					
565.0			SB-9 Terminated at 40 Ft			

EHS Support, LLC

Monitoring Well Log - Borehole

SB-10

Easting (ft)	: 457307.42	Drill Rig	: Geoprobe 3230DT	Job Number	: LLC.06149.0000
Northing (ft)	: 4227873.59	Driller Supplier	: Enviroprobe Integrated Solutions	Client	: American Electric Power (AEP)
Ground Elevation	: 618.15 (Ft)	Logged By	: Greg Sowder	Project	: Cabin Creek
Total Depth	: 40 Ft BGL	Reviewed By	: Andrew Fowler	Location	: 15225 MacCorkle Ave SE, Cabin Creek, WV 25035, USA
		Date	: 06/10/2025	Loc Comment	: Ground elevation and coordinates extracted from 2018 LIDAR

Elevation(NAVD88)	Depth (ft)	Lithologic Column	Lithological Description	Recovery (Inches)	Water	Notes
618.0			0.00 - 0.70: Fill: Bottom ash, moist.			
			0.70 - 7.80: Fill: Fly ash, moist.			
617.0	1					
616.0	2			25		
615.0	3					
614.0	4					
613.0	5					
612.0	6					
611.0	7			36		
610.35			7.80 - 26.00: Wet.		▼	
610.0	8					
609.0	9					

EHS Support, LLC

Monitoring Well Log - Borehole

SB-10

Easting (ft)	: 457307.42	Drill Rig	: Geoprobe 3230DT	Job Number	: LLC.06149.0000
Northing (ft)	: 4227873.59	Driller Supplier	: Enviroprobe Integrated Solutions	Client	: American Electric Power (AEP)
Ground Elevation	: 618.15 (Ft)	Logged By	: Greg Sowder	Project	: Cabin Creek
Total Depth	: 40 Ft BGL	Reviewed By	: Andrew Fowler	Location	: 15225 MacCorkle Ave SE, Cabin Creek, WV 25035, USA
		Date	: 06/10/2025	Loc Comment	: Ground elevation and coordinates extracted from 2018 LIDAR

Elevation(NAVD88)	Depth (ft)	Lithologic Column	Lithological Description	Recovery (Inches)	Water	Notes
608.0			7.80 - 26.00: Wet. (continued)			
	11					
607.0						
	12					
606.0				55		
	13					
605.0						
	14					
604.0						
	15					
603.0						
	16					
602.0						
	17					
601.0				60		
	18					
600.0						
	19					
599.0						

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Monitoring Well Log - Borehole

SB-10

Easting (ft)	: 457307.42	Drill Rig	: Geoprobe 3230DT	Job Number	: LLC.06149.0000
Northing (ft)	: 4227873.59	Driller Supplier	: Enviroprobe Integrated Solutions	Client	: American Electric Power (AEP)
Ground Elevation	: 618.15 (Ft)	Logged By	: Greg Sowder	Project	: Cabin Creek
Total Depth	: 40 Ft BGL	Reviewed By	: Andrew Fowler	Location	: 15225 MacCorkle Ave SE, Cabin Creek, WV 25035, USA
		Date	: 06/10/2025	Loc Comment	: Ground elevation and coordinates extracted from 2018 LIDAR

Elevation(NAVD88)	Depth (ft)	Lithologic Column	Lithological Description	Recovery (Inches)	Water	Notes
598.0			7.80 - 26.00: Wet. (continued)			
	21					
597.0						
	22					
596.0				60		
	23					
595.0						
	24					
594.0						
	25					
593.0						
592.15	26		26.00 - 30.00: Alluvium: SILT (ML), gray, moist.			
592.0						
	27					
591.0				60		
	28					
590.0						
	29					
589.0						

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Monitoring Well Log - Borehole

SB-10

Easting (ft)	: 457307.42	Drill Rig	: Geoprobe 3230DT	Job Number	: LLC.06149.0000
Northing (ft)	: 4227873.59	Driller Supplier	: Enviroprobe Integrated Solutions	Client	: American Electric Power (AEP)
Ground Elevation	: 618.15 (Ft)	Logged By	: Greg Sowder	Project	: Cabin Creek
Total Depth	: 40 Ft BGL	Reviewed By	: Andrew Fowler	Location	: 15225 MacCorkle Ave SE, Cabin Creek, WV 25035, USA
		Date	: 06/10/2025	Loc Comment	: Ground elevation and coordinates extracted from 2018 LIDAR

Elevation(NAVD88)	Depth (ft)	Lithologic Column	Lithological Description	Recovery (Inches)	Water	Notes
588.0			30.00 - 35.00: Alluvium: CLAY (CL), soft, gray, moist.			
587.0	31					
586.0	32			60		
585.0	33					
584.0	34					
583.15	35		35.00 - 36.20: Alluvium: SILT (ML), gray, wet.			
583.0						
582.0	36		36.20 - 40.00: Alluvium: SILT (ML), brown, wet.			
581.0	37					
				60		
580.0	38					
579.0	39		SB - 10 Terminated at 40 Ft			

EHS Support, LLC

Monitoring Well Log - Borehole

SB-11

Easting (ft)	: 457377.52	Drill Rig	: Geoprobe 3230DT	Job Number	: LLC.06149.0000
Northing (ft)	: 4227889.10	Driller Supplier	: Enviroprobe Integrated Solutions	Client	: American Electric Power (AEP)
Ground Elevation	: 615.13 (Ft)	Logged By	: Greg Sowder	Project	: Cabin Creek
Total Depth	: 30 Ft BGL	Reviewed By	: Andrew Fowler	Location	: 15225 MacCorkle Ave SE, Cabin Creek, WV 25035, USA
		Date	: 06/02/2025	Loc Comment	: Ground elevation and coordinates extracted from 2018 LIDAR

Elevation(NAVD88)	Depth (ft)	Lithologic Column	Lithological Description	Recovery (Inches)	Water	Notes
615.0			0.00 - 11.30: Fill: Fly ash, moist.			
614.0	1					
613.0	2			25		
612.0	3					
611.0	4					
610.0	5					
609.0	6					
608.0	7			36		
607.0	8					
606.0	9					

EHS Support, LLC

Monitoring Well Log - Borehole

SB-11

Easting (ft)	: 457377.52	Drill Rig	: Geoprobe 3230DT	Job Number	: LLC.06149.0000
Northing (ft)	: 4227889.10	Driller Supplier	: Enviroprobe Integrated Solutions	Client	: American Electric Power (AEP)
Ground Elevation	: 615.13 (Ft)	Logged By	: Greg Sowder	Project	: Cabin Creek
Total Depth	: 30 Ft BGL	Reviewed By	: Andrew Fowler	Location	: 15225 MacCorkle Ave SE, Cabin Creek, WV 25035, USA
		Date	: 06/02/2025	Loc Comment	: Ground elevation and coordinates extracted from 2018 LIDAR

Elevation(NAVD88)	Depth (ft)	Lithologic Column	Lithological Description	Recovery (Inches)	Water	Notes
605.0			0.00 - 11.30: Fill: Fly ash, moist. (continued)			
604.0	11					
603.83			11.30 - 17.30: Wet.			
603.0	12			55		
602.0	13					
601.0	14					
600.0	15					
599.0	16					
598.0	17					
597.83			17.30 - 20.00: Alluvium: SILT (ML), brown, moist.	60		
597.0	18					
596.0	19					

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Monitoring Well Log - Borehole

SB-11

Easting (ft)	: 457377.52	Drill Rig	: Geoprobe 3230DT	Job Number	: LLC.06149.0000
Northing (ft)	: 4227889.10	Driller Supplier	: Enviroprobe Integrated Solutions	Client	: American Electric Power (AEP)
Ground Elevation	: 615.13 (Ft)	Logged By	: Greg Sowder	Project	: Cabin Creek
Total Depth	: 30 Ft BGL	Reviewed By	: Andrew Fowler	Location	: 15225 MacCorkle Ave SE, Cabin Creek, WV 25035, USA
		Date	: 06/02/2025	Loc Comment	: Ground elevation and coordinates extracted from 2018 LIDAR

Elevation(NAVD88)	Depth (ft)	Lithologic Column	Lithological Description	Recovery (Inches)	Water	Notes
595.0			20.00 - 30.00: Alluvium: SILT (ML), brown, wet.			
594.0	21					
593.0	22			60		
592.0	23					
591.0	24					
590.0	25					
589.0	26					
588.0	27					
587.0	28					
586.0	29					
			SB - 11 Terminated at 30 Ft			

EHS Support, LLC

Monitoring Well Log - Borehole

SB-12

Easting (ft)	: 457461.58	Drill Rig	: Geoprobe 3230DT	Job Number	: LLC.06149.0000
Northing (ft)	: 4227905.53	Driller Supplier	: Enviroprobe Integrated Solutions	Client	: American Electric Power (AEP)
Ground Elevation	: 617.47 (Ft)	Logged By	: Greg Sowder	Project	: Cabin Creek
Total Depth	: 30 Ft BGL	Reviewed By	: Andrew Fowler	Location	: 15225 MacCorkle Ave SE, Cabin Creek, WV 25035, USA
		Date	: 06/11/2025	Loc Comment	: Ground elevation and coordinates extracted from 2018 LIDAR

Elevation(NAVD88)	Depth (ft)	Lithologic Column	Lithological Description	Recovery (Inches)	Water	Notes
617.0			0.00 - 0.60: Fill: CLAY (CL), gray and brown, wood.			
616.87			0.60 - 12.40: Fill: Fly ash, moist.			
	1					
616.0						
	2					
615.0				30		
	3					
614.0						
	4					
613.0						
	5					
612.0						
	6					
611.0						
	7					
610.0				23		
	8					
609.0						
	9					
608.0						

EHS Support, LLC

Monitoring Well Log - Borehole

SB-12

Easting (ft)	: 457461.58	Drill Rig	: Geoprobe 3230DT	Job Number	: LLC.06149.0000
Northing (ft)	: 4227905.53	Driller Supplier	: Enviroprobe Integrated Solutions	Client	: American Electric Power (AEP)
Ground Elevation	: 617.47 (Ft)	Logged By	: Greg Sowder	Project	: Cabin Creek
Total Depth	: 30 Ft BGL	Reviewed By	: Andrew Fowler	Location	: 15225 MacCorkle Ave SE, Cabin Creek, WV 25035, USA
		Date	: 06/11/2025	Loc Comment	: Ground elevation and coordinates extracted from 2018 LIDAR

Elevation(NAVD88)	Depth (ft)	Lithologic Column	Lithological Description	Recovery (Inches)	Water	Notes
607.0			0.60 - 12.40: Fill: Fly ash, moist. (continued)			
	11					
606.0						
	12					
605.07					▼	
605.0			12.40 - 22.90: Fill: Fly ash, wet.	38		
	13					
604.0						
	14					
603.0						
	15					
602.0						
	16					
601.0						
	17					
600.0				38		
	18					
599.0						
	19					
598.0						

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EHS Support, LLC

Monitoring Well Log - Borehole

SB-12

Easting (ft)	: 457461.58	Drill Rig	: Geoprobe 3230DT	Job Number	: LLC.06149.0000
Northing (ft)	: 4227905.53	Driller Supplier	: Enviroprobe Integrated Solutions	Client	: American Electric Power (AEP)
Ground Elevation	: 617.47 (Ft)	Logged By	: Greg Sowder	Project	: Cabin Creek
Total Depth	: 30 Ft BGL	Reviewed By	: Andrew Fowler	Location	: 15225 MacCorkle Ave SE, Cabin Creek, WV 25035, USA
		Date	: 06/11/2025	Loc Comment	: Ground elevation and coordinates extracted from 2018 LIDAR

Elevation(NAVD88)	Depth (ft)	Lithologic Column	Lithological Description	Recovery (Inches)	Water	Notes
			12.40 - 22.90: Fill: Fly ash, wet. (continued)			
597.0						
	21					
596.0						
	22					
595.0				36		
594.57						
	23		22.90 - 30.00: Alluvium: SILT (ML), brown.			
594.0						
	24					
593.0						
	25					
592.0						
	26					
591.0						
	27					
590.0				55		
	28					
589.0						
	29					
588.0						
			SB - 12 Terminated at 30 Ft			

EHS Support, LLC

Monitoring Well Log - Borehole

SB-13

Easting (ft)	: 457549.47	Drill Rig	: Geoprobe 3230DT	Job Number	: LLC.06149.0000
Northing (ft)	: 4227923.74	Driller Supplier	: Enviroprobe Integrated Solutions	Client	: American Electric Power (AEP)
Ground Elevation	: 618.43 (Ft)	Logged By	: Greg Sowder	Project	: Cabin Creek
Total Depth	: 30 Ft BGL	Reviewed By	: Andrew Fowler	Location	: 15225 MacCorkle Ave SE, Cabin Creek, WV 25035, USA
		Date	: 06/11/2025	Loc Comment	: Ground elevation and coordinates extracted from 2018 LIDAR

Elevation(NAVD88)	Depth (ft)	Lithologic Column	Lithological Description	Recovery (Inches)	Water	Notes
618.0 617.93			0.00 - 0.50: Fill: CLAY (CL), brown, wood.			
			0.50 - 13.80: Fill: Fly ash, moist.			
617.0	1					
616.0	2			37		
615.0	3					
614.0	4					
613.0	5					
612.0	6					
611.0	7			28		
610.0	8					
609.0	9					

EHS Support, LLC

Monitoring Well Log - Borehole

SB-13

Easting (ft)	: 457549.47	Drill Rig	: Geoprobe 3230DT	Job Number	: LLC.06149.0000
Northing (ft)	: 4227923.74	Driller Supplier	: Enviroprobe Integrated Solutions	Client	: American Electric Power (AEP)
Ground Elevation	: 618.43 (Ft)	Logged By	: Greg Sowder	Project	: Cabin Creek
Total Depth	: 30 Ft BGL	Reviewed By	: Andrew Fowler	Location	: 15225 MacCorkle Ave SE, Cabin Creek, WV 25035, USA
		Date	: 06/11/2025	Loc Comment	: Ground elevation and coordinates extracted from 2018 LIDAR

Elevation(NAVD88)	Depth (ft)	Lithologic Column	Lithological Description	Recovery (Inches)	Water	Notes
608.0			0.50 - 13.80: Fill: Fly ash, moist. (continued)			
	11					
607.0						
	12					
606.0				33		
	13					
605.0						
604.63					▼	
	14		13.80 - 19.60: Wet.			
604.0						
	15					
603.0						
	16					
602.0						
	17					
601.0				45		
	18					
600.0						
	19					
599.0						
			19.60 - 25.00: Alluvium: SILT (ML), gray, wet.			

EHS Support, LLC

Monitoring Well Log - Borehole

SB-13

Easting (ft)	: 457549.47	Drill Rig	: Geoprobe 3230DT	Job Number	: LLC.06149.0000
Northing (ft)	: 4227923.74	Driller Supplier	: Enviroprobe Integrated Solutions	Client	: American Electric Power (AEP)
Ground Elevation	: 618.43 (Ft)	Logged By	: Greg Sowder	Project	: Cabin Creek
Total Depth	: 30 Ft BGL	Reviewed By	: Andrew Fowler	Location	: 15225 MacCorkle Ave SE, Cabin Creek, WV 25035, USA
		Date	: 06/11/2025	Loc Comment	: Ground elevation and coordinates extracted from 2018 LIDAR

Elevation(NAVD88)	Depth (ft)	Lithologic Column	Lithological Description	Recovery (Inches)	Water	Notes
			19.60 - 25.00: Alluvium: SILT (ML), gray, wet. (continued)			
598.0						
	21					
597.0						
	22					
596.0				38		
	23					
595.0						
	24					
594.0						
593.43	25		25.00 - 30.00: Alluvium: SILT (ML), brown, wet.			
593.0						
	26					
592.0						
	27					
591.0				60		
	28					
590.0						
	29					
589.0						
			SB - 13 Terminated at 30 Ft			

EHS Support, LLC

Monitoring Well Log - Borehole

SB-14

Easting (ft)	: 457633.09	Drill Rig	: Geoprobe 3230DT	Job Number	: LLC.06149.0000
Northing (ft)	: 4227941.61	Driller Supplier	: Enviroprobe Integrated Solutions	Client	: American Electric Power (AEP)
Ground Elevation	: 618.87 (Ft)	Logged By	: Greg Sowder	Project	: Cabin Creek
Total Depth	: 30 Ft BGL	Reviewed By	: Andrew Fowler	Location	: 15225 MacCorkle Ave SE, Cabin Creek, WV 25035, USA
		Date	: 06/11/2025	Loc Comment	: Ground elevation and coordinates extracted from 2018 LIDAR

Elevation(NAVD88)	Depth (ft)	Lithologic Column	Lithological Description	Recovery (Inches)	Water	Notes
618.07			0.00 - 0.80: Fill: CLAY (CL), brown, wood.			
618.0	1		0.80 - 13.80: Fill: Fly ash, moist.			
617.0	2			38		
616.0	3					
615.0	4					
614.0	5					
613.0	6			31		
612.0	7					
611.0	8					
610.0	9					
609.0						

EHS Support, LLC

Monitoring Well Log - Borehole

SB-14

Easting (ft)	: 457633.09	Drill Rig	: Geoprobe 3230DT	Job Number	: LLC.06149.0000
Northing (ft)	: 4227941.61	Driller Supplier	: Enviroprobe Integrated Solutions	Client	: American Electric Power (AEP)
Ground Elevation	: 618.87 (Ft)	Logged By	: Greg Sowder	Project	: Cabin Creek
Total Depth	: 30 Ft BGL	Reviewed By	: Andrew Fowler	Location	: 15225 MacCorkle Ave SE, Cabin Creek, WV 25035, USA
		Date	: 06/11/2025	Loc Comment	: Ground elevation and coordinates extracted from 2018 LIDAR

Elevation(NAVD88)	Depth (ft)	Lithologic Column	Lithological Description	Recovery (Inches)	Water	Notes
			0.80 - 13.80: Fill: Fly ash, moist. (continued)			
608.0	11					
607.0	12			30		
606.0	13					
605.07					▼	
605.0	14		13.80 - 20.00: Wet.			
604.0	15					
603.0	16					
602.0	17			41		
601.0	18					
600.0	19					
599.0						

EHS Support

EHS Support, LLC

Monitoring Well Log - Borehole

SB-14

Easting (ft)	: 457633.09	Drill Rig	: Geoprobe 3230DT	Job Number	: LLC.06149.0000
Northing (ft)	: 4227941.61	Driller Supplier	: Enviroprobe Integrated Solutions	Client	: American Electric Power (AEP)
Ground Elevation	: 618.87 (Ft)	Logged By	: Greg Sowder	Project	: Cabin Creek
Total Depth	: 30 Ft BGL	Reviewed By	: Andrew Fowler	Location	: 15225 MacCorkle Ave SE, Cabin Creek, WV 25035, USA
		Date	: 06/11/2025	Loc Comment	: Ground elevation and coordinates extracted from 2018 LIDAR

Elevation(NAVD88)	Depth (ft)	Lithologic Column	Lithological Description	Recovery (Inches)	Water	Notes
598.0	21		20.00 - 25.00: Alluvium: SAND (SP), brown, wet, coal lenses at 23.2, 23.6, 23.9, and 24.1 ft.			
597.0	22					
				38		
596.0	23					
595.0	24					
594.0						
593.87	25		25.00 - 30.00: Alluvium: SILT (ML), brown, wet.			
593.0	26					
592.0	27					
				60		
591.0	28					
590.0	29					
589.0			SB - 14 Terminated at 30 Ft			

EHS Support, LLC

Monitoring Well Log - Borehole

SB-15

Easting (ft)	: 457712.94	Drill Rig	: Geoprobe 3230DT	Job Number	: LLC.06149.0000
Northing (ft)	: 4227957.29	Driller Supplier	: Enviroprobe Integrated Solutions	Client	: American Electric Power (AEP)
Ground Elevation	: 598.38 (Ft)	Logged By	: Greg Sowder	Project	: Cabin Creek
Total Depth	: 35 Ft BGL	Reviewed By	: Andrew Fowler	Location	: 15225 MacCorkle Ave SE, Cabin Creek, WV 25035, USA
		Date	: 06/11/2025	Loc Comment	: Ground elevation and coordinates extracted from 2018 LIDAR

Elevation(NAVD88)	Depth (ft)	Lithologic Column	Lithological Description	Recovery (Inches)	Water	Notes
598.08			0.00-0.30: Fill: CLAY (CL), brown, moist.			
598.0 / 597.88			0.30-0.50: Fill: Bottom ash, moist.			
			0.50-8.00: Fill: Fly ash, moist.			
	1					
597.0						
	2					
596.0				28		
	3					
595.0						
	4					
594.0						
	5					
593.0						
	6					
592.0						
	7					
591.0				36		
590.38	8		8.00-10.00: Fill: Bottom ash, moist.			
590.0						
	9					
589.0						

EHS Support, LLC

Monitoring Well Log - Borehole

SB-15

Easting (ft)	: 457712.94	Drill Rig	: Geoprobe 3230DT	Job Number	: LLC.06149.0000
Northing (ft)	: 4227957.29	Driller Supplier	: Enviroprobe Integrated Solutions	Client	: American Electric Power (AEP)
Ground Elevation	: 598.38 (Ft)	Logged By	: Greg Sowder	Project	: Cabin Creek
Total Depth	: 35 Ft BGL	Reviewed By	: Andrew Fowler	Location	: 15225 MacCorkle Ave SE, Cabin Creek, WV 25035, USA
		Date	: 06/11/2025	Loc Comment	: Ground elevation and coordinates extracted from 2018 LIDAR

Elevation(NAVD88)	Depth (ft)	Lithologic Column	Lithological Description	Recovery (Inches)	Water	Notes
588.0			10.00-13.60: Alluvium: SAND (SP), brown, fine grained, moist.			
	11					
587.0						
	12					
586.0				36		
	13					
585.0						
584.78			13.60-25.00: Alluvium: SILT (ML), reddish brown, moist.			
	14					
584.0						
	15					
583.0						
	16					
582.0						
	17					
581.0				29		
	18					
580.0						
	19					
579.0						

EHS Support, LLC

Monitoring Well Log - Borehole

SB-15

Easting (ft)	: 457712.94	Drill Rig	: Geoprobe 3230DT	Job Number	: LLC.06149.0000
Northing (ft)	: 4227957.29	Driller Supplier	: Enviroprobe Integrated Solutions	Client	: American Electric Power (AEP)
Ground Elevation	: 598.38 (Ft)	Logged By	: Greg Sowder	Project	: Cabin Creek
Total Depth	: 35 Ft BGL	Reviewed By	: Andrew Fowler	Location	: 15225 MacCorkle Ave SE, Cabin Creek, WV 25035, USA
		Date	: 06/11/2025	Loc Comment	: Ground elevation and coordinates extracted from 2018 LIDAR

Elevation(NAVD88)	Depth (ft)	Lithologic Column	Lithological Description	Recovery (Inches)	Water	Notes
578.0			13.60-25.00: Alluvium: SILT (ML), reddish brown, moist. (continued)			
	21					
577.0						
	22					
576.0				34		
	23					
575.0						
	24					
574.0						
573.38	25		25.00-29.80: Alluvium: SILT (ML), gray, moist.			
573.0						
	26					
572.0						
	27					
571.0				42		
	28					
570.0						
	29					
569.0						
568.58			29.80-30.00: Wet.		▼	

EHS Support

EHS Support, LLC

Monitoring Well Log - Borehole

SB-15

Easting (ft)	: 457712.94	Drill Rig	: Geoprobe 3230DT	Job Number	: LLC.06149.0000
Northing (ft)	: 4227957.29	Driller Supplier	: Enviroprobe Integrated Solutions	Client	: American Electric Power (AEP)
Ground Elevation	: 598.38 (Ft)	Logged By	: Greg Sowder	Project	: Cabin Creek
Total Depth	: 35 Ft BGL	Reviewed By	: Andrew Fowler	Location	: 15225 MacCorkle Ave SE, Cabin Creek, WV 25035, USA
		Date	: 06/11/2025	Loc Comment	: Ground elevation and coordinates extracted from 2018 LIDAR

Elevation(NAVD88)	Depth (ft)	Lithologic Column	Lithological Description	Recovery (Inches)	Water	Notes
568.0			30.00-35.00: Alluvium: SILT (ML), brown, wet.			
	31					
567.0						
	32					
566.0				60		
	33					
565.0						
	34					
564.0						
			SB-15 Terminated at 35 Ft			

EHS Support, LLC

Monitoring Well Log - Borehole

SB-16

Easting (ft)	: 457281.37	Drill Rig	: Geoprobe 3126GT	Job Number	: LLC.06149.0000
Northing (ft)	: 4227831.75	Driller Supplier	: Enviroprobe Integrated Solutions	Client	: American Electric Power (AEP)
Ground Elevation	: 601.45 (Ft)	Logged By	: Greg Sowder	Project	: Cabin Creek
Total Depth	: 44 Ft BGL	Reviewed By	: Andrew Fowler	Location	: 15225 MacCorkle Ave SE, Cabin Creek, WV 25035, USA
		Date	: 06/05/2025	Loc Comment	: Ground elevation and coordinates extracted from 2018 LIDAR

Elevation(NAVD88)	Depth (ft)	Lithologic Column	Lithological Description	Recovery (Inches)	Water	Notes
601.0			0.00 - 3.00: Fill: Bottom ash, moist.			
	1					
600.0						
	2			41		
599.0						
598.45	3		3.00 - 4.00: Fill: Fly ash, moist.			
598.0						
597.45	4		4.00 - 4.75: Fill: SAND (SP), brown, moist.			
597.0						
596.7			4.75 - 6.00: Fill: Bottom ash, moist.			
	5					
596.0						
595.45	6		6.00 - 9.90: Fill: Fly ash, moist.			
595.0				60		
	7					
594.0						
	8					
593.0						
	9					
592.0				49		

EHS Support, LLC

Monitoring Well Log - Borehole

SB-16

Easting (ft)	: 457281.37	Drill Rig	: Geoprobe 3126GT	Job Number	: LLC.06149.0000
Northing (ft)	: 4227831.75	Driller Supplier	: Enviroprobe Integrated Solutions	Client	: American Electric Power (AEP)
Ground Elevation	: 601.45 (Ft)	Logged By	: Greg Sowder	Project	: Cabin Creek
Total Depth	: 44 Ft BGL	Reviewed By	: Andrew Fowler	Location	: 15225 MacCorkle Ave SE, Cabin Creek, WV 25035, USA
		Date	: 06/05/2025	Loc Comment	: Ground elevation and coordinates extracted from 2018 LIDAR

Elevation(NAVD88)	Depth (ft)	Lithologic Column	Lithological Description	Recovery (Inches)	Water	Notes
591.0			9.90 - 13.60: Fill: Bottom ash, moist. (continued)			
	11					
590.0						
	12			49		
589.0						
	13					
588.0						
587.85			13.60 - 17.80: Alluvium: SILT (ML), gray, moist.			
	14					
587.0						
	15					
586.0						
	16					
585.0				49		
	17					
584.0						
	18		17.80 - 19.00: Alluvium: SILT (ML), reddish brown, moist.			
583.0						
582.45	19		19.00 - 24.00: Alluvium SILT (ML), gray, moist.			
582.0				52		

EHS Support, LLC

Monitoring Well Log - Borehole

SB-16

Easting (ft)	: 457281.37	Drill Rig	: Geoprobe 3126GT	Job Number	: LLC.06149.0000
Northing (ft)	: 4227831.75	Driller Supplier	: Enviroprobe Integrated Solutions	Client	: American Electric Power (AEP)
Ground Elevation	: 601.45 (Ft)	Logged By	: Greg Sowder	Project	: Cabin Creek
Total Depth	: 44 Ft BGL	Reviewed By	: Andrew Fowler	Location	: 15225 MacCorkle Ave SE, Cabin Creek, WV 25035, USA
		Date	: 06/05/2025	Loc Comment	: Ground elevation and coordinates extracted from 2018 LIDAR

Elevation(NAVD88)	Depth (ft)	Lithologic Column	Lithological Description	Recovery (Inches)	Water	Notes
			19.00 - 24.00: Alluvium SILT (ML), gray, moist. (continued)			
581.0						
	21					
580.0						
	22			52		
579.0						
	23					
578.0						
577.45	24		24.00 - 29.00: Alluvium: SILT (ML), brownish gray, moist.			
577.0						
	25					
576.0						
	26					
575.0				54		
	27					
574.0						
	28					
573.0						
572.45	29		29.00 - 34.50: Alluvium: SILT (ML), gray, wet.		▼	
572.0				60		

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EHS Support, LLC

Monitoring Well Log - Borehole

SB-16

Easting (ft)	: 457281.37	Drill Rig	: Geoprobe 3126GT	Job Number	: LLC.06149.0000
Northing (ft)	: 4227831.75	Driller Supplier	: Enviroprobe Integrated Solutions	Client	: American Electric Power (AEP)
Ground Elevation	: 601.45 (Ft)	Logged By	: Greg Sowder	Project	: Cabin Creek
Total Depth	: 44 Ft BGL	Reviewed By	: Andrew Fowler	Location	: 15225 MacCorkle Ave SE, Cabin Creek, WV 25035, USA
		Date	: 06/05/2025	Loc Comment	: Ground elevation and coordinates extracted from 2018 LIDAR

Elevation(NAVD88)	Depth (ft)	Lithologic Column	Lithological Description	Recovery (Inches)	Water	Notes
571.0			29.00 - 34.50: Alluvium: SILT (ML), gray, wet. (continued)			
	31					
570.0						
	32			60		
569.0						
	33					
568.0						
	34					
567.0 566.95			34.50 - 39.00: Alluvium: SILT with some sand (ML), dark gray, wet, sandstone fragments.			
	35					
566.0						
	36					
565.0				60		
	37					
564.0						
	38					
563.0						
562.45	39		39.00 - 42.10: Alluvium: SILT with some sand (ML), dark gray, gravel lenses throughout, wet.			
562.0				48		

EHS Support, LLC

Monitoring Well Log - Borehole

SB-16

Easting (ft)	: 457281.37	Drill Rig	: Geoprobe 3126GT	Job Number	: LLC.06149.0000
Northing (ft)	: 4227831.75	Driller Supplier	: Enviroprobe Integrated Solutions	Client	: American Electric Power (AEP)
Ground Elevation	: 601.45 (Ft)	Logged By	: Greg Sowder	Project	: Cabin Creek
Total Depth	: 44 Ft BGL	Reviewed By	: Andrew Fowler	Location	: 15225 MacCorkle Ave SE, Cabin Creek, WV 25035, USA
		Date	: 06/05/2025	Loc Comment	: Ground elevation and coordinates extracted from 2018 LIDAR

Elevation(NAVD88)	Depth (ft)	Lithologic Column	Lithological Description	Recovery (Inches)	Water	Notes
561.0			39.00 - 42.10: Alluvium: SILT with some sand (ML), dark gray, gravel lenses throughout, wet. (continued)			
	41					
560.0						
559.35	42			48		
			42.10 - 44.00: GRAVEL (GW), brown, wet, with cobbles.			
559.0						
	43					
558.0						
			SB - 16 Terminated at 44 Ft			

EHS Support, LLC

Monitoring Well Log - Borehole

SB-17

Easting (ft)	: 457325.90	Drill Rig	: Geoprobe 3126GT	Job Number	: LLC.06149.0000
Northing (ft)	: 4227816.92	Driller Supplier	: Enviroprobe Integrated Solutions	Client	: American Electric Power (AEP)
Ground Elevation	: 618.54 (Ft)	Logged By	: Greg Sowder	Project	: Cabin Creek
Total Depth	: 39 Ft BGL	Reviewed By	: Andrew Fowler	Location	: 15225 MacCorkle Ave SE, Cabin Creek, WV 25035, USA
		Date	: 06/05/2025	Loc Comment	: Ground elevation and coordinates extracted from 2018 LIDAR

Elevation(NAVD88)	Depth (ft)	Lithologic Column	Lithological Description	Recovery (Inches)	Water	Notes
618.0			0.00 - 6.80: Fill: Bottom ash, moist.			
	1					
617.0						
	2			45		
616.0						
	3					
615.0						
	4					
614.0						
	5					
613.0						
	6					
612.0				49		
611.74			6.80 - 12.20: Fill: Fly ash, moist.			
	7					
611.0						
	8					
610.0						
	9					
609.0				54		

EHS Support, LLC

Monitoring Well Log - Borehole

SB-17

Easting (ft)	: 457325.90	Drill Rig	: Geoprobe 3126GT	Job Number	: LLC.06149.0000
Northing (ft)	: 4227816.92	Driller Supplier	: Enviroprobe Integrated Solutions	Client	: American Electric Power (AEP)
Ground Elevation	: 618.54 (Ft)	Logged By	: Greg Sowder	Project	: Cabin Creek
Total Depth	: 39 Ft BGL	Reviewed By	: Andrew Fowler	Location	: 15225 MacCorkle Ave SE, Cabin Creek, WV 25035, USA
		Date	: 06/05/2025	Loc Comment	: Ground elevation and coordinates extracted from 2018 LIDAR

Elevation(NAVD88)	Depth (ft)	Lithologic Column	Lithological Description	Recovery (Inches)	Water	Notes
608.0			6.80 - 12.20: Fill: Fly ash, moist. (continued)			
	11					
607.0						
	12			54		
606.34			12.20 - 19.00: Alluvium: SILT with little fine grained sand (ML), brown, moist.			
606.0						
	13					
605.0						
	14					
604.0						
	15					
603.0						
	16					
602.0				56		
	17					
601.0						
	18					
600.0						
599.54	19		19.00 - 29.00: Alluvium: SILT with little fine grained sand (ML), gray, moist.			
599.0				45		

EHS Support, LLC

Monitoring Well Log - Borehole

SB-17

Easting (ft)	: 457325.90	Drill Rig	: Geoprobe 3126GT	Job Number	: LLC.06149.0000
Northing (ft)	: 4227816.92	Driller Supplier	: Enviroprobe Integrated Solutions	Client	: American Electric Power (AEP)
Ground Elevation	: 618.54 (Ft)	Logged By	: Greg Sowder	Project	: Cabin Creek
Total Depth	: 39 Ft BGL	Reviewed By	: Andrew Fowler	Location	: 15225 MacCorkle Ave SE, Cabin Creek, WV 25035, USA
		Date	: 06/05/2025	Loc Comment	: Ground elevation and coordinates extracted from 2018 LIDAR

Elevation(NAVD88)	Depth (ft)	Lithologic Column	Lithological Description	Recovery (Inches)	Water	Notes
			19.00 - 29.00: Alluvium: SILT with little fine grained sand (ML), gray, moist. (continued)			
598.0						
	21					
597.0						
	22			45		
596.0						
	23					
595.0						
	24					
594.0						
	25					
593.0						
	26					
592.0				54		
	27					
591.0						
	28					
590.0						
589.54	29		29.00 - 30.20: Dark gray, wet.		▼	
589.0				60		

EHS Support, LLC

Monitoring Well Log - Borehole

SB-17

Easting (ft)	: 457325.90	Drill Rig	: Geoprobe 3126GT	Job Number	: LLC.06149.0000
Northing (ft)	: 4227816.92	Driller Supplier	: Enviroprobe Integrated Solutions	Client	: American Electric Power (AEP)
Ground Elevation	: 618.54 (Ft)	Logged By	: Greg Sowder	Project	: Cabin Creek
Total Depth	: 39 Ft BGL	Reviewed By	: Andrew Fowler	Location	: 15225 MacCorkle Ave SE, Cabin Creek, WV 25035, USA
		Date	: 06/05/2025	Loc Comment	: Ground elevation and coordinates extracted from 2018 LIDAR

Elevation(NAVD88)	Depth (ft)	Lithologic Column	Lithological Description	Recovery (Inches)	Water	Notes
			29.00 - 30.20: Dark gray, wet. (continued)			
588.0			30.20 - 32.70: Gray.			
	31					
587.0						
	32			60		
586.0						
			32.70 - 34.00: Brown.			
	33					
585.0						
584.54	34		34.00 - 35.80: Alluvium: SILT with little fine grained sand (ML), brown, wet.			
584.0						
	35					
583.0						
582.74			35.80 - 39.00: Alluvium: SILT with little fine grained sand (ML), reddish brown, wet.			
	36					
582.0				54		
	37					
581.0						
	38					
580.0						
			SB - 17 Terminated at 39 Ft			

EHS Support, LLC

Monitoring Well Log - Borehole

SB-17A

Easting (ft)	: 457316.14	Drill Rig	: Geoprobe 3126GT	Job Number	: LLC.06149.0000
Northing (ft)	: 4227805.15	Driller Supplier	: Enviroprobe Integrated Solutions	Client	: American Electric Power (AEP)
Ground Elevation	: 615.83 (Ft)	Logged By	: Greg Sowder	Project	: Cabin Creek
Total Depth	: 29 Ft BGL	Reviewed By	: Andrew Fowler	Location	: 15225 MacCorkle Ave SE, Cabin Creek, WV 25035, USA
		Date	: 06/05/2025	Loc Comment	: Ground elevation and coordinates extracted from 2018 LIDAR

Elevation(NAVD88)	Depth (ft)	Lithologic Column	Lithological Description	Recovery (Inches)	Water	Notes
615.0	1		0.00 - 2.70: Fill: Fly ash, moist.			
614.0	2			43		
613.13						
613.0	3		2.70 - 14.00: Alluvium: SILT (ML), brown, moist.			
612.0	4					
611.0	5					
610.0	6			47		
609.0	7					
608.0	8					
607.0	9					
606.0				49		

EHS Support, LLC

Monitoring Well Log - Borehole

SB-17A

Easting (ft)	: 457316.14	Drill Rig	: Geoprobe 3126GT	Job Number	: LLC.06149.0000
Northing (ft)	: 4227805.15	Driller Supplier	: Enviroprobe Integrated Solutions	Client	: American Electric Power (AEP)
Ground Elevation	: 615.83 (Ft)	Logged By	: Greg Sowder	Project	: Cabin Creek
Total Depth	: 29 Ft BGL	Reviewed By	: Andrew Fowler	Location	: 15225 MacCorkle Ave SE, Cabin Creek, WV 25035, USA
		Date	: 06/05/2025	Loc Comment	: Ground elevation and coordinates extracted from 2018 LIDAR

Elevation(NAVD88)	Depth (ft)	Lithologic Column	Lithological Description	Recovery (Inches)	Water	Notes
605.0	11		2.70 - 14.00: Alluvium: SILT (ML), brown, moist. (continued)			
604.0	12			49		
603.0	13					
602.0	14					
601.83			14.00 - 16.30: Alluvium: SILT (ML), loose, gray, moist.			
601.0	15					
600.0	16					
			16.30 - 18.20: Dense.	49		
599.0	17					
598.0	18					
597.63			18.20 - 18.80: Reddish brown, wet.			
597.0	19		18.80 - 19.80: Wet.			
				60		
596.0			19.80 - 21.20: Loose.			

EHS Support, LLC

Monitoring Well Log - Borehole

SB-17A

Easting (ft)	: 457316.14	Drill Rig	: Geoprobe 3126GT	Job Number	: LLC.06149.0000
Northing (ft)	: 4227805.15	Driller Supplier	: Enviroprobe Integrated Solutions	Client	: American Electric Power (AEP)
Ground Elevation	: 615.83 (Ft)	Logged By	: Greg Sowder	Project	: Cabin Creek
Total Depth	: 29 Ft BGL	Reviewed By	: Andrew Fowler	Location	: 15225 MacCorkle Ave SE, Cabin Creek, WV 25035, USA
		Date	: 06/05/2025	Loc Comment	: Ground elevation and coordinates extracted from 2018 LIDAR

Elevation(NAVD88)	Depth (ft)	Lithologic Column	Lithological Description	Recovery (Inches)	Water	Notes
595.0	21		19.80 - 21.20: Loose. (continued)			
594.63			21.20 - 29.00: Alluvium: SILT (ML), loose, reddish brown, wet.			
594.0	22			60		
593.0	23					
592.0	24					
591.0	25					
590.0	26			60		
589.0	27					
588.0	28					
587.0						
			SB - 17A Terminated at 29 Ft			

EHS Support, LLC

Monitoring Well Log - Borehole

SB-18

Easting (ft)	: 457402.53	Drill Rig	: Geoprobe 3126GT	Job Number	: LLC.06149.0000
Northing (ft)	: 4227835.31	Driller Supplier	: Enviroprobe Integrated Solutions	Client	: American Electric Power (AEP)
Ground Elevation	: 619.23 (Ft)	Logged By	: Greg Sowder	Project	: Cabin Creek
Total Depth	: 34 Ft BGL	Reviewed By	: Andrew Fowler	Location	: 15225 MacCorkle Ave SE, Cabin Creek, WV 25035, USA
		Date	: 06/05/2025	Loc Comment	: Ground elevation and coordinates extracted from 2018 LIDAR

Elevation(NAVD88)	Depth (ft)	Lithologic Column	Lithological Description	Recovery (Inches)	Water	Notes
619.0			0.00 - 0.30: Fill: Mulch and bottom ash mixture, moist.			
			0.30 - 16.50: Fill: Fly ash, moist.			
618.0	1					
617.0	2			36		
616.0	3					
615.0	4					
614.0	5					
613.0	6			48		
612.0	7					
611.0	8					
610.0	9			42		

EHS Support, LLC

Monitoring Well Log - Borehole

SB-18

Easting (ft)	: 457402.53	Drill Rig	: Geoprobe 3126GT	Job Number	: LLC.06149.0000
Northing (ft)	: 4227835.31	Driller Supplier	: Enviroprobe Integrated Solutions	Client	: American Electric Power (AEP)
Ground Elevation	: 619.23 (Ft)	Logged By	: Greg Sowder	Project	: Cabin Creek
Total Depth	: 34 Ft BGL	Reviewed By	: Andrew Fowler	Location	: 15225 MacCorkle Ave SE, Cabin Creek, WV 25035, USA
		Date	: 06/05/2025	Loc Comment	: Ground elevation and coordinates extracted from 2018 LIDAR

Elevation(NAVD88)	Depth (ft)	Lithologic Column	Lithological Description	Recovery (Inches)	Water	Notes
609.0			0.30 - 16.50: Fill: Fly ash, moist. (continued)			
	11					
608.0						
	12			42		
607.0						
	13					
606.0						
	14					
605.0						
	15					
604.0						
	16					
603.0						
602.73			16.50 - 26.70: Wet.	44	▼	
	17					
602.0						
	18					
601.0						
	19					
600.0				60		

EHS Support, LLC

Monitoring Well Log - Borehole

SB-18

Easting (ft)	: 457402.53	Drill Rig	: Geoprobe 3126GT	Job Number	: LLC.06149.0000
Northing (ft)	: 4227835.31	Driller Supplier	: Enviroprobe Integrated Solutions	Client	: American Electric Power (AEP)
Ground Elevation	: 619.23 (Ft)	Logged By	: Greg Sowder	Project	: Cabin Creek
Total Depth	: 34 Ft BGL	Reviewed By	: Andrew Fowler	Location	: 15225 MacCorkle Ave SE, Cabin Creek, WV 25035, USA
		Date	: 06/05/2025	Loc Comment	: Ground elevation and coordinates extracted from 2018 LIDAR

Elevation(NAVD88)	Depth (ft)	Lithologic Column	Lithological Description	Recovery (Inches)	Water	Notes
599.0			16.50 - 26.70: Wet. (continued)			
	21					
598.0						
	22			60		
597.0						
	23					
596.0						
	24					
595.0						
	25					
594.0						
	26					
593.0				47		
592.53			26.70 - 28.20: Alluvium: SILT with some clay (ML), loose, gray, wet.			
	27					
592.0						
	28					
591.03			28.20 - 29.00: Moist.			
591.0						
590.23	29		29.00 - 34.00: Alluvium: SILT with some clay (ML), loose, brown, wet.			
590.0				54		

EHS Support, LLC

Monitoring Well Log - Borehole

SB-18

Easting (ft)	: 457402.53	Drill Rig	: Geoprobe 3126GT	Job Number	: LLC.06149.0000
Northing (ft)	: 4227835.31	Driller Supplier	: Enviroprobe Integrated Solutions	Client	: American Electric Power (AEP)
Ground Elevation	: 619.23 (Ft)	Logged By	: Greg Sowder	Project	: Cabin Creek
Total Depth	: 34 Ft BGL	Reviewed By	: Andrew Fowler	Location	: 15225 MacCorkle Ave SE, Cabin Creek, WV 25035, USA
		Date	: 06/05/2025	Loc Comment	: Ground elevation and coordinates extracted from 2018 LIDAR

Elevation(NAVD88)	Depth (ft)	Lithologic Column	Lithological Description	Recovery (Inches)	Water	Notes
589.0			29.00 - 34.00: Alluvium: SILT with some clay (ML), loose, brown, wet. (continued)			
588.0	31					
587.0	32			54		
586.0	33					
			SB - 18 Terminated at 34 Ft			

EHS Support, LLC

Monitoring Well Log - Borehole

SB-19

Easting (ft)	: 457492.89	Drill Rig	: Geoprobe 3126GT	Job Number	: LLC.06149.0000
Northing (ft)	: 4227854.78	Driller Supplier	: Enviroprobe Integrated Solutions	Client	: American Electric Power (AEP)
Ground Elevation	: 616.97 (Ft)	Logged By	: Greg Sowder	Project	: Cabin Creek
Total Depth	: 29 Ft BGL	Reviewed By	: Andrew Fowler	Location	: 15225 MacCorkle Ave SE, Cabin Creek, WV 25035, USA
		Date	: 06/04/2025	Loc Comment	: Ground elevation and coordinates extracted from 2018 LIDAR

Elevation(NAVD88)	Depth (ft)	Lithologic Column	Lithological Description	Recovery (Inches)	Water	Notes
616.47			0.00 - 0.50: Fill: Mulch and bottom ash material, moist			
			0.50 - 18.30: Fill: Fly ash, moist.			
616.0	1					
615.0	2			45		
614.0	3					
613.0	4					
612.0	5					
611.0	6			58		
610.0	7					
609.0	8					
608.0	9			52		
607.0						

EHS Support, LLC

Monitoring Well Log - Borehole

SB-19

Easting (ft)	: 457492.89	Drill Rig	: Geoprobe 3126GT	Job Number	: LLC.06149.0000
Northing (ft)	: 4227854.78	Driller Supplier	: Enviroprobe Integrated Solutions	Client	: American Electric Power (AEP)
Ground Elevation	: 616.97 (Ft)	Logged By	: Greg Sowder	Project	: Cabin Creek
Total Depth	: 29 Ft BGL	Reviewed By	: Andrew Fowler	Location	: 15225 MacCorkle Ave SE, Cabin Creek, WV 25035, USA
		Date	: 06/04/2025	Loc Comment	: Ground elevation and coordinates extracted from 2018 LIDAR

Elevation(NAVD88)	Depth (ft)	Lithologic Column	Lithological Description	Recovery (Inches)	Water	Notes
			0.50 - 18.30: Fill: Fly ash, moist. (continued)			
606.0	11					
605.0	12			52		
604.0	13					
603.0	14					
602.0	15					
601.0	16					
600.0	17					
599.0	18				▼	
			18.30 - 20.40: Wet.			
598.0	19					
				52		
597.0						

EHS Support, LLC

Monitoring Well Log - Borehole

SB-19

Easting (ft)	: 457492.89	Drill Rig	: Geoprobe 3126GT	Job Number	: LLC.06149.0000
Northing (ft)	: 4227854.78	Driller Supplier	: Enviroprobe Integrated Solutions	Client	: American Electric Power (AEP)
Ground Elevation	: 616.97 (Ft)	Logged By	: Greg Sowder	Project	: Cabin Creek
Total Depth	: 29 Ft BGL	Reviewed By	: Andrew Fowler	Location	: 15225 MacCorkle Ave SE, Cabin Creek, WV 25035, USA
		Date	: 06/04/2025	Loc Comment	: Ground elevation and coordinates extracted from 2018 LIDAR

Elevation(NAVD88)	Depth (ft)	Lithologic Column	Lithological Description	Recovery (Inches)	Water	Notes
596.57			18.30 - 20.40: Wet. (continued)			
			20.40 - 24.00: Alluvium: SILT with some clay (ML), grayish brown, wet, with coal flecks.			
596.0	21					
595.0	22			52		
594.0	23					
593.0 592.97	24		24.00 - 28.20: Alluvium: SILT with some clay and sand (ML), loose, grayish brown, wet.			
592.0	25					
591.0	26					
				52		
590.0	27					
589.0	28					
588.77			28.20 - 29.00: Alluvium: CLAY with some silt and sand (CL), soft, gray, wet.			
588.0						
			SB - 19 Terminated at 29 Ft			

EHS Support, LLC

Monitoring Well Log - Borehole

SB-19A

Easting (ft)	: 457551.61	Drill Rig	: Geoprobe 3126GT	Job Number	: LLC.06149.0000
Northing (ft)	: 4227868.36	Driller Supplier	: Enviroprobe Integrated Solutions	Client	: American Electric Power (AEP)
Ground Elevation	: 622.19 (Ft)	Logged By	: Greg Sowder	Project	: Cabin Creek
Total Depth	: 39 Ft BGL	Reviewed By	: Andrew Fowler	Location	: 15225 MacCorkle Ave SE, Cabin Creek, WV 25035, USA
		Date	: 06/04/2025	Loc Comment	: Ground elevation and coordinates extracted from 2018 LIDAR

Elevation(NAVD88)	Depth (ft)	Lithologic Column	Lithological Description	Recovery (Inches)	Water	Notes
622.0			0.00-3.80: Fill: Fly ash, moist.			
621.0	1					
620.0	2			44		
619.0	3					
	4		3.80-5.80: Fill: Bottom ash, moist.			
618.0						
617.0	5					
	6		5.80-23.00: Fill: Fly ash, moist.			
616.0				47		
615.0	7					
614.0	8					
	9					
613.0				54		

EHS Support, LLC

Monitoring Well Log - Borehole

SB-19A

Easting (ft)	: 457551.61	Drill Rig	: Geoprobe 3126GT	Job Number	: LLC.06149.0000
Northing (ft)	: 4227868.36	Driller Supplier	: Enviroprobe Integrated Solutions	Client	: American Electric Power (AEP)
Ground Elevation	: 622.19 (Ft)	Logged By	: Greg Sowder	Project	: Cabin Creek
Total Depth	: 39 Ft BGL	Reviewed By	: Andrew Fowler	Location	: 15225 MacCorkle Ave SE, Cabin Creek, WV 25035, USA
		Date	: 06/04/2025	Loc Comment	: Ground elevation and coordinates extracted from 2018 LIDAR

Elevation(NAVD88)	Depth (ft)	Lithologic Column	Lithological Description	Recovery (Inches)	Water	Notes
612.0			5.80-23.00: Fill: Fly ash, moist. (continued)			
	11					
611.0						
	12			54		
610.0						
	13					
609.0						
	14					
608.0						
	15					
607.0						
	16					
606.0				54		
	17					
605.0						
	18					
604.0						
	19					
603.0				54		

EHS Support, LLC

Monitoring Well Log - Borehole

SB-19A

Easting (ft)	: 457551.61	Drill Rig	: Geoprobe 3126GT	Job Number	: LLC.06149.0000
Northing (ft)	: 4227868.36	Driller Supplier	: Enviroprobe Integrated Solutions	Client	: American Electric Power (AEP)
Ground Elevation	: 622.19 (Ft)	Logged By	: Greg Sowder	Project	: Cabin Creek
Total Depth	: 39 Ft BGL	Reviewed By	: Andrew Fowler	Location	: 15225 MacCorkle Ave SE, Cabin Creek, WV 25035, USA
		Date	: 06/04/2025	Loc Comment	: Ground elevation and coordinates extracted from 2018 LIDAR

Elevation(NAVD88)	Depth (ft)	Lithologic Column	Lithological Description	Recovery (Inches)	Water	Notes
602.0			5.80-23.00: Fill: Fly ash, moist. (continued)			
601.0	21					
600.0	22			54		
599.19	23		23.00-25.00: Wet.			
599.0						
598.0	24					
597.19	25		25.00-29.00: Alluvium: Sandy SILT with some clay (ML), brown, wet.			
597.0						
596.0	26					
				53		
595.0	27					
594.0	28					
593.19	29		29.00-32.10: Alluvium: SAND (SP), brown, medium grained, wet.			
593.0				60		

EHS Support, LLC

Monitoring Well Log - Borehole

SB-19A

Easting (ft)	: 457551.61	Drill Rig	: Geoprobe 3126GT	Job Number	: LLC.06149.0000
Northing (ft)	: 4227868.36	Driller Supplier	: Enviroprobe Integrated Solutions	Client	: American Electric Power (AEP)
Ground Elevation	: 622.19 (Ft)	Logged By	: Greg Sowder	Project	: Cabin Creek
Total Depth	: 39 Ft BGL	Reviewed By	: Andrew Fowler	Location	: 15225 MacCorkle Ave SE, Cabin Creek, WV 25035, USA
		Date	: 06/04/2025	Loc Comment	: Ground elevation and coordinates extracted from 2018 LIDAR

Elevation(NAVD88)	Depth (ft)	Lithologic Column	Lithological Description	Recovery (Inches)	Water	Notes
592.0			29.00-32.10: Alluvium: SAND (SP), brown, medium grained, wet. (continued)			
591.0	31					
590.09	32			60		
590.0			32.10-34.80: Alluvium: Silty CLAY (CL-ML), brown, wet.			
589.0	33					
588.0	34					
			34.80-37.00: Alluvium: Sandy SILT with some clay (ML), brown, moist.			
587.0	35					
586.0	36			60		
585.19	37		37.00-39.00: Wet.			
585.0						
584.0	38					
			SB-19A Terminated at 39 Ft			

EHS Support, LLC

Monitoring Well Log - Borehole

SB-20

Easting (ft)	: 457581.09	Drill Rig	: Geoprobe 3126GT	Job Number	: LLC.06149.0000
Northing (ft)	: 4227876.34	Driller Supplier	: Enviroprobe Integrated Solutions	Client	: American Electric Power (AEP)
Ground Elevation	: 617.71 (Ft)	Logged By	: Greg Sowder	Project	: Cabin Creek
Total Depth	: 34 Ft BGL	Reviewed By	: Andrew Fowler	Location	: 15225 MacCorkle Ave SE, Cabin Creek, WV 25035, USA
		Date	: 06/04/2025	Loc Comment	: Ground elevation and coordinates extracted from 2018 LIDAR

Elevation(NAVD88)	Depth (ft)	Lithologic Column	Lithological Description	Recovery (Inches)	Water	Notes
			0.00 - 0.30: Top soil and mulch.			
			0.30 - 5.00: Fill: Fly ash, moist.			
617.0						
	1					
616.0						
	2			46		
615.0						
	3					
614.0						
	4					
613.0						
612.71	5		5.00 - 6.10: Wet.			
612.0						
611.61	6		6.10 - 20.40: Moist.			
				53		
611.0						
	7					
610.0						
	8					
609.0						
	9					
				53		
608.0						

EHS Support, LLC

Monitoring Well Log - Borehole

SB-20

Easting (ft)	: 457581.09	Drill Rig	: Geoprobe 3126GT	Job Number	: LLC.06149.0000
Northing (ft)	: 4227876.34	Driller Supplier	: Enviroprobe Integrated Solutions	Client	: American Electric Power (AEP)
Ground Elevation	: 617.71 (Ft)	Logged By	: Greg Sowder	Project	: Cabin Creek
Total Depth	: 34 Ft BGL	Reviewed By	: Andrew Fowler	Location	: 15225 MacCorkle Ave SE, Cabin Creek, WV 25035, USA
		Date	: 06/04/2025	Loc Comment	: Ground elevation and coordinates extracted from 2018 LIDAR

Elevation(NAVD88)	Depth (ft)	Lithologic Column	Lithological Description	Recovery (Inches)	Water	Notes
			6.10 - 20.40: Moist. (continued)			
607.0						
	11					
606.0						
	12			53		
605.0						
	13					
604.0						
	14					
603.0						
	15					
602.0						
	16					
				50		
601.0						
	17					
600.0						
	18					
599.0						
	19					
				60		
598.0						

EHS Support, LLC

Monitoring Well Log - Borehole

SB-20

Easting (ft)	: 457581.09	Drill Rig	: Geoprobe 3126GT	Job Number	: LLC.06149.0000
Northing (ft)	: 4227876.34	Driller Supplier	: Enviroprobe Integrated Solutions	Client	: American Electric Power (AEP)
Ground Elevation	: 617.71 (Ft)	Logged By	: Greg Sowder	Project	: Cabin Creek
Total Depth	: 34 Ft BGL	Reviewed By	: Andrew Fowler	Location	: 15225 MacCorkle Ave SE, Cabin Creek, WV 25035, USA
		Date	: 06/04/2025	Loc Comment	: Ground elevation and coordinates extracted from 2018 LIDAR

Elevation(NAVD88)	Depth (ft)	Lithologic Column	Lithological Description	Recovery (Inches)	Water	Notes
			6.10 - 20.40: Moist. (continued)			
597.0			20.40 - 24.00: Alluvium: SILT with some clay (ML), loose, grayish brown, wet, with coal flecks.			
	21					
596.0						
	22			60		
595.0						
	23					
594.0						
593.71	24		24.00 - 24.60: Alluvium: SILT with some clay and sand (ML), loose, grayish brown, wet.			
593.11			24.60 - 28.20: Wet.			
593.0						
	25					
592.0						
	26					
				58		
591.0						
	27					
590.0						
	28					
589.51			28.20 - 34.00: Alluvium: CLAY with some silt and sand (CL), soft, gray, wet.			
589.0						
	29					
				60		
588.0						

EHS Support, LLC

Monitoring Well Log - Borehole

SB-20

Easting (ft)	: 457581.09	Drill Rig	: Geoprobe 3126GT	Job Number	: LLC.06149.0000
Northing (ft)	: 4227876.34	Driller Supplier	: Enviroprobe Integrated Solutions	Client	: American Electric Power (AEP)
Ground Elevation	: 617.71 (Ft)	Logged By	: Greg Sowder	Project	: Cabin Creek
Total Depth	: 34 Ft BGL	Reviewed By	: Andrew Fowler	Location	: 15225 MacCorkle Ave SE, Cabin Creek, WV 25035, USA
		Date	: 06/04/2025	Loc Comment	: Ground elevation and coordinates extracted from 2018 LIDAR

Elevation(NAVD88)	Depth (ft)	Lithologic Column	Lithological Description	Recovery (Inches)	Water	Notes
587.0 586.0 585.0 584.0	31 32 33		28.20 - 34.00: Alluvium: CLAY with some silt and sand (CL), soft, gray, wet. (continued)	60		
			SB - 20 Terminated at 34 Ft			

EHS Support, LLC

Monitoring Well Log - Borehole

SB-21

Easting (ft)	: 457668.12	Drill Rig	: Geoprobe 3126GT	Job Number	: LLC.06149.0000
Northing (ft)	: 4227896.21	Driller Supplier	: Enviroprobe Integrated Solutions	Client	: American Electric Power (AEP)
Ground Elevation	: 618.82 (Ft)	Logged By	: Greg Sowder	Project	: Cabin Creek
Total Depth	: 59.5 Ft BGL	Reviewed By	: Andrew Fowler	Location	: 15225 MacCorkle Ave SE, Cabin Creek, WV 25035, USA
		Date	: 06/02/2025	Loc Comment	: Ground elevation and coordinates extracted from 2018 LIDAR

Elevation(NAVD88)	Depth (ft)	Lithologic Column	Lithological Description	Recovery (Inches)	Water	Notes
			0.00-0.30: Mulch.			
			0.30-0.80: Gravelly SILT (ML), gray.			
618.0			0.80-9.00: Fill: Bottom ash, wet.			
	1					
617.0						
	2			44		
616.0						
	3					
615.0						
	4					
614.0						
	5					
613.0						
	6					
				43		
612.0						
	7					
611.0						
	8					
610.0						
609.82	9		9.00-14.00: Loose, wet.			
				54		
609.0						

EHS Support, LLC

Monitoring Well Log - Borehole

SB-21

Easting (ft)	: 457668.12	Drill Rig	: Geoprobe 3126GT	Job Number	: LLC.06149.0000
Northing (ft)	: 4227896.21	Driller Supplier	: Enviroprobe Integrated Solutions	Client	: American Electric Power (AEP)
Ground Elevation	: 618.82 (Ft)	Logged By	: Greg Sowder	Project	: Cabin Creek
Total Depth	: 59.5 Ft BGL	Reviewed By	: Andrew Fowler	Location	: 15225 MacCorkle Ave SE, Cabin Creek, WV 25035, USA
		Date	: 06/02/2025	Loc Comment	: Ground elevation and coordinates extracted from 2018 LIDAR

Elevation(NAVD88)	Depth (ft)	Lithologic Column	Lithological Description	Recovery (Inches)	Water	Notes
			9.00-14.00: Loose, wet. (continued)			
608.0	11					
607.0	12			54		
606.0	13					
605.0						
604.82	14		14.00-19.00: Dense.			
604.0	15					
603.0	16					
				51		
602.0	17					
601.0	18					
600.0						
599.82	19		19.00-22.70: Soft.			
				60		
599.0						

EHS Support, LLC

Monitoring Well Log - Borehole

SB-21

Easting (ft)	: 457668.12	Drill Rig	: Geoprobe 3126GT	Job Number	: LLC.06149.0000
Northing (ft)	: 4227896.21	Driller Supplier	: Enviroprobe Integrated Solutions	Client	: American Electric Power (AEP)
Ground Elevation	: 618.82 (Ft)	Logged By	: Greg Sowder	Project	: Cabin Creek
Total Depth	: 59.5 Ft BGL	Reviewed By	: Andrew Fowler	Location	: 15225 MacCorkle Ave SE, Cabin Creek, WV 25035, USA
		Date	: 06/02/2025	Loc Comment	: Ground elevation and coordinates extracted from 2018 LIDAR

Elevation(NAVD88)	Depth (ft)	Lithologic Column	Lithological Description	Recovery (Inches)	Water	Notes
598.0	21		19.00-22.70: Soft. (continued)			
597.0	22			60		
596.12						
596.0	23		22.70-26.50: Alluvium: SAND (SP), brown, fine grained, wet.			
595.0	24					
594.0	25					
593.0	26					
592.32				46		
592.0	27		26.50-27.80: Alluvium: SAND (SP), gray, fine grained, coal fragments.			
591.0	28		27.80-29.00: Alluvium: SAND (SP), gray, fine grained.			
590.0						
589.82	29		29.00-34.00: Alluvium: Sandy SILT (ML), black, wet.	60		
589.0						

EHS Support, LLC

Monitoring Well Log - Borehole

SB-21

Easting (ft)	: 457668.12	Drill Rig	: Geoprobe 3126GT	Job Number	: LLC.06149.0000
Northing (ft)	: 4227896.21	Driller Supplier	: Enviroprobe Integrated Solutions	Client	: American Electric Power (AEP)
Ground Elevation	: 618.82 (Ft)	Logged By	: Greg Sowder	Project	: Cabin Creek
Total Depth	: 59.5 Ft BGL	Reviewed By	: Andrew Fowler	Location	: 15225 MacCorkle Ave SE, Cabin Creek, WV 25035, USA
		Date	: 06/02/2025	Loc Comment	: Ground elevation and coordinates extracted from 2018 LIDAR

Elevation(NAVD88)	Depth (ft)	Lithologic Column	Lithological Description	Recovery (Inches)	Water	Notes
588.0	31		29.00-34.00: Alluvium: Sandy SILT (ML), black, wet. (continued)	60		
587.0	32					
586.0	33					
585.0						
584.82	34		34.00-35.25: Alluvium: Sandy SILT (ML), black, wet.	60		
584.0	35					
583.57			35.25-39.00: Alluvium: SAND (SP), black, fine grained, wet.			
583.0	36					
582.0	37					
581.0	38					
580.0						
579.82	39		39.00-44.00: Alluvium: SAND (SP), brown, fine to medium grained, wet, heaving.	54		
579.0						

EHS Support, LLC

Monitoring Well Log - Borehole

SB-21

Easting (ft)	: 457668.12	Drill Rig	: Geoprobe 3126GT	Job Number	: LLC.06149.0000
Northing (ft)	: 4227896.21	Driller Supplier	: Enviroprobe Integrated Solutions	Client	: American Electric Power (AEP)
Ground Elevation	: 618.82 (Ft)	Logged By	: Greg Sowder	Project	: Cabin Creek
Total Depth	: 59.5 Ft BGL	Reviewed By	: Andrew Fowler	Location	: 15225 MacCorkle Ave SE, Cabin Creek, WV 25035, USA
		Date	: 06/02/2025	Loc Comment	: Ground elevation and coordinates extracted from 2018 LIDAR

Elevation(NAVD88)	Depth (ft)	Lithologic Column	Lithological Description	Recovery (Inches)	Water	Notes
578.0	41		39.00-44.00: Alluvium: SAND (SP), brown, fine to medium grained, wet, heaving. (continued)			
577.0	42			54		
576.0	43					
575.0						
574.82	44		44.00-49.00: Alluvium: SAND (SP), brown, fine grained, wet.			
574.0	45					
573.0	46					
				20		
572.0	47					
571.0	48					
570.0						
569.82	49		49.00-50.70: Alluvium: SAND (SP), loose, gray, fine to medium grained, wet.			
				60		
569.0						

EHS Support, LLC

Monitoring Well Log - Borehole

SB-21

Easting (ft)	: 457668.12	Drill Rig	: Geoprobe 3126GT	Job Number	: LLC.06149.0000
Northing (ft)	: 4227896.21	Driller Supplier	: Enviroprobe Integrated Solutions	Client	: American Electric Power (AEP)
Ground Elevation	: 618.82 (Ft)	Logged By	: Greg Sowder	Project	: Cabin Creek
Total Depth	: 59.5 Ft BGL	Reviewed By	: Andrew Fowler	Location	: 15225 MacCorkle Ave SE, Cabin Creek, WV 25035, USA
		Date	: 06/02/2025	Loc Comment	: Ground elevation and coordinates extracted from 2018 LIDAR

Elevation(NAVD88)	Depth (ft)	Lithologic Column	Lithological Description	Recovery (Inches)	Water	Notes
568.12			49.00-50.70: Alluvium: SAND (SP), loose, gray, fine to medium grained, wet. (continued)			
568.0	51		50.70-51.20: Alluvium: SILT (ML), dense, gray, moist.			
567.62			51.20-52.30: Alluvium: Clayey SILT with medium sized gravel (ML), gray, wet.			
567.0	52			60		
566.52			52.30-54.00: Alluvium: Clayey SILT (ML), gray and brown, wet, sandstone fragments.			
566.0	53					
565.0						
564.82	54		54.00-56.00: Alluvium: SAND (SP), brown, wet.			
564.0	55					
563.0						
562.82	56		56.00-59.00: Alluvium: SAND (SP), brown, fine to medium grained, wet.	60		
562.0	57					
561.0	58					
560.0						
559.82	59		59.00-59.50: Rock: SANDSTONE, gray, refusal at 59.5.	6		
			SB-21 Refusal at 59.5 Ft			

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Monitoring Well Log - Borehole

SB-22

Easting (ft)	: 457747.64	Drill Rig	: Geoprobe 3126GT	Job Number	: LLC.06149.0000
Northing (ft)	: 4227913.47	Driller Supplier	: Enviroprobe Integrated Solutions	Client	: American Electric Power (AEP)
Ground Elevation	: 613.11 (Ft)	Logged By	: Greg Sowder	Project	: Cabin Creek
Total Depth	: 39 Ft BGL	Reviewed By	: Andrew Fowler	Location	: 15225 MacCorkle Ave SE, Cabin Creek, WV 25035, USA
		Date	: 06/02/2025	Loc Comment	: Ground elevation and coordinates extracted from 2018 LIDAR

Elevation(NAVD88)	Depth (ft)	Lithologic Column	Lithological Description	Recovery (Inches)	Water	Notes
613.0			0.00-0.30: SILT (ML), dark brown.			
			0.30-4.00: Fill: Gravelly SILT with sand (ML), dark gray, fly ash.			
612.0	1					
611.0	2			31		
610.0	3					
609.11	4					
609.0			4.00-4.60: Fill: Bottom ash.			
608.51			4.60-11.40: Alluvium: SILT (ML), brown, moist.			
608.0	5					
607.0	6			48		
606.0	7					
605.0	8					
604.0	9			56		

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Monitoring Well Log - Borehole

SB-22

Easting (ft)	: 457747.64	Drill Rig	: Geoprobe 3126GT	Job Number	: LLC.06149.0000
Northing (ft)	: 4227913.47	Driller Supplier	: Enviroprobe Integrated Solutions	Client	: American Electric Power (AEP)
Ground Elevation	: 613.11 (Ft)	Logged By	: Greg Sowder	Project	: Cabin Creek
Total Depth	: 39 Ft BGL	Reviewed By	: Andrew Fowler	Location	: 15225 MacCorkle Ave SE, Cabin Creek, WV 25035, USA
		Date	: 06/02/2025	Loc Comment	: Ground elevation and coordinates extracted from 2018 LIDAR

Elevation(NAVD88)	Depth (ft)	Lithologic Column	Lithological Description	Recovery (Inches)	Water	Notes
603.0			4.60-11.40: Alluvium: SILT (ML), brown, moist. (continued)			
602.0	11					
601.71			11.40-23.50: Alluvium: SILT (ML), gray, moist.			
601.0	12			56		
600.0	13					
599.0	14					
598.0	15					
597.0	16			56		
596.0	17					
595.0	18					
594.0	19			55		

EHS Support, LLC

Monitoring Well Log - Borehole

SB-22

Easting (ft)	: 457747.64	Drill Rig	: Geoprobe 3126GT	Job Number	: LLC.06149.0000
Northing (ft)	: 4227913.47	Driller Supplier	: Enviroprobe Integrated Solutions	Client	: American Electric Power (AEP)
Ground Elevation	: 613.11 (Ft)	Logged By	: Greg Sowder	Project	: Cabin Creek
Total Depth	: 39 Ft BGL	Reviewed By	: Andrew Fowler	Location	: 15225 MacCorkle Ave SE, Cabin Creek, WV 25035, USA
		Date	: 06/02/2025	Loc Comment	: Ground elevation and coordinates extracted from 2018 LIDAR

Elevation(NAVD88)	Depth (ft)	Lithologic Column	Lithological Description	Recovery (Inches)	Water	Notes
593.0			11.40-23.50: Alluvium: SILT (ML), gray, moist. (continued)			
592.0	21					
591.0	22			55		
590.0	23					
589.61			23.50-24.00: Alluvium: CLAY (CL), gray, firm, moist.			
589.11	24					
589.0			24.00-28.50: Alluvium: SILT (ML), gray, gravels, moist.			
588.0	25					
587.0	26					
				35		
586.0	27					
585.0	28					
584.61			28.50-29.00: Rock: SANDSTONE, yellowish gray, fragmented.			
584.11	29					
584.0			29.00-32.80: Alluvium: CLAY with some silt (CL), brown, sandstone fragments, moist.	51		

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Monitoring Well Log - Borehole

SB-22

Easting (ft)	: 457747.64	Drill Rig	: Geoprobe 3126GT	Job Number	: LLC.06149.0000
Northing (ft)	: 4227913.47	Driller Supplier	: Enviroprobe Integrated Solutions	Client	: American Electric Power (AEP)
Ground Elevation	: 613.11 (Ft)	Logged By	: Greg Sowder	Project	: Cabin Creek
Total Depth	: 39 Ft BGL	Reviewed By	: Andrew Fowler	Location	: 15225 MacCorkle Ave SE, Cabin Creek, WV 25035, USA
		Date	: 06/02/2025	Loc Comment	: Ground elevation and coordinates extracted from 2018 LIDAR

Elevation(NAVD88)	Depth (ft)	Lithologic Column	Lithological Description	Recovery (Inches)	Water	Notes
583.0			29.00-32.80: Alluvium: CLAY with some silt (CL), brown, sandstone fragments, moist. (continued)			
582.0	31					
581.0	32			51		
			32.80-34.00: Alluvium: SAND (SP), gray - black, wet.			
580.0	33					
579.11	34					
579.0			34.00-39.00: Alluvium: SAND (SP), gray-dark gray, loose, wet.			
578.0	35					
577.0	36			60		
576.0	37					
575.0	38					
			SB-22 Refusal at 39 Ft			

EHS Support, LLC

Monitoring Well Log - Borehole

SB-23

Easting (ft)	: 457340.88	Drill Rig	: Geoprobe 3126GT	Job Number	: LLC.06149.0000
Northing (ft)	: 4227791.52	Driller Supplier	: Enviroprobe Integrated Solutions	Client	: American Electric Power (AEP)
Ground Elevation	: 619.11 (Ft)	Logged By	: Greg Sowder	Project	: Cabin Creek
Total Depth	: 34 Ft BGL	Reviewed By	: Andrew Fowler	Location	: 15225 MacCorkle Ave SE, Cabin Creek, WV 25035, USA
		Date	: 06/06/2025	Loc Comment	: Ground elevation and coordinates extracted from 2018 LIDAR

Elevation(NAVD88)	Depth (ft)	Lithologic Column	Lithological Description	Recovery (Inches)	Water	Notes
619.0			0.00 - 0.20: Alluvium: Topsoil.			
618.91			0.20 - 3.20: Fill: Bottom ash, moist.			
618.0	1					
617.0	2			39		
616.0	3					
615.91			3.20 - 3.60: Fill: SAND (SP), brown, moist.			
615.51			3.60 - 13.30: Fill: Fly ash, moist.			
615.0	4					
614.0	5					
613.0	6			56		
612.0	7					
611.0	8					
610.0	9			44		

EHS Support, LLC

Monitoring Well Log - Borehole

SB-23

Easting (ft)	: 457340.88	Drill Rig	: Geoprobe 3126GT	Job Number	: LLC.06149.0000
Northing (ft)	: 4227791.52	Driller Supplier	: Enviroprobe Integrated Solutions	Client	: American Electric Power (AEP)
Ground Elevation	: 619.11 (Ft)	Logged By	: Greg Sowder	Project	: Cabin Creek
Total Depth	: 34 Ft BGL	Reviewed By	: Andrew Fowler	Location	: 15225 MacCorkle Ave SE, Cabin Creek, WV 25035, USA
		Date	: 06/06/2025	Loc Comment	: Ground elevation and coordinates extracted from 2018 LIDAR

Elevation (NAVD88)	Depth (ft)	Lithologic Column	Lithological Description	Recovery (Inches)	Water	Notes
609.0			3.60 - 13.30: Fill: Fly ash, moist. (continued)			
608.0	11					
607.0	12			44		
606.0	13					
			13.30 - 14.00: Alluvium: SILT (ML), gray and red, mottled, moist.			
605.11	14					
605.0			14.00 - 24.00: Alluvium: Silt with little fine grained sands (ML), moist, wet.			
604.0	15					
603.0	16			58		
602.0	17				▼	
601.0	18					
600.0	19			54		

EHS Support, LLC

Monitoring Well Log - Borehole

SB-23

Easting (ft)	: 457340.88	Drill Rig	: Geoprobe 3126GT	Job Number	: LLC.06149.0000
Northing (ft)	: 4227791.52	Driller Supplier	: Enviroprobe Integrated Solutions	Client	: American Electric Power (AEP)
Ground Elevation	: 619.11 (Ft)	Logged By	: Greg Sowder	Project	: Cabin Creek
Total Depth	: 34 Ft BGL	Reviewed By	: Andrew Fowler	Location	: 15225 MacCorkle Ave SE, Cabin Creek, WV 25035, USA
		Date	: 06/06/2025	Loc Comment	: Ground elevation and coordinates extracted from 2018 LIDAR

Elevation (NAVD88)	Depth (ft)	Lithologic Column	Lithological Description	Recovery (Inches)	Water	Notes
599.0			14.00 - 24.00: Alluvium: Silt with little fine grained sands (ML), moist, wet. (continued)			
598.0	21					
597.0	22			54		
596.0	23					
595.11	24					
595.0			24.00 - 29.00: Alluvium: SILT with little clay (ML), reddish brown, wet.			
594.0	25					
593.0	26			54		
592.0	27					
591.0	28					
590.11	29					
590.0			29.00 - 34.00: Alluvium: Silt (ML), reddish brown, wet.	60		

EHS Support, LLC

Monitoring Well Log - Borehole

SB-23

Easting (ft)	: 457340.88	Drill Rig	: Geoprobe 3126GT	Job Number	: LLC.06149.0000
Northing (ft)	: 4227791.52	Driller Supplier	: Enviroprobe Integrated Solutions	Client	: American Electric Power (AEP)
Ground Elevation	: 619.11 (Ft)	Logged By	: Greg Sowder	Project	: Cabin Creek
Total Depth	: 34 Ft BGL	Reviewed By	: Andrew Fowler	Location	: 15225 MacCorkle Ave SE, Cabin Creek, WV 25035, USA
		Date	: 06/06/2025	Loc Comment	: Ground elevation and coordinates extracted from 2018 LIDAR

Elevation (NAVD88)	Depth (ft)	Lithologic Column	Lithological Description	Recovery (Inches)	Water	Notes
589.0			29.00 - 34.00: Alluvium: Silt (ML), reddish brown, wet. (continued)			
588.0	31					
587.0	32			60		
586.0	33					
			SB - 23 Terminated at 34 Ft			

EHS Support, LLC

Monitoring Well Log - Borehole

SB-24

Easting (ft)	: 457394.74	Drill Rig	: Geoprobe 3126GT	Job Number	: LLC.06149.0000
Northing (ft)	: 4227772.22	Driller Supplier	: Enviroprobe Integrated Solutions	Client	: American Electric Power (AEP)
Ground Elevation	: 621.54 (Ft)	Logged By	: Greg Sowder	Project	: Cabin Creek
Total Depth	: 34 Ft BGL	Reviewed By	: Andrew Fowler	Location	: 15225 MacCorkle Ave SE, Cabin Creek, WV 25035, USA
		Date	: 06/06/2025	Loc Comment	: Ground elevation and coordinates extracted from 2018 LIDAR

Elevation(NAVD88)	Depth (ft)	Lithologic Column	Lithological Description	Recovery (Inches)	Water	Notes
621.0			0.00 - 3.70: Fill: Bottom ash.			
	1					
620.0						
	2			32		
619.0						
	3					
618.0						
617.74			3.70 - 3.80: Fill: SAND (SP), brown, moist.			
	4		3.80 - 15.90: Fill: Fly ash, moist.			
617.0						
	5					
616.0						
	6					
615.0				58		
	7					
614.0						
	8					
613.0						
	9					
612.0				58		

EHS Support, LLC

Monitoring Well Log - Borehole

SB-24

Easting (ft)	: 457394.74	Drill Rig	: Geoprobe 3126GT	Job Number	: LLC.06149.0000
Northing (ft)	: 4227772.22	Driller Supplier	: Enviroprobe Integrated Solutions	Client	: American Electric Power (AEP)
Ground Elevation	: 621.54 (Ft)	Logged By	: Greg Sowder	Project	: Cabin Creek
Total Depth	: 34 Ft BGL	Reviewed By	: Andrew Fowler	Location	: 15225 MacCorkle Ave SE, Cabin Creek, WV 25035, USA
		Date	: 06/06/2025	Loc Comment	: Ground elevation and coordinates extracted from 2018 LIDAR

Elevation(NAVD88)	Depth (ft)	Lithologic Column	Lithological Description	Recovery (Inches)	Water	Notes
			3.80 - 15.90: Fill: Fly ash, moist. (continued)			
611.0						
	11					
610.0						
	12			58		
609.0						
	13					
608.0						
	14					
607.0						
	15					
606.0						
605.64					▼	
	16		15.90 - 18.70: Wet.			
605.0				59		
	17					
604.0						
	18					
603.0						
			18.70 - 19.00: Alluvium: SILT (ML), soft, brown, wet.			
602.54	19		19.00 - 20.10: Alluvium: SILT (ML), soft, dark gray, wet.			
602.0				56		

EHS Support, LLC

Monitoring Well Log - Borehole

SB-24

Easting (ft)	: 457394.74	Drill Rig	: Geoprobe 3126GT	Job Number	: LLC.06149.0000
Northing (ft)	: 4227772.22	Driller Supplier	: Enviroprobe Integrated Solutions	Client	: American Electric Power (AEP)
Ground Elevation	: 621.54 (Ft)	Logged By	: Greg Sowder	Project	: Cabin Creek
Total Depth	: 34 Ft BGL	Reviewed By	: Andrew Fowler	Location	: 15225 MacCorkle Ave SE, Cabin Creek, WV 25035, USA
		Date	: 06/06/2025	Loc Comment	: Ground elevation and coordinates extracted from 2018 LIDAR

Elevation(NAVD88)	Depth (ft)	Lithologic Column	Lithological Description	Recovery (Inches)	Water	Notes
			19.00 - 20.10: Alluvium: SILT (ML), soft, dark gray, wet. (continued)			
			20.10 - 29.50: Alluvium: SILT (ML), soft, grayish brown, wet.			
601.0						
	21					
600.0						
	22			56		
599.0						
	23					
598.0						
	24					
597.0						
	25					
596.0						
	26					
595.0				60		
	27					
594.0						
	28					
593.0						
	29					
592.0 (592.04)			29.50 - 34.00: Alluvium: SILT with fine grained sands (ML), soft, reddish brown, wet.	60		

EHS Support, LLC

Monitoring Well Log - Borehole

SB-24

Easting (ft)	: 457394.74	Drill Rig	: Geoprobe 3126GT	Job Number	: LLC.06149.0000
Northing (ft)	: 4227772.22	Driller Supplier	: Enviroprobe Integrated Solutions	Client	: American Electric Power (AEP)
Ground Elevation	: 621.54 (Ft)	Logged By	: Greg Sowder	Project	: Cabin Creek
Total Depth	: 34 Ft BGL	Reviewed By	: Andrew Fowler	Location	: 15225 MacCorkle Ave SE, Cabin Creek, WV 25035, USA
		Date	: 06/06/2025	Loc Comment	: Ground elevation and coordinates extracted from 2018 LIDAR

Elevation(NAVD88)	Depth (ft)	Lithologic Column	Lithological Description	Recovery (Inches)	Water	Notes
591.0			29.50 - 34.00: Alluvium: SILT with fine grained sands (ML), soft, reddish brown, wet. (continued)			
	31					
590.0						
	32			60		
589.0						
	33					
588.0						
			SB - 24 Terminated at 34 Ft			

EHS Support, LLC

Monitoring Well Log - Borehole

SB-25

Easting (ft)	: 457485.85	Drill Rig	: Geoprobe 3230DT	Job Number	: LLC.06149.0000
Northing (ft)	: 4227803.20	Driller Supplier	: Enviroprobe Integrated Solutions	Client	: American Electric Power (AEP)
Ground Elevation	: 616.69 (Ft)	Logged By	: Greg Sowder	Project	: Cabin Creek
Total Depth	: 35 Ft BGL	Reviewed By	: Andrew Fowler	Location	: 15225 MacCorkle Ave SE, Cabin Creek, WV 25035, USA
		Date	: 06/09/2025	Loc Comment	: Ground elevation and coordinates extracted from 2018 LIDAR

Elevation(NAVD88)	Depth (ft)	Lithologic Column	Lithological Description	Recovery (Inches)	Water	Notes
616.0			0.00 - 5.00: Fill: Fly ash, wet.			
	1					
615.0						
	2					
				45		
614.0						
	3					
613.0						
	4					
612.0						
611.69	5		5.00 - 15.00: Moist.			
611.0						
	6					
610.0						
	7					
				42		
609.0						
	8					
608.0						
	9					
607.0						

EHS Support, LLC

Monitoring Well Log - Borehole

SB-25

Easting (ft)	: 457485.85	Drill Rig	: Geoprobe 3230DT	Job Number	: LLC.06149.0000
Northing (ft)	: 4227803.20	Driller Supplier	: Enviroprobe Integrated Solutions	Client	: American Electric Power (AEP)
Ground Elevation	: 616.69 (Ft)	Logged By	: Greg Sowder	Project	: Cabin Creek
Total Depth	: 35 Ft BGL	Reviewed By	: Andrew Fowler	Location	: 15225 MacCorkle Ave SE, Cabin Creek, WV 25035, USA
		Date	: 06/09/2025	Loc Comment	: Ground elevation and coordinates extracted from 2018 LIDAR

Elevation(NAVD88)	Depth (ft)	Lithologic Column	Lithological Description	Recovery (Inches)	Water	Notes
			5.00 - 15.00: Moist. (continued)			
606.0						
	11					
605.0						
	12					
				37		
604.0						
	13					
603.0						
	14					
602.0						
601.69	15		15.00 - 23.30: Wet.		▼	
601.0						
	16					
600.0						
	17					
				55		
599.0						
	18					
598.0						
	19					
597.0						

EHS Support, LLC

Monitoring Well Log - Borehole

SB-25

Easting (ft)	: 457485.85	Drill Rig	: Geoprobe 3230DT	Job Number	: LLC.06149.0000
Northing (ft)	: 4227803.20	Driller Supplier	: Enviroprobe Integrated Solutions	Client	: American Electric Power (AEP)
Ground Elevation	: 616.69 (Ft)	Logged By	: Greg Sowder	Project	: Cabin Creek
Total Depth	: 35 Ft BGL	Reviewed By	: Andrew Fowler	Location	: 15225 MacCorkle Ave SE, Cabin Creek, WV 25035, USA
		Date	: 06/09/2025	Loc Comment	: Ground elevation and coordinates extracted from 2018 LIDAR

Elevation(NAVD88)	Depth (ft)	Lithologic Column	Lithological Description	Recovery (Inches)	Water	Notes
596.0			15.00 - 23.30: Wet. (continued)			
	21					
595.0						
	22			60		
594.0						
	23					
			23.30 - 24.50: Alluvium: CLAY (CL), soft, gray, moist.			
593.0						
	24					
592.19						
592.0			24.50 - 25.00: Alluvium: SILT (ML), gray, moist.			
591.69	25		25.00 - 28.00: Wet.			
591.0						
	26					
590.0						
	27			60		
589.0						
588.69	28		28.00 - 30.00: Brown.			
588.0						
	29					
587.0						

EHS Support

EHS Support, LLC

Monitoring Well Log - Borehole

SB-25

Easting (ft)	: 457485.85	Drill Rig	: Geoprobe 3230DT	Job Number	: LLC.06149.0000
Northing (ft)	: 4227803.20	Driller Supplier	: Enviroprobe Integrated Solutions	Client	: American Electric Power (AEP)
Ground Elevation	: 616.69 (Ft)	Logged By	: Greg Sowder	Project	: Cabin Creek
Total Depth	: 35 Ft BGL	Reviewed By	: Andrew Fowler	Location	: 15225 MacCorkle Ave SE, Cabin Creek, WV 25035, USA
		Date	: 06/09/2025	Loc Comment	: Ground elevation and coordinates extracted from 2018 LIDAR

Elevation(NAVD88)	Depth (ft)	Lithologic Column	Lithological Description	Recovery (Inches)	Water	Notes
586.0			30.00 - 35.00: Gray, wet.			
	31					
585.0						
	32			60		
584.0						
	33					
583.0						
	34					
582.0						
			SB - 25 Terminated at 35 Ft			

EHS Support, LLC

Monitoring Well Log - Borehole

SB-26

Easting (ft)	: 457569.33	Drill Rig	: Geoprobe 3230DT	Job Number	: LLC.06149.0000
Northing (ft)	: 4227826.12	Driller Supplier	: Enviroprobe Integrated Solutions	Client	: American Electric Power (AEP)
Ground Elevation	: 616.79 (Ft)	Logged By	: Greg Sowder	Project	: Cabin Creek
Total Depth	: 30 Ft BGL	Reviewed By	: Andrew Fowler	Location	: 15225 MacCorkle Ave SE, Cabin Creek, WV 25035, USA
		Date	: 06/09/2025	Loc Comment	: Ground elevation and coordinates extracted from 2018 LIDAR

Elevation(NAVD88)	Depth (ft)	Lithologic Column	Lithological Description	Recovery (Inches)	Water	Notes
616.49			0.00 - 0.30: CLAY (CL), gray, wood.			
			0.30 - 7.40: Fill: Fly ash, moist.			
616.0						
	1					
615.0						
	2					
				43		
614.0						
	3					
613.0						
	4					
612.0						
	5					
611.0						
	6					
610.0						
	7					
609.39			7.40 - 7.80: Wet.	47		
609.0 / 608.99			7.80 - 15.00: Moist.			
	8					
608.0						
	9					
607.0						

EHS Support, LLC

Monitoring Well Log - Borehole

SB-26

Easting (ft)	: 457569.33	Drill Rig	: Geoprobe 3230DT	Job Number	: LLC.06149.0000
Northing (ft)	: 4227826.12	Driller Supplier	: Enviroprobe Integrated Solutions	Client	: American Electric Power (AEP)
Ground Elevation	: 616.79 (Ft)	Logged By	: Greg Sowder	Project	: Cabin Creek
Total Depth	: 30 Ft BGL	Reviewed By	: Andrew Fowler	Location	: 15225 MacCorkle Ave SE, Cabin Creek, WV 25035, USA
		Date	: 06/09/2025	Loc Comment	: Ground elevation and coordinates extracted from 2018 LIDAR

Elevation(NAVD88)	Depth (ft)	Lithologic Column	Lithological Description	Recovery (Inches)	Water	Notes
			7.80 - 15.00: Moist. (continued)	38		
606.0	11					
605.0	12					
604.0	13					
603.0	14					
602.0						
601.79	15		15.00 - 18.30: Wet.	38		
601.0	16					
600.0	17					
599.0	18					
598.49			18.30 - 20.00: Alluvium: SILT with fine grained sand (ML), gray, moist.			
598.0	19					
597.0						

EHS Support, LLC

Monitoring Well Log - Borehole

SB-26

Easting (ft)	: 457569.33	Drill Rig	: Geoprobe 3230DT	Job Number	: LLC.06149.0000
Northing (ft)	: 4227826.12	Driller Supplier	: Enviroprobe Integrated Solutions	Client	: American Electric Power (AEP)
Ground Elevation	: 616.79 (Ft)	Logged By	: Greg Sowder	Project	: Cabin Creek
Total Depth	: 30 Ft BGL	Reviewed By	: Andrew Fowler	Location	: 15225 MacCorkle Ave SE, Cabin Creek, WV 25035, USA
		Date	: 06/09/2025	Loc Comment	: Ground elevation and coordinates extracted from 2018 LIDAR

Elevation(NAVD88)	Depth (ft)	Lithologic Column	Lithological Description	Recovery (Inches)	Water	Notes
			20.00 - 25.00: Alluvium: SILT (ML), gray, wet.			
596.0						
	21					
595.0						
	22			44		
594.0						
	23					
593.0						
	24					
592.0						
591.79	25		25.00 - 30.00: Wet.			
591.0						
	26					
590.0						
	27			60		
589.0						
	28					
588.0						
	29					
587.0			SB - 26 Terminated at 30 Ft			

EHS Support, LLC

Monitoring Well Log - Borehole

SB-27

Easting (ft)	: 457648.83	Drill Rig	: Geoprobe 3230DT	Job Number	: LLC.06149.0000
Northing (ft)	: 4227849.71	Driller Supplier	: Enviroprobe Integrated Solutions	Client	: American Electric Power (AEP)
Ground Elevation	: 621.52 (Ft)	Logged By	: Greg Sowder	Project	: Cabin Creek
Total Depth	: 30 Ft BGL	Reviewed By	: Andrew Fowler	Location	: 15225 MacCorkle Ave SE, Cabin Creek, WV 25035, USA
		Date	: 06/09/2025	Loc Comment	: Ground elevation and coordinates extracted from 2018 LIDAR

Elevation(NAVD88)	Depth (ft)	Lithologic Column	Lithological Description	Recovery (Inches)	Water	Notes
621.0			0.00 - 0.80: CLAY (CL), light gray.			
620.72						
620.42	1		0.80 - 1.10: Fill: Bottom ash, dry.			
			1.10 - 5.00: Fill: Fly ash.			
620.0						
	2					
619.0				39		
	3					
618.0						
	4					
617.0						
616.52	5		5.00 - 14.00: Moist to wet.			
616.0						
	6					
615.0						
	7					
614.0				50		
	8					
613.0						
	9					
612.0						

EHS Support, LLC

Monitoring Well Log - Borehole

SB-27

Easting (ft)	: 457648.83	Drill Rig	: Geoprobe 3230DT	Job Number	: LLC.06149.0000
Northing (ft)	: 4227849.71	Driller Supplier	: Enviroprobe Integrated Solutions	Client	: American Electric Power (AEP)
Ground Elevation	: 621.52 (Ft)	Logged By	: Greg Sowder	Project	: Cabin Creek
Total Depth	: 30 Ft BGL	Reviewed By	: Andrew Fowler	Location	: 15225 MacCorkle Ave SE, Cabin Creek, WV 25035, USA
		Date	: 06/09/2025	Loc Comment	: Ground elevation and coordinates extracted from 2018 LIDAR

Elevation(NAVD88)	Depth (ft)	Lithologic Column	Lithological Description	Recovery (Inches)	Water	Notes
			5.00 - 14.00: Moist to wet. (continued)			
611.0						
	11					
610.0						
	12					
609.0				40		
	13					
608.0						
607.52	14		14.00 - 22.50: Wet.		▼	
607.0						
	15					
606.0						
	16					
605.0						
	17					
604.0				44		
	18					
603.0						
	19					
602.0						

EHS Support, LLC

Monitoring Well Log - Borehole

SB-27

Easting (ft)	: 457648.83	Drill Rig	: Geoprobe 3230DT	Job Number	: LLC.06149.0000
Northing (ft)	: 4227849.71	Driller Supplier	: Enviroprobe Integrated Solutions	Client	: American Electric Power (AEP)
Ground Elevation	: 621.52 (Ft)	Logged By	: Greg Sowder	Project	: Cabin Creek
Total Depth	: 30 Ft BGL	Reviewed By	: Andrew Fowler	Location	: 15225 MacCorkle Ave SE, Cabin Creek, WV 25035, USA
		Date	: 06/09/2025	Loc Comment	: Ground elevation and coordinates extracted from 2018 LIDAR

Elevation(NAVD88)	Depth (ft)	Lithologic Column	Lithological Description	Recovery (Inches)	Water	Notes
			14.00 - 22.50: Wet. (continued)			
601.0						
	21					
600.0						
	22					
599.0 (599.02)			22.50 - 25.00: Alluvium: SILT (ML), gray, wet, mottled black.	40		
	23					
598.0						
	24					
597.0						
(596.52)	25		25.00 - 30.00: Brown and gray, wet.			
596.0						
	26					
595.0						
	27					
594.0				36		
	28					
593.0						
	29					
592.0						
			SB - 27 Terminated at 30 Ft			

EHS Support, LLC

Monitoring Well Log - Borehole

SB-28

Easting (ft)	: 457720.61	Drill Rig	: Geoprobe 3230DT	Job Number	: LLC.06149.0000
Northing (ft)	: 4227871.76	Driller Supplier	: Enviroprobe Integrated Solutions	Client	: American Electric Power (AEP)
Ground Elevation	: 620.47 (Ft)	Logged By	: Greg Sowder	Project	: Cabin Creek
Total Depth	: 35 Ft BGL	Reviewed By	: Andrew Fowler	Location	: 15225 MacCorkle Ave SE, Cabin Creek, WV 25035, USA
		Date	: 06/09/2025	Loc Comment	: Ground elevation and coordinates extracted from 2018 LIDAR

Elevation(NAVD88)	Depth (ft)	Lithologic Column	Lithological Description	Recovery (Inches)	Water	Notes
620.0			0.00 - 5.00: Fill: Bottom ash, moist.			
	1					
619.0						
	2					
618.0				20		
	3					
617.0						
	4					
616.0						
615.47	5		5.00 - 15.00: Fill: Fly ash, moist.			
615.0						
	6					
614.0						
	7					
613.0				23		
	8					
612.0						
	9					
611.0						

EHS Support, LLC

Monitoring Well Log - Borehole

SB-28

Easting (ft)	: 457720.61	Drill Rig	: Geoprobe 3230DT	Job Number	: LLC.06149.0000
Northing (ft)	: 4227871.76	Driller Supplier	: Enviroprobe Integrated Solutions	Client	: American Electric Power (AEP)
Ground Elevation	: 620.47 (Ft)	Logged By	: Greg Sowder	Project	: Cabin Creek
Total Depth	: 35 Ft BGL	Reviewed By	: Andrew Fowler	Location	: 15225 MacCorkle Ave SE, Cabin Creek, WV 25035, USA
		Date	: 06/09/2025	Loc Comment	: Ground elevation and coordinates extracted from 2018 LIDAR

Elevation(NAVD88)	Depth (ft)	Lithologic Column	Lithological Description	Recovery (Inches)	Water	Notes
			5.00 - 15.00: Fill: Fly ash, moist. (continued)			
610.0						
	11					
609.0						
	12					
608.0				40		
	13					
607.0						
	14					
606.0						
605.47	15		15.00 - 19.00: Moist to wet.			
605.0						
	16					
604.0						
	17					
603.0				42		
	18					
602.0						
601.47	19		19.00 - 20.00: Wet.		▼	
601.0						

EHS Support, LLC

Monitoring Well Log - Borehole

SB-28

Easting (ft)	: 457720.61	Drill Rig	: Geoprobe 3230DT	Job Number	: LLC.06149.0000
Northing (ft)	: 4227871.76	Driller Supplier	: Enviroprobe Integrated Solutions	Client	: American Electric Power (AEP)
Ground Elevation	: 620.47 (Ft)	Logged By	: Greg Sowder	Project	: Cabin Creek
Total Depth	: 35 Ft BGL	Reviewed By	: Andrew Fowler	Location	: 15225 MacCorkle Ave SE, Cabin Creek, WV 25035, USA
		Date	: 06/09/2025	Loc Comment	: Ground elevation and coordinates extracted from 2018 LIDAR

Elevation(NAVD88)	Depth (ft)	Lithologic Column	Lithological Description	Recovery (Inches)	Water	Notes
600.0			20.00 - 22.20: Wet, bottom ash.			
	21					
599.0						
	22					
598.27			22.20 - 24.50: Alluvium: SILT with fine grained sand (ML), gray, wet.			
598.0				44		
	23					
597.0						
	24					
596.0						
595.97			24.50 - 25.00: Soft, moist.			
595.47	25		25.00 - 27.80: Wet.			
595.0						
	26					
594.0						
	27					
593.0				58		
	28		27.80 - 30.00: Alluvium: SILT with fine grained sands (ML), brown, wet.			
592.0						
	29					
591.0						

EHS Support

EHS Support, LLC

Monitoring Well Log - Borehole

SB-28

Easting (ft)	: 457720.61	Drill Rig	: Geoprobe 3230DT	Job Number	: LLC.06149.0000
Northing (ft)	: 4227871.76	Driller Supplier	: Enviroprobe Integrated Solutions	Client	: American Electric Power (AEP)
Ground Elevation	: 620.47 (Ft)	Logged By	: Greg Sowder	Project	: Cabin Creek
Total Depth	: 35 Ft BGL	Reviewed By	: Andrew Fowler	Location	: 15225 MacCorkle Ave SE, Cabin Creek, WV 25035, USA
		Date	: 06/09/2025	Loc Comment	: Ground elevation and coordinates extracted from 2018 LIDAR

Elevation(NAVD88)	Depth (ft)	Lithologic Column	Lithological Description	Recovery (Inches)	Water	Notes
590.0			30.00 - 35.00: Alluvium: SILT with fine grained sand (ML), loose, soft, gray, wet.			
	31					
589.0						
	32					
588.0				53		
	33					
587.0						
	34					
586.0						
			SB - 28 Terminated at 35 Ft			

EHS Support, LLC

Monitoring Well Log - Borehole

SB-29

Easting (ft)	: 457766.02	Drill Rig	: Geoprobe 3230DT	Job Number	: LLC.06149.0000
Northing (ft)	: 4227882.72	Driller Supplier	: Enviroprobe Integrated Solutions	Client	: American Electric Power (AEP)
Ground Elevation	: 614.86 (Ft)	Logged By	: Greg Sowder	Project	: Cabin Creek
Total Depth	: 53 Ft BGL	Reviewed By	: Andrew Fowler	Location	: 15225 MacCorkle Ave SE, Cabin Creek, WV 25035, USA
		Date	: 06/17/2025	Loc Comment	: Ground elevation and coordinates extracted from 2018 LIDAR

Elevation(NAVD88)	Depth (ft)	Lithologic Column	Lithological Description	Recovery (Inches)	Water	Notes
			0.00-0.30: CLAY (CL), brown.			
			0.30-0.60: Fill: Bottom ash, moist.			
614.26			0.60-4.60: Fill: Fly ash, moist.			
614.0	1					
613.0	2			46		
612.0	3					
611.0	4					
610.26			4.60-7.30: Fill: SAND (SP), brown, moist.			
610.0	5					
609.0	6					
608.0	7					
			7.30-8.40: Fill: Bottom ash, moist to wet.	43		
607.0	8					
606.46			8.40-13.20: Clayey SILT with gravel (ML), brown, moist.			
606.0	9					
605.0						

EHS Support, LLC

Monitoring Well Log - Borehole

SB-29

Easting (ft)	: 457766.02	Drill Rig	: Geoprobe 3230DT	Job Number	: LLC.06149.0000
Northing (ft)	: 4227882.72	Driller Supplier	: Enviroprobe Integrated Solutions	Client	: American Electric Power (AEP)
Ground Elevation	: 614.86 (Ft)	Logged By	: Greg Sowder	Project	: Cabin Creek
Total Depth	: 53 Ft BGL	Reviewed By	: Andrew Fowler	Location	: 15225 MacCorkle Ave SE, Cabin Creek, WV 25035, USA
		Date	: 06/17/2025	Loc Comment	: Ground elevation and coordinates extracted from 2018 LIDAR

Elevation(NAVD88)	Depth (ft)	Lithologic Column	Lithological Description	Recovery (Inches)	Water	Notes
604.0	11		8.40-13.20: Clayey SILT with gravel (ML), brown, moist. (continued)			
603.0	12			31		
602.0	13					
601.66			13.20-14.60: Fill: SILT (ML), brown, moist.			
601.0	14					
600.26			14.60-25.00: Fill: Moist, bottom ash.			
600.0	15					
599.0	16					
598.0	17			17		
597.0	18					
596.0	19					
595.0						

EHS Support, LLC

Monitoring Well Log - Borehole

SB-29

Easting (ft)	: 457766.02	Drill Rig	: Geoprobe 3230DT	Job Number	: LLC.06149.0000
Northing (ft)	: 4227882.72	Driller Supplier	: Enviroprobe Integrated Solutions	Client	: American Electric Power (AEP)
Ground Elevation	: 614.86 (Ft)	Logged By	: Greg Sowder	Project	: Cabin Creek
Total Depth	: 53 Ft BGL	Reviewed By	: Andrew Fowler	Location	: 15225 MacCorkle Ave SE, Cabin Creek, WV 25035, USA
		Date	: 06/17/2025	Loc Comment	: Ground elevation and coordinates extracted from 2018 LIDAR

Elevation(NAVD88)	Depth (ft)	Lithologic Column	Lithological Description	Recovery (Inches)	Water	Notes
			14.60-25.00: Fill: Moist, bottom ash. (continued)			
594.0	21					
593.0	22			12		
592.0	23					
591.0	24					
590.0	25				▼	
589.86			25.00-30.00: Wet.			
589.0	26					
588.0	27			16		
587.0	28					
586.0	29					
585.0						

EHS Support, LLC

Monitoring Well Log - Borehole

SB-29

Easting (ft)	: 457766.02	Drill Rig	: Geoprobe 3230DT	Job Number	: LLC.06149.0000
Northing (ft)	: 4227882.72	Driller Supplier	: Enviroprobe Integrated Solutions	Client	: American Electric Power (AEP)
Ground Elevation	: 614.86 (Ft)	Logged By	: Greg Sowder	Project	: Cabin Creek
Total Depth	: 53 Ft BGL	Reviewed By	: Andrew Fowler	Location	: 15225 MacCorkle Ave SE, Cabin Creek, WV 25035, USA
		Date	: 06/17/2025	Loc Comment	: Ground elevation and coordinates extracted from 2018 LIDAR

Elevation(NAVD88)	Depth (ft)	Lithologic Column	Lithological Description	Recovery (Inches)	Water	Notes
584.0	31		30.00-32.90: Fill: SAND (SP), gray, wet.	60		
583.0	32					
582.0 / 581.96	33		32.90-35.00: Alluvium: Sandy SILT (ML), gray, wet.			
581.0	34					
580.0 / 579.86	35		35.00-37.40: Alluvium: SAND (SP): gray, wet.			
579.0	36					
578.0	37					
577.46			37.40-42.80: Alluvium: SAND (SP): gray, wet.	60		
577.0	38					
576.0	39					
575.0						

EHS Support, LLC

Monitoring Well Log - Borehole

SB-29

Easting (ft)	: 457766.02	Drill Rig	: Geoprobe 3230DT	Job Number	: LLC.06149.0000
Northing (ft)	: 4227882.72	Driller Supplier	: Enviroprobe Integrated Solutions	Client	: American Electric Power (AEP)
Ground Elevation	: 614.86 (Ft)	Logged By	: Greg Sowder	Project	: Cabin Creek
Total Depth	: 53 Ft BGL	Reviewed By	: Andrew Fowler	Location	: 15225 MacCorkle Ave SE, Cabin Creek, WV 25035, USA
		Date	: 06/17/2025	Loc Comment	: Ground elevation and coordinates extracted from 2018 LIDAR

Elevation(NAVD88)	Depth (ft)	Lithologic Column	Lithological Description	Recovery (Inches)	Water	Notes
574.0	41		37.40-42.80: Alluvium: SAND (SP): gray, wet. (continued)	50		
573.0	42					
572.0	43		42.80-45.00: Alluvium: SAND (SP), gray/brown, moist, sandstone fragments.			
571.0	44					
570.0	45		45.00-47.80: Alluvium: SAND (SP), brown, wet.	60		
569.86						
569.0	46					
568.0	47					
567.0	48		47.80-48.30: Alluvium: SAND (SP), gray, moist, sandstone fragments.			
			48.30-50.00: Alluvium: SAND (SP), brown, moist, sandstone fragments.			
566.0	49					
565.0						

EHS Support, LLC

Monitoring Well Log - Borehole

SB-29

Easting (ft)	: 457766.02	Drill Rig	: Geoprobe 3230DT	Job Number	: LLC.06149.0000
Northing (ft)	: 4227882.72	Driller Supplier	: Enviroprobe Integrated Solutions	Client	: American Electric Power (AEP)
Ground Elevation	: 614.86 (Ft)	Logged By	: Greg Sowder	Project	: Cabin Creek
Total Depth	: 53 Ft BGL	Reviewed By	: Andrew Fowler	Location	: 15225 MacCorkle Ave SE, Cabin Creek, WV 25035, USA
		Date	: 06/17/2025	Loc Comment	: Ground elevation and coordinates extracted from 2018 LIDAR

Elevation(NAVD88)	Depth (ft)	Lithologic Column	Lithological Description	Recovery (Inches)	Water	Notes
564.86						
564.0	51		50.00-51.50: Alluvium: SAND (SP), gray, wet.	36		
563.36			51.50-53.00: Alluvium: SAND (SP), brown, moist, sandstone fragments.			
563.0	52					
562.0						
			SB-29 Refusal at 53 Ft			

EHS Support, LLC

Monitoring Well Log - Borehole

SB-30

Easting (ft)	: 457816.67	Drill Rig	: Geoprobe 3230DT	Job Number	: LLC.06149.0000
Northing (ft)	: 4227899.02	Driller Supplier	: Enviroprobe Integrated Solutions	Client	: American Electric Power (AEP)
Ground Elevation	: 612.22 (Ft)	Logged By	: Greg Sowder	Project	: Cabin Creek
Total Depth	: 53 Ft BGL	Reviewed By	: Andrew Fowler	Location	: 15225 MacCorkle Ave SE, Cabin Creek, WV 25035, USA
		Date	: 06/17/2025	Loc Comment	: Ground elevation and coordinates extracted from 2018 LIDAR

Elevation(NAVD88)	Depth (ft)	Lithologic Column	Lithological Description	Recovery (Inches)	Water	Notes
612.0			0.00-2.60: Fill: Bottom ash, moist.			
611.0	1					
610.0	2					
609.62			2.60-3.90: Fill: Fly ash, moist.	36		
609.0	3					
608.32			3.90-5.00: Fill: Bottom ash, moist.			
608.0	4					
607.22	5		5.00-10.00: Wet.		▼	
607.0						
606.0	6					
605.0	7			17		
604.0	8					
603.0	9					

EHS Support, LLC

Monitoring Well Log - Borehole

SB-30

Easting (ft)	: 457816.67	Drill Rig	: Geoprobe 3230DT	Job Number	: LLC.06149.0000
Northing (ft)	: 4227899.02	Driller Supplier	: Enviroprobe Integrated Solutions	Client	: American Electric Power (AEP)
Ground Elevation	: 612.22 (Ft)	Logged By	: Greg Sowder	Project	: Cabin Creek
Total Depth	: 53 Ft BGL	Reviewed By	: Andrew Fowler	Location	: 15225 MacCorkle Ave SE, Cabin Creek, WV 25035, USA
		Date	: 06/17/2025	Loc Comment	: Ground elevation and coordinates extracted from 2018 LIDAR

Elevation(NAVD88)	Depth (ft)	Lithologic Column	Lithological Description	Recovery (Inches)	Water	Notes
602.0			10.00-19.70: Moist.			
	11					
601.0						
	12					
600.0				17		
	13					
599.0						
	14					
598.0						
	15					
597.0						
	16					
596.0						
	17					
595.0				21		
	18					
594.0						
	19					
593.0						
592.52			19.70-20.00: Alluvium: SILT (ML), brown, moist.			

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Monitoring Well Log - Borehole

SB-30

Easting (ft)	: 457816.67	Drill Rig	: Geoprobe 3230DT	Job Number	: LLC.06149.0000
Northing (ft)	: 4227899.02	Driller Supplier	: Enviroprobe Integrated Solutions	Client	: American Electric Power (AEP)
Ground Elevation	: 612.22 (Ft)	Logged By	: Greg Sowder	Project	: Cabin Creek
Total Depth	: 53 Ft BGL	Reviewed By	: Andrew Fowler	Location	: 15225 MacCorkle Ave SE, Cabin Creek, WV 25035, USA
		Date	: 06/17/2025	Loc Comment	: Ground elevation and coordinates extracted from 2018 LIDAR

Elevation(NAVD88)	Depth (ft)	Lithologic Column	Lithological Description	Recovery (Inches)	Water	Notes
592.0			20.00-22.00: Wet.			
	21					
591.0						
590.22	22		22.00-42.60: Alluvium: SILT (ML), gray, wet.			
590.0				56		
	23					
589.0						
	24					
588.0						
	25					
587.0						
	26					
586.0						
	27					
585.0				58		
	28					
584.0						
	29					
583.0						

EHS Support, LLC

Monitoring Well Log - Borehole

SB-30

Easting (ft)	: 457816.67	Drill Rig	: Geoprobe 3230DT	Job Number	: LLC.06149.0000
Northing (ft)	: 4227899.02	Driller Supplier	: Enviroprobe Integrated Solutions	Client	: American Electric Power (AEP)
Ground Elevation	: 612.22 (Ft)	Logged By	: Greg Sowder	Project	: Cabin Creek
Total Depth	: 53 Ft BGL	Reviewed By	: Andrew Fowler	Location	: 15225 MacCorkle Ave SE, Cabin Creek, WV 25035, USA
		Date	: 06/17/2025	Loc Comment	: Ground elevation and coordinates extracted from 2018 LIDAR

Elevation(NAVD88)	Depth (ft)	Lithologic Column	Lithological Description	Recovery (Inches)	Water	Notes
582.0			22.00-42.60: Alluvium: SILT (ML), gray, wet. (continued)			
	31					
581.0						
	32					
580.0				57		
	33					
579.0						
	34					
578.0						
	35					
577.0						
	36					
576.0						
	37					
575.0				60		
	38					
574.0						
	39					
573.0						

EHS Support, LLC

Monitoring Well Log - Borehole

SB-30

Easting (ft)	: 457816.67	Drill Rig	: Geoprobe 3230DT	Job Number	: LLC.06149.0000
Northing (ft)	: 4227899.02	Driller Supplier	: Enviroprobe Integrated Solutions	Client	: American Electric Power (AEP)
Ground Elevation	: 612.22 (Ft)	Logged By	: Greg Sowder	Project	: Cabin Creek
Total Depth	: 53 Ft BGL	Reviewed By	: Andrew Fowler	Location	: 15225 MacCorkle Ave SE, Cabin Creek, WV 25035, USA
		Date	: 06/17/2025	Loc Comment	: Ground elevation and coordinates extracted from 2018 LIDAR

Elevation(NAVD88)	Depth (ft)	Lithologic Column	Lithological Description	Recovery (Inches)	Water	Notes
572.0			22.00-42.60: Alluvium: SILT (ML), gray, wet. (continued)			
571.0	41					
570.0	42					
569.62				28		
			42.60-50.00: Alluvium: SAND (SP), moist, sandstone fragments.			
569.0	43					
568.0	44					
	45					
567.0						
566.0	46					
	47					
565.0				24		
564.0	48					
563.0	49					

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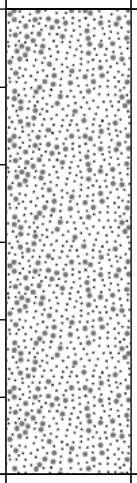
Monitoring Well Log - Borehole

SB-30

Easting (ft)	: 457816.67	Drill Rig	: Geoprobe 3230DT	Job Number	: LLC.06149.0000
Northing (ft)	: 4227899.02	Driller Supplier	: Enviroprobe Integrated Solutions	Client	: American Electric Power (AEP)
Ground Elevation	: 612.22 (Ft)	Logged By	: Greg Sowder	Project	: Cabin Creek
Total Depth	: 53 Ft BGL	Reviewed By	: Andrew Fowler	Location	: 15225 MacCorkle Ave SE, Cabin Creek, WV 25035, USA
		Date	: 06/17/2025	Loc Comment	: Ground elevation and coordinates extracted from 2018 LIDAR

Elevation(NAVD88)	Depth (ft)	Lithologic Column	Lithological Description	Recovery (Inches)	Water	Notes
562.0 561.0 560.0	51 52		50.00-53.00: Alluvium: SAND (SP): reddish brown, moist to wet, sandstone fragments.	22		
			SB-30 Refusal at 53 Ft			

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Monitoring Well Log - Borehole

SB-31

Easting (ft)	: 457898.29	Drill Rig	: Geoprobe 7822DT	Job Number	: LLC.06149.0000
Northing (ft)	: 4227921.85	Driller Supplier	: Enviroprobe Integrated Solutions	Client	: American Electric Power (AEP)
Ground Elevation	: 611.45 (Ft)	Logged By	: Greg Sowder	Project	: Cabin Creek
Total Depth	: 30 Ft BGL	Reviewed By	: Andrew Fowler	Location	: 15225 MacCorkle Ave SE, Cabin Creek, WV 25035, USA
		Date	: 06/13/2025	Loc Comment	: Ground elevation and coordinates extracted from 2018 LIDAR

Elevation(NAVD88)	Depth (ft)	Lithologic Column	Lithological Description	Recovery (Inches)	Water	Notes
611.0			0.00 - 1.30: Fill: Bottom ash, moist.			
	1					
610.0			1.30 - 3.40: Fill: Coal fragments.			
	2					
609.0				48		
	3					
608.0			3.40 - 4.10: Fill: SILT (ML), brownish orange, moist, sandstone fragments.			
607.35	4		4.10 - 5.00: Fill: SILT (ML), reddish brown, moist.			
607.0						
606.45	5		5.00 - 19.80: Fill: Bottom ash, moist.			
606.0						
	6					
605.0						
	7					
604.0				31		
	8					
603.0						
	9					
602.0						

EHS Support, LLC

Monitoring Well Log - Borehole

SB-31

Easting (ft)	: 457898.29	Drill Rig	: Geoprobe 7822DT	Job Number	: LLC.06149.0000
Northing (ft)	: 4227921.85	Driller Supplier	: Enviroprobe Integrated Solutions	Client	: American Electric Power (AEP)
Ground Elevation	: 611.45 (Ft)	Logged By	: Greg Sowder	Project	: Cabin Creek
Total Depth	: 30 Ft BGL	Reviewed By	: Andrew Fowler	Location	: 15225 MacCorkle Ave SE, Cabin Creek, WV 25035, USA
		Date	: 06/13/2025	Loc Comment	: Ground elevation and coordinates extracted from 2018 LIDAR

Elevation(NAVD88)	Depth (ft)	Lithologic Column	Lithological Description	Recovery (Inches)	Water	Notes
			5.00 - 19.80: Fill: Bottom ash, moist. (continued)			
601.0						
	11					
600.0						
	12					
599.0				30		
	13					
598.0						
	14					
597.0						
	15					
596.0						
	16					
595.0						
	17					
594.0				35		
	18					
593.0						
	19					
592.0						
			19.80 - 20.30: Alluvium: SILT (ML), brown, moist.			

EHS Support, LLC

Monitoring Well Log - Borehole

SB-31

Easting (ft)	: 457898.29	Drill Rig	: Geoprobe 7822DT	Job Number	: LLC.06149.0000
Northing (ft)	: 4227921.85	Driller Supplier	: Enviroprobe Integrated Solutions	Client	: American Electric Power (AEP)
Ground Elevation	: 611.45 (Ft)	Logged By	: Greg Sowder	Project	: Cabin Creek
Total Depth	: 30 Ft BGL	Reviewed By	: Andrew Fowler	Location	: 15225 MacCorkle Ave SE, Cabin Creek, WV 25035, USA
		Date	: 06/13/2025	Loc Comment	: Ground elevation and coordinates extracted from 2018 LIDAR

Elevation(NAVD88)	Depth (ft)	Lithologic Column	Lithological Description	Recovery (Inches)	Water	Notes
			19.80 - 20.30: Alluvium: SILT (ML), brown, moist. (continued)			
591.0			20.30 - 23.00: Alluvium: SILT with fine grained sand (ML), reddish brown, wet.			
	21					
590.0						
	22					
589.0				60		
588.45	23		23.00 - 23.90: Alluvium: SAND (SP), brown, wet.			
588.0						
	24		23.90 - 25.00: Alluvium: Sandy SILT (ML), brown, wet.			
587.0						
586.45	25		25.00 - 28.90: Wet.			
586.0						
	26					
585.0						
	27					
584.0				60		
	28					
583.0						
	29		28.90 - 30.00: Alluvium: SAND (SP), gray, fine grained sand, wet.			
582.0			SB - 31 Terminated at 30 Ft			

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Monitoring Well Log - Borehole

SB-32

Easting (ft)	: 457976.91	Drill Rig	: Geoprobe 7822DT	Job Number	: LLC.06149.0000
Northing (ft)	: 4227944.26	Driller Supplier	: Enviroprobe Integrated Solutions	Client	: American Electric Power (AEP)
Ground Elevation	: 593.49 (Ft)	Logged By	: Greg Sowder	Project	: Cabin Creek
Total Depth	: 25 Ft BGL	Reviewed By	: Andrew Fowler	Location	: 15225 MacCorkle Ave SE, Cabin Creek, WV 25035, USA
		Date	: 06/12/2025	Loc Comment	: Ground elevation and coordinates extracted from 2018 LIDAR

Elevation(NAVD88)	Depth (ft)	Lithologic Column	Lithological Description	Recovery (Inches)	Water	Notes
593.0			0.00-0.50: SILT with sand and gravel (ML), brown, moist.			
592.99			0.50-4.60: Fill: Bottom ash, moist.			
592.0	1					
591.0	2			28		
590.0	3					
589.0	4					
588.89			4.60-8.40: Fill: Bottom ash, moist			
588.0	5					
587.0	6					
586.0	7			26		
585.09	8					
585.0			8.40-9.00: Alluvium: Clayey SILT (ML), red, moist.			
584.49	9		9.00-10.00: Alluvium: SILT with gravel (ML), brown, moist, white sandstone fragments.			
584.0						

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Monitoring Well Log - Borehole

SB-32

Easting (ft)	: 457976.91	Drill Rig	: Geoprobe 7822DT	Job Number	: LLC.06149.0000
Northing (ft)	: 4227944.26	Driller Supplier	: Enviroprobe Integrated Solutions	Client	: American Electric Power (AEP)
Ground Elevation	: 593.49 (Ft)	Logged By	: Greg Sowder	Project	: Cabin Creek
Total Depth	: 25 Ft BGL	Reviewed By	: Andrew Fowler	Location	: 15225 MacCorkle Ave SE, Cabin Creek, WV 25035, USA
		Date	: 06/12/2025	Loc Comment	: Ground elevation and coordinates extracted from 2018 LIDAR

Elevation(NAVD88)	Depth (ft)	Lithologic Column	Lithological Description	Recovery (Inches)	Water	Notes
583.0			10.00-17.30: Alluvium: SILT (ML), brown, moist, coal fragments.			
	11					
582.0						
	12					
581.0				41		
	13					
580.0						
	14					
579.0						
	15					
578.0						
	16					
577.0						
	17					
576.19						
576.0			17.30-18.60: Alluvium: SILT and gravel (ML), gray, wet.	34		
	18					
575.0						
574.89			18.60-19.20: Alluvium: SILT and gravel (ML), black, wet.			
	19					
574.29			19.20-20.00: Alluvium: SILT with fine grained sand (ML), gray, moist.			
574.0						

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Monitoring Well Log - Borehole

SB-32

Easting (ft)	: 457976.91	**Drill Rig**	: Geoprobe 7822DT	**Job Number**	: LLC.06149.0000
Northing (ft)	: 4227944.26	**Driller Supplier**	: Enviroprobe Integrated Solutions	**Client**	: American Electric Power (AEP)
Ground Elevation	: 593.49 (Ft)	**Logged By**	: Greg Sowder	**Project**	: Cabin Creek
Total Depth	: 25 Ft BGL	**Reviewed By**	: Andrew Fowler	**Location**	: 15225 MacCorkle Ave SE, Cabin Creek, WV 25035, USA
		Date	: 06/12/2025	**Loc Comment**	: Ground elevation and coordinates extracted from 2018 LIDAR

Elevation(NAVD88)	*Depth (ft)*	*Lithologic Column*	*Lithological Description*	*Recovery (Inches)*	*Water*	*Notes*
573.0			20.00-23.20: Wet.			
	21					
572.0						
	22					
571.0				44		
	23					
570.29			23.20-25.00: Alluvium: GRAVEL (GW), dark gray, wet.			
570.0						
	24					
569.0						
			SB-32 Terminated at 25 Ft			

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Monitoring Well Log - Borehole

SB-33

Easting (ft)	: 457476.81	Drill Rig	: Geoprobe 3126GT	Job Number	: LLC.06149.0000
Northing (ft)	: 4227763.29	Driller Supplier	: Enviroprobe Integrated Solutions	Client	: American Electric Power (AEP)
Ground Elevation	: 618.06 (Ft)	Logged By	: Greg Sowder	Project	: Cabin Creek
Total Depth	: 39 Ft BGL	Reviewed By	: Andrew Fowler	Location	: 15225 MacCorkle Ave SE, Cabin Creek, WV 25035, USA
		Date	: 06/06/2025	Loc Comment	: Ground elevation and coordinates extracted from 2018 LIDAR

Elevation(NAVD88)	Depth (ft)	Lithologic Column	Lithological Description	Recovery (Inches)	Water	Notes
618.0			0.00 - 5.10: Fill: Bottom ash, moist.			
617.0	1					
616.0	2			40		
615.0	3					
614.0	4					
613.0	5		5.10 - 9.00: Fill: Fly ash, moist, sandstone fragments from 5.1' - 6.5'.			
612.0	6					
611.0	7			53		
610.0	8					
609.06 609.0	9		9.00 - 19.00: Fill: Fly ash, dark grey, moist.	58		

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Monitoring Well Log - Borehole

SB-33

Easting (ft)	: 457476.81	**Drill Rig**	: Geoprobe 3126GT	**Job Number**	: LLC.06149.0000
Northing (ft)	: 4227763.29	**Driller Supplier**	: Enviroprobe Integrated Solutions	**Client**	: American Electric Power (AEP)
Ground Elevation	: 618.06 (Ft)	**Logged By**	: Greg Sowder	**Project**	: Cabin Creek
Total Depth	: 39 Ft BGL	**Reviewed By**	: Andrew Fowler	**Location**	: 15225 MacCorkle Ave SE, Cabin Creek, WV 25035, USA
		Date	: 06/06/2025	**Loc Comment**	: Ground elevation and coordinates extracted from 2018 LIDAR

Elevation(NAVD88)	Depth (ft)	Lithologic Column	Lithological Description	Recovery (Inches)	Water	Notes
608.0			9.00 - 19.00: Fill: Fly ash, dark grey, moist. (continued)			
607.0	11					
606.0	12			58		
605.0	13					
604.0	14					
603.0	15					
602.0	16			55		
601.0	17					
600.0	18					
599.06 599.0	19		19.00 - 27.60: Fill: Bottom ash, wet.	48	▼	

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Monitoring Well Log - Borehole

SB-33

Easting (ft)	: 457476.81	Drill Rig	: Geoprobe 3126GT	Job Number	: LLC.06149.0000
Northing (ft)	: 4227763.29	Driller Supplier	: Enviroprobe Integrated Solutions	Client	: American Electric Power (AEP)
Ground Elevation	: 618.06 (Ft)	Logged By	: Greg Sowder	Project	: Cabin Creek
Total Depth	: 39 Ft BGL	Reviewed By	: Andrew Fowler	Location	: 15225 MacCorkle Ave SE, Cabin Creek, WV 25035, USA
		Date	: 06/06/2025	Loc Comment	: Ground elevation and coordinates extracted from 2018 LIDAR

Elevation(NAVD88)	Depth (ft)	Lithologic Column	Lithological Description	Recovery (Inches)	Water	Notes
598.0			19.00 - 27.60: Fill: Bottom ash, wet. (continued)			
597.0	21					
596.0	22			48		
595.0	23					
594.0	24					
593.0	25					
592.0	26					
				56		
591.0	27					
			27.60 - 29.30: Fill: Fly ash, wet.			
590.0	28					
589.0	29					
588.76			29.30 - 34.50: Alluvium: SILT (ML), gray, wet.	60		

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Monitoring Well Log - Borehole

SB-33

Easting (ft)	: 457476.81	Drill Rig	: Geoprobe 3126GT	Job Number	: LLC.06149.0000
Northing (ft)	: 4227763.29	Driller Supplier	: Enviroprobe Integrated Solutions	Client	: American Electric Power (AEP)
Ground Elevation	: 618.06 (Ft)	Logged By	: Greg Sowder	Project	: Cabin Creek
Total Depth	: 39 Ft BGL	Reviewed By	: Andrew Fowler	Location	: 15225 MacCorkle Ave SE, Cabin Creek, WV 25035, USA
		Date	: 06/06/2025	Loc Comment	: Ground elevation and coordinates extracted from 2018 LIDAR

Elevation(NAVD88)	Depth (ft)	Lithologic Column	Lithological Description	Recovery (Inches)	Water	Notes
588.0			29.30 - 34.50: Alluvium: SILT (ML), gray, wet. (continued)			
587.0	31					
586.0	32			60		
585.0	33					
584.0	34					
583.56			34.50 - 38.50: Alluvium: CLAY (CH), soft, high plasticity, gray, moist.			
583.0	35					
582.0	36			60		
581.0	37					
580.0	38					
579.56			38.50 - 39.00: Alluvium: SILT with coarse grained sand (ML), dark gray, heaving sand.			
			SB - 33 Terminated at 39 Ft			

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Monitoring Well Log - Borehole

SB-34

Easting (ft)	: 457557.80	**Drill Rig**	: Geoprobe 3126GT	**Job Number**	: LLC.06149.0000
Northing (ft)	: 4227771.26	**Driller Supplier**	: Enviroprobe Integrated Solutions	**Client**	: American Electric Power (AEP)
Ground Elevation	: 618.34 (Ft)	**Logged By**	: Greg Sowder	**Project**	: Cabin Creek
Total Depth	: 44 Ft BGL	**Reviewed By**	: Andrew Fowler	**Location**	: 15225 MacCorkle Ave SE, Cabin Creek, WV 25035, USA
		Date	: 06/06/2025	**Loc Comment**	: Ground elevation and coordinates extracted from 2018 LIDAR

Elevation(NAVD88)	*Depth (ft)*	*Lithologic Column*	*Lithological Description*	*Recovery (Inches)*	*Water*	*Notes*
618.0			0.00-3.50: Fill: Bottom ash, dry.			
617.0	1					
616.0	2			42		
615.0	3					
614.84			3.50-4.00: Fill: Fly ash, moist.			
614.34	4		4.00-5.40: Moist to wet.			
614.0						
613.0	5					
612.94			5.40-7.00: Sandstone fragments.			
612.0	6			54		
611.34	7		7.00-16.00: Fill: Fly ash, dark gray, moist.			
611.0						
610.0	8					
	9					
609.0				53		

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Monitoring Well Log - Borehole

SB-34

Easting (ft)	: 457557.80	Drill Rig	: Geoprobe 3126GT	Job Number	: LLC.06149.0000
Northing (ft)	: 4227771.26	Driller Supplier	: Enviroprobe Integrated Solutions	Client	: American Electric Power (AEP)
Ground Elevation	: 618.34 (Ft)	Logged By	: Greg Sowder	Project	: Cabin Creek
Total Depth	: 44 Ft BGL	Reviewed By	: Andrew Fowler	Location	: 15225 MacCorkle Ave SE, Cabin Creek, WV 25035, USA
		Date	: 06/06/2025	Loc Comment	: Ground elevation and coordinates extracted from 2018 LIDAR

Elevation(NAVD88)	Depth (ft)	Lithologic Column	Lithological Description	Recovery (Inches)	Water	Notes
608.0			7.00-16.00: Fill: Fly ash, dark gray, moist. (continued)			
	11					
607.0						
	12			53		
606.0						
	13					
605.0						
	14					
604.0						
	15					
603.0						
602.34	16		16.00-17.80: Fill: SILT (ML), brown, moist.			
602.0				54		
	17					
601.0						
	18		17.80-18.60: Fill: SILT (ML), gray.			
600.0						
599.74			18.60-20.00: Fill: Sandy SILT (ML), brown, moist.			
	19					
599.0				55		

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Monitoring Well Log - Borehole

SB-34

Easting (ft)	: 457557.80	Drill Rig	: Geoprobe 3126GT	Job Number	: LLC.06149.0000
Northing (ft)	: 4227771.26	Driller Supplier	: Enviroprobe Integrated Solutions	Client	: American Electric Power (AEP)
Ground Elevation	: 618.34 (Ft)	Logged By	: Greg Sowder	Project	: Cabin Creek
Total Depth	: 44 Ft BGL	Reviewed By	: Andrew Fowler	Location	: 15225 MacCorkle Ave SE, Cabin Creek, WV 25035, USA
		Date	: 06/06/2025	Loc Comment	: Ground elevation and coordinates extracted from 2018 LIDAR

Elevation(NAVD88)	Depth (ft)	Lithologic Column	Lithological Description	Recovery (Inches)	Water	Notes
598.0			20.00-21.90: Fill: GRAVEL (GP), brown/gray, wet.			
597.0	21					
596.44						
596.0	22		21.90-24.00: Fill: Wet, bottom ash.	55		
595.0	23					
594.34	24					
594.24			24.00-24.10: Alluvium: GRAVEL (GP), black, wet.			
594.0			24.10-27.40: Alluvium: SILT (ML), gray, wet, coal fragments.			
593.0	25					
592.0	26			60		
591.0	27					
590.94			27.40-29.00: Alluvium: SILT (ML), gray, wet.			
590.0	28					
589.34	29					
589.0			29.00-34.00: Alluvium: SILT (ML), soft, dark gray, wet.	60		

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Monitoring Well Log - Borehole

SB-34

Easting (ft)	: 457557.80	Drill Rig	: Geoprobe 3126GT	Job Number	: LLC.06149.0000
Northing (ft)	: 4227771.26	Driller Supplier	: Enviroprobe Integrated Solutions	Client	: American Electric Power (AEP)
Ground Elevation	: 618.34 (Ft)	Logged By	: Greg Sowder	Project	: Cabin Creek
Total Depth	: 44 Ft BGL	Reviewed By	: Andrew Fowler	Location	: 15225 MacCorkle Ave SE, Cabin Creek, WV 25035, USA
		Date	: 06/06/2025	Loc Comment	: Ground elevation and coordinates extracted from 2018 LIDAR

Elevation(NAVD88)	Depth (ft)	Lithologic Column	Lithological Description	Recovery (Inches)	Water	Notes
588.0			29.00-34.00: Alluvium: SILT (ML), soft, dark gray, wet. (continued)			
	31					
587.0						
	32			60		
586.0						
	33					
585.0						
584.34	34		34.00-41.20: Alluvium: SILT (ML), dark gray, wet, wood fragments at 37.2.			
584.0						
	35					
583.0						
	36					
582.0				31		
	37					
581.0						
	38					
580.0						
	39					
579.0						

EHS Support LLC

Monitoring Well Log - Borehole

SB-34

Easting (ft)	: 457557.80	Drill Rig	: Geoprobe 3126GT	Job Number	: LLC.06149.0000
Northing (ft)	: 4227771.26	Driller Supplier	: Enviroprobe Integrated Solutions	Client	: American Electric Power (AEP)
Ground Elevation	: 618.34 (Ft)	Logged By	: Greg Sowder	Project	: Cabin Creek
Total Depth	: 44 Ft BGL	Reviewed By	: Andrew Fowler	Location	: 15225 MacCorkle Ave SE, Cabin Creek, WV 25035, USA
		Date	: 06/06/2025	Loc Comment	: Ground elevation and coordinates extracted from 2018 LIDAR

Elevation(NAVD88)	Depth (ft)	Lithologic Column	Lithological Description	Recovery (Inches)	Water	Notes
578.0			34.00-41.20: Alluvium: SILT (ML), dark gray, wet, wood fragments at 37.2. (continued)			
	41					
577.14			41.20-44.00: Alluvium: GRAVEL (GP), wet.			
577.0						
	42					
576.0						
	43					
575.0						
			SB-34 Terminated at 44 Ft			

EHS Support LLC

Monitoring Well Log - Borehole

SB-35

Easting (ft)	: 457640.80	Drill Rig	: Geoprobe 3230DT	Job Number	: LLC.06149.0000
Northing (ft)	: 4227798.81	Driller Supplier	: Enviroprobe Integrated Solutions	Client	: American Electric Power (AEP)
Ground Elevation	: 619.91 (Ft)	Logged By	: Greg Sowder	Project	: Cabin Creek
Total Depth	: 35 Ft BGL	Reviewed By	: Andrew Fowler	Location	: 15225 MacCorkle Ave SE, Cabin Creek, WV 25035, USA
		Date	: 06/09/2025	Loc Comment	: Ground elevation and coordinates extracted from 2018 LIDAR

Elevation(NAVD88)	Depth (ft)	Lithologic Column	Lithological Description	Recovery (Inches)	Water	Notes
619.0	1		0.00-3.00: SILT with clay (ML), brown, moist.			
618.0	2			32		
617.0 / 616.91	3		3.00-7.60: Fill: Bottom ash, moist.			
616.0	4					
615.0	5					
614.0	6					
613.0	7					
612.31			7.60-9.00: Fill: Fly ash, moist to wet.	36		
612.0	8					
611.0 / 610.91	9		9.00-9.20: SAND (SP), brown, wet.			
			9.20-9.80: Fill: Fly ash, wet.			
610.11						
610.0			9.80-10.00: Fill: Bottom ash, wet.			

EHS Support

EHS Support LLC

Monitoring Well Log - Borehole

SB-35

Easting (ft)	: 457640.80	Drill Rig	: Geoprobe 3230DT	Job Number	: LLC.06149.0000
Northing (ft)	: 4227798.81	Driller Supplier	: Enviroprobe Integrated Solutions	Client	: American Electric Power (AEP)
Ground Elevation	: 619.91 (Ft)	Logged By	: Greg Sowder	Project	: Cabin Creek
Total Depth	: 35 Ft BGL	Reviewed By	: Andrew Fowler	Location	: 15225 MacCorkle Ave SE, Cabin Creek, WV 25035, USA
		Date	: 06/09/2025	Loc Comment	: Ground elevation and coordinates extracted from 2018 LIDAR

Elevation(NAVD88)	Depth (ft)	Lithologic Column	Lithological Description	Recovery (Inches)	Water	Notes
609.0	11		10.00-12.00: Moist.			
608.0 / 607.91	12		12.00-18.80: Fill: Fly ash, moist.	41		
607.0	13					
606.0	14					
605.0	15					
604.0	16			49		
603.0	17					
602.0	18					
601.11 / 601.0	19		18.80-23.60: Wet.		▼	
600.0						

EHS Support

EHS Support LLC

Monitoring Well Log - Borehole

SB-35

Easting (ft)	: 457640.80	**Drill Rig**	: Geoprobe 3230DT	**Job Number**	: LLC.06149.0000
Northing (ft)	: 4227798.81	**Driller Supplier**	: Enviroprobe Integrated Solutions	**Client**	: American Electric Power (AEP)
Ground Elevation	: 619.91 (Ft)	**Logged By**	: Greg Sowder	**Project**	: Cabin Creek
Total Depth	: 35 Ft BGL	**Reviewed By**	: Andrew Fowler	**Location**	: 15225 MacCorkle Ave SE, Cabin Creek, WV 25035, USA
		Date	: 06/09/2025	**Loc Comment**	: Ground elevation and coordinates extracted from 2018 LIDAR

Elevation(NAVD88)	Depth (ft)	Lithologic Column	Lithological Description	Recovery (Inches)	Water	Notes
599.0	21		18.80-23.60: Wet. (continued)			
598.0	22			60		
597.0	23					
596.31			23.60-25.00: SAND with gravel (SP), brown/black, wet.			
596.0	24					
595.0	25					
594.91			25.00-26.00: SILT with fine sand (ML), brown, wet.			
594.0	26					
593.91			26.00-30.00: Fill: Bottom ash, wet.			
593.0	27			60		
592.0	28					
591.0	29					
590.0						

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Monitoring Well Log - Borehole

SB-35

Easting (ft)	: 457640.80	**Drill Rig**	: Geoprobe 3230DT	**Job Number**	: LLC.06149.0000
Northing (ft)	: 4227798.81	**Driller Supplier**	: Enviroprobe Integrated Solutions	**Client**	: American Electric Power (AEP)
Ground Elevation	: 619.91 (Ft)	**Logged By**	: Greg Sowder	**Project**	: Cabin Creek
Total Depth	: 35 Ft BGL	**Reviewed By**	: Andrew Fowler	**Location**	: 15225 MacCorkle Ave SE, Cabin Creek, WV 25035, USA
		Date	: 06/09/2025	**Loc Comment**	: Ground elevation and coordinates extracted from 2018 LIDAR

Elevation(NAVD88)	*Depth (ft)*	*Lithologic Column*	*Lithological Description*	*Recovery (Inches)*	*Water*	*Notes*
589.0	31		30.00-32.50: Alluvium: SILT (ML), gray, wet.	60		
588.0	32					
587.41			32.50-35.00: Alluvium: SILT (ML), brown, wet.			
587.0	33					
586.0	34					
585.0						
			SB-35 Terminated at 35 Ft			

EHS Support LLC

Monitoring Well Log - Borehole

SB-36

Easting (ft)	: 457711.38	Drill Rig	: Geoprobe 3230DT	Job Number	: LLC.06149.0000
Northing (ft)	: 4227834.89	Driller Supplier	: Enviroprobe Integrated Solutions	Client	: American Electric Power (AEP)
Ground Elevation	: 620.71 (Ft)	Logged By	: Greg Sowder	Project	: Cabin Creek
Total Depth	: 40 Ft BGL	Reviewed By	: Andrew Fowler	Location	: 15225 MacCorkle Ave SE, Cabin Creek, WV 25035, USA
		Date	: 06/09/2025	Loc Comment	: Ground elevation and coordinates extracted from 2018 LIDAR

Elevation(NAVD88)	Depth (ft)	Lithologic Column	Lithological Description	Recovery (Inches)	Water	Notes
620.0			0.00-2.80: Fill: Silty SAND (SP), wet.			
	1					
619.0						
	2			38		
618.0						
			2.80-9.00: Fill: Bottom ash, moist.			
	3					
617.0						
	4					
616.0						
	5					
615.0						
	6					
614.0						
	7			26		
613.0						
	8					
612.0						
611.71	9		9.00-9.30: Fill: SAND (SP), brown.			
			9.30-12.80: Fill: Fly ash, moist.			
611.0						

EHS Support LLC

Monitoring Well Log - Borehole

SB-36

Easting (ft)	: 457711.38	Drill Rig	: Geoprobe 3230DT	Job Number	: LLC.06149.0000
Northing (ft)	: 4227834.89	Driller Supplier	: Enviroprobe Integrated Solutions	Client	: American Electric Power (AEP)
Ground Elevation	: 620.71 (Ft)	Logged By	: Greg Sowder	Project	: Cabin Creek
Total Depth	: 40 Ft BGL	Reviewed By	: Andrew Fowler	Location	: 15225 MacCorkle Ave SE, Cabin Creek, WV 25035, USA
		Date	: 06/09/2025	Loc Comment	: Ground elevation and coordinates extracted from 2018 LIDAR

Elevation(NAVD88)	Depth (ft)	Lithologic Column	Lithological Description	Recovery (Inches)	Water	Notes
610.0			9.30-12.80: Fill: Fly ash, moist. (continued)			
	11					
609.0						
	12			31		
608.0						
	13		12.80-13.20: Fill: SILT (ML), gray, moist.			
607.51			13.20-13.90: Fill: SILT (ML), brown, moist.			
607.0						
606.61	14		13.90-14.10: Fill: SILT (ML), gray, moist.			
			14.10-15.00: Fill: SILT (ML), brown, moist.			
606.0						
605.71	15		15.00-19.20: Sandstone fragments.			
605.0						
	16					
604.0						
	17			16		
603.0						
	18					
602.0						
	19					
601.51			19.20-23.30: Fill: Bottom ash, moist.			
601.0						

EHS Support

EHS Support LLC

Monitoring Well Log - Borehole

SB-36

Easting (ft)	: 457711.38	Drill Rig	: Geoprobe 3230DT	Job Number	: LLC.06149.0000
Northing (ft)	: 4227834.89	Driller Supplier	: Enviroprobe Integrated Solutions	Client	: American Electric Power (AEP)
Ground Elevation	: 620.71 (Ft)	Logged By	: Greg Sowder	Project	: Cabin Creek
Total Depth	: 40 Ft BGL	Reviewed By	: Andrew Fowler	Location	: 15225 MacCorkle Ave SE, Cabin Creek, WV 25035, USA
		Date	: 06/09/2025	Loc Comment	: Ground elevation and coordinates extracted from 2018 LIDAR

Elevation(NAVD88)	Depth (ft)	Lithologic Column	Lithological Description	Recovery (Inches)	Water	Notes
600.0			19.20-23.30: Fill: Bottom ash, moist. (continued)			
	21					
599.0						
	22			22		
598.0						
	23					
597.21			23.30-23.50: Wood fragments.			
597.0			23.50-25.00: Fill: Silty CLAY (CL), soft, mottled with black, moist.			
	24					
596.0						
595.71	25		25.00-28.50: Fill: SILT with little clay (ML), gray, moist.			
595.0						
	26					
594.0						
	27			17		
593.0						
	28					
592.21			28.50-30.00: Fill: Bottom ash, moist.			
592.0						
	29					
591.0						

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Monitoring Well Log - Borehole

SB-36

Easting (ft)	: 457711.38	Drill Rig	: Geoprobe 3230DT	Job Number	: LLC.06149.0000
Northing (ft)	: 4227834.89	Driller Supplier	: Enviroprobe Integrated Solutions	Client	: American Electric Power (AEP)
Ground Elevation	: 620.71 (Ft)	Logged By	: Greg Sowder	Project	: Cabin Creek
Total Depth	: 40 Ft BGL	Reviewed By	: Andrew Fowler	Location	: 15225 MacCorkle Ave SE, Cabin Creek, WV 25035, USA
		Date	: 06/09/2025	Loc Comment	: Ground elevation and coordinates extracted from 2018 LIDAR

Elevation(NAVD88)	Depth (ft)	Lithologic Column	Lithological Description	Recovery (Inches)	Water	Notes
			30.00-34.30: Fill: Bottom ash, wet.			
590.0						
	31					
589.0						
	32			17		
588.0						
	33					
587.0						
	34					
			34.30-35.00: Alluvium: SILT (ML), brown, wet.			
586.0						
585.71	35		35.00-40.00: Alluvium: Sandy SILT (ML), brown/gray, wet.			
585.0						
	36					
584.0						
	37					
583.0						
	38					
582.0						
	39					
581.0			SB-36 Terminated at 40 Ft			

EHS Support LLC

Monitoring Well Log - Borehole

SB-37

Easting (ft)	: 457818.22	Drill Rig	: Geoprobe 3230DT	Job Number	: LLC.06149.0000
Northing (ft)	: 4227847.73	Driller Supplier	: Enviroprobe Integrated Solutions	Client	: American Electric Power (AEP)
Ground Elevation	: 611.78 (Ft)	Logged By	: Greg Sowder	Project	: Cabin Creek
Total Depth	: 35 Ft BGL	Reviewed By	: Andrew Fowler	Location	: 15225 MacCorkle Ave SE, Cabin Creek, WV 25035, USA
		Date	: 06/17/2025	Loc Comment	: Ground elevation and coordinates extracted from 2018 LIDAR

Elevation(NAVD88)	Depth (ft)	Lithologic Column	Lithological Description	Recovery (Inches)	Water	Notes
611.48			0.00-0.30: CLAY with medium grained gravel (CL), brown.			
611.0	1		0.30-3.10: Silty SAND with medium grained gravel (SM), brown, moist.			
610.0	2					
609.0	3			16		
608.68			3.10-8.60: Fill: Moist, bottom ash.			
608.0	4					
607.0	5					
606.0	6					
605.0	7					
604.0	8			18		
603.18			8.60-14.40: Light brown, dry, sandstone fragments.			
603.0	9					
602.0						

EHS Support

EHS Support LLC

Monitoring Well Log - Borehole

SB-37

Easting (ft)	: 457818.22	**Drill Rig**	: Geoprobe 3230DT	**Job Number**	: LLC.06149.0000
Northing (ft)	: 4227847.73	**Driller Supplier**	: Enviroprobe Integrated Solutions	**Client**	: American Electric Power (AEP)
Ground Elevation	: 611.78 (Ft)	**Logged By**	: Greg Sowder	**Project**	: Cabin Creek
Total Depth	: 35 Ft BGL	**Reviewed By**	: Andrew Fowler	**Location**	: 15225 MacCorkle Ave SE, Cabin Creek, WV 25035, USA
		Date	: 06/17/2025	**Loc Comment**	: Ground elevation and coordinates extracted from 2018 LIDAR

Elevation(NAVD88)	Depth (ft)	Lithologic Column	Lithological Description	Recovery (Inches)	Water	Notes
601.0			8.60-14.40: Light brown, dry, sandstone fragments. (continued)			
	11					
600.0						
	12					
599.0						
	13					
598.0						
	14			31		
597.38			14.40-20.00: Fill: Bottom ash, moist.			
597.0						
	15					
596.0						
	16					
595.0						
	17					
594.0						
	18			16		
593.0						
	19					
592.0						

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EHS Support LLC

Monitoring Well Log - Borehole

SB-37

Easting (ft)	: 457818.22	Drill Rig	: Geoprobe 3230DT	Job Number	: LLC.06149.0000
Northing (ft)	: 4227847.73	Driller Supplier	: Enviroprobe Integrated Solutions	Client	: American Electric Power (AEP)
Ground Elevation	: 611.78 (Ft)	Logged By	: Greg Sowder	Project	: Cabin Creek
Total Depth	: 35 Ft BGL	Reviewed By	: Andrew Fowler	Location	: 15225 MacCorkle Ave SE, Cabin Creek, WV 25035, USA
		Date	: 06/17/2025	Loc Comment	: Ground elevation and coordinates extracted from 2018 LIDAR

Elevation(NAVD88)	Depth (ft)	Lithologic Column	Lithological Description	Recovery (Inches)	Water	Notes
			20.00-27.80: Wet.			
591.0	21			16		
590.0	22			18		
589.0	23					
588.0	24					
587.0	25					
586.0	26					
585.0	27			41		
584.0 583.98	28		27.80-30.00: Alluvium: Sandy SILT (ML), brown, wet.			
583.0	29					
582.0						

EHS Support

EHS Support LLC

Monitoring Well Log - Borehole

SB-37

Easting (ft)	: 457818.22	**Drill Rig**	: Geoprobe 3230DT	**Job Number**	: LLC.06149.0000
Northing (ft)	: 4227847.73	**Driller Supplier**	: Enviroprobe Integrated Solutions	**Client**	: American Electric Power (AEP)
Ground Elevation	: 611.78 (Ft)	**Logged By**	: Greg Sowder	**Project**	: Cabin Creek
Total Depth	: 35 Ft BGL	**Reviewed By**	: Andrew Fowler	**Location**	: 15225 MacCorkle Ave SE, Cabin Creek, WV 25035, USA
		Date	: 06/17/2025	**Loc Comment**	: Ground elevation and coordinates extracted from 2018 LIDAR

Elevation(NAVD88)	*Depth (ft)*	*Lithologic Column*	*Lithological Description*	*Recovery (Inches)*	*Water*	*Notes*
581.0 580.0 579.0 578.0 577.0	31 32 33 34		30.00-32.70: Alluvium: SILT with fine grained sand (ML), brown, wet. 32.70-35.00: Alluvium: Silty SAND (SM), gray.	60		
			SB-37 Terminated at 35 Ft			

EHS Support LLC

Monitoring Well Log - Borehole

SB-38

Easting (ft)	: 457833.51	Drill Rig	: Geoprobe 7822DT	Job Number	: LLC.06149.0000
Northing (ft)	: 4227948.56	Driller Supplier	: Enviroprobe Integrated Solutions	Client	: American Electric Power (AEP)
Ground Elevation	: 602.55 (Ft)	Logged By	: Greg Sowder	Project	: Cabin Creek
Total Depth	: 10 Ft BGL	Reviewed By	: Andrew Fowler	Location	: 15225 MacCorkle Ave SE, Cabin Creek, WV 25035, USA
		Date	: 06/13/2025	Loc Comment	: Ground elevation and coordinates extracted from 2018 LIDAR

Elevation(NAVD88)	Depth (ft)	Lithologic Column	Lithological Description	Recovery (Inches)	Water	Notes
602.0			0.00-2.30: SILT (ML), brown, moist, rootlets.			
	1					
601.0						
	2					
600.25			2.30-3.90: SILT (ML), gray, wet.	46		
600.0						
	3					
599.0						
598.65			3.90-10.00: SILT with fine grained sand (ML), dark gray, wet.			
	4					
598.0						
	5					
597.0						
	6					
596.0						
	7					
595.0				57		
	8					
594.0						
	9					
593.0			SB-38 Terminated at 10 Ft			

EHS Support LLC

Monitoring Well Log - Borehole

SB-39

Easting (ft)	: 457887.89	Drill Rig	: Geoprobe 3230DT	Job Number	: LLC.06149.0000
Northing (ft)	: 4227863.61	Driller Supplier	: Enviroprobe Integrated Solutions	Client	: American Electric Power (AEP)
Ground Elevation	: 609.65 (Ft)	Logged By	: Greg Sowder	Project	: Cabin Creek
Total Depth	: 35 Ft BGL	Reviewed By	: Andrew Fowler	Location	: 15225 MacCorkle Ave SE, Cabin Creek, WV 25035, USA
		Date	: 06/17/2025	Loc Comment	: Ground elevation and coordinates extracted from 2018 LIDAR

Elevation(NAVD88)	Depth (ft)	Lithologic Column	Lithological Description	Recovery (Inches)	Water	Notes
609.0			0.00-2.50: Fill: Bottom ash, moist.			
	1					
608.0						
	2					
607.15			2.50-15.00: Fill: Fly ash, moist.	39		
607.0						
	3					
606.0						
	4					
605.0						
	5					
604.0						
	6					
603.0						
	7			27		
602.0						
	8					
601.0						
	9					
600.0						

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Monitoring Well Log - Borehole

SB-39

Easting (ft)	: 457887.89	Drill Rig	: Geoprobe 3230DT	Job Number	: LLC.06149.0000
Northing (ft)	: 4227863.61	Driller Supplier	: Enviroprobe Integrated Solutions	Client	: American Electric Power (AEP)
Ground Elevation	: 609.65 (Ft)	Logged By	: Greg Sowder	Project	: Cabin Creek
Total Depth	: 35 Ft BGL	Reviewed By	: Andrew Fowler	Location	: 15225 MacCorkle Ave SE, Cabin Creek, WV 25035, USA
		Date	: 06/17/2025	Loc Comment	: Ground elevation and coordinates extracted from 2018 LIDAR

Elevation(NAVD88)	Depth (ft)	Lithologic Column	Lithological Description	Recovery (Inches)	Water	Notes
			2.50-15.00: Fill: Fly ash, moist. (continued)			
599.0						
	11					
598.0						
	12					
597.0				19		
	13					
596.0						
	14					
595.0						
594.65	15		15.00-18.80: Wet.			
594.0						
	16					
593.0						
	17			27		
592.0						
	18					
591.0						
590.85	19		18.80-22.00: Fill: Bottom ash, wet.			
590.0						

EHS Support

EHS Support LLC

Monitoring Well Log - Borehole

SB-39

Easting (ft)	: 457887.89	**Drill Rig**	: Geoprobe 3230DT	**Job Number**	: LLC.06149.0000
Northing (ft)	: 4227863.61	**Driller Supplier**	: Enviroprobe Integrated Solutions	**Client**	: American Electric Power (AEP)
Ground Elevation	: 609.65 (Ft)	**Logged By**	: Greg Sowder	**Project**	: Cabin Creek
Total Depth	: 35 Ft BGL	**Reviewed By**	: Andrew Fowler	**Location**	: 15225 MacCorkle Ave SE, Cabin Creek, WV 25035, USA
		Date	: 06/17/2025	**Loc Comment**	: Ground elevation and coordinates extracted from 2018 LIDAR

Elevation(NAVD88)	Depth (ft)	Lithologic Column	Lithological Description	Recovery (Inches)	Water	Notes
			18.80-22.00: Fill: Bottom ash, wet. (continued)			
589.0						
	21					
588.0						
587.65	22		22.00-25.00: Alluvium: Clayey SILT (ML), soft, brown, wet.	44		
587.0						
	23					
586.0						
	24					
585.0						
584.65	25		25.00-30.00: Alluvium: SILT (ML), brown, wet.	60		
584.0						
	26					
583.0						
	27					
582.0						
	28					
581.0						
	29					
580.0						

EHS Support LLC

Monitoring Well Log - Borehole

SB-39

Easting (ft)	: 457887.89	Drill Rig	: Geoprobe 3230DT	Job Number	: LLC.06149.0000
Northing (ft)	: 4227863.61	Driller Supplier	: Enviroprobe Integrated Solutions	Client	: American Electric Power (AEP)
Ground Elevation	: 609.65 (Ft)	Logged By	: Greg Sowder	Project	: Cabin Creek
Total Depth	: 35 Ft BGL	Reviewed By	: Andrew Fowler	Location	: 15225 MacCorkle Ave SE, Cabin Creek, WV 25035, USA
		Date	: 06/17/2025	Loc Comment	: Ground elevation and coordinates extracted from 2018 LIDAR

Elevation(NAVD88)	Depth (ft)	Lithologic Column	Lithological Description	Recovery (Inches)	Water	Notes
579.65			30.00-34.60: Alluvium: SILT with sand (ML), brown.	54		
579.0						
	31					
578.0						
	32					
577.0						
	33					
576.0						
	34					
575.05						
575.0			34.60-35.00: Alluvium: SAND (SP), brown, wet.			
			SB-39 Terminated at 35 Ft			

EHS Support LLC

Monitoring Well Log - Borehole

SB-40

Easting (ft)	: 457955.56	Drill Rig	: Geoprobe 7822DT	Job Number	: LLC.06149.0000
Northing (ft)	: 4227880.69	Driller Supplier	: Enviroprobe Integrated Solutions	Client	: American Electric Power (AEP)
Ground Elevation	: 609.87 (Ft)	Logged By	: Greg Sowder	Project	: Cabin Creek
Total Depth	: 30 Ft BGL	Reviewed By	: Andrew Fowler	Location	: 15225 MacCorkle Ave SE, Cabin Creek, WV 25035, USA
		Date	: 06/13/2025	Loc Comment	: Ground elevation and coordinates extracted from 2018 LIDAR

Elevation(NAVD88)	Depth (ft)	Lithologic Column	Lithological Description	Recovery (Inches)	Water	Notes
609.0	1		0.00-2.80: Fill: Bottom ash and coal, moist.	52		
608.0	2					
607.07						
607.0	3		2.80-7.20: Alluvium: Clayey SILT with medium sized gravel (CL - ML), brown/gray, wet, with coal fragments.			
606.0	4					
605.0	5					
604.0	6			42		
603.0	7					
602.67			7.20-15.00: Alluvium: SILT (ML), reddish brown/gray, moist, sandstone fragments and bottom ash.			
602.0	8					
601.0	9					
600.0						

EHS Support LLC

Monitoring Well Log - Borehole

SB-40

Easting (ft)	: 457955.56	Drill Rig	: Geoprobe 7822DT	Job Number	: LLC.06149.0000
Northing (ft)	: 4227880.69	Driller Supplier	: Enviroprobe Integrated Solutions	Client	: American Electric Power (AEP)
Ground Elevation	: 609.87 (Ft)	Logged By	: Greg Sowder	Project	: Cabin Creek
Total Depth	: 30 Ft BGL	Reviewed By	: Andrew Fowler	Location	: 15225 MacCorkle Ave SE, Cabin Creek, WV 25035, USA
		Date	: 06/13/2025	Loc Comment	: Ground elevation and coordinates extracted from 2018 LIDAR

Elevation(NAVD88)	Depth (ft)	Lithologic Column	Lithological Description	Recovery (Inches)	Water	Notes
			7.20-15.00: Alluvium: SILT (ML), reddish brown/gray, moist, sandstone fragments and bottom ash. (continued)			
599.0	11					
598.0	12			49		
597.0	13					
596.0	14					
595.0	15					
594.87			15.00-18.00: Wet.			
594.0	16					
593.0	17			36		
592.0	18					
591.87			18.00-19.20: Alluvium: GRAVEL with medium grained sand (GP), gray, wet.			
591.0	19					
590.67			19.20-19.40: Alluvium: Silty CLAY (ML), gray, moist.			
590.47			19.40-20.00: Alluvium: GRAVEL (GP), brown, with medium grained sand, wet.			
590.0						

EHS Support

EHS Support LLC

Monitoring Well Log - Borehole

SB-40

Easting (ft)	: 457955.56	Drill Rig	: Geoprobe 7822DT	Job Number	: LLC.06149.0000
Northing (ft)	: 4227880.69	Driller Supplier	: Enviroprobe Integrated Solutions	Client	: American Electric Power (AEP)
Ground Elevation	: 609.87 (Ft)	Logged By	: Greg Sowder	Project	: Cabin Creek
Total Depth	: 30 Ft BGL	Reviewed By	: Andrew Fowler	Location	: 15225 MacCorkle Ave SE, Cabin Creek, WV 25035, USA
		Date	: 06/13/2025	Loc Comment	: Ground elevation and coordinates extracted from 2018 LIDAR

Elevation(NAVD88)	Depth (ft)	Lithologic Column	Lithological Description	Recovery (Inches)	Water	Notes
589.67			20.00-20.20: Alluvium: Silty SAND (SM).			
			20.20-25.00: Alluvium: SILT with little clay (ML), soft, gray, moist.			
589.0	21					
588.0	22			60		
587.0	23					
586.0	24					
585.0						
584.87	25		25.00-30.00: Alluvium: SILT with little clay (ML), soft, gray, wet.			
584.0	26					
583.0	27			60		
582.0	28					
581.0	29					
580.0			SB-40 Terminated at 30 Ft			

EHS Support LLC

Monitoring Well Log - Borehole

SB-41

Easting (ft)	: 457803.27	Drill Rig	: Geoprobe 3230DT	Job Number	: LLC.06149.0000
Northing (ft)	: 4227793.32	Driller Supplier	: Enviroprobe Integrated Solutions	Client	: American Electric Power (AEP)
Ground Elevation	: 616.72 (Ft)	Logged By	: Greg Sowder	Project	: Cabin Creek
Total Depth	: 40 Ft BGL	Reviewed By	: Andrew Fowler	Location	: 15225 MacCorkle Ave SE, Cabin Creek, WV 25035, USA
		Date	: 06/10/2025	Loc Comment	: Ground elevation and coordinates extracted from 2018 LIDAR

Elevation(NAVD88)	Depth (ft)	Lithologic Column	Lithological Description	Recovery (Inches)	Water	Notes
			0.00-0.30: Mulch.			
			0.30-14.80: Alluvium: SILT (ML), brown, moist.			
616.0						
	1					
615.0						
	2					
				28		
614.0						
	3					
613.0						
	4					
612.0						
	5					
611.0						
	6					
610.0						
	7					
				37		
609.0						
	8					
608.0						
	9					
607.0						

EHS Support

EHS Support LLC

Monitoring Well Log - Borehole

SB-41

Easting (ft)	: 457803.27	**Drill Rig**	: Geoprobe 3230DT	**Job Number**	: LLC.06149.0000
Northing (ft)	: 4227793.32	**Driller Supplier**	: Enviroprobe Integrated Solutions	**Client**	: American Electric Power (AEP)
Ground Elevation	: 616.72 (Ft)	**Logged By**	: Greg Sowder	**Project**	: Cabin Creek
Total Depth	: 40 Ft BGL	**Reviewed By**	: Andrew Fowler	**Location**	: 15225 MacCorkle Ave SE, Cabin Creek, WV 25035, USA
		Date	: 06/10/2025	**Loc Comment**	: Ground elevation and coordinates extracted from 2018 LIDAR

Elevation(NAVD88)	*Depth (ft)*	*Lithologic Column*	*Lithological Description*	*Recovery (Inches)*	*Water*	*Notes*
606.0			0.30-14.80: Alluvium: SILT (ML), brown, moist. (continued)			
	11					
605.0						
	12					
				41		
604.0						
	13					
603.0						
	14					
602.0						
601.72			14.80-15.00: Alluvium: Silty SAND (SM), brown, moist.			
	15		15.00-20.00: Alluvium: SILT with some fine grained sand (ML), brown, moist.			
601.0						
	16					
600.0						
	17					
				49		
599.0						
	18					
598.0						
	19					
597.0						

EHS Support

EHS Support LLC

Monitoring Well Log - Borehole

SB-41

Easting (ft)	: 457803.27	Drill Rig	: Geoprobe 3230DT	Job Number	: LLC.06149.0000
Northing (ft)	: 4227793.32	Driller Supplier	: Enviroprobe Integrated Solutions	Client	: American Electric Power (AEP)
Ground Elevation	: 616.72 (Ft)	Logged By	: Greg Sowder	Project	: Cabin Creek
Total Depth	: 40 Ft BGL	Reviewed By	: Andrew Fowler	Location	: 15225 MacCorkle Ave SE, Cabin Creek, WV 25035, USA
		Date	: 06/10/2025	Loc Comment	: Ground elevation and coordinates extracted from 2018 LIDAR

Elevation(NAVD88)	Depth (ft)	Lithologic Column	Lithological Description	Recovery (Inches)	Water	Notes
			20.00-28.20: Alluvium: Sandy SILT (ML), brown, moist.			
596.0						
	21					
595.0						
	22					
				55		
594.0						
	23					
593.0						
	24					
592.0						
	25					
591.0						
	26					
590.0						
	27					
				60		
589.0						
	28					
588.52			28.20-31.50: Alluvium: CLAY with silt (CL), soft, gray, plastic, moist.			
588.0						
	29					
587.0						

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EHS Support LLC

Monitoring Well Log - Borehole

SB-41

Easting (ft)	: 457803.27	**Drill Rig**	: Geoprobe 3230DT	**Job Number**	: LLC.06149.0000
Northing (ft)	: 4227793.32	**Driller Supplier**	: Enviroprobe Integrated Solutions	**Client**	: American Electric Power (AEP)
Ground Elevation	: 616.72 (Ft)	**Logged By**	: Greg Sowder	**Project**	: Cabin Creek
Total Depth	: 40 Ft BGL	**Reviewed By**	: Andrew Fowler	**Location**	: 15225 MacCorkle Ave SE, Cabin Creek, WV 25035, USA
		Date	: 06/10/2025	**Loc Comment**	: Ground elevation and coordinates extracted from 2018 LIDAR

Elevation(NAVD88)	Depth (ft)	Lithologic Column	Lithological Description	Recovery (Inches)	Water	Notes
586.0	31		28.20-31.50: Alluvium: CLAY with silt (CL), soft, gray, plastic, moist. (continued)			
585.22			31.50-32.20: Alluvium: SILT with sand (ML), reddish brown, moist, sandstone fragments.			
585.0	32					
584.52			32.20-32.90: Alluvium: Silty SAND (SM), gray, moist.	60		
584.0						
583.82	33		32.90-33.60: Alluvium: SILT (ML), reddish brown, moist, sandstone fragments.			
583.12			33.60-34.20: Alluvium: Silty SAND (SM), gray, moist.			
583.0	34					
582.52			34.20-35.00: Alluvium: SAND (SP) reddish brown, wet.			
582.0						
581.72	35		35.00-38.20: Wet.			
581.0	36					
580.0	37			60		
579.0	38					
578.52			38.20-38.80: Alluvium: CLAY with little silt (CL), soft, gray.			
578.0	39		38.80-40.00: Alluvium: SAND (SP), reddish brown, wet.			
577.0			SB-41 Terminated at 40 Ft			

EHS Support

EHS Support LLC

Monitoring Well Log - Borehole

SB-42

Easting (ft)	**: 457869.03**	**Drill Rig**	**: Geoprobe 3230DT**	**Job Number**	**: LLC.06149.0000**
Northing (ft)	**: 4227812.13**	**Driller Supplier**	**: Enviroprobe Integrated Solutions**	**Client**	**: American Electric Power (AEP)**
Ground Elevation	**: 611.83 (Ft)**	**Logged By**	**: Greg Sowder**	**Project**	**: Cabin Creek**
Total Depth	**: 25 Ft BGL**	**Reviewed By**	**: Andrew Fowler**	**Location**	**: 15225 MacCorkle Ave SE, Cabin Creek, WV 25035, USA**
		Date	**: 06/17/2025**	**Loc Comment**	**: Ground elevation and coordinates extracted from 2018 LIDAR**

Elevation(NAVD88)	*Depth (ft)*	*Lithologic Column*	*Lithological Description*	*Recovery (Inches)*	*Water*	*Notes*
611.33			0.00-0.50: Fill GRAVEL (GP).			
611.0	1		0.50-5.00: Fill: Bottom ash, wet.			
610.0	2					
				23		
609.0	3					
608.0	4					
607.0						
606.83	5		5.00-5.40: Wood (creosote).			
			5.40-15.00: Fill: SILT (ML), brown, moist.			
606.0	6					
605.0	7					
				16		
604.0	8					
603.0	9					
602.0						

EHS Support LLC

Monitoring Well Log - Borehole

SB-42

Easting (ft)	: 457869.03	Drill Rig	: Geoprobe 3230DT	Job Number	: LLC.06149.0000
Northing (ft)	: 4227812.13	Driller Supplier	: Enviroprobe Integrated Solutions	Client	: American Electric Power (AEP)
Ground Elevation	: 611.83 (Ft)	Logged By	: Greg Sowder	Project	: Cabin Creek
Total Depth	: 25 Ft BGL	Reviewed By	: Andrew Fowler	Location	: 15225 MacCorkle Ave SE, Cabin Creek, WV 25035, USA
		Date	: 06/17/2025	Loc Comment	: Ground elevation and coordinates extracted from 2018 LIDAR

Elevation(NAVD88)	Depth (ft)	Lithologic Column	Lithological Description	Recovery (Inches)	Water	Notes
			5.40-15.00: Fill: SILT (ML), brown, moist. (continued)			
601.0	11					
600.0	12			38		
599.0	13					
598.0	14					
597.0						
596.83	15		15.00-20.00: Fill: SILT (ML), brown, moist to wet.			
596.0	16					
595.0	17			40		
594.0	18					
593.0	19					
592.0						

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EHS Support LLC

Monitoring Well Log - Borehole

SB-42

Easting (ft)	: 457869.03	Drill Rig	: Geoprobe 3230DT	Job Number	: LLC.06149.0000
Northing (ft)	: 4227812.13	Driller Supplier	: Enviroprobe Integrated Solutions	Client	: American Electric Power (AEP)
Ground Elevation	: 611.83 (Ft)	Logged By	: Greg Sowder	Project	: Cabin Creek
Total Depth	: 25 Ft BGL	Reviewed By	: Andrew Fowler	Location	: 15225 MacCorkle Ave SE, Cabin Creek, WV 25035, USA
		Date	: 06/17/2025	Loc Comment	: Ground elevation and coordinates extracted from 2018 LIDAR

Elevation(NAVD88)	Depth (ft)	Lithologic Column	Lithological Description	Recovery (Inches)	Water	Notes
591.83			20.00-25.00: Wet.			
591.0	21					
590.0	22			57		
589.0	23					
588.0	24					
587.0						
			SB-42 Terminated at 25 Ft			

EHS Support LLC

Monitoring Well Log - Borehole

SB-43

Easting (ft)	: 457941.59	Drill Rig	: Geoprobe 3230DT	Job Number	: LLC.06149.0000
Northing (ft)	: 4227834.90	Driller Supplier	: Enviroprobe Integrated Solutions	Client	: American Electric Power (AEP)
Ground Elevation	: 608.39 (Ft)	Logged By	: Greg Sowder	Project	: Cabin Creek
Total Depth	: 15 Ft BGL	Reviewed By	: Andrew Fowler	Location	: 15225 MacCorkle Ave SE, Cabin Creek, WV 25035, USA
		Date	: 06/18/2025	Loc Comment	: Ground elevation and coordinates extracted from 2018 LIDAR

Elevation(NAVD88)	Depth (ft)	Lithologic Column	Lithological Description	Recovery (Inches)	Water	Notes
9999999999			0.00-0.20: Fill: CLAY (CL), gray.			
608.0			0.20-8.40: Fill: Bottom ash, moist.			
	1					
607.0						
	2					
606.0				34		
	3					
605.0						
	4					
604.0						
	5					
603.0						
	6					
602.0						
	7					
601.0				29		
	8					
600.0 599.99			8.40-14.30: Fill: SILT (ML), brown, moist.			
	9					
599.0						

EHS Support LLC

Monitoring Well Log - Borehole

SB-43

Easting (ft)	: 457941.59	Drill Rig	: Geoprobe 3230DT	Job Number	: LLC.06149.0000
Northing (ft)	: 4227834.90	Driller Supplier	: Enviroprobe Integrated Solutions	Client	: American Electric Power (AEP)
Ground Elevation	: 608.39 (Ft)	Logged By	: Greg Sowder	Project	: Cabin Creek
Total Depth	: 15 Ft BGL	Reviewed By	: Andrew Fowler	Location	: 15225 MacCorkle Ave SE, Cabin Creek, WV 25035, USA
		Date	: 06/18/2025	Loc Comment	: Ground elevation and coordinates extracted from 2018 LIDAR

Elevation(NAVD88)	Depth (ft)	Lithologic Column	Lithological Description	Recovery (Inches)	Water	Notes
598.0			8.40-14.30: Fill: SILT (ML), brown, moist. (continued)			
	11					
597.0						
	12					
596.0				43		
	13					
595.0						
	14					
594.09					▼	
594.0			14.30-15.00: Fill: SILT (ML), stained gray, moist to wet, odor present and sheen.			
			SB-43 Terminated at 15 Ft			

EHS Support LLC

Monitoring Well Log - Borehole

SB-44

Easting (ft)	: 458016.38	Drill Rig	: Geoprobe 3230DT	Job Number	: LLC.06149.0000
Northing (ft)	: 4227857.12	Driller Supplier	: Enviroprobe Integrated Solutions	Client	: American Electric Power (AEP)
Ground Elevation	: 608.06 (Ft)	Logged By	: Greg Sowder	Project	: Cabin Creek
Total Depth	: 35 Ft BGL	Reviewed By	: Andrew Fowler	Location	: 15225 MacCorkle Ave SE, Cabin Creek, WV 25035, USA
		Date	: 06/18/2025	Loc Comment	: Ground elevation and coordinates extracted from 2018 LIDAR

Elevation(NAVD88)	Depth (ft)	Lithologic Column	Lithological Description	Recovery (Inches)	Water	Notes
608.0			0.00-19.60: Fill: Bottom ash, moist.			
607.0	1					
606.0	2			45		
605.0	3					
604.0	4					
603.0	5					
602.0	6					
601.0	7			14		
600.0	8					
599.0	9					

EHS Support LLC

Monitoring Well Log - Borehole

SB-44

Easting (ft)	: 458016.38	Drill Rig	: Geoprobe 3230DT	Job Number	: LLC.06149.0000
Northing (ft)	: 4227857.12	Driller Supplier	: Enviroprobe Integrated Solutions	Client	: American Electric Power (AEP)
Ground Elevation	: 608.06 (Ft)	Logged By	: Greg Sowder	Project	: Cabin Creek
Total Depth	: 35 Ft BGL	Reviewed By	: Andrew Fowler	Location	: 15225 MacCorkle Ave SE, Cabin Creek, WV 25035, USA
		Date	: 06/18/2025	Loc Comment	: Ground elevation and coordinates extracted from 2018 LIDAR

Elevation(NAVD88)	Depth (ft)	Lithologic Column	Lithological Description	Recovery (Inches)	Water	Notes
598.0			0.00-19.60: Fill: Bottom ash, moist. (continued)			
597.0	11					
596.0	12			14		
595.0	13					
594.0	14					
593.0	15					
592.0	16					
591.0	17			18		
590.0	18					
589.0	19					
9999999999			19.60-20.00: Alluvium: SILT (ML), gray, moist.			

EHS Support

EHS Support LLC

Monitoring Well Log - Borehole

SB-44

Easting (ft)	: 458016.38	Drill Rig	: Geoprobe 3230DT	Job Number	: LLC.06149.0000
Northing (ft)	: 4227857.12	Driller Supplier	: Enviroprobe Integrated Solutions	Client	: American Electric Power (AEP)
Ground Elevation	: 608.06 (Ft)	Logged By	: Greg Sowder	Project	: Cabin Creek
Total Depth	: 35 Ft BGL	Reviewed By	: Andrew Fowler	Location	: 15225 MacCorkle Ave SE, Cabin Creek, WV 25035, USA
		Date	: 06/18/2025	Loc Comment	: Ground elevation and coordinates extracted from 2018 LIDAR

Elevation(NAVD88)	Depth (ft)	Lithologic Column	Lithological Description	Recovery (Inches)	Water	Notes
588.0			20.00-25.00: Alluvium: SILT with little clay (ML), gray, moist.			
587.0	21					
586.0	22			54		
585.0	23					
584.0	24					
583.06 583.0	25		25.00-30.00: Alluvium: Silty CLAY (CL), gray, moist.			
582.0	26					
581.0	27			45		
580.0	28					
579.0	29					

EHS Support

EHS Support LLC

Monitoring Well Log - Borehole

SB-44

Easting (ft)	: 458016.38	Drill Rig	: Geoprobe 3230DT	Job Number	: LLC.06149.0000
Northing (ft)	: 4227857.12	Driller Supplier	: Enviroprobe Integrated Solutions	Client	: American Electric Power (AEP)
Ground Elevation	: 608.06 (Ft)	Logged By	: Greg Sowder	Project	: Cabin Creek
Total Depth	: 35 Ft BGL	Reviewed By	: Andrew Fowler	Location	: 15225 MacCorkle Ave SE, Cabin Creek, WV 25035, USA
		Date	: 06/18/2025	Loc Comment	: Ground elevation and coordinates extracted from 2018 LIDAR

Elevation(NAVD88)	Depth (ft)	Lithologic Column	Lithological Description	Recovery (Inches)	Water	Notes
578.06 578.0 577.0 576.0 575.0 574.0	31 32 33 34		30.00-34.10: Alluvium: SILT with medium grained sand (ML), gray, wet. 34.10-35.00: Alluvium: SAND (SP) brown, wet.	60		
			SB-44 Terminated at 35 Ft			

EHS Support LLC

Monitoring Well Log - Borehole

SB-45

Easting (ft)	: 457915.44	Drill Rig	: Geoprobe 3230DT	Job Number	: LLC.06149.0000
Northing (ft)	: 4227784.91	Driller Supplier	: Enviroprobe Integrated Solutions	Client	: American Electric Power (AEP)
Ground Elevation	: 614.26 (Ft)	Logged By	: Greg Sowder	Project	: Cabin Creek
Total Depth	: 15 Ft BGL	Reviewed By	: Andrew Fowler	Location	: 15225 MacCorkle Ave SE, Cabin Creek, WV 25035, USA
		Date	: 06/18/2025	Loc Comment	: Ground elevation and coordinates extracted from 2018 LIDAR

Elevation(NAVD88)	Depth (ft)	Lithologic Column	Lithological Description	Recovery (Inches)	Water	Notes
614.0			0.00-0.50: Fill: GRAVEL (GP), gray.			
613.76			0.50-1.00: Fill: Silty CLAY (CL), brown, moist, with coal fragments.			
613.26	1		1.00-1.40: Fill: Bottom ash, moist.			
613.0						
612.86			1.40-5.00: Alluvium: Clayey SILT (CL, brown, moist, sandstone fragments.			
612.0	2					
				45		
	3					
611.0						
	4					
610.0						
609.26	5		5.00-7.90: Alluvium: SILT (ML), brown, moist.			
609.0						
	6					
608.0						
	7					
607.0				32		
606.36	8		7.90-10.00: Alluvium: SILT (ML), gray, moist, wood fragments.			
606.0						
	9					
605.0						

EHS Support

EHS Support LLC

Monitoring Well Log - Borehole

SB-45

Easting (ft)	**: 457915.44**	**Drill Rig**	**: Geoprobe 3230DT**	**Job Number**	**: LLC.06149.0000**
Northing (ft)	**: 4227784.91**	**Driller Supplier**	**: Enviroprobe Integrated Solutions**	**Client**	**: American Electric Power (AEP)**
Ground Elevation	**: 614.26 (Ft)**	**Logged By**	**: Greg Sowder**	**Project**	**: Cabin Creek**
Total Depth	**: 15 Ft BGL**	**Reviewed By**	**: Andrew Fowler**	**Location**	**: 15225 MacCorkle Ave SE, Cabin Creek, WV 25035, USA**
		Date	**: 06/18/2025**	**Loc Comment**	**: Ground elevation and coordinates extracted from 2018 LIDAR**

Elevation(NAVD88)	*Depth (ft)*	*Lithologic Column*	*Lithological Description*	*Recovery (Inches)*	*Water*	*Notes*
604.0 603.0 602.0 601.0 600.0	11 12 13 14		10.00-15.00: Alluvium: SILT (ML), gray, moist, petroleum odor.	45		
			SB-45 Terminated at 15 Ft			

EHS Support LLC

Monitoring Well Log - Borehole

SB-46

Easting (ft)	: 457984.16	Drill Rig	: Geoprobe 3230DT	Job Number	: LLC.06149.0000
Northing (ft)	: 4227799.16	Driller Supplier	: Enviroprobe Integrated Solutions	Client	: American Electric Power (AEP)
Ground Elevation	: 612.79 (Ft)	Logged By	: Greg Sowder	Project	: Cabin Creek
Total Depth	: 40 Ft BGL	Reviewed By	: Andrew Fowler	Location	: 15225 MacCorkle Ave SE, Cabin Creek, WV 25035, USA
		Date	: 06/18/2025	Loc Comment	: Ground elevation and coordinates extracted from 2018 LIDAR

Elevation(NAVD88)	Depth (ft)	Lithologic Column	Lithological Description	Recovery (Inches)	Water	Notes
612.49			0.00-0.30: Mulch.			
			0.30-14.20: Fill: Bottom ash, moist.			
612.0	1					
611.0	2					
				24		
610.0	3					
609.0	4					
608.0	5					
607.0	6					
606.0	7					
				14		
605.0	8					
604.0	9					
603.0						

EHS Support

EHS Support USA

Monitoring Well Log - Borehole

SB-46

Easting (ft)	: 457984.16	Drill Rig	: Geoprobe 3230DT	Job Number	: LLC.06149.0000
Northing (ft)	: 4227799.16	Driller Supplier	: Enviroprobe Integrated Solutions	Client	: American Electric Power (AEP)
Ground Elevation	: 612.79 (Ft)	Logged By	: Greg Sowder	Project	: Cabin Creek
Total Depth	: 40 Ft BGL	Reviewed By	: Andrew Fowler	Location	: 15225 MacCorkle Ave SE, Cabin Creek, WV 25035, USA
		Date	: 06/18/2025	Loc Comment	: Ground elevation and coordinates extracted from 2018 LIDAR

Elevation(NAVD88)	Depth (ft)	Lithologic Column	Lithological Description	Recovery (Inches)	Water	Notes
			0.30-14.20: Fill: Bottom ash, moist. (continued)			
602.0	11					
601.0	12					
				22		
600.0	13					
599.0	14					
			14.20-25.00: Alluvium: SILT (ML), brown, moist.			
598.0	15					
597.0	16					
596.0	17					
				46		
595.0	18					
594.0	19					
593.0						

EHS Support LLC

Monitoring Well Log - Borehole

SB-46

Easting (ft)	: 457984.16	Drill Rig	: Geoprobe 3230DT	Job Number	: LLC.06149.0000
Northing (ft)	: 4227799.16	Driller Supplier	: Enviroprobe Integrated Solutions	Client	: American Electric Power (AEP)
Ground Elevation	: 612.79 (Ft)	Logged By	: Greg Sowder	Project	: Cabin Creek
Total Depth	: 40 Ft BGL	Reviewed By	: Andrew Fowler	Location	: 15225 MacCorkle Ave SE, Cabin Creek, WV 25035, USA
		Date	: 06/18/2025	Loc Comment	: Ground elevation and coordinates extracted from 2018 LIDAR

Elevation(NAVD88)	Depth (ft)	Lithologic Column	Lithological Description	Recovery (Inches)	Water	Notes
			14.20-25.00: Alluvium: SILT (ML), brown, moist. (continued)			
592.0	21					
591.0	22			52		
590.0	23					
589.0	24					
588.0						
587.79	25		25.00-31.40: Alluvium: Clayey SILT (ML), brown, moist.			
587.0	26					
586.0	27			57		
585.0	28					
584.0	29					
583.0						

EHS Support

EHS Support LLC

Monitoring Well Log - Borehole

SB-46

Easting (ft)	: 457984.16	**Drill Rig**	: Geoprobe 3230DT	**Job Number**	: LLC.06149.0000
Northing (ft)	: 4227799.16	**Driller Supplier**	: Enviroprobe Integrated Solutions	**Client**	: American Electric Power (AEP)
Ground Elevation	: 612.79 (Ft)	**Logged By**	: Greg Sowder	**Project**	: Cabin Creek
Total Depth	: 40 Ft BGL	**Reviewed By**	: Andrew Fowler	**Location**	: 15225 MacCorkle Ave SE, Cabin Creek, WV 25035, USA
		Date	: 06/18/2025	**Loc Comment**	: Ground elevation and coordinates extracted from 2018 LIDAR

Elevation(NAVD88)	Depth (ft)	Lithologic Column	Lithological Description	Recovery (Inches)	Water	Notes
582.0	31		25.00-31.40: Alluvium: Clayey SILT (ML), brown, moist. (continued)			
581.39			31.40-32.70: Alluvium: CLAY with little silt (CL), brown.			
581.0	32			60		
580.0	33		32.70-35.00: Alluvium: SILT with fine grained sand (ML), brown, wet.			
579.0	34					
578.0						
577.79	35		35.00-38.30: Alluvium: Silty SAND (SM), loose, brown, wet, sandstone fragments.			
577.0	36					
576.0	37			60		
575.0	38					
574.49			38.30-40.00: Alluvium: SILT with sand (ML), gray, wet, sandstone fragments.			
574.0	39					
573.0			SB-46 Terminated at 40 Ft			

EHS Support LLC

Monitoring Well Log - Borehole

SB-47D

Easting (ft)	: 458016.38	Drill Rig	: Geoprobe 3230DT	Job Number	: LLC.06149.0000
Northing (ft)	: 4227857.12	Driller Supplier	: Enviroprobe Integrated Solutions	Client	: American Electric Power (AEP)
Ground Elevation	: 604.65 (Ft)	Logged By	: Greg Sowder	Project	: Cabin Creek
Total Depth	: 59 Ft BGL	Reviewed By	: Andrew Fowler	Location	: 15225 MacCorkle Ave SE, Cabin Creek, WV 25035, USA
		Date	: 06/12/2025	Loc Comment	: Ground elevation and coordinates extracted from 2018 LIDAR

Elevation(NAVD88)	Depth (ft)	Lithologic Column	Lithological Description	Recovery (Inches)	Water	Notes
604.35			0.00-0.30: Fill: Clay with gravel (CL), gray, moist.			
604.0			0.30-2.30: Fill: Bottom ash, moist.			
	1					
603.0						
	2					
602.35			2.30-8.90: Fill: Fly ash, moist.	51		
602.0						
	3					
601.0						
	4					
600.0						
	5					
599.0						
	6					
598.0						
	7			39		
597.0						
	8					
596.0						
595.75						
	9		8.90-9.80: Fill: Bottom ash, moist.			
595.0						
594.85			9.80-12.10: Alluvium: SILT (ML), brown, moist.			

EHS Support LLC

Monitoring Well Log - Borehole

SB-47D

Easting (ft)	: 458016.38	Drill Rig	: Geoprobe 3230DT	Job Number	: LLC.06149.0000
Northing (ft)	: 4227857.12	Driller Supplier	: Enviroprobe Integrated Solutions	Client	: American Electric Power (AEP)
Ground Elevation	: 604.65 (Ft)	Logged By	: Greg Sowder	Project	: Cabin Creek
Total Depth	: 59 Ft BGL	Reviewed By	: Andrew Fowler	Location	: 15225 MacCorkle Ave SE, Cabin Creek, WV 25035, USA
		Date	: 06/12/2025	Loc Comment	: Ground elevation and coordinates extracted from 2018 LIDAR

Elevation(NAVD88)	Depth (ft)	Lithologic Column	Lithological Description	Recovery (Inches)	Water	Notes
594.0			9.80-12.10: Alluvium: SILT (ML), brown, moist. (continued)			
	11					
593.0						
592.55	12		12.10-16.70: Reddish brown.			
592.0				35		
	13					
591.0						
	14					
590.0						
	15					
589.0						
	16					
588.0999			16.70-20.00: Grayish brown.			
	17					
587.0						
	18					
586.0						
	19					
585.0						

EHS Support LLC

Monitoring Well Log - Borehole

SB-47D

Easting (ft)	: 458016.38	Drill Rig	: Geoprobe 3230DT	Job Number	: LLC.06149.0000
Northing (ft)	: 4227857.12	Driller Supplier	: Enviroprobe Integrated Solutions	Client	: American Electric Power (AEP)
Ground Elevation	: 604.65 (Ft)	Logged By	: Greg Sowder	Project	: Cabin Creek
Total Depth	: 59 Ft BGL	Reviewed By	: Andrew Fowler	Location	: 15225 MacCorkle Ave SE, Cabin Creek, WV 25035, USA
		Date	: 06/12/2025	Loc Comment	: Ground elevation and coordinates extracted from 2018 LIDAR

Elevation(NAVD88)	Depth (ft)	Lithologic Column	Lithological Description	Recovery (Inches)	Water	Notes
			20.00-25.00: Gray with sandstone fragments at 21.7 feet.			
584.0						
	21					
583.0						
	22					
582.0						
	23					
581.0						
	24					
580.0						
579.65	25		25.00-28.30: Soft, gray, wet.		▼	
579.0						
	26					
578.0						
	27					
577.0						
	28					
576.35			28.30-28.80: Alluvium: CLAY with some silt (CL), soft, gray, wet.			
576.0						
575.85			28.80-35.00: Alluvium: SILT with very fine sand (ML), soft, gray, wet.			
	29					
575.0						

EHS Support LLC

Monitoring Well Log - Borehole

SB-47D

Easting (ft)	: 458016.38	Drill Rig	: Geoprobe 3230DT	Job Number	: LLC.06149.0000
Northing (ft)	: 4227857.12	Driller Supplier	: Enviroprobe Integrated Solutions	Client	: American Electric Power (AEP)
Ground Elevation	: 604.65 (Ft)	Logged By	: Greg Sowder	Project	: Cabin Creek
Total Depth	: 59 Ft BGL	Reviewed By	: Andrew Fowler	Location	: 15225 MacCorkle Ave SE, Cabin Creek, WV 25035, USA
		Date	: 06/12/2025	Loc Comment	: Ground elevation and coordinates extracted from 2018 LIDAR

Elevation(NAVD88)	Depth (ft)	Lithologic Column	Lithological Description	Recovery (Inches)	Water	Notes
			28.80-35.00: Alluvium: SILT with very fine sand (ML), soft, gray, wet. (continued)			
574.0						
	31					
573.0						
	32					
572.0						
	33					
571.0						
	34					
570.0						
569.65	35		35.00-42.50: With fine sand.			
569.0						
	36					
568.0						
	37					
567.0						
	38					
566.0						
	39					
565.0						

EHS Support LLC

Monitoring Well Log - Borehole

SB-47D

Easting (ft)	: 458016.38	Drill Rig	: Geoprobe 3230DT	Job Number	: LLC.06149.0000
Northing (ft)	: 4227857.12	Driller Supplier	: Enviroprobe Integrated Solutions	Client	: American Electric Power (AEP)
Ground Elevation	: 604.65 (Ft)	Logged By	: Greg Sowder	Project	: Cabin Creek
Total Depth	: 59 Ft BGL	Reviewed By	: Andrew Fowler	Location	: 15225 MacCorkle Ave SE, Cabin Creek, WV 25035, USA
		Date	: 06/12/2025	Loc Comment	: Ground elevation and coordinates extracted from 2018 LIDAR

Elevation(NAVD88)	Depth (ft)	Lithologic Column	Lithological Description	Recovery (Inches)	Water	Notes
			35.00-42.50: With fine sand. (continued)			
564.0						
	41					
563.0						
	42					
562.15			42.50-46.30: Grades to reddish brown, without sand.			
562.0						
	43					
561.0						
	44					
560.0						
	45					
559.0						
	46					
558.35			46.30-48.00: Alluvium: Clayey SILT (ML), soft, gray, wet.			
558.0						
	47					
557.0						
556.65	48		48.00-49.10: Alluvium: SILT with sand (ML), soft, brown, wet.			
556.0						
555.55	49		49.10-50.00: Alluvium: SAND (SP), gray, wet, with wood fragments.			
555.0						

EHS Support

EHS Support LLC

Monitoring Well Log - Borehole

SB-47D

Easting (ft)	: 458016.38	Drill Rig	: Geoprobe 3230DT	Job Number	: LLC.06149.0000
Northing (ft)	: 4227857.12	Driller Supplier	: Enviroprobe Integrated Solutions	Client	: American Electric Power (AEP)
Ground Elevation	: 604.65 (Ft)	Logged By	: Greg Sowder	Project	: Cabin Creek
Total Depth	: 59 Ft BGL	Reviewed By	: Andrew Fowler	Location	: 15225 MacCorkle Ave SE, Cabin Creek, WV 25035, USA
		Date	: 06/12/2025	Loc Comment	: Ground elevation and coordinates extracted from 2018 LIDAR

Elevation(NAVD88)	Depth (ft)	Lithologic Column	Lithological Description	Recovery (Inches)	Water	Notes
554.65			50.00-51.60: Alluvium: SILT (ML), soft, gray, wet.			
554.0	51					
553.05			51.60-51.80: Dark brown, with wood fragments.			
553.0						
552.85			51.80-52.30: Rock: SANDSTONE, highly weathered, low strength, gray, moist.			
552.35	52		52.30-53.90: Alluvium: SAND with gravel (SP), wet.			
552.0						
551.0	53					
550.75	54		53.90-55.00: Alluvium: SAND (SP), brown, wet, sandstone fragments.			
550.0						
549.65	55		55.00-57.50: Alluvium: Silty SAND (SM).			
549.0	56					
548.0	57					
547.15			57.50-58.80: Weathered sandstone fragments, moist.			
547.0	58					
546.0						
545.85			58.80-59.00: Gray, weathered sandstone and siltstone fragments.			
			SB-47D Refusal at 59 Ft			

EHS Support LLC

Monitoring Well Log - Borehole

SB-48D

Easting (ft)	: 458016.38	Drill Rig	: Geoprobe 7822DT	Job Number	: LLC.06149.0000
Northing (ft)	: 4227857.12	Driller Supplier	: Enviroprobe Integrated Solutions	Client	: American Electric Power (AEP)
Ground Elevation	: 591.96 (Ft)	Logged By	: Greg Sowder	Project	: Cabin Creek
Total Depth	: 32 Ft BGL	Reviewed By	: Andrew Fowler	Location	: 15225 MacCorkle Ave SE, Cabin Creek, WV 25035, USA
		Date	: 06/12/2025	Loc Comment	: Ground elevation and coordinates extracted from 2018 LIDAR

Elevation(NAVD88)	Depth (ft)	Lithologic Column	Lithological Description	Recovery (Inches)	Water	Notes
591.0	1		0.00-2.80: Alluvium: SILT with medium sized sand and gravel (ML), brown, wet.	39		
590.0	2					
589.0	3		2.80-11.70: Alluvium: SILT with medium grained sand (ML), dark gray, wet.			
588.0	4					
587.0	5			40		
586.0	6					
585.0	7					
584.0	8					
583.0	9					
582.0						

EHS Support LLC

Monitoring Well Log - Borehole

SB-48D

Easting (ft)	: 458016.38	Drill Rig	: Geoprobe 7822DT	Job Number	: LLC.06149.0000
Northing (ft)	: 4227857.12	Driller Supplier	: Enviroprobe Integrated Solutions	Client	: American Electric Power (AEP)
Ground Elevation	: 591.96 (Ft)	Logged By	: Greg Sowder	Project	: Cabin Creek
Total Depth	: 32 Ft BGL	Reviewed By	: Andrew Fowler	Location	: 15225 MacCorkle Ave SE, Cabin Creek, WV 25035, USA
		Date	: 06/12/2025	Loc Comment	: Ground elevation and coordinates extracted from 2018 LIDAR

Elevation(NAVD88)	Depth (ft)	Lithologic Column	Lithological Description	Recovery (Inches)	Water	Notes
			2.80-11.70: Alluvium: SILT with medium grained sand (ML), dark gray, wet. (continued)			
581.0	11					
580.26			11.70-15.00: Alluvium: SILT with fine grained sand (ML), gray, wet.			
580.0	12			54		
579.0	13					
578.0	14					
577.0 576.96	15		15.00-19.70: Wet.			
576.0	16					
575.0	17			47		
574.0	18					
573.0	19					
572.26			19.70-23.80: Alluvium: SILT with fine grained sand (ML), light gray, wet.			
572.0						

EHS Support LLC

Monitoring Well Log - Borehole

SB-48D

Easting (ft)	: 458016.38	Drill Rig	: Geoprobe 7822DT	Job Number	: LLC.06149.0000
Northing (ft)	: 4227857.12	Driller Supplier	: Enviroprobe Integrated Solutions	Client	: American Electric Power (AEP)
Ground Elevation	: 591.96 (Ft)	Logged By	: Greg Sowder	Project	: Cabin Creek
Total Depth	: 32 Ft BGL	Reviewed By	: Andrew Fowler	Location	: 15225 MacCorkle Ave SE, Cabin Creek, WV 25035, USA
		Date	: 06/12/2025	Loc Comment	: Ground elevation and coordinates extracted from 2018 LIDAR

Elevation(NAVD88)	Depth (ft)	Lithologic Column	Lithological Description	Recovery (Inches)	Water	Notes
			19.70-23.80: Alluvium: SILT with fine grained sand (ML), light gray, wet. (continued)			
571.0	21					
570.0	22			18		
569.0	23					
568.0	24		23.80-24.80: Sandstone fragments.			
567.0	25		24.80-27.50: Alluvium: SAND (SP), gray, wet.			
566.0	26					
565.0	27					
564.46			27.50-32.00: Alluvium: SAND (SP), brown, wet, sandstone fragments.	48		
564.0	28					
563.0	29					
562.0						

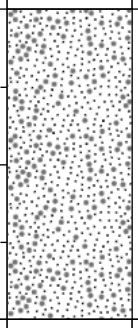
EHS Support

EHS Support LLC

Monitoring Well Log - Borehole

SB-48D

Easting (ft)	: 458016.38	**Drill Rig**	: Geoprobe 7822DT	**Job Number**	: LLC.06149.0000
Northing (ft)	: 4227857.12	**Driller Supplier**	: Enviroprobe Integrated Solutions	**Client**	: American Electric Power (AEP)
Ground Elevation	: 591.96 (Ft)	**Logged By**	: Greg Sowder	**Project**	: Cabin Creek
Total Depth	: 32 Ft BGL	**Reviewed By**	: Andrew Fowler	**Location**	: 15225 MacCorkle Ave SE, Cabin Creek, WV 25035, USA
		Date	: 06/12/2025	**Loc Comment**	: Ground elevation and coordinates extracted from 2018 LIDAR

Elevation(NAVD88)	*Depth (ft)*	*Lithologic Column*	*Lithological Description*	*Recovery (Inches)*	*Water*	*Notes*
561.0 560.0	31		27.50-32.00: Alluvium: SAND (SP), brown, wet, sandstone fragments. (continued)	34		
			SB-48D Refusal at 32 Ft			

EHS Support LLC

Monitoring Well Log - Borehole

SB-49D

Easting (ft)	: 458016.38	Drill Rig	: Geoprobe 3230DT	Job Number	: LLC.06149.0000
Northing (ft)	: 4227857.12	Driller Supplier	: Enviroprobe Integrated Solutions	Client	: American Electric Power (AEP)
Ground Elevation	: 614.3 (Ft)	Logged By	: Greg Sowder	Project	: Cabin Creek
Total Depth	: 49 Ft BGL	Reviewed By	: Andrew Fowler	Location	: 15225 MacCorkle Ave SE, Cabin Creek, WV 25035, USA
		Date	: 06/12/2025	Loc Comment	: Ground elevation and coordinates extracted from 2018 LIDAR

Elevation(NAVD88)	Depth (ft)	Lithologic Column	Lithological Description	Recovery (Inches)	Water	Notes
614.0			0.00-0.40: Clay (CL), dark gray/brown, moist, rootlets.			
613.9			0.40-6.30: Fill: Fly ash, moist.			
613.0	1					
612.0	2			47		
611.0	3					
610.0	4					
609.0	5					
608.0	6					
608			6.30-12.40: SILT with sand (ML), moist to wet.			
607.0	7			42		
606.0	8					
605.0	9					

EHS Support LLC

Monitoring Well Log - Borehole

SB-49D

Easting (ft)	: 458016.38	Drill Rig	: Geoprobe 3230DT	Job Number	: LLC.06149.0000
Northing (ft)	: 4227857.12	Driller Supplier	: Enviroprobe Integrated Solutions	Client	: American Electric Power (AEP)
Ground Elevation	: 614.3 (Ft)	Logged By	: Greg Sowder	Project	: Cabin Creek
Total Depth	: 49 Ft BGL	Reviewed By	: Andrew Fowler	Location	: 15225 MacCorkle Ave SE, Cabin Creek, WV 25035, USA
		Date	: 06/12/2025	Loc Comment	: Ground elevation and coordinates extracted from 2018 LIDAR

Elevation(NAVD88)	Depth (ft)	Lithologic Column	Lithological Description	Recovery (Inches)	Water	Notes
604.0			6.30-12.40: SILT with sand (ML), moist to wet. (continued)			
	11					
603.0						
	12					
602.0						
601.9			12.40-15.00: Clayey SILT (ML), brown, moist.	41		
	13					
601.0						
	14					
600.0						
599.3	15		15.00-26.30: SILT (ML), soft, brown, moist.			
599.0						
	16					
598.0						
	17					
597.0				56		
	18					
596.0						
	19					
595.0						

EHS Support

EHS Support LLC

Monitoring Well Log - Borehole

SB-49D

Easting (ft)	: 458016.38	Drill Rig	: Geoprobe 3230DT	Job Number	: LLC.06149.0000
Northing (ft)	: 4227857.12	Driller Supplier	: Enviroprobe Integrated Solutions	Client	: American Electric Power (AEP)
Ground Elevation	: 614.3 (Ft)	Logged By	: Greg Sowder	Project	: Cabin Creek
Total Depth	: 49 Ft BGL	Reviewed By	: Andrew Fowler	Location	: 15225 MacCorkle Ave SE, Cabin Creek, WV 25035, USA
		Date	: 06/12/2025	Loc Comment	: Ground elevation and coordinates extracted from 2018 LIDAR

Elevation(NAVD88)	Depth (ft)	Lithologic Column	Lithological Description	Recovery (Inches)	Water	Notes
594.0			15.00-26.30: SILT (ML), soft, brown, moist. (continued)			
	21					
593.0						
	22					
592.0				58		
	23					
591.0						
	24					
590.0						
	25					
589.0						
	26					
588.0 (588)			26.30-30.00: CLAY with little silt (CL), stiff, brown, medium plasticity, moist.			
	27					
587.0				60		
	28					
586.0						
	29					
585.0						

EHS Support

EHS Support LLC

Monitoring Well Log - Borehole

SB-49D

Easting (ft)	: 458016.38	**Drill Rig**	: Geoprobe 3230DT	**Job Number**	: LLC.06149.0000
Northing (ft)	: 4227857.12	**Driller Supplier**	: Enviroprobe Integrated Solutions	**Client**	: American Electric Power (AEP)
Ground Elevation	: 614.3 (Ft)	**Logged By**	: Greg Sowder	**Project**	: Cabin Creek
Total Depth	: 49 Ft BGL	**Reviewed By**	: Andrew Fowler	**Location**	: 15225 MacCorkle Ave SE, Cabin Creek, WV 25035, USA
		Date	: 06/12/2025	**Loc Comment**	: Ground elevation and coordinates extracted from 2018 LIDAR

Elevation(NAVD88)	Depth (ft)	Lithologic Column	Lithological Description	Recovery (Inches)	Water	Notes
584.3			30.00-31.80: Silty CLAY (CL), gray, plastic, moist.			
582.5			31.80-34.00: SILT (ML), gray, soft, moist.	55		
580.3			34.00-35.00: SILT (ML), yellowish brown/gray, moist, sandstone fragments.			
579.3			35.00-40.00: SAND (SP), gray/light brown, moist, sandstone fragments.	28		

584.0, 583.0, 582.0, 581.0, 580.0, 579.0, 578.0, 577.0, 576.0, 575.0

31, 32, 33, 34, 35, 36, 37, 38, 39

EHS Support

EHS Support LLC

Monitoring Well Log - Borehole

SB-49D

Easting (ft)	: 458016.38	Drill Rig	: Geoprobe 3230DT	Job Number	: LLC.06149.0000
Northing (ft)	: 4227857.12	Driller Supplier	: Enviroprobe Integrated Solutions	Client	: American Electric Power (AEP)
Ground Elevation	: 614.3 (Ft)	Logged By	: Greg Sowder	Project	: Cabin Creek
Total Depth	: 49 Ft BGL	Reviewed By	: Andrew Fowler	Location	: 15225 MacCorkle Ave SE, Cabin Creek, WV 25035, USA
		Date	: 06/12/2025	Loc Comment	: Ground elevation and coordinates extracted from 2018 LIDAR

Elevation(NAVD88)	Depth (ft)	Lithologic Column	Lithological Description	Recovery (Inches)	Water	Notes
574.3			40.00-43.80: SAND (SP), brown, wet, sandstone fragments.			
574.0						
	41					
573.0						
	42					
572.0				49		
	43					
571.0						
570.5			43.80-45.50: Moist.			
	44					
570.0						
	45					
569.0						
568.8			45.50-48.30: Clayey SILT (ML), gray, moist, sandstone fragments.			
	46					
568.0						
	47			42		
567.0						
	48					
566.0						
566			48.30-48.90: Clayey SAND (SP), light brown/brown, sandstone fragments.			
565.4			48.90-49.00: Rock: SANDSTONE, gray.			
			SB-49D Refusal at 49 Ft			

APPENDIX C

Geotechnical Boring Logs

RECORD OF BOREHOLE: A-1

CLIENT:	AEP	START DATE:	September 05, 2025	ELEVATION:	616.2 ft (Ground)
PROJECT:	AEP Cabin Creek	END DATE:	September 08, 2025	COORDINATES:	Lat: 38.197944° Long: -81.486306°
PROJECT NO:	US0041868.3924			COORD SYS:	Geographical Coordinates
LOCATION:	Cabin Creek	CONTRACTOR:	Cascade	HORZ DATUM:	NAD83
		SURVEYOR:	Elevation From LiDAR Survey.		

DRILL RIG: Geoprobe 8040 DT

DRILL METHOD: Hollow Stem Auger (4.25" ID) - 8.00-in Hole Dia.

MATERIAL PROFILE: DESCRIPTION	USCS	ELEV. / DEPTH (ft)
CCR-SOIL MIX - (SM) SILTY SAND, fine to medium, non plastic fines, some fine gravel; dark gray; non-cohesive, moist, very loose to loose, some soil, grass roots, and tree branches/mulch present.	SM	0.0
SLUICED CCR, SAMPLED AS, (ML) sandy SILT, non plastic, fine to medium sand; dark gray banded light gray; non-cohesive, moist to wet, very loose to loose.	ML	610.7 / 5.5
- 19.0 ft: Split spoon sample wet.		596.4
ALLUVIUM - (SM) SAND and SILT, fine to coarse, non plastic fines; light brown to dark brown; non-cohesive, wet, very loose to loose.	SM	19.8
- 23.5 to 25.0 ft: Some Silty Clay at top.		

SAMPLES: NUMBER	TYPE	REC %	BLOWS	N-VALUE	ADDITIONAL OBSERVATIONS
S-1	DO	0	1-2-3	5	0.00 - 1.50 ft: Sample collected from hand digging.
S-2	DO	45	1-1-2	3	
S-3	DO	39	2-1-2	3	
S-4	DO	37	1-2-2	4	
S-5	DO	48	2-1-2	3	
S-6	DO	41	1-1-1	2	
S-7	DO	100	2-2-3	5	23.50 - 25.00 ft: S-7: Non plastic.

WATER CONTENT: Plastic & Liquid Limits (%); Water Content (%); NP Nonplastic; 0, 25, 50, 75, 100, 125, 150

ADDITIONAL LAB TESTING

GROUNDWATER OBSERVATIONS: 08Sep25

Continued on Next Page

HAMMER TYPE: Automatic, 140lb, 30" drop

REV:

LOGGED: Prakash Ghimire DATE: Sep 05, 2025

CHECKED: Naveen Kumar Ganji DATE: Jan 28, 2026

RECORD OF BOREHOLE: A-1

CLIENT:	AEP	START DATE:	September 05, 2025	ELEVATION:	616.2 ft (Ground)
PROJECT:	AEP Cabin Creek	END DATE:	September 08, 2025	COORDINATES:	Lat: 38.197944° Long: -81.486306°
PROJECT NO:	US0041868.3924			COORD SYS:	Geographical Coordinates
LOCATION:	Cabin Creek	CONTRACTOR:	Cascade	HORZ DATUM:	NAD83
		SURVEYOR:	Elevation From LiDAR Survey.		

DEPTH (ft)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE: DESCRIPTION	USCS	STRATA PLOT	ELEV. / DEPTH (ft)	SAMPLES: NUMBER	TYPE	REC %	BLOWS	N-VALUE	WATER CONTENT (Plastic & Liquid Limits (%), Water Content (%), NP Nonplastic; 0, 25, 50, 75, 100, 125, 150)	ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS	ADDITIONAL OBSERVATIONS
26, 27, 28, 29	Geoprobe 8040 DT	Hollow Stem Auger (4.25" ID) - 8.00-in Hole Dia.	ALLUVIUM - (SM) SAND and SILT, fine to coarse, non plastic fines; light brown to dark brown; non-cohesive, wet, very loose to loose.	SM											
							S-8	DO	50	2-2-1	3				
30						586.2									
31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50			End of hole at 30.00 ft. Borehole terminated after drilling 10 ft below bottom of ash. Backfilled with bentonite up to 18 ft and bentonite/ cuttings to ground surface. Groundwater encountered at 19 ft below ground surface at the time of drilling.												

HAMMER TYPE: Automatic, 140lb, 30" drop

REV:

LOGGED: Prakash Ghimire DATE: Sep 05, 2025

CHECKED: Naveen Kumar Ganji DATE: Jan 28, 2026

RECORD OF BOREHOLE: A-2

CLIENT:	AEP	START DATE:	September 08, 2025	ELEVATION:	618.0 ft (Ground)
PROJECT:	AEP Cabin Creek	END DATE:	September 09, 2025	COORDINATES:	Lat: 38.198111° Long: -81.485361°
PROJECT NO:	US0041868.3924			COORD SYS:	Geographical Coordinates
LOCATION:	Cabin Creek	CONTRACTOR:	Cascade	HORZ DATUM:	NAD83
		SURVEYOR:	Elevation From LiDAR Survey.		

DRILL RIG: Geoprobe 8040 DT

DRILL METHOD: Hollow Stem Auger (4.25" ID) - 8.00-in Hole Dia.

MATERIAL PROFILE: DESCRIPTION	USCS	ELEV. / DEPTH (ft)
Tree Mulch.		0.0
CCR-SOIL MIX - (SM) SILTY SAND, fine to medium, non plastic fines, some fine gravel; dark gray banded light gray; non-cohesive, moist, loose, grass roots, branches and tree mulch.	SM	617.8 / 0.2
SLUICED CCR, SAMPLED AS, (ML) sandy SILT, non plastic, fine to medium sand; dark gray to light gray; non-cohesive, moist, very loose to loose. - 2.5 to 8.0 ft: Trace tree branches and grass roots present. - 13.5 to 15.0 ft: Dark gray with light gray bands. - 18.5 to 19.8 ft: Dark gray with light gray bands and slightly wet.	ML	615.5 / 2.5
ALLUVIUM - (SM) SILTY SAND, fine to coarse, non plastic fines; light brown to brown; non-cohesive, moist to wet, very loose to loose.	SM	598.2 / 19.8

SAMPLES: NUMBER	TYPE	REC %	BLOWS	N-VALUE
S-1	DO	33	1-2-2	4
S-2	DO	19	2-2-2	4
S-3	DO	22	2-2-2	4
S-4	DO	33	2-1-1	2
TO-1	TO	88		
S-5	DO	67	2-4-4	8
S-6	DO	50	2-3-3	6
S-7	DO	26	2-1-1	2

WATER CONTENT: Plastic & Liquid Limits (%); Water Content (%); NP Nonplastic; 0, 25, 50, 75, 100, 125, 150

ADDITIONAL LAB TESTING:

GROUNDWATER OBSERVATIONS: 09Sep25

ADDITIONAL OBSERVATIONS: 10.00 - 12.00 ft: TO-1: Non-plastic; Triaxial C/U results: c'=0, phi'=34.2.

Continued on Next Page

HAMMER TYPE: Automatic, 140lb, 30" drop

REV:

LOGGED: Prakash Ghimire DATE: Sep 08, 2025

CHECKED: Naveen Kumar Ganji DATE: Jan 28, 2026

RECORD OF BOREHOLE: A-2

CLIENT:	AEP	START DATE:	September 08, 2025	ELEVATION:	618.0 ft (Ground)
PROJECT:	AEP Cabin Creek	END DATE:	September 09, 2025	COORDINATES:	Lat: 38.198111° Long: -81.485361°
PROJECT NO:	US0041868.3924			COORD SYS:	Geographical Coordinates
LOCATION:	Cabin Creek	CONTRACTOR:	Cascade	HORZ DATUM:	NAD83
		SURVEYOR:	Elevation From LiDAR Survey.		

DEPTH (ft)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE: DESCRIPTION	USCS	STRATA PLOT	ELEV. / DEPTH (ft)	SAMPLES: NUMBER	TYPE	REC %	BLOWS	N-VALUE	WATER CONTENT (Plastic & Liquid Limits (%), Water Content (%), NP Nonplastic)	ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS	ADDITIONAL OBSERVATIONS
26	Geoprobe 8040 DT	Hollow Stem Auger (4.25" ID); - 8.00-in Hole Dia.	ALLUVIUM - (SM) SILTY SAND, fine to coarse, non plastic fines; light brown to brown; non-cohesive, moist to wet, very loose to loose.	SM			TO-2	TO	0						25.00 - 27.00 ft: Shelby tube attempted, however, shelby tube got stuck in the ground and could not be retrieved.
27															
28															
29							S-8	DO	0	1-1-5	6				28.50 - 30.00 ft: No recovery, no material changes observed from Auger.
30						588.0									
31			End of hole at 30.00 ft. Borehole terminated after drilling 10 ft below bottom of ash. Backfilled with bentonite up to 18 ft and bentonite/ cuttings to ground surface. Groundwater encountered at 20 ft below ground surface at the time of drilling.												
32															
33															
34															
35															
36															
37															
38															
39															
40															
41															
42															
43															
44															
45															
46															
47															
48															
49															
50															

HAMMER TYPE: Automatic, 140lb, 30" drop

REV:

LOGGED: Prakash Ghimire DATE: Sep 08, 2025

CHECKED: Naveen Kumar Ganji DATE: Jan 28, 2026

RECORD OF BOREHOLE: A-3

CLIENT:	AEP	DATE:	September 10, 2025	ELEVATION:	619.7 ft (Ground)
PROJECT:	AEP Cabin Creek			COORDINATES:	Lat: 38.198139° Long: -81.483944°
PROJECT NO:	US0041868.3924			COORD SYS:	Geographical Coordinates
LOCATION:	Cabin Creek	CONTRACTOR:	Cascade	HORZ DATUM:	NAD83
		SURVEYOR:	Elevation From LiDAR Survey.		

DRILL RIG: Geoprobe 8040 DT

DRILL METHOD: Hollow Stem Auger (4.25" ID) - 8.00-in Hole Dia.

MATERIAL PROFILE: DESCRIPTION	USCS	ELEV. / DEPTH (ft)	SAMPLE NUMBER	TYPE	REC %	BLOWS	N-VALUE	ADDITIONAL OBSERVATIONS
CCR-SOIL MIX - (SM) gravelly SILTY SAND, fine to coarse, fine to coarse rounded to subrounded gravel, non plastic fines; grayish brown to gray; non-cohesive, moist, loose, grass roots and tree mulch present.	SM	0.0	S-1	DO	67	3-4-3	7	
SLUICED CCR, SAMPLED AS, (ML) sandy SILT, non plastic, fine to medium sand; dark gray banded light gray; non-cohesive, moist, very loose to loose.	ML	617.2 / 2.5	S-2	DO	39	1-2-2	4	
			TO-1	TO	92			5.00 - 7.00 ft: TO-1: Non-plastic.
			S-3	DO	33	2-2-2	4	
			S-4	DO	33	1-1-1	2	
- 13.5 to 15.0 ft: Split spoon sample slightly wet.			S-5	DO	33	1	0	
- 18.5 to 19.2 ft: Some fly ash observed.			S-6	DO	89	4-6-8	14	18.50 - 20.00 ft: Samples collected as S-6A and S-6B.
ALLUVIUM - (SM) SILTY SAND, fine to coarse, non plastic fines; light brown to grayish brown; non-cohesive, moist to wet, compact.	SM	600.4 / 19.2						
ALLUVIUM - (SC) CLAYEY SAND, fine to coarse, low plasticity fines; light brown to brown; cohesive, w ~ PL, soft.	SC	595.7 / 24.0	S-7	DO	78	3-4-6	10	

WATER CONTENT: Plastic & Liquid Limits (%); Water Content (%); NP Nonplastic; 0, 25, 50, 75, 100, 125, 150

ADDITIONAL LAB TESTING:

GROUNDWATER OBSERVATIONS: 10Sep25

Continued on Next Page

HAMMER TYPE: Automatic, 140lb, 30" drop

REV:

LOGGED: Prakash Ghimire DATE: Sep 10, 2025

CHECKED: Naveen Kumar Ganji DATE: Jan 28, 2026

RECORD OF BOREHOLE: A-3

CLIENT:	AEP	DATE:	September 10, 2025	ELEVATION:	619.7 ft (Ground)
PROJECT:	AEP Cabin Creek			COORDINATES:	Lat: 38.198139° Long: -81.483944°
PROJECT NO:	US0041868.3924			COORD SYS:	Geographical Coordinates
LOCATION:	Cabin Creek	CONTRACTOR:	Cascade	HORZ DATUM:	NAD83
		SURVEYOR:	Elevation From LiDAR Survey.		

DEPTH (ft)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE: DESCRIPTION	USCS	STRATA PLOT	ELEV. / DEPTH (ft)	SAMPLES: NUMBER	TYPE	REC %	BLOWS	N-VALUE	WATER CONTENT (Plastic & Liquid Limits (%), Water Content (%), NP Nonplastic; 0, 25, 50, 75, 100, 125, 150)	ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS	ADDITIONAL OBSERVATIONS
26, 27, 28, 29	Geoprobe 8040 DT	Hollow Stem Auger (4.25" ID) - 8.00-in Hole Dia.	ALLUVIUM - (SC) CLAYEY SAND, fine to coarse, low plasticity fines; light brown to brown; cohesive, w ~ PL, soft.	SC			S-8	DO	67	2-1-1	2				28.50 - 30.00 ft: S-8: Non plastic.
30			End of hole at 30.00 ft. Borehole terminated after drilling 10 ft below bottom of ash. Backfilled with bentonite up to 19 ft and bentonite/ cuttings to ground surface. Groundwater encountered at 23.5 ft below ground surface at the time of drilling.			589.7									

31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50

HAMMER TYPE: Automatic, 140lb, 30" drop

REV:

LOGGED: Prakash Ghimire DATE: Sep 10, 2025

CHECKED: Naveen Kumar Ganji DATE: Jan 28, 2026

RECORD OF BOREHOLE: A-4

CLIENT:	AEP	START DATE:	August 29, 2025	ELEVATION:	616.3 ft (Ground)
PROJECT:	AEP Cabin Creek	END DATE:	September 04, 2025	COORDINATES:	Lat: 38.197417° Long: -81.485306°
PROJECT NO:	US0041868.3924			COORD SYS:	Geographical Coordinates
LOCATION:	Cabin Creek	CONTRACTOR:	Cascade	HORZ DATUM:	NAD83
		SURVEYOR:	Elevation From LiDAR Survey.		

DRILL RIG: Geoprobe 8040 DT

DRILL METHOD: Hollow Stem Auger (4.25" ID) - 8.00-in Hole Dia.; Mud Rotary - 8.00-in Hole Dia.

MATERIAL PROFILE: DESCRIPTION	USCS	ELEV. / DEPTH (ft)	SAMPLES: NUMBER	TYPE	REC %	BLOWS	N-VALUE	ADDITIONAL OBSERVATIONS
Tree Mulch.		0.0						
CCR-SOIL MIX - (SM) SILTY SAND, fine to coarse, non plastic fines, some fine to medium gravel; black to dark gray; non-cohesive, moist, loose to compact, roots and tree mulch present.	SM	616.0 / 0.2	S-1	DO	67	2-1-2	3	
			S-2	DO	0			
			S-3	DO	95	4-8-5	13	
		607.0 / 9.3	S-4	DO	78	4-3-3	6	
SLUICED CCR, SAMPLED AS, (ML) sandy SILT, non plastic, fine to medium sand; dark gray banded light gray; non-cohesive, moist to wet, very loose to loose.	ML							
			S-5	DO	67	5-4-4	8	
			TO-1	TO	100			15.00 - 17.00 ft: TO-1: Non-plastic; Triaxial C/U results: c'=0, phi'=35.
- 18.5 to 20.0 ft: Trace fine gravel.			S-6	DO	67	1-1-1	2	
		592.8 / 23.5						
ALLUVIUM - (ML) SILT and SAND, non plastic fines, fine to coarse; brown to grayish brown; non-cohesive, wet, very loose to compact.			S-7	DO	100	1-0-1	1	23.50 - 25.00 ft: S-7: Non plastic.

WATER CONTENT: Plastic & Liquid Limits (%); Water Content (%); NP Nonplastic; 0, 25, 50, 75, 100, 125, 150

ADDITIONAL LAB TESTING

GROUNDWATER OBSERVATIONS

Continued on Next Page

HAMMER TYPE: Automatic, 140lb, 30" drop

REV:

LOGGED: Prakash Ghimire DATE: Aug 29, 2025

CHECKED: Naveen Kumar Ganji DATE: Jan 28, 2026

RECORD OF BOREHOLE: A-4

CLIENT:	AEP	START DATE:	August 29, 2025	ELEVATION:	616.3 ft (Ground)
PROJECT:	AEP Cabin Creek	END DATE:	September 04, 2025	COORDINATES:	Lat: 38.197417° Long: -81.485306°
PROJECT NO:	US0041868.3924			COORD SYS:	Geographical Coordinates
LOCATION:	Cabin Creek	CONTRACTOR:	Cascade	HORZ DATUM:	NAD83
		SURVEYOR:	Elevation From LiDAR Survey.		

DEPTH (ft)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE: DESCRIPTION	USCS	STRATA PLOT	ELEV. / DEPTH (ft)	SAMPLES: NUMBER	TYPE	REC %	BLOWS	N-VALUE	WATER CONTENT (Plastic & Liquid Limits (%), Water Content (%), NP Nonplastic; 0, 25, 50, 75, 100, 125, 150)	ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS	ADDITIONAL OBSERVATIONS
26	Geoprobe 8040 DT	Mud Rotary - 8.00-in Hole Dia.	ALLUVIUM - (ML) SILT and SAND, non plastic fines, fine to coarse; brown to grayish brown; non-cohesive, wet, very loose to compact.	ML											
27															
28															
29							S-8	DO	50	1-1-1	2				
30															
31															
32															
33															
34							S-9	DO	67	4-5-5	10				
35						581.3									
36			End of hole at 35.00 ft. Borehole terminated after drilling 10 ft below bottom of ash. Backfilled with bentonite up to 18 ft and bentonite/ cuttings to ground surface.												
37															
38															
39															
40															
41															
42															
43															
44															
45															
46															
47															
48															
49															
50															

HAMMER TYPE: Automatic, 140lb, 30" drop

REV:

LOGGED: Prakash Ghimire DATE: Aug 29, 2025

CHECKED: Naveen Kumar Ganji DATE: Jan 28, 2026

RECORD OF BOREHOLE: B-1

CLIENT:	AEP	START DATE:	September 04, 2025	ELEVATION:	619.0 ft (Ground)
PROJECT:	AEP Cabin Creek	END DATE:	September 05, 2025	COORDINATES:	Lat: 38.197278° Long: -81.486639°
PROJECT NO:	US0041868.3924			COORD SYS:	Geographical Coordinates
LOCATION:	Cabin Creek	CONTRACTOR:	Cascade	HORZ DATUM:	NAD83
		SURVEYOR:	Elevation From LiDAR Survey.		

DRILL RIG: Geoprobe 8040 DT

DRILL METHOD: Hollow Stem Auger (4.25" ID) - 8.00-in Hole Dia.; Mud Rotary - 8.00-in Hole Dia.

MATERIAL PROFILE

DESCRIPTION	USCS	ELEV. / DEPTH (ft)
CCR - SOIL MIX - (SM) SILTY SAND, fine to coarse, non plastic fines, some fine gravel; dark gray to black; non-cohesive, moist, loose, roots and grasses present.	SM	0.0 / 616.5
SLUICED CCR, SAMPLED AS, (ML) sandy SILT, non plastic, fine to medium sand; dark gray to light gray; non-cohesive, moist, very loose to loose, roots present. - 2.5 to 7.0 ft: Roots present. - 13.5 to 15.0 ft: Tree branch and leaf present. - 18.5 to 20.0 ft: Split spoon sample wet with light gray bands.	ML	2.5 / 594.5
DREDGE SPOIL, SAMPLED AS, (CL) SILTY CLAY, low plasticity, trace fine to medium sand; dark brown; cohesive, w ~ PL, very soft to soft.	CL	24.5

SAMPLES

NUMBER	TYPE	REC %	BLOWS	N-VALUE
S-1	DO	0	2-3-3	6
S-2	DO	45	2-2-3	5
S-3	DO	67	1-2-3	5
S-4	DO	33	1-1-2	3
S-5	DO	33	2-1-1	2
S-6	DO	100	1-0-0	0
S-7	DO	100	1-0-0	0

WATER CONTENT: Plastic & Liquid Limits (%); Water Content (%); NP Nonplastic; 0, 25, 50, 75, 100, 125, 150

ADDITIONAL LAB TESTING

GROUNDWATER OBSERVATIONS

ADDITIONAL OBSERVATIONS

Continued on Next Page

HAMMER TYPE: Automatic, 140lb, 30" drop

REV:

LOGGED: Prakash Ghimire DATE: Sep 04, 2025

CHECKED: Naveen Kumar Ganji DATE: Jan 28, 2026

RECORD OF BOREHOLE: B-1

CLIENT:	AEP	START DATE:	September 04, 2025	ELEVATION:	619.0 ft (Ground)
PROJECT:	AEP Cabin Creek	END DATE:	September 05, 2025	COORDINATES:	Lat: 38.197278° Long: -81.486639°
PROJECT NO:	US0041868.3924			COORD SYS:	Geographical Coordinates
LOCATION:	Cabin Creek	CONTRACTOR:	Cascade	HORZ DATUM:	NAD83
		SURVEYOR:	Elevation From LiDAR Survey.		

DRILL RIG: Geoprobe 8040 DT

DRILL METHOD: Mud Rotary - 8.00-in Hole Dia.

MATERIAL PROFILE: DESCRIPTION	USCS	ELEV. / DEPTH (ft)	SAMPLES: NUMBER	TYPE	REC %	BLOWS	N-VALUE	WATER CONTENT (Plastic & Liquid Limits (%), Water Content (%), NP Nonplastic)	ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS	ADDITIONAL OBSERVATIONS
DREDGE SPOIL, SAMPLED AS, (CL) SILTY CLAY, low plasticity, trace fine to medium sand; dark brown; cohesive, w ~ PL, very soft to soft.	CL										27.00 ft: Mud loss observed.
- 28.5 to 30.0 ft: Shiny black Silty Sand with coal smell at bottom of spoon.	CL		S-8	DO	100	2-2-2	4				
ALLUVIUM - (SM) SILTY SAND, fine to coarse, non plastic fines, some fine rounded gravel; dark gray to black; non-cohesive, wet, loose, ash inclusions.	SM	587.2 / 31.8									
	SM	584.0	S-9	DO	61	1-2-2	4				
End of hole at 35.00 ft. Borehole terminated after drilling 10 ft below bottom of ash. Backfilled with bentonite up to 24 ft and bentonite/ cuttings to ground surface.											

HAMMER TYPE: Automatic, 140lb, 30" drop

REV:

LOGGED: Prakash Ghimire DATE: Sep 04, 2025

CHECKED: Naveen Kumar Ganji DATE: Jan 28, 2026

RECORD OF BOREHOLE: B-2

CLIENT:	AEP	DATE:	September 10, 2025	ELEVATION:	625.9 ft (Ground)
PROJECT:	AEP Cabin Creek			COORDINATES:	Lat: 38.197056° Long: -81.484861°
PROJECT NO:	US0041868.3924			COORD SYS:	Geographical Coordinates
LOCATION:	Cabin Creek	CONTRACTOR:	Cascade	HORZ DATUM:	NAD83
		SURVEYOR:	Elevation From LiDAR Survey.		

DRILL RIG: Geoprobe 8040 DT

DRILL METHOD: Hollow Stem Auger (4.25" ID) - 8.00-in Hole Dia.

MATERIAL PROFILE: DESCRIPTION	USCS	ELEV. / DEPTH (ft)
CCR - SOIL MIX - (SM) SILTY SAND, fine to coarse, non plastic fines, trace fine gravel; dark gray; non-cohesive, moist, loose, tree branches, and mulch present.	SM	0.0
SLUICED CCR, SAMPLED AS, (ML) sandy SILT, non plastic, fine to medium sand; dark gray banded light gray; non-cohesive, moist, loose. - 2.5 to 8.0 ft: Trace soil present.	ML	623.4 / 2.5

SAMPLES: NUMBER	TYPE	REC %	BLOWS	N-VALUE
S-1	DO	17	1-2-2	4
S-2	DO	17	3-1-1	2
S-4	DO	72	1-2-2	4
S-5	DO	55	1-2-2	4
S-6	DO	67	1-4-3	7
S-7	DO	67	2-1-2	3

WATER CONTENT: Plastic & Liquid Limits (%) ⊢⊣; Water Content (%) ○; NP Nonplastic; 0, 25, 50, 75, 100, 125, 150

ADDITIONAL LAB TESTING:

GROUNDWATER OBSERVATIONS:

ADDITIONAL OBSERVATIONS: 8.00 ft: Auger cuttings return wet.

Continued on Next Page

HAMMER TYPE: Automatic, 140lb, 30" drop

REV:

LOGGED: Prakash Ghimire DATE: Sep 10, 2025

CHECKED: Naveen Kumar Ganji DATE: Jan 28, 2026

RECORD OF BOREHOLE: B-2

CLIENT:	AEP	DATE:	September 10, 2025	ELEVATION:	625.9 ft (Ground)
PROJECT:	AEP Cabin Creek			COORDINATES:	Lat: 38.197056° Long: -81.484861°
PROJECT NO:	US0041868.3924			COORD SYS:	Geographical Coordinates
LOCATION:	Cabin Creek	CONTRACTOR:	Cascade	HORZ DATUM:	NAD83
		SURVEYOR:	Elevation From LiDAR Survey.		

DRILL RIG: Geoprobe 8040 DT

DRILL METHOD: Hollow Stem Auger (4.25" ID) - 8.00-in Hole Dia.

MATERIAL PROFILE: DESCRIPTION	USCS	ELEV. / DEPTH (ft)	SAMPLES: NUMBER	TYPE	REC %	BLOWS	N-VALUE	WATER CONTENT (Plastic & Liquid Limits (%), Water Content (%), NP Nonplastic)	ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS	ADDITIONAL OBSERVATIONS
SLUICED CCR, SAMPLED AS, (ML) sandy SILT, non plastic, fine to medium sand; dark gray banded light gray; non-cohesive, moist, loose.	ML	597.4 / 28.5								10Sep25 ▽	
DREDGE SPOIL, SAMPLED AS, (SM) SILTY SAND, fine to coarse, non plastic fines, some fine gravel; yellowish brown to grayish brown; non-cohesive, wet, very loose to loose, lenses of coal present.	SM		S-8	DO	61	1-3-5	8	○			
			S-9	DO	67	2-1-1	2				
			TO-1	TO	0						
ALLUVIUM - (ML) sandy SILT, non-plastic fines, fine to coarse; grayish brown to gray; non-cohesive, wet, very loose, trace clay.	ML	589.2 / 36.8									
			S-10	DO	100	0-0-0	0	○			
End of hole at 40.00 ft. Borehole terminated after drilling 10 ft below bottom of ash. Backfilled with bentonite up to 28 ft and bentonite/ cuttings to ground surface. Groundwater encountered at 28.5 ft below ground surface at the time of drilling.		585.9									

HAMMER TYPE: Automatic, 140lb, 30" drop

REV:

LOGGED: Prakash Ghimire DATE: Sep 10, 2025

CHECKED: Naveen Kumar Ganji DATE: Jan 28, 2026

RECORD OF BOREHOLE: B-3

CLIENT:	AEP	START DATE:	August 27, 2025	ELEVATION:	617.4 ft (Ground)
PROJECT:	AEP Cabin Creek	END DATE:	August 29, 2025	COORDINATES:	Lat: 38.197444° Long: -81.483944°
PROJECT NO:	US0041868.3924			COORD SYS:	Geographical Coordinates
LOCATION:	Cabin Creek	CONTRACTOR:	Cascade	HORZ DATUM:	NAD83
		SURVEYOR:	Elevation From LiDAR Survey.		

DRILL RIG: Geoprobe 8040 DT

DRILL METHOD: Percussion - 3.62-in Hole Dia.

MATERIAL PROFILE: DESCRIPTION	USCS	ELEV. / DEPTH (ft)
Tree Mulch.		0.0 / 616.4
CCR - SOIL MIX - (SM) SILTY SAND, fine to coarse, non plastic fines, some fine to coarse gravel; dark gray; non-cohesive, moist, loose, soil inclusions.	SM	1.0 / 615.9
SLUICED CCR, SAMPLED AS, (ML) sandy SILT, non plastic, fine to medium sand; dark gray banded light gray; non-cohesive, moist, loose to compact.	ML	1.5
- 3.5 to 5.0 ft: Roots observed.		
- 8.5 to 10.0 ft: Tree mulch observed, potential artifact of drilling method.		

SAMPLES: NUMBER	TYPE	REC %	BLOWS	N-VALUE
S-1	DO	17	1-2-3	5
S-2	DO	33	3-4-5	9
S-4	DO	26	12-12-8	20
S-5	DO	100	16-30-24	54
S-6	DO	67	3-4-5	9
S-7	DO	100	1-2-2	4

WATER CONTENT: Plastic & Liquid Limits (%); Water Content (%); NP Nonplastic; 0, 25, 50, 75, 100, 125, 150

ADDITIONAL LAB TESTING:

GROUNDWATER OBSERVATIONS:

ADDITIONAL OBSERVATIONS: 13.50 - 15.00 ft: High blow count, artifact of drilling method used.

Continued on Next Page

HAMMER TYPE: Automatic, 140lb, 30" drop

REV:

LOGGED: Prakash Ghimire DATE: Aug 27, 2025

CHECKED: Naveen Kumar Ganji DATE: Jan 28, 2026

RECORD OF BOREHOLE: B-3

CLIENT:	AEP	START DATE:	August 27, 2025	ELEVATION:	617.4 ft (Ground)
PROJECT:	AEP Cabin Creek	END DATE:	August 29, 2025	COORDINATES:	Lat: 38.197444° Long: -81.483944°
PROJECT NO:	US0041868.3924			COORD SYS:	Geographical Coordinates
LOCATION:	Cabin Creek	CONTRACTOR:	Cascade	HORZ DATUM:	NAD83
		SURVEYOR:	Elevation From LiDAR Survey.		

DRILL RIG: Geoprobe 8040 DT

DRILL METHOD: Percussion - 3.62-in Hole Dia.

MATERIAL PROFILE: DESCRIPTION	USCS	ELEV. / DEPTH (ft)	SAMPLES: NUMBER	TYPE	REC %	BLOWS	N-VALUE
SLUICED CCR, SAMPLED AS, (ML) sandy SILT, non plastic, fine to medium sand; dark gray banded light gray; non-cohesive, moist, loose to compact.	ML	590.6 / 26.8					
ALLUVIUM - (SM) SILTY SAND, fine to coarse, non plastic fines; light brown; non-cohesive, wet, compact.	SM		S-8	DO	89	6-8-9	17
- 33.5 to 35.0 ft: Root present at bottom.			S-9	DO	67	6-9-8	17
			TO-1	TO	100		
End of hole at 37.00 ft. Borehole terminated after drilling 10 ft below bottom of ash. Backfilled with bentonite up to 26 ft and bentonite/ cuttings to ground surface. Groundwater encountered at 28.5 ft below ground surface at the time of drilling.		580.4					

WATER CONTENT: Plastic & Liquid Limits (%); Water Content (%); NP Nonplastic; 0, 25, 50, 75, 100, 125, 150

ADDITIONAL LAB TESTING

GROUNDWATER OBSERVATIONS: 29Aug25

ADDITIONAL OBSERVATIONS

HAMMER TYPE: Automatic, 140lb, 30" drop

REV:

LOGGED: Prakash Ghimire DATE: Aug 27, 2025

CHECKED: Naveen Kumar Ganji DATE: Jan 28, 2026

RECORD OF BOREHOLE: E-1

CLIENT:	AEP	START DATE:	September 12, 2025	ELEVATION:	618.0 ft (Ground)
PROJECT:	AEP Cabin Creek	END DATE:	September 15, 2025	COORDINATES:	Lat: 38.197750° Long: -81.487944°
PROJECT NO:	US0041868.3924			COORD SYS:	Geographical Coordinates
LOCATION:	Cabin Creek	CONTRACTOR:	Cascade	HORZ DATUM:	NAD83
		SURVEYOR:	Elevation From LiDAR Survey.		

DRILL RIG: Geoprobe 8040 DT

DRILL METHOD: Hollow Stem Auger (4.25"ID) - 8.00-in Hole Dia.; Mud Rotary - 8.00-in Hole Dia.

MATERIAL PROFILE: DESCRIPTION	USCS	ELEV. / DEPTH (ft)	SAMPLES: NUMBER	TYPE	REC %	BLOWS	N-VALUE
TOPSOIL - (ML) sandy SILT, non plastic, fine to coarse sand, some fine gravel; brown; non-cohesive, moist, compact, grass roots, leaves, and branches present.	ML	0.0 / 617.5	S-1	DO	100	3-7-8	15
CCR - SOIL MIX - (SM) gravelly SILTY SAND, fine to coarse, non plastic fines, fine to coarse gravel; dark gray to black; non-cohesive, moist, compact, honeycombed slag gravel.	SM	0.5 / 614.0					
CCR (MIXED ASH), SAMPLED AS, (ML) sandy SILT, non plastic, fine to medium sand; dark gray banded light gray; non-cohesive, moist, compact.	ML	4.0 / 611.2	S-2	DO	89	3-4-6	10
CCR (BOTTOM ASH), SAMPLED AS, (SM) SILTY SAND, fine to coarse, non plastic fines, some fine to coarse gravel; dark gray; non-cohesive, moist, compact, coal pieces and rounded natural gravel.	SM	6.8 / 609.2	S-3	DO	67	2-4-10	14
CCR (MIXED ASH), SAMPLED AS, (ML) sandy SILT, non plastic, fine to medium sand; dark gray to gray; non-cohesive, moist to wet, very loose to loose.	ML	8.8 / 598.2	S-4	DO	100	4-5-7	12
- 13.5 to 15.0 ft: Trace fine gravel.			S-5	DO	100	1-2-1	3
- 18.5 to 20.0 ft: Split spoon sample slightly wet.			S-6	DO	50	1-1-0	1
EARTH FILL - (ML) SILT and SAND, non plastic fines, fine to coarse; brown to light brown; non-cohesive, wet, very loose, fine mica present.		19.8					
- 23.5 to 25.0 ft: Trace clay.			S-7				

WATER CONTENT: Plastic & Liquid Limits (%); Water Content (%); NP Nonplastic; 0, 25, 50, 75, 100, 125, 150

ADDITIONAL LAB TESTING:

GROUNDWATER OBSERVATIONS:

ADDITIONAL OBSERVATIONS:
- 8.50 ft: Drill bit heated up while augering.
- 24.00 - 25.00 ft: Mud lost during drilling, no return.

Continued on Next Page

HAMMER TYPE: Automatic, 140lb, 30" drop

REV:

LOGGED: Prakash Ghimire DATE: Sep 12, 2025

CHECKED: Naveen Kumar Ganji DATE: Jan 28, 2026

RECORD OF BOREHOLE: E-1

CLIENT:	AEP	START DATE:	September 12, 2025	ELEVATION:	618.0 ft (Ground)
PROJECT:	AEP Cabin Creek	END DATE:	September 15, 2025	COORDINATES:	Lat: 38.197750° Long: -81.487944°
PROJECT NO:	US0041868.3924			COORD SYS:	Geographical Coordinates
LOCATION:	Cabin Creek	CONTRACTOR:	Cascade	HORZ DATUM:	NAD83
		SURVEYOR:	Elevation From LiDAR Survey.		

DRILL RIG: Geoprobe 8040 DT

DRILL METHOD: Mud Rotary - 8.00-in Hole Dia.; Hollow Stem Auger (4.25" ID) - 8.00-in Hole Dia.

MATERIAL PROFILE

DESCRIPTION	USCS	ELEV. / DEPTH (ft)
EARTH FILL - (ML) SILT and SAND, non plastic fines, fine to coarse; brown to light brown; non-cohesive, wet, very loose, fine mica present.	ML	
ALLUVIUM - (CL-ML) SILTY CLAY and SAND, low plasticity fines, fine to coarse; dark brown to grayish brown; cohesive, w ~ PL, firm, fine mica present.	CL-ML	586.2 / 31.8
ALLUVIUM - (SM) SILTY SAND, fine to coarse, non plastic fines; dark gray to black; non-cohesive, wet, loose, rounded natural to subangular coal gravel.	SM	578.5 / 39.5
ALLUVIUM - (SM) SILTY SAND, fine to coarse, non plastic fines, some fine gravel; grayish brown; non-cohesive, wet, loose, trace shells, and coal pieces.		571.2 / 46.8
End of hole at 50.00 ft.		568.0

SAMPLES

NUMBER	TYPE	REC %	BLOWS	N-VALUE
	DO	45	0-0-0	0
S-8	DO	28	1-2-2	4
S-9	DO	100	1-2-4	6
TO-1	TO	92		
S-10	DO	78	2-1-2	3
S-11	DO	50	1-3-3	6
S-12	DO	55	1-3-1	4

WATER CONTENT: Plastic & Liquid Limits (%); Water Content (%); NP Nonplastic; 0, 25, 50, 75, 100, 125, 150

ADDITIONAL LAB TESTING

GROUNDWATER OBSERVATIONS

ADDITIONAL OBSERVATIONS

28.00 ft: About 200 gallons of mud lost seeking mud return.

35.00 - 37.00 ft: Triaxial C/U results: c'=0, phi'=37.5

Borehole terminated after reaching maximum depth 50 ft below ground surface.
Backfilled with bentonite up to ground surface and topped off with cuttings.

HAMMER TYPE: Automatic, 140lb, 30" drop

REV:

LOGGED: Prakash Ghimire DATE: Sep 12, 2025

CHECKED: Naveen Kumar Ganji DATE: Jan 28, 2026

RECORD OF BOREHOLE: E-2

CLIENT:	AEP	START DATE:	September 15, 2025	ELEVATION:	619.4 ft (Ground)
PROJECT:	AEP Cabin Creek	END DATE:	September 16, 2025	COORDINATES:	Lat: 38.198056° Long: -81.487306°
PROJECT NO:	US0041868.3924			COORD SYS:	Geographical Coordinates
LOCATION:	Cabin Creek	CONTRACTOR:	Cascade	HORZ DATUM:	NAD83
		SURVEYOR:	Elevation From LiDAR Survey.		

DRILL RIG: Geoprobe 8040 DT

DRILL METHOD: Hollow Stem Auger (4.25" ID) - 8.00-in Hole Dia.

MATERIAL PROFILE: DESCRIPTION	USCS	ELEV. / DEPTH (ft)	SAMPLES: NUMBER	TYPE	REC %	BLOWS	N-VALUE
CCR - SOIL MIX - (SM) SILTY SAND, fine to coarse, non plastic fines, some gravel; dark gray to black; non-cohesive, moist, compact, coal pieces, tree branches, and organics present.	SM	0.0	S-1	DO	78	7-6-4	10
CCR (MIXED ASH), SAMPLED AS, (ML) sandy SILT, non plastic, fine to medium sand; dark gray to light gray; non-cohesive, moist, compact, fly ash lenses.	ML	616.4 / 3.0	S-2	DO	78	3-5-9	14
			S-3	DO	83	7-8-9	17
- 8.5 to 10.0 ft: Some fine to coarse coal gravel and lens of Silty Sand at top.			S-4	DO	78	7-6-6	12
EARTH FILL - (SM) SAND and SILT, fine to coarse, non plastic fines; grayish brown to brown; non-cohesive, moist, loose to compact.	SM	605.2 / 14.2	S-5	DO	67	4-4-6	10
- 18.5 to 20.0 ft: Fine mica.			S-6	DO	55	2-2-4	6
- 23.5 to 25.0 ft: Fine mica.			S-7	DO	78	6-4-3	7
- 24.8 ft: Split spoon sample slightly wet.		594.4					

End of hole at 25.00 ft.

WATER CONTENT: Plastic & Liquid Limits (%); Water Content (%); NP Nonplastic; 0, 25, 50, 75, 100, 125, 150

ADDITIONAL LAB TESTING

GROUNDWATER OBSERVATIONS

ADDITIONAL OBSERVATIONS

3.00 ft: Auger grinding.

13.50 - 15.00 ft: Only natural sand collected.

Borehole terminated after drilling 10 ft below bottom of ash. Backfilled with bentonite up to ground surface and topped off with cuttings. Groundwater not encountered, caved in at 20 ft below ground surface.

HAMMER TYPE: Automatic, 140lb, 30" drop

REV:

LOGGED: Prakash Ghimire DATE: Sep 15, 2025

CHECKED: Naveen Kumar Ganji DATE: Jan 28, 2026

RECORD OF BOREHOLE: E-3

CLIENT:	AEP	DATE:	September 16, 2025	ELEVATION:	617.9 ft (Ground)
PROJECT:	AEP Cabin Creek			COORDINATES:	Lat: 38.198361° Long: -81.486306°
PROJECT NO:	US0041868.3924			COORD SYS:	Geographical Coordinates
LOCATION:	Cabin Creek	CONTRACTOR:	Cascade	HORZ DATUM:	NAD83
		SURVEYOR:	Elevation From LiDAR Survey.		

DRILL RIG: Geoprobe 8040 DT

DRILL METHOD: Hollow Stem Auger (4.25" ID) - 8.00-in Hole Dia.

MATERIAL PROFILE: DESCRIPTION	USCS	ELEV. / DEPTH (ft)	SAMPLES: NUMBER	TYPE	REC %	BLOWS	N-VALUE	ADDITIONAL OBSERVATIONS
CCR - SOIL MIX - (SM) SILTY SAND, fine to coarse, non plastic fines, some fine gravel; dark gray to black; non-cohesive, moist, loose, grass roots, organics, coal, and honeycombed slag pieces.	SM	0.0	S-1	DO	78	3-4-3	7	
- 3.5 to 4.8 ft: Lens of yellowish brown Silty Sand.			S-2	DO	55	2-3-3	6	
CCR (MIXED ASH), SAMPLED AS, (ML) sandy SILT, non plastic, fine to medium sand; gray to light gray; non-cohesive, moist, loose to compact.	ML	613.2 / 4.8	TO-1	TO	88			5.00 - 7.00 ft: TO-1: Non-plastic.
			S-3	DO	72	4-7-10	17	
EARTH FILL - (SM) SILTY SAND, fine to coarse, non plastic fines; yellowish brown to brown; non-cohesive, moist, loose to compact.	SM	609.4 / 8.5	S-4	DO	95	11-14-13	27	
			S-5	DO	61	2-5-6	11	
			S-6	DO	45	4-4-5	9	
End of hole at 20.00 ft. Borehole terminated after drilling 10 ft below bottom of ash. Backfilled with bentonite up to ground surface and topped off with cuttings. Groundwater not encountered, caved in at 15 ft below ground surface.		597.9						

WATER CONTENT: Plastic & Liquid Limits (%); Water Content (%); NP Nonplastic

ADDITIONAL LAB TESTING:

GROUNDWATER OBSERVATIONS:

HAMMER TYPE: Automatic, 140lb, 30" drop

REV:

LOGGED: Prakash Ghimire DATE: Sep 16, 2025

CHECKED: Naveen Kumar Ganji DATE: Jan 28, 2026

RECORD OF BOREHOLE: E-4

CLIENT:	AEP	DATE:	September 16, 2025	ELEVATION:	619.0 ft (Ground)
PROJECT:	AEP Cabin Creek			COORDINATES:	Lat: 38.198528° Long: -81.485444°
PROJECT NO:	US0041868.3924			COORD SYS:	Geographical Coordinates
LOCATION:	Cabin Creek	CONTRACTOR:	Cascade	HORZ DATUM:	NAD83
		SURVEYOR:	Elevation From LiDAR Survey.		

DRILL RIG: Geoprobe 8040 DT

DRILL METHOD: Hollow Stem Auger (4.25" ID) - 8.00-in Hole Dia.

MATERIAL PROFILE: DESCRIPTION	USCS	ELEV. / DEPTH (ft)	SAMPLES: NUMBER	TYPE	REC %	BLOWS	N-VALUE
CCR - SOIL MIX - (SM) SILTY SAND, fine to coarse, non plastic fines, some medium gravel; dark gray to black; non-cohesive, moist, compact, tree branches, coal, and honeycombed slag pieces.	SM	0.0	S-1	DO	89	4-8-9	17
		616.8 / 2.2					
CCR (MIXED ASH), SAMPLED AS, (ML) sandy SILT, non plastic, fine to coarse sand; dark gray banded light gray; non-cohesive, moist, loose to compact, fly ash lenses.	ML		S-2	DO	72	4-7-6	13
			S-3	DO	83	5-7-8	15
			S-4	DO	55	3-3-2	5
- 9.5 to 10.0 ft: Lens of bottom ash (Silty Sand) with trace honeycombed slag gravel.							
- 13.5 to 14.4 ft: Some fine honeycombed slag gravel.			S-5	DO	72	7-4-4	8
		604.6 / 14.4					
EARTH FILL - (SM) SILTY SAND, fine to coarse, non plastic fines; yellowish brown to light brown, ; non-cohesive, moist, loose to compact, fine mica and brown bands.	SM		S-6	DO	72	8-5-5	10
- 24.0 ft: Split spoon sample slightly wet.			S-7	DO	78	2-2-3	5
		594.0					

WATER CONTENT: Plastic & Liquid Limits (%); Water Content (%); NP Nonplastic; 0, 25, 50, 75, 100, 125, 150

ADDITIONAL LAB TESTING

GROUNDWATER OBSERVATIONS

ADDITIONAL OBSERVATIONS

End of hole at 25.00 ft.

Borehole terminated after drilling 10 ft below bottom of ash. Backfilled with bentonite up to ground surface and topped off with cuttings. Groundwater and cave in not observed.

HAMMER TYPE: Automatic, 140lb, 30" drop

REV:

LOGGED: Prakash Ghimire DATE: Sep 16, 2025

CHECKED: Naveen Kumar Ganji DATE: Jan 28, 2026

RECORD OF BOREHOLE: E-5

CLIENT:	AEP	DATE:	September 16, 2025	ELEVATION:	619.0 ft (Ground)
PROJECT:	AEP Cabin Creek			COORDINATES:	Lat: 38.198722° Long: -81.484667°
PROJECT NO:	US0041868.3924			COORD SYS:	Geographical Coordinates
LOCATION:	Cabin Creek	CONTRACTOR:	Cascade	HORZ DATUM:	NAD83
		SURVEYOR:	Elevation From LiDAR Survey.		

DRILL RIG: Geoprobe 8040 DT

DRILL METHOD: Hollow Stem Auger (4.25" ID) - 8.00-in Hole Dia.

MATERIAL PROFILE: DESCRIPTION	USCS	ELEV. / DEPTH (ft)
CCR - SOIL MIX - (SM) SILTY SAND, fine to coarse, non plastic fines, some fine to coarse gravel; gray to grayish brown; non-cohesive, moist, compact, tree roots, branches, leaves, honeycombed slag, and natural gravel.	SM	0.0 / 617.5
CCR (MIXED ASH), SAMPLED AS, (ML) sandy SILT, non plastic, fine to medium sand; dark gray banded light gray; non-cohesive, moist, loose to compact.	ML	1.5
- 6.0 to 7.5 ft: Lens of yellowish brown natural Silty Sand.		
- 13.5 to 14.2 ft: Trace fine honeycombed slag gravel.		604.8
EARTH FILL - (SM) SILTY SAND, fine to coarse; yellowish brown to grayish brown; non-cohesive, moist, very loose to compact, fine mica.	SM	14.2 / 594.0

SAMPLES: NUMBER	TYPE	REC %	BLOWS	N-VALUE
S-1	DO	100	2-6-7	13
S-2	DO	39	6-6-5	11
S-3	DO	72	7-4-5	9
S-4	DO	72	6-7-5	12
S-5	DO	67	5-5-4	9
S-6	DO	100	4-5-6	11
S-7	DO	33	1-1-1	2

WATER CONTENT: Plastic & Liquid Limits (%); Water Content (%); NP Nonplastic; 0 25 50 75 100 125 150

ADDITIONAL LAB TESTING:

GROUNDWATER OBSERVATIONS:

ADDITIONAL OBSERVATIONS: 3.50 ft: Auger cuttings return slightly wet.

End of hole at 25.00 ft.

Borehole terminated after drilling 10 ft below bottom of ash. Backfilled with bentonite up to ground surface and topped off with cuttings. Groundwater not encountered, caved in at 13 ft below ground surface.

HAMMER TYPE: Automatic, 140lb, 30" drop

REV:

LOGGED: Prakash Ghimire DATE: Sep 16, 2025

CHECKED: Naveen Kumar Ganji DATE: Jan 28, 2026

RECORD OF BOREHOLE: E-6

CLIENT:	AEP	DATE:	September 17, 2025	ELEVATION:	624.2 ft (Ground)
PROJECT:	AEP Cabin Creek			COORDINATES:	Lat: 38.198750° Long: -81.483639°
PROJECT NO:	US0041868.3924			COORD SYS:	Geographical Coordinates
LOCATION:	Cabin Creek	CONTRACTOR:	Cascade	HORZ DATUM:	NAD83
		SURVEYOR:	Elevation From LiDAR Survey.		

DRILL RIG: Geoprobe 8040 DT

DRILL METHOD: Hollow Stem Auger (4.25" ID) - 8.00-in Hole Dia.

MATERIAL PROFILE: DESCRIPTION	USCS	ELEV. / DEPTH (ft)	SAMPLES: NUMBER	TYPE	REC %	BLOWS	N-VALUE
CCR - SOIL MIX - (SM) SILTY SAND, fine to coarse, non plastic fines, some fine gravel; dark gray; non-cohesive, moist, loose, tree roots, branches, and mulch present.	S M	0.0					
CCR (MIXED ASH), SAMPLED AS, (ML) sandy SILT, non plastic, fine to medium sand; dark gray banded light gray; non-cohesive, moist, loose.	ML	624.0 / 0.2	S-1	DO	67	3-3-4	7
- 3.5 to 5.0 ft: Roots present.			S-2	DO	33	2-2-1	3
- 6.0 to 7.5 ft: Roots present.			S-3	DO	33	2-1-2	3
CCR (BOTTOM ASH), SAMPLED AS, (SM) SILTY SAND, fine to coarse, non plastic fines, trace fine gravel; grayish black; non-cohesive, moist, very loose to loose.	SM	615.3 / 8.9	S-4	DO	83	1-1-1	2
- 13.5 to 15.0 ft: Thin mixed ash lens at top.			S-5	DO	72	1-3-4	7
EARTH FILL - (SM) SILTY SAND, fine to coarse, non plastic fines, trace fine gravel; yellowish brown to grayish brown; non-cohesive, moist, loose to compact, black bands.		605.4 / 18.8	S-6	DO	100	3-9-12	21
- 23.5 to 25.0 ft: Fine mica.			S-7	DO	89	3-4-4	8

WATER CONTENT: Plastic & Liquid Limits (%); Water Content (%); NP Nonplastic; 0, 25, 50, 75, 100, 125, 150

ADDITIONAL LAB TESTING

GROUNDWATER OBSERVATIONS

ADDITIONAL OBSERVATIONS

Continued on Next Page

HAMMER TYPE: Automatic, 140lb, 30" drop

REV:

LOGGED: Prakash Ghimire DATE: Sep 17, 2025

CHECKED: Naveen Kumar Ganji DATE: Jan 28, 2026

RECORD OF BOREHOLE: E-6

CLIENT:	AEP	DATE:	September 17, 2025	ELEVATION:	624.2 ft (Ground)
PROJECT:	AEP Cabin Creek			COORDINATES:	Lat: 38.198750° Long: -81.483639°
PROJECT NO:	US0041868.3924			COORD SYS:	Geographical Coordinates
LOCATION:	Cabin Creek	CONTRACTOR:	Cascade	HORZ DATUM:	NAD83
		SURVEYOR:	Elevation From LiDAR Survey.		

DEPTH (ft)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE: DESCRIPTION	USCS	STRATA PLOT	ELEV. / DEPTH (ft)	SAMPLES: NUMBER	TYPE	REC %	BLOWS	N-VALUE	WATER CONTENT (Plastic & Liquid Limits (%), Water Content (%), NP Nonplastic; 0, 25, 50, 75, 100, 125, 150)	ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS	ADDITIONAL OBSERVATIONS
26, 27, 28, 29	Geoprobe 8040 DT	Hollow Stem Auger (4.25" ID) - 8.00-in Hole Dia.	EARTH FILL - (SM) SILTY SAND, fine to coarse, non plastic fines, trace fine gravel; yellowish brown to grayish brown; non-cohesive, moist, loose to compact, black bands. - 28.5 to 30.0 ft: Grayish brown, and lens of coal.	SM		594.2	S-8	DO	67	4-2-2	4				
30			End of hole at 30.00 ft. Borehole terminated after drilling 10 ft below bottom of ash. Backfilled with bentonite up to ground surface and topped off with cuttings. Groundwater not encountered, caved in at 15 ft below ground surface.												
31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50															

HAMMER TYPE: Automatic, 140lb, 30" drop

REV:

LOGGED: Prakash Ghimire DATE: Sep 17, 2025

CHECKED: Naveen Kumar Ganji DATE: Jan 28, 2026

RECORD OF BOREHOLE: E-7

CLIENT:	AEP	START DATE:	September 17, 2025	ELEVATION:	619.9 ft (Ground)
PROJECT:	AEP Cabin Creek	END DATE:	September 17, 2025	COORDINATES:	Lat: 38.198306° Long: -81.482889°
PROJECT NO:	US0041868.3924			COORD SYS:	Geographical Coordinates
LOCATION:	Cabin Creek	CONTRACTOR:	Cascade	HORZ DATUM:	NAD83
		SURVEYOR:	Elevation From LiDAR Survey.		

DRILL RIG: Geoprobe 8040 DT

DRILL METHOD: Hollow Stem Auger (4.25" ID) - 8.00-in Hole Dia.

MATERIAL PROFILE: DESCRIPTION	USCS	ELEV. / DEPTH (ft)	SAMPLES: NUMBER	TYPE	REC %	BLOWS	N-VALUE	ADDITIONAL OBSERVATIONS
EARTH FILL - (SM) SILTY SAND, fine to coarse, non plastic fines, some fine gravel; grayish brown to yellowish brown; non-cohesive, moist, compact, tree branches, mulch, and grass roots present.		0.0	S-1	DO	67	2-2-8	10	
CCR (BOTTOM ASH), SAMPLED AS, (SM) SILTY SAND, fine to coarse, non plastic fines, some fine gravel; dark gray to grayish black; non-cohesive, moist, loose to compact, honeycombed slag, and coal pieces.		618.6 / 1.2						3.00 ft: Auger cuttings return slightly wet.
			S-2	DO	45	4-3-4	7	
			S-3	DO	89	7-9-14	23	
EARTH FILL - (SM) SAND and SILT, fine to coarse, non plastic fines; yellowish brown to grayish brown; non-cohesive, moist, loose to compact, fine mica, some black spots.	SM	612.4 / 7.5						
			S-4	DO	78	7-12-11	23	
			S-5	DO	0	1-2-4	6	13.50 - 15.00 ft: No recovery in split spoon, no change in auger return cuttings observed.
- 18.5 to 20.0 ft: One decayed tree root.			S-6	DO	78	3-4-5	9	
End of hole at 20.00 ft. Borehole terminated after drilling 10 ft below bottom of ash. Backfilled with bentonite up to ground surface and topped off with cuttings. Groundwater not encountered, caved in at 10 ft below ground surface.		599.9						

WATER CONTENT: Plastic & Liquid Limits (%); Water Content (%); NP Nonplastic

ADDITIONAL LAB TESTING:

GROUNDWATER OBSERVATIONS:

HAMMER TYPE: Automatic, 140lb, 30" drop

REV:

LOGGED: Prakash Ghimire DATE: Sep 17, 2025

CHECKED: Naveen Kumar Ganji DATE: Jan 28, 2026

RECORD OF BOREHOLE: E-8

CLIENT:	AEP	DATE:	September 11, 2025	ELEVATION:	618.8 ft (Ground)
PROJECT:	AEP Cabin Creek			COORDINATES:	Lat: 38.197139° Long: -81.484139°
PROJECT NO:	US0041868.3924			COORD SYS:	Geographical Coordinates
LOCATION:	Cabin Creek	CONTRACTOR:	Cascade	HORZ DATUM:	NAD83
		SURVEYOR:	Elevation From LiDAR Survey.		

DRILL RIG: Geoprobe 8040 DT

DRILL METHOD: Hollow Stem Auger (4.25" ID) - 8.00-in Hole Dia.

MATERIAL PROFILE: DESCRIPTION	USCS	ELEV. / DEPTH (ft)	SAMPLES: NUMBER	TYPE	REC %	BLOWS	N-VALUE
CCR - SOIL MIX - (SM) SILTY SAND, fine to coarse, non plastic fines, some fine gravel; grayish brown to dark gray; non-cohesive, moist, compact, tree roots, and branches present.	SM	0.0	S-1	DO	33	3-6-5	11
EARTH FILL - (SM) SILTY SAND, fine to coarse, non plastic fines, some fine to coarse gravel; grayish brown to yellowish brown; non-cohesive, moist, compact, tree roots and black spottings.	SM	614.8 / 4.0	S-2	DO	61	6-7-10	17
CCR - SOIL MIX - (SM) SILTY SAND, fine to coarse, non plastic fines, some fine gravel; grayish brown to dark gray; non-cohesive, moist, compact, tree roots and branches, honeycombed slag gravel.	SM	612.8 / 6.0	S-3	DO	78	6-10-11	21
- 8.5 to 9.5 ft: Trace coarse gravel, and ash inclusions. - 8.5 to 10.0 ft: Coal and honeycombed slag gravel.	SM	609.3	S-4	DO	72	7-4-5	9
CCR (MIXED ASH), SAMPLED AS, (ML) sandy SILT, non plastic, fine to medium sand; dark gray banded light gray; non-cohesive, moist, loose.	ML	9.5	S-5	DO	55	2-2-4	6
DREDGE SPOIL, SAMPLED AS, (SM) SILTY SAND, fine to coarse, non plastic fines; brown to yellowish brown; non-cohesive, moist to wet, loose. - 14.5 ft: Lens of Earthfill, and Split spoon sample slightly wet.	SM	604.3 / 14.5					
- 18.5 to 20.0 ft: Some black bands, and fine mica present.	SM		S-6	DO	45	2-2-2	4
ALLUVIUM - (SM) SILTY SAND, fine to coarse, non plastic fines; grayish brown to light gray; non-cohesive, wet, very loose to compact, fine mica present.	SM	597.0 / 21.8	S-7	DO	55	5-6-8	14

WATER CONTENT: Plastic & Liquid Limits (%); Water Content (%); NP Nonplastic

ADDITIONAL LAB TESTING

GROUNDWATER OBSERVATIONS

ADDITIONAL OBSERVATIONS

Continued on Next Page

HAMMER TYPE: Automatic, 140lb, 30" drop

REV:

LOGGED: Prakash Ghimire DATE: Sep 11, 2025

CHECKED: Naveen Kumar Ganji DATE: Jan 28, 2026

RECORD OF BOREHOLE: E-8

CLIENT:	AEP	DATE:	September 11, 2025	ELEVATION:	618.8 ft (Ground)
PROJECT:	AEP Cabin Creek			COORDINATES:	Lat: 38.197139° Long: -81.484139°
PROJECT NO:	US0041868.3924			COORD SYS:	Geographical Coordinates
LOCATION:	Cabin Creek	CONTRACTOR:	Cascade	HORZ DATUM:	NAD83
		SURVEYOR:	Elevation From LiDAR Survey.		

DEPTH (ft)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE: DESCRIPTION	USCS	STRATA PLOT	ELEV. / DEPTH (ft)	SAMPLES: NUMBER	TYPE	REC %	BLOWS	N-VALUE	WATER CONTENT (Plastic & Liquid Limits (%), Water Content (%), NP Nonplastic)	ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS	ADDITIONAL OBSERVATIONS
26	Geoprobe 8040 DT	Hollow Stem Auger (4.25" ID) - 8.00-in Hole Dia.	ALLUVIUM - (SM) SILTY SAND, fine to coarse, non plastic fines; grayish brown to light gray; non-cohesive, wet, very loose to compact, fine mica present.	SM											
27															
28															
29			- 29.0 to 30.0 ft: Lens of low plasticity Silty Clay with some fine sand.				S-8	DO	100	2-1-1	2			11Sep25	28.50 - 30.00 ft: S-8: Non plastic.
30			- 30.0 ft: Lens of coal/ash at bottom of split spoon.												
31															
32															
33															
34							S-9	DO	67	2-3-4	7				
35						583.8									
36			End of hole at 35.00 ft. Borehole terminated after drilling 10 ft below bottom of ash. Backfilled with bentonite up to ground surface and topped off with cuttings. Groundwater encountered at 29 ft below ground surface at the time of drilling.												
37															
38															
39															
40															
41															
42															
43															
44															
45															
46															
47															
48															
49															
50															

HAMMER TYPE: Automatic, 140lb, 30" drop

REV:

LOGGED: Prakash Ghimire DATE: Sep 11, 2025

CHECKED: Naveen Kumar Ganji DATE: Jan 28, 2026

RECORD OF BOREHOLE: E-9

CLIENT:	AEP	DATE:	September 11, 2025	ELEVATION:	617.4 ft (Ground)
PROJECT:	AEP Cabin Creek			COORDINATES:	Lat: 38.196806° Long: -81.485333°
PROJECT NO:	US0041868.3924			COORD SYS:	Geographical Coordinates
LOCATION:	Cabin Creek	CONTRACTOR:	Cascade	HORZ DATUM:	NAD83
		SURVEYOR:	Elevation From LiDAR Survey.		

DRILL RIG: Geoprobe 8040 DT

DRILL METHOD: Hollow Stem Auger (4.25" ID) - 8.00-in Hole Dia.

MATERIAL PROFILE: DESCRIPTION	USCS	ELEV. / DEPTH (ft)	SAMPLES: NUMBER	TYPE	REC %	BLOWS	N-VALUE	ADDITIONAL OBSERVATIONS
CCR - SOIL MIX - (SM) SILTY SAND, fine to coarse, non plastic fines, some fine to coarse gravel; dark gray to grayish brown; non-cohesive, moist, compact, roots, and coal pieces present.	SM	0.0	S-1	DO	72	2-5-5	10	
EARTH FILL - (SM) SILTY SAND, fine to coarse, non plastic fines, some fine to coarse gravel; light brown to grayish brown; non-cohesive, moist, dense, brown/ black spottings/inclusions.		614.9 / 2.5	S-2	DO	55	9-22-22	44	5.00 ft: Auger creaking, potential cobbles.
CCR (MIXED ASH), SAMPLED AS, (SM) SAND and SILT, fine to coarse, non plastic fines; dark gray banded light gray; non-cohesive, moist, loose to compact.		610.9 / 6.5	S-3	DO	78	6-9-15	24	
			S-4	DO	78	7-9-10	19	
			S-5	DO	33	4-3-2	5	15.00 - 17.00 ft: TO-1: Non-plastic; Triaxial C/U results: c'=0, phi'=25.6; Direct Shear results: c'=0, phi'=25.9
			TO-1	TO	84			
DREDGE SPOIL, SAMPLED AS, (SM) SILTY SAND, fine to coarse, non plastic fines, trace fine gravel; light brown to brown; non-cohesive, moist to wet, loose.		599.6 / 17.8						
- 20.0 ft: Split spoon wet at bottom.			S-6	DO	45	6-2-3	5	
ALLUVIUM - (SM) SAND and SILT, fine to coarse, non plastic fines, trace fine rounded to subrounded gravel; grayish brown to dark gray; non-cohesive, wet, very loose, ash lenses with coal pieces.		595.6 / 21.8	S-7	DO	61	1-1-1	2	

WATER CONTENT: Plastic & Liquid Limits (%); Water Content (%); NP Nonplastic; 0, 25, 50, 75, 100, 125, 150

ADDITIONAL LAB TESTING:

GROUNDWATER OBSERVATIONS: 11Sep25

Continued on Next Page

HAMMER TYPE: Automatic, 140lb, 30" drop

REV:

LOGGED: Prakash Ghimire DATE: Sep 11, 2025

CHECKED: Naveen Kumar Ganji DATE: Jan 28, 2026

RECORD OF BOREHOLE: E-9

CLIENT:	AEP	DATE:	September 11, 2025	ELEVATION:	617.4 ft (Ground)
PROJECT:	AEP Cabin Creek			COORDINATES:	Lat: 38.196806° Long: -81.485333°
PROJECT NO:	US0041868.3924			COORD SYS:	Geographical Coordinates
LOCATION:	Cabin Creek	CONTRACTOR:	Cascade	HORZ DATUM:	NAD83
		SURVEYOR:	Elevation From LiDAR Survey.		

DEPTH (ft)	DRILL RIG	DRILL METHOD	MATERIAL PROFILE: DESCRIPTION	USCS	STRATA PLOT	ELEV. / DEPTH (ft)	SAMPLES: NUMBER	TYPE	REC %	BLOWS	N-VALUE	WATER CONTENT (Plastic & Liquid Limits (%), Water Content (%), NP Nonplastic; 0, 25, 50, 75, 100, 125, 150)	ADDITIONAL LAB TESTING	GROUNDWATER OBSERVATIONS	ADDITIONAL OBSERVATIONS
26, 27, 28, 29	Geoprobe 8040 DT	Hollow Stem Auger (4.25" ID) - 8.00-in Hole Dia.	ALLUVIUM - (SM) SAND and SILT, fine to coarse, non plastic fines, trace fine rounded to subrounded gravel; grayish brown to dark gray; non-cohesive, wet, very loose, ash lenses with coal pieces.	SM			S-8	DO	72	2-2-1	3	○			
30						587.4									
31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50			End of hole at 30.00 ft. Borehole terminated after drilling 10 ft below bottom of ash. Backfilled with bentonite up to ground surface and topped off with cuttings. Groundwater encountered at 23.5 ft below ground surface at the time of drilling.												

HAMMER TYPE: Automatic, 140lb, 30" drop

REV:

LOGGED: Prakash Ghimire DATE: Sep 11, 2025

CHECKED: Naveen Kumar Ganji DATE: Jan 28, 2026

APPENDIX D

Geotechnical Laboratory Test Reports

AEP/CABIN CREEK/GA
SUMMARY OF SOIL DATA

Borehole I.D.	Sample I.D.	Sample Depth	Sample Type	Soil Classi-fication	As-R'cvd Moisture Content %	Atterberg Limits				Grain Size Distribution			Compaction		Gs	Unit Weight		Permeability (cm/sec)	Additional Tests Conducted (See Notes)
						LL	PL	PI	LI	% Finer No. 4 Sieve	% Finer No. 200 Sieve	% Finer 0.002 mm	Max. Dry Density (pcf)	Optimum Moisture %		Dry Density (pcf)	Moisture Content %		
A-1	S-5	13.5-15.0'	Bag	-	70.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
A-1	S-7	23.5-25.0'	Bag	SM	29.5	NP	NP	NP	NP	100.0	49.7	10.3	-	-	2.71	-	-	-	-
A-2	S-1	0.0-1.5'	Bag	-	61.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-
A-2	S-5	13.5-15.0'	Bag	-	63.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
A-2	S-7	23.5-25.0'	Bag	-	22.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-
A-3	S-1	0.0-1.5'	Bag	-	11.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
A-3	S-6A	18.5-20.0'	Bag	-	52.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-
A-3	S-7	23.5-25.0'	Bag	-	19.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-
A-3	S-8	28.5-30.0'	Bag	-	21.9	NP	NP	NP	NP	-	-	-	-	-	-	-	-	-	-
A-4	S-1	0.0-1.5'	Bag	-	25.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-
A-4	S-7	23.5-25.0'	Bag	ML	34.5	NP	NP	NP	NP	100.0	60.2	9.8	-	-	2.62	-	-	-	-
B-1	S-3	6.0-7.5'	Bag	-	49.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
B-1	S-6	18.5-20.0'	Bag	-	99.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
B-1	S-8	28.5-30.0'	Bag	CL	51.4	45	24	21	1.30	100.0	96.1	-	-	-	-	-	-	-	-
B-2	S-7	23.5-25.0'	Bag	-	70.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-

ABBREVIATIONS: LIQUID LIMIT (LL)
PLASTIC LIMIT (PL)
PLASTICITY INDEX (PI)
LIQUIDITY INDEX (LI)
SPECIFIC GRAVITY (Gs)

NOTES: T = TRIAXIAL TEST
U = UNCONFINED COMPRESSION TEST
C = CONSOLIDATION TEST
DS = DIRECT SHEAR TEST

WATER CONTENT DETERMINATION
ASTM D2216

PROJECT TITLE	AEP/CABIN CREEK/GA
PROJECT NUMBER	US-0041868.3924
REMARKS	

Sample Type	Bag	Bag	Bag	Bag	Bag
Borehole Number	A-1	A-2	A-2	A-2	A-3
Sample Number	S-5	S-1	S-5	S-7	S-1
Depth of Sample (ft)	13.5-15.0'	0.0-1.5'	13.5-15.0'	23.5-25.0'	0.0-1.5'
Weight of Wet Soil + Tare (gm)	233.45	141.22	244.61	267.95	268.42
Weight of Dry Soil + Tare (gm)	154.94	106.79	169.67	227.92	245.66
Weight of Tare (gm)	43.17	51.09	50.91	52.06	42.56
Weight of Water (gm)	78.51	34.43	74.94	40.03	22.76
Weight of Dry Soil (gm)	111.77	55.70	118.76	175.86	203.10
Water Content (%)	70.2	61.8	63.1	22.8	11.2

Sample Type	Bag	Bag	Bag	Bag	Bag
Borehole Number	A-3	A-3	A-4	B-1	B-1
Sample Number	S-6A	S-7	S-1	S-3	S-6
Depth of Sample (ft)	18.5-20.0'	23.5-25.0'	0.0-1.5'	6.0-7.5'	18.5-20.0'
Weight of Wet Soil + Tare (gm)	206.87	351.56	172.13	232.58	342.58
Weight of Dry Soil + Tare (gm)	150.17	302.22	147.55	172.92	197.43
Weight of Tare (gm)	42.84	51.65	51.88	51.75	51.17
Weight of Water (gm)	56.70	49.34	24.58	59.66	145.15
Weight of Dry Soil (gm)	107.33	250.57	95.67	121.17	146.26
Water Content (%)	52.8	19.7	25.7	49.2	99.2

Sample Type	Bag				
Borehole Number	B-2				
Sample Number	S-7				
Depth of Sample (ft)	23.5-25.0'				
Weight of Wet Soil + Tare (gm)	287.72				
Weight of Dry Soil + Tare (gm)	190.06				
Weight of Tare (gm)	51.79				
Weight of Water (gm)	97.66				
Weight of Dry Soil (gm)	138.27				
Water Content (%)	70.6				

TECH	JC
DATE	10/7/25
CHECK	
REVIEW	
APPROVE	

OCTOBER 2025

US-0041868.3924

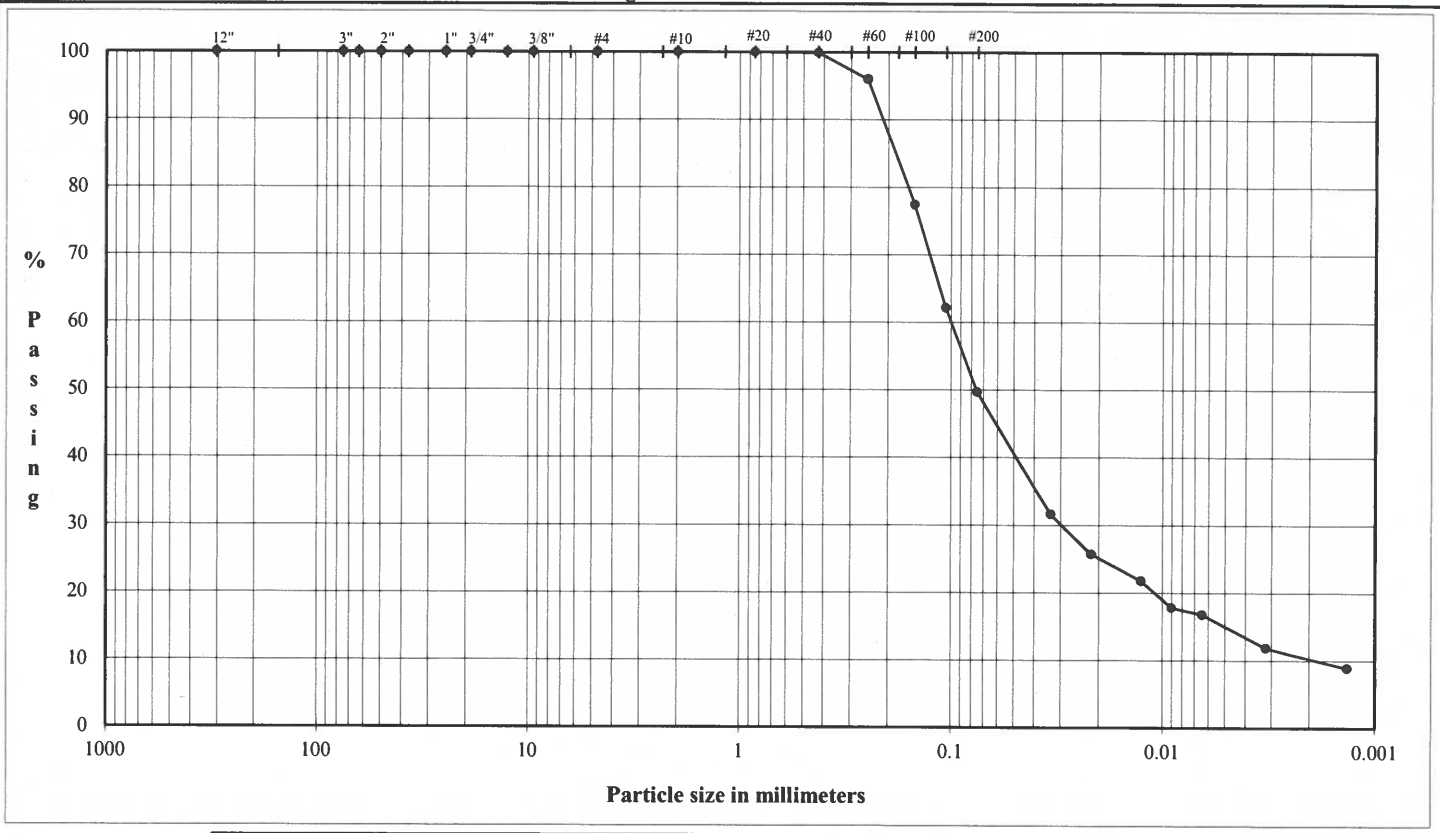
PARTICLE SIZE DISTRIBUTION & ATTERBERG LIMITS

ASTM D421, D422, D4318

PROJECT NAME: **AEP/CABIN CREEK/GA**

SAMPLE ID: **A-1, S-7** Depth: **23.5-25.0'**

TYPE: **Bag**



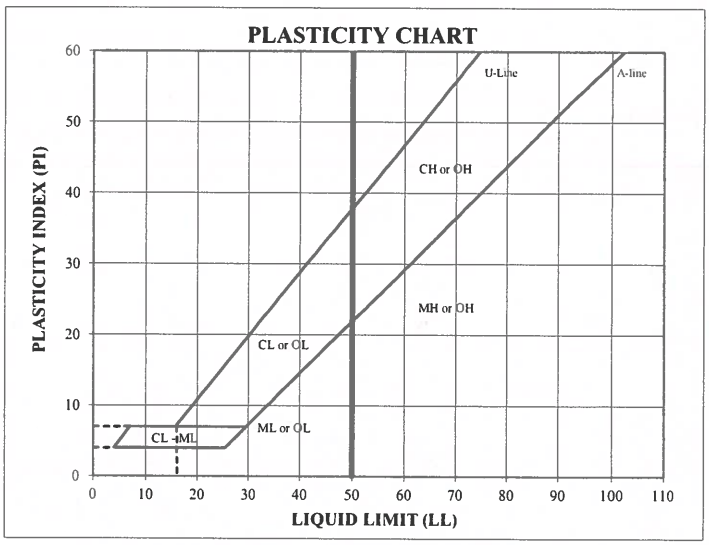
COBBLES	Coarse	Fine	Coarse	Medium	Fine	Silt or Clay
	GRAVEL		SAND			FINES

U.S. Standard Sieves Sizes and Numbers

	Particle Size (mm)	% Passing	Particle Size Classification	Particle Size Percentage
12.0"	304.8	**100.0**		
3.0"	75.0	**100.0**	Cobbles	**0.0**
2.5"	63.5	**100.0**		
2.0"	50.0	**100.0**		
1.5"	37.5	**100.0**		
1.0"	25.0	**100.0**		
0.75"	19.0	**100.0**	Coarse Gravel	**0.0**
0.50"	12.7	**100.0**		
0.375"	9.5	**100.0**		
#4	4.8	**100.0**	Fine Gravel	**0.0**
#10	2.00	**100.0**	Coarse Sand	**0.0**
#20	0.85	**100.0**		
#40	0.43	**99.9**	Medium Sand	**0.1**
#60	0.25	**95.9**		
#100	0.15	**77.4**		
#140	0.106	**62.1**		
#200	0.034	**49.7**	Fine Sand	**50.2**

Hydrometer Analysis

(mm)	%Finer		
0.034	**31.6**		
0.022	**25.7**		
0.013	**21.8**	Fines	
0.0090	**17.8**	Silt or Clay	**49.7**
0.0064	**16.8**		
0.0032	**11.9**		
0.0013	**8.9**		



ATTERBERG LIMITS

Method - B (Dry preparation)

M_c	LL	PL	PI	LI
29.5	**NP**	**NP**	**NP**	**NP**

LL (oven-dried)
< 0.75 = ORGANIC (OL OH)

DESCRIPTION: SAND and SILT, fine to medium; dark grayish brown.

USCS: SM

TECH	EK/TB/JC
DATE	10/7/25
CHECK	
REVIEW	
APPROVE	

WSP USA

SPECIFIC GRAVITY OF SOILS
ASTM D854
PYCNOMETER METHOD

PROJECT TITLE	AEP/CABIN CREEK/GA		
PROJECT NUMBER	US-0041868.3924	**SAMPLE ID**	A-1, S-7
		SAMPLE DEPTH	23.5-25.0'
TESTED FOR	Gs	**SAMPLE TYPE**	Bag

HYGROSCOPIC MOISTURE CONTENT OF MATERIAL PASSING THE #4 SIEVE

Weight of Soil and Tare, Initial (g)	92.86
Weight of Soil and Tare, Final (g)	92.60
Weight of Tare (g)	51.51
Weight of Moisture (g)	0.26
Weight of Dry Soil (g)	41.09
Hygroscopic Moisture Content	0.6%

Test Method		**Method - B**
Pycnometer Number		13
Weight of Pycnometer (g)		177.86
Volume of Pycnometer (mL)		499.32
Weight of Pycnometer and Water (g)		676.10
Mass of Pycnometer and Water at the Test Temperture	(A)	675.93
Observed Temperature (Tb), for (Mb) (°C)		23.1
Weight of Soil, Water & Pycnometer (g)	(B)	708.03
Temperature (°C)		23.1
Density of Water @ Tested Temperature (g/mL)		0.9975
Tare Number		-
Weight of Dry Soil Slurry plus Tare (g)		181.77
Weight of Tare (g)		131.00
Weight of Dry Soil (g)	(C)	50.77
Temperature Coefficient		0.9979
SPECIFIC GRAVITY	**(G)**	**2.71**

G @ 20 °C = [C/(A-(B - C))]*(K)

METHOD - A WET METHOD
METHOD - B OVEN-DRIED METHOD

METHOD OF AIR REMOVAL: VACUUM

Maximum Particle Size of Reduced Sample	Specimen Dry Mass (g) when using 500 mL Pycnometer (Minimum)	(Maximum)
No. 100	30	75
No. 40	40	100
No. 10	50	125
No. 4	75	200
3/8 in.	165	300

TECH	CJ
DATE	10/8/25
CHECK	[illegible]
REVIEW	[illegible]
APPROVE	

ATTERBERG LIMITS

ASTM D4318

PROJECT NAME: AEP/CABIN CREEK/GA
PROJECT NUMBER: US-0041868.3924
SAMPLE ID: A-3, S-8 **SAMPLE DEPTH:** 28.5-30.0'
SAMPLE TYPE: Bag

Sample Preparation: Wet or Dry: Dry Minus #40 Sieve: Yes

	PLASTIC LIMIT		LIQUID LIMIT		AS-RECEIVED MOISTURE
Number of Blows			12	12	
Wt. of Wet Soil & Tare (g)	25.20	26.02	24.44	21.72	191.61
Wt. of Dry Soil & Tare (g)	22.76	23.42	21.32	19.09	168.44
Weight of Tare (g)	11.37	11.41	6.65	6.69	62.45
Weight of Water (g)	2.44	2.60	3.12	2.63	23.17
Weight of Dry Soil (g)	11.39	12.01	14.67	12.40	105.99
Water Content %	21.4	21.6	21.3	21.2	21.9

PLASTIC LIMIT (PL): NP

LIQUID LIMIT (LL): NP

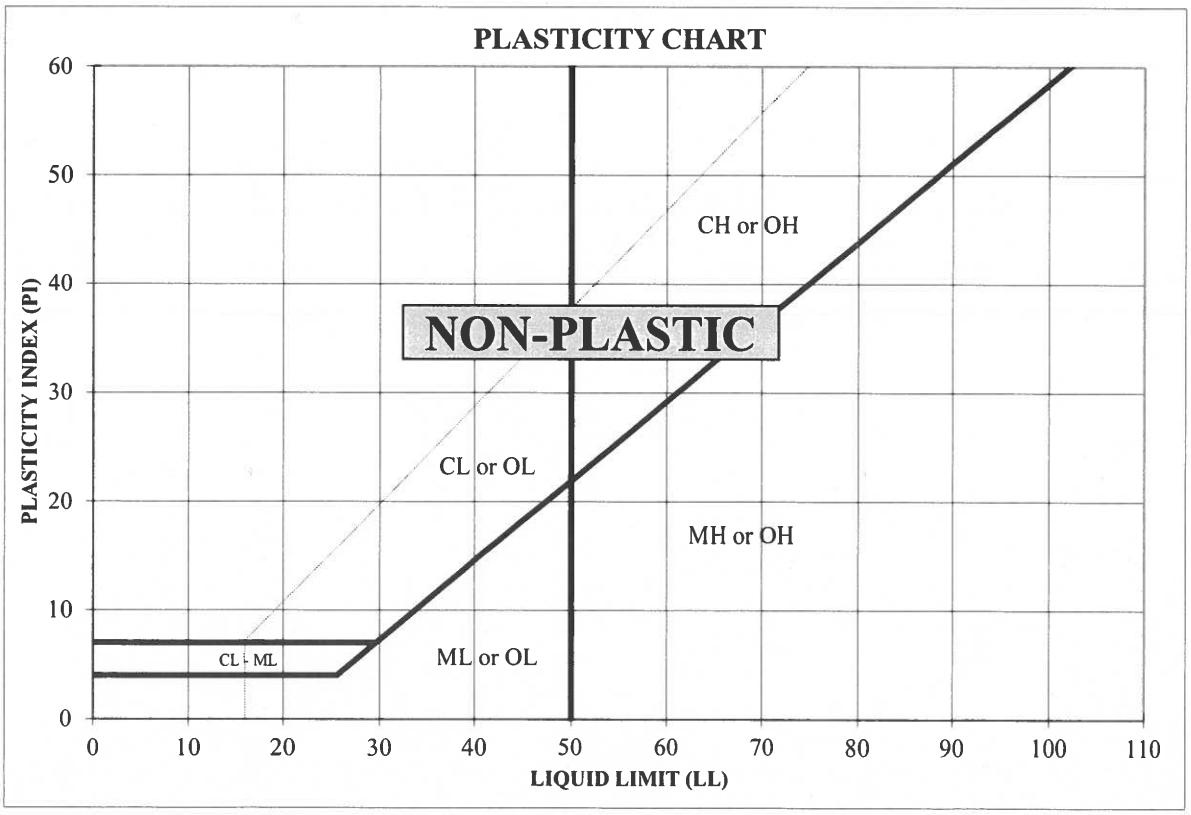
PLASTICITY INDEX (PI): NP

LIQUIDITY INDEX (LI): NP

NOTE:

DESCRIPTION: -

USCS: -



TECH	TB
DATE	10/9/25
CHECK	
REVIEW	
APPROVE	

OCTOBER 2025

US-0041868.3924

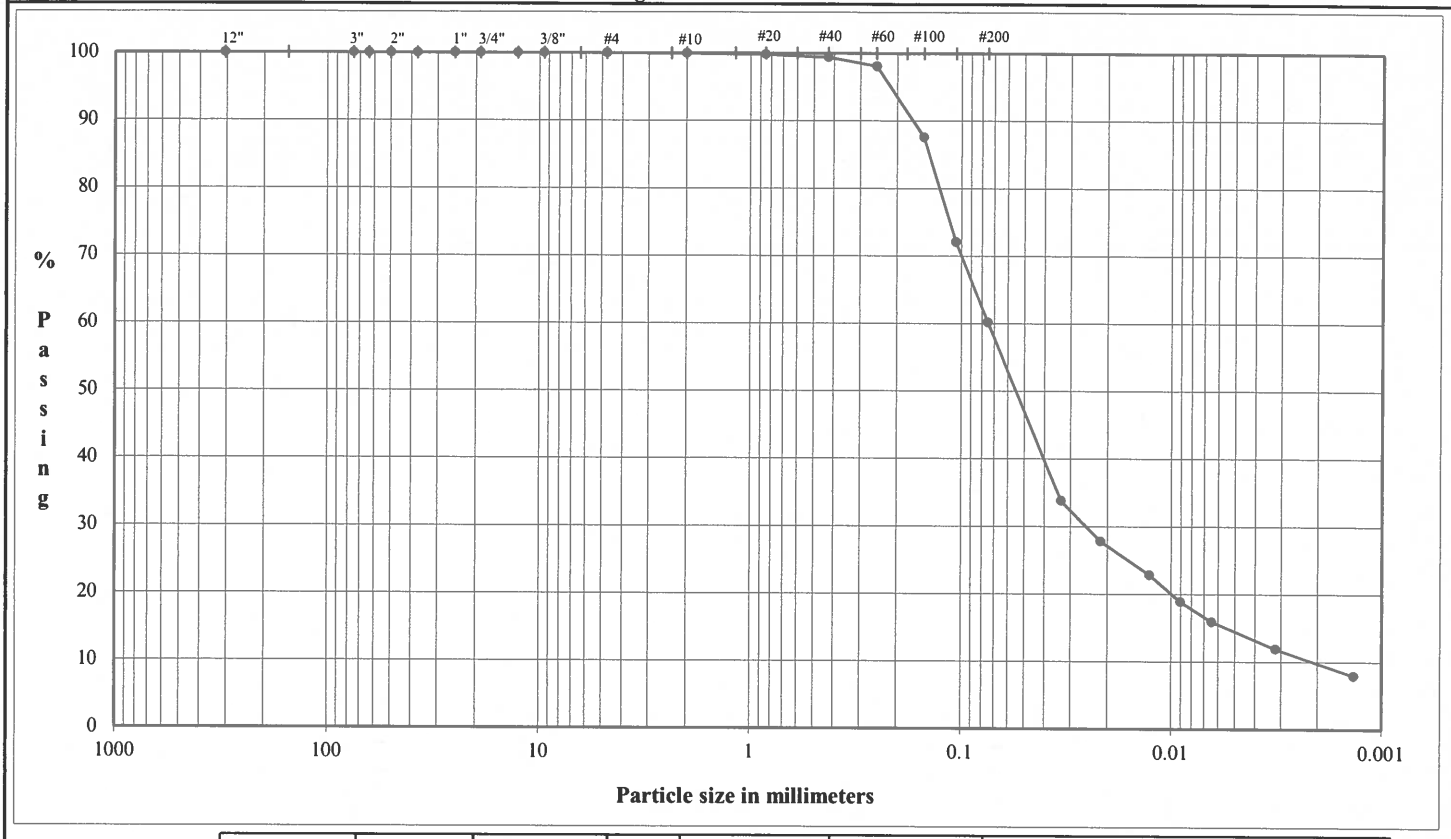
PARTICLE SIZE DISTRIBUTION & ATTERBERG LIMITS

ASTM D421, D422, D4318

PROJECT NAME: **AEP/CABIN CREEK/GA**

SAMPLE ID: **A-4, S-7** Depth: **23.5-25.0'**

TYPE: **Bag**



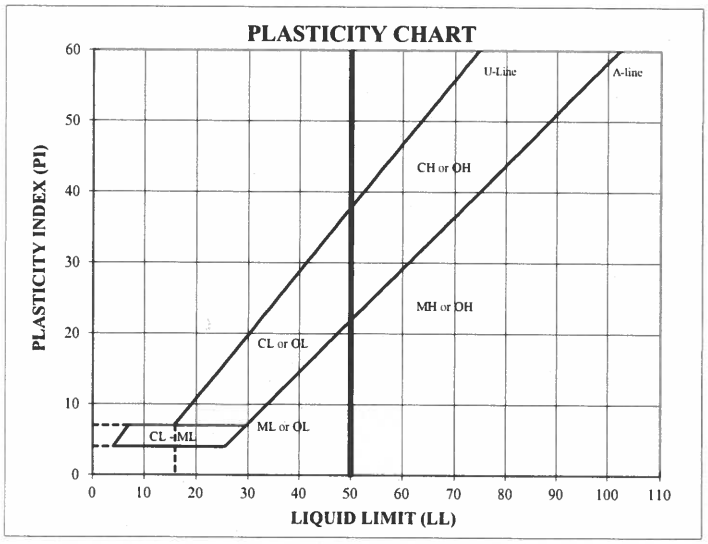
COBBLES	Coarse	Fine	Coarse	Medium	Fine	Silt or Clay
	GRAVEL		SAND			FINES

U.S. Standard Sieves Sizes and Numbers

	Particle Size (mm)	% Passing	Particle Size Classification	Particle Size Percentage
12.0"	304.8	**100.0**		
3.0"	75.0	**100.0**	Cobbles	**0.0**
2.5"	63.5	**100.0**		
2.0"	50.0	**100.0**		
1.5"	37.5	**100.0**		
1.0"	25.0	**100.0**		
0.75"	19.0	**100.0**	Coarse Gravel	**0.0**
0.50"	12.7	**100.0**		
0.375"	9.5	**100.0**		
#4	4.8	**100.0**	Fine Gravel	**0.0**
#10	2.00	**99.9**	Coarse Sand	**0.1**
#20	0.85	**99.8**		
#40	0.43	**99.4**	Medium Sand	**0.5**
#60	0.25	**98.1**		
#100	0.15	**87.5**		
#140	0.106	**72.0**		
#200	0.033	**60.2**	Fine Sand	**39.2**

Hydrometer Analysis

(mm)	%Finer		
0.033	**33.8**		
0.021	**27.8**		
0.013	**22.8**	Fines	
0.0090	**18.9**	Silt or Clay	**60.2**
0.0064	**15.9**		
0.0032	**11.9**		
0.0013	**7.9**		



ATTERBERG LIMITS

Method - B (Dry preparation)

M_c	LL	PL	PI	LI
34.5	**NP**	**NP**	**NP**	**NP**

LL (oven-dried)
< 0.75 = ORGANIC (OL OH)

DESCRIPTION: SILT and SAND, fine to coarse; very dark grayish brown.

USCS: ML

TECH	EK/TB/JC
DATE	10/7/25
CHECK	
REVIEW	
APPROVE	

SPECIFIC GRAVITY OF SOILS
ASTM D854
PYCNOMETER METHOD

PROJECT TITLE	AEP/CABIN CREEK/GA		
PROJECT NUMBER	US-0041868.3924	**SAMPLE ID**	A-4, S-7
		SAMPLE DEPTH	23.5-25.0'
TESTED FOR	Gs	**SAMPLE TYPE**	Bag

HYGROSCOPIC MOISTURE CONTENT OF MATERIAL PASSING THE #4 SIEVE

Weight of Soil and Tare, Initial (g)	223.82
Weight of Soil and Tare, Final (g)	223.08
Weight of Tare (g)	51.10
Weight of Moisture (g)	0.74
Weight of Dry Soil (g)	171.98
Hygroscopic Moisture Content	0.4%

Test Method		Method - B
Pycnometer Number		22
Weight of Pycnometer (g)		165.59
Volume of Pycnometer (mL)		499.43
Weight of Pycnometer and Water (g)		663.99
Mass of Pycnometer and Water at the Test Temperture	(A)	663.79
Observed Temperature (Tb), for (Mb) (°C)		23.0
Weight of Soil, Water & Pycnometer (g)	(B)	711.97
Temperature (°C)		23.0
Density of Water @ Tested Temperature (g/mL)		0.9975
Tare Number		-
Weight of Dry Soil Slurry plus Tare (g)		217.87
Weight of Tare (g)		140.04
Weight of Dry Soil (g)	(C)	77.83
Temperature Coefficient		0.9979
SPECIFIC GRAVITY	**(G)**	**2.62**

G @ 20 °C = [C/(A-(B - C))]*(K)

METHOD - A WET METHOD
METHOD - B OVEN-DRIED METHOD

METHOD OF AIR REMOVAL: VACUUM

Maximum Particle Size of Reduced Sample	Specimen Dry Mass (g) when using 500 mL Pycnometer (Minimum)	(Maximum)
No. 100	30	75
No. 40	40	100
No. 10	50	125
No. 4	75	200
3/8 in.	165	300

TECH	CJ
DATE	10/8/25
CHECK	
REVIEW	
APPROVE	

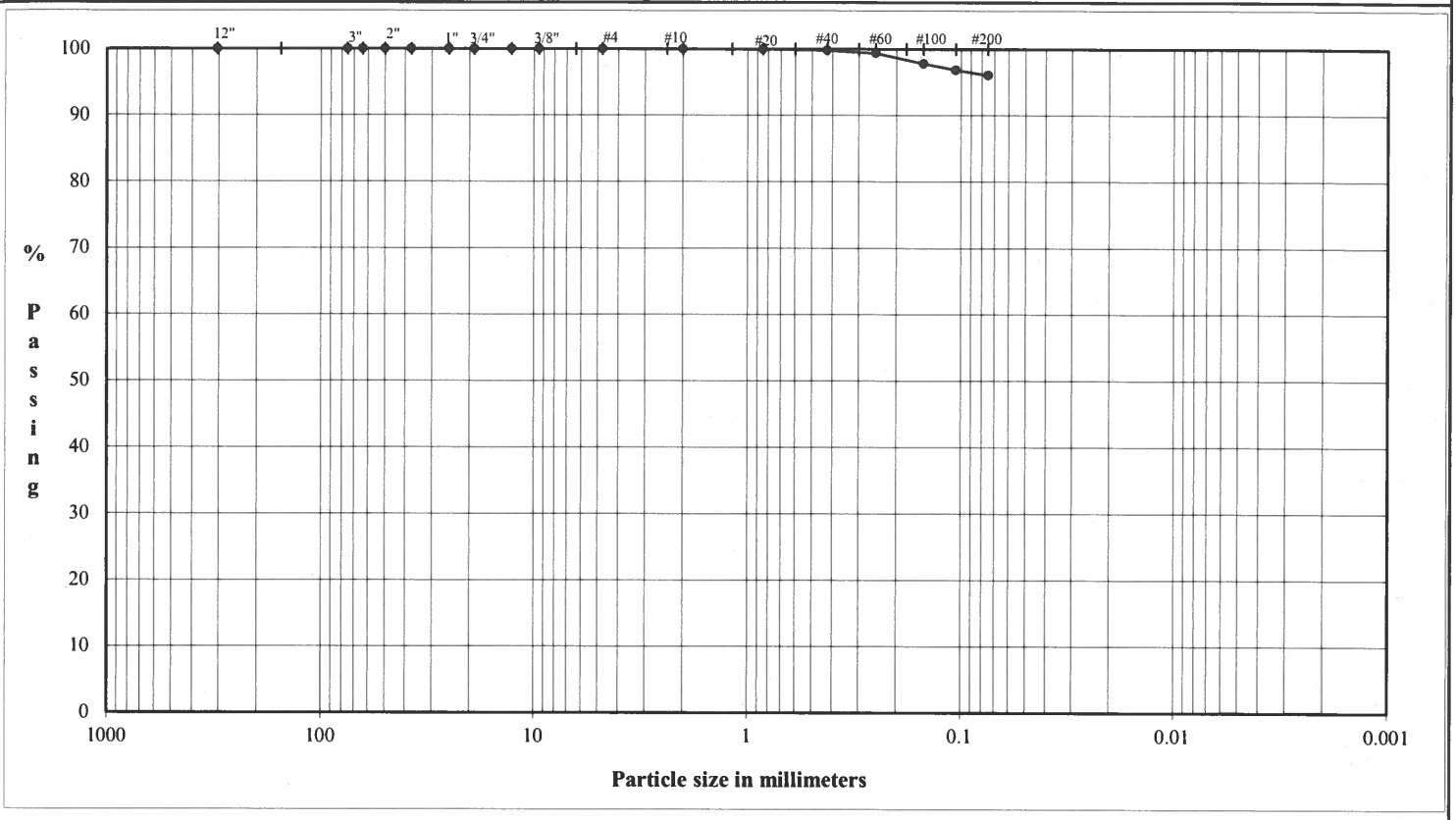
OCTOBER 2025

US-0041868.3924

PARTICLE SIZE DISTRIBUTION & ATTERBERG LIMITS

ASTM D6913 & D4318

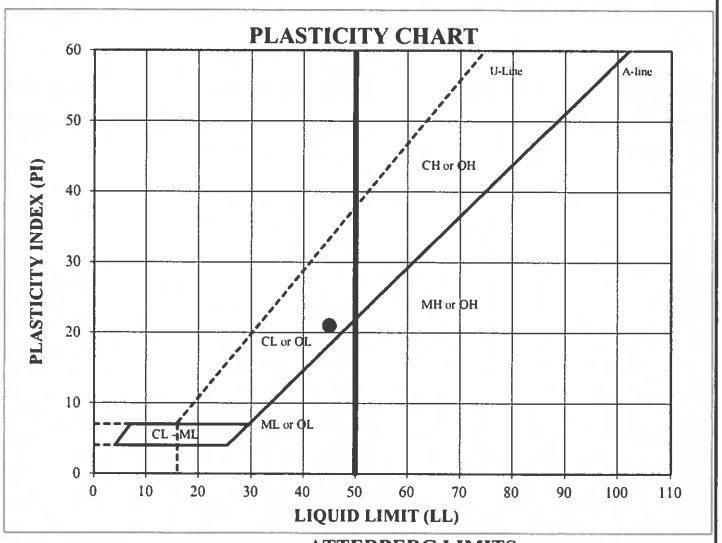
PROJECT NAME: **AEP/CABIN CREEK/GA**
SAMPLE ID: **B-1, S-8** Depth: **28.5-30.0'**
TYPE: **Bag**



COBBLES	Coarse	Fine	Coarse	Medium	Fine	Silt or Clay
	GRAVEL		SAND			FINES

U.S. Standard Sieves Sizes and Numbers

	Particle Size (mm)	% Passing	Particle Size Classification	Percentage
12.0"	304.8	**100.0**		
3.0"	75.0	**100.0**	Cobbles	**0.0**
2.5"	63.5	**100.0**		
2.0"	50.0	**100.0**		
1.5"	37.5	**100.0**		
1.0"	25.0	**100.0**		
0.75"	19.0	**100.0**	Coarse Gravel	**0.0**
0.50"	12.7	**100.0**		
0.375"	9.5	**100.0**		
#4	4.8	**100.0**	Fine Gravel	**0.0**
#10	2.00	**100.0**	Coarse Sand	**0.0**
#20	0.85	**99.9**		
#40	0.43	**99.8**	Medium Sand	**0.2**
#60	0.25	**99.4**		
#100	0.15	**97.8**		
#140	0.11	**96.9**		
#200	0.08	**96.1**	Fine Sand	**3.7**
			Fines	**96.1**



ATTERBERG LIMITS

Method - B (Dry preparation)

M_c	LL	PL	PI	LI
51.4	**45**	**24**	**21**	**1.30**

DESCRIPTION: SILTY CLAY, trace fine to coarse sand; very dark grayish brown.

USCS: CL

LL (oven-dried)
< 0.75 = ORGANIC (OL OH)

TECH	EK/JC
DATE	10/7/25
CHECK	
REVIEW	
APPROVE	

WSP USA

AEP/CABIN CREEK/GA
SUMMARY OF SOIL DATA

Borehole I.D.	Sample I.D.	Sample Depth	Sample Type	Soil Classi-fication	As-R'cvd Moisture Content %	Atterberg Limits				Grain Size Distribution			Compaction		Gs	Unit Weight		Permeability (cm/sec)	Additional Tests Conducted (See Notes)
						LL	PL	PI	LI	% Finer No. 4 Sieve	% Finer No. 200 Sieve	% Finer 0.002 mm	Max. Dry Density (pcf)	Optimum Moisture %		Dry Density (pcf)	Moisture Content %		
B-2	S-8	28.5-30.0'	Bag	-	28.5	-	-	-	-	93.7	22.1	-	-	-	-	-	-	-	-
B-2	S-10	38.5-40.0'	Bag	-	30.4	-	-	-	-	100.0	67.8	-	-	-	-	-	-	-	-
B-3	S-2	3.5-5.0'	Bag	-	58.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
B-3	S-8	28.5-30.0'	Bag	-	27.4	-	-	-	-	99.7	19.8	-	-	-	-	-	-	-	-
E-1	S-1	0.0-1.5'	Bag	-	17.8	-	-	-	-	76.1	18.9	-	-	-	-	-	-	-	-
E-1	S-6	18.5-20.0'	Bag	-	29.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
E-1	S-7	25.0-26.5'	Bag	-	29.2	-	-	-	-	99.1	52.6	-	-	-	-	-	-	-	-
E-1	S-12	48.5-50.0'	Bag	-	32.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-
E-2	S-1	0.0-1.5'	Bag	-	19.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-
E-2	S-3	6.0-7.5'	Bag	-	39.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-
E-2	S-5	13.5-15.0'	Bag	-	13.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-
E-2	S-7	23.5-25.0'	Bag	-	17.7	-	-	-	-	99.9	47.3	-	-	-	-	-	-	-	-
E-3	S-4	8.5-10.0'	Bag	-	8.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
E-3	S-6	18.5-20.0'	Bag	-	14.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-
E-4	S-1	0.0-1.5'	Bag	-	19.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-

ABBREVIATIONS: LIQUID LIMIT (LL)
PLASTIC LIMIT (PL)
PLASTICITY INDEX (PI)
LIQUIDITY INDEX (LI)
SPECIFIC GRAVITY (Gs)

NOTES: T = TRIAXIAL TEST
U = UNCONFINED COMPRESSION TEST
C = CONSOLIDATION TEST
DS = DIRECT SHEAR TEST

WATER CONTENT DETERMINATION
ASTM D2216

PROJECT TITLE	AEP/CABIN CREEK/GA
PROJECT NUMBER	US-0041868.3924
REMARKS	

Sample Type	Bag	Bag	Bag	Bag	Bag
Borehole Number	B-3	E-1	E-1	E-2	E-2
Sample Number	S-2	S-6	S-12	S-1	S-3
Depth of Sample (ft)	3.5-5.0'	18.5-20.0'	48.5-50.0'	0.0-1.5'	6.0-7.5'
Weight of Wet Soil + Tare (gm)	185.83	287.01	290.32	213.06	245.67
Weight of Dry Soil + Tare (gm)	136.27	234.10	231.23	186.38	191.08
Weight of Tare (gm)	51.51	52.33	51.07	51.29	52.05
Weight of Water (gm)	49.56	52.91	59.09	26.68	54.59
Weight of Dry Soil (gm)	84.76	181.77	180.16	135.09	139.03
Water Content (%)	58.5	29.1	32.8	19.7	39.3

Sample Type	Bag	Bag	Bag	Bag	
Borehole Number	E-2	E-3	E-3	E-4	
Sample Number	S-5	S-4	S-6	S-1	
Depth of Sample (ft)	13.5-15.0'	8.5-10.0'	18.5-20.0'	0.0-1.5'	
Weight of Wet Soil + Tare (gm)	279.02	295.90	302.22	230.17	
Weight of Dry Soil + Tare (gm)	251.20	276.89	268.59	200.79	
Weight of Tare (gm)	51.65	41.22	43.34	51.46	
Weight of Water (gm)	27.82	19.01	33.63	29.38	
Weight of Dry Soil (gm)	199.55	235.67	225.25	149.33	
Water Content (%)	13.9	8.1	14.9	19.7	

Sample Type					
Borehole Number					
Sample Number					
Depth of Sample (ft)					
Weight of Wet Soil + Tare (gm)					
Weight of Dry Soil + Tare (gm)					
Weight of Tare (gm)					
Weight of Water (gm)					
Weight of Dry Soil (gm)					
Water Content (%)					

TECH	JC
DATE	10/7/25
CHECK	
REVIEW	
APPROVE	

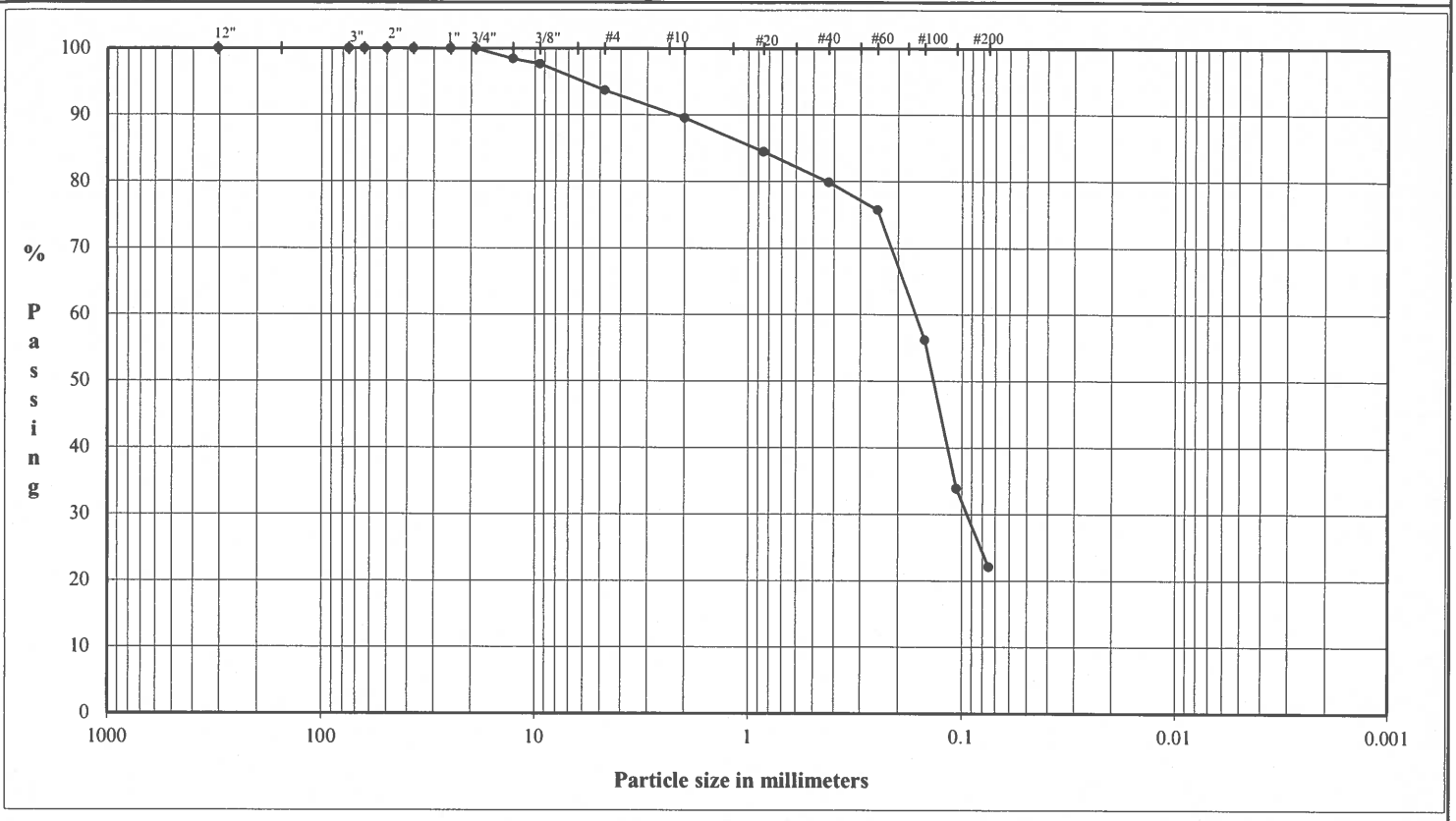
OCTOBER 2025

US-0041868.3924

PARTICLE SIZE DISTRIBUTION & ATTERBERG LIMITS

ASTM D6913 & D4318

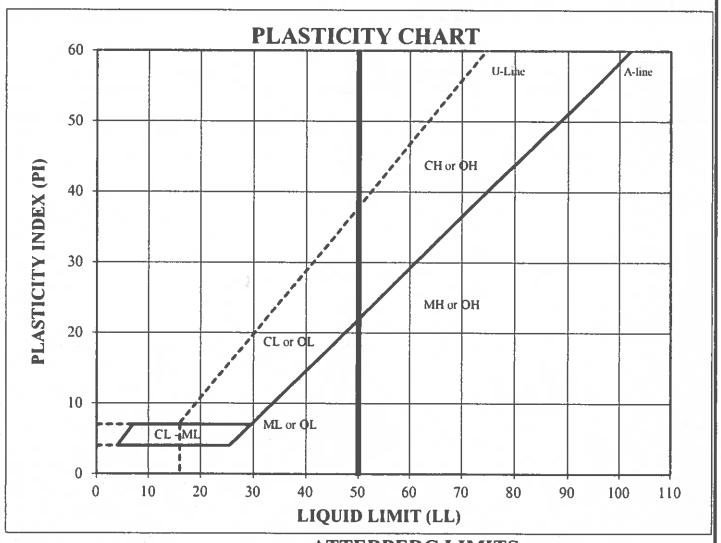
PROJECT NAME: **AEP/CABIN CREEK/GA**
SAMPLE ID: **B-2, S-8** Depth: **28.5-30.0'**
TYPE: **Bag**



	Coarse	Fine	Coarse	Medium	Fine	Silt or Clay
COBBLES	GRAVEL		SAND			FINES

U.S. Standard Sieves Sizes and Numbers

	Particle Size (mm)	% Passing	Particle Size Classification	Percentage
12.0"	304.8	**100.0**		
3.0"	75.0	**100.0**	Cobbles	**0.0**
2.5"	63.5	**100.0**		
2.0"	50.0	**100.0**		
1.5"	37.5	**100.0**		
1.0"	25.0	**100.0**		
0.75"	19.0	**100.0**	Coarse Gravel	**0.0**
0.50"	12.7	**98.5**		
0.375"	9.5	**97.7**		
#4	4.8	**93.7**	Fine Gravel	**6.3**
#10	2.00	**89.6**	Coarse Sand	**4.1**
#20	0.85	**84.5**		
#40	0.43	**79.8**	Medium Sand	**9.7**
#60	0.25	**75.7**		
#100	0.15	**56.2**		
#140	0.11	**33.9**		
#200	0.08	**22.1**	Fine Sand	**57.8**
			Fines	**22.1**



ATTERBERG LIMITS

Method - B (Dry preparation)

M_c	LL	PL	PI	LI
28.5				

LL (oven-dried) < 0.75 = ORGANIC (OL OH)

DESCRIPTION: -

USCS: -

TECH	EK/JC
DATE	10/7/25
CHECK	
REVIEW	
APPROVE	

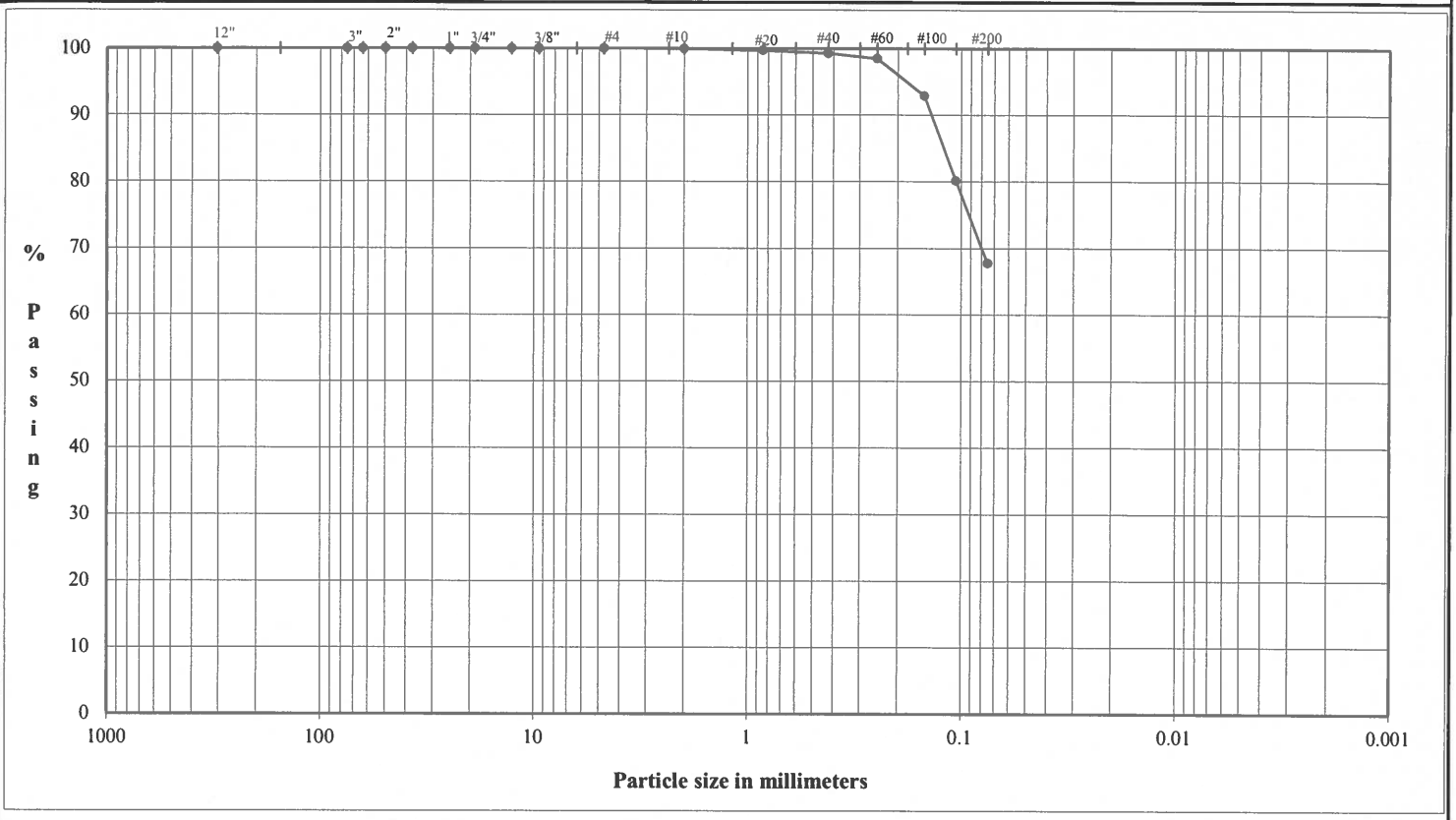
OCTOBER 2025

US-0041868.3924

PARTICLE SIZE DISTRIBUTION & ATTERBERG LIMITS

ASTM D6913 & D4318

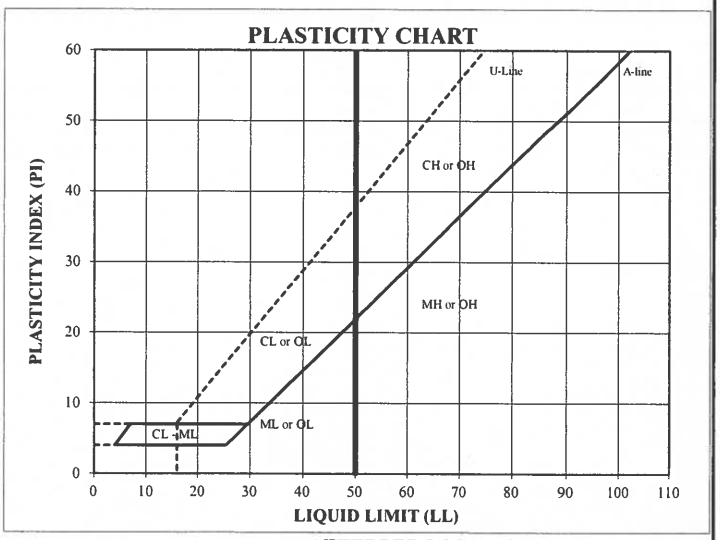
PROJECT NAME: **AEP/CABIN CREEK/GA**
SAMPLE ID: **B-2, S-10** Depth: **38.5-40.0'**
TYPE: **Bag**



COBBLES	Coarse	Fine	Coarse	Medium	Fine	Silt or Clay
	GRAVEL		SAND			FINES

U.S. Standard Sieves Sizes and Numbers

	Particle Size (mm)	% Passing	Particle Size Classification	Percentage
12.0"	304.8	**100.0**		
3.0"	75.0	**100.0**	Cobbles	**0.0**
2.5"	63.5	**100.0**		
2.0"	50.0	**100.0**		
1.5"	37.5	**100.0**		
1.0"	25.0	**100.0**		
0.75"	19.0	**100.0**	Coarse Gravel	**0.0**
0.50"	12.7	**100.0**		
0.375"	9.5	**100.0**		
#4	4.8	**100.0**	Fine Gravel	**0.0**
#10	2.00	**99.9**	Coarse Sand	**0.1**
#20	0.85	**99.7**		
#40	0.43	**99.3**	Medium Sand	**0.7**
#60	0.25	**98.5**		
#100	0.15	**92.9**		
#140	0.11	**80.1**		
#200	0.08	**67.8**	Fine Sand	**31.5**
			Fines	**67.8**



ATTERBERG LIMITS

Method - B (Dry preparation)

M_c	LL	PL	PI	LI
30.4				

LL (oven-dried) < 0.75 = ORGANIC (OL OH)

DESCRIPTION: -

USCS: -

TECH	EK/JC
DATE	10/7/25
CHECK	
REVIEW	
APPROVE	

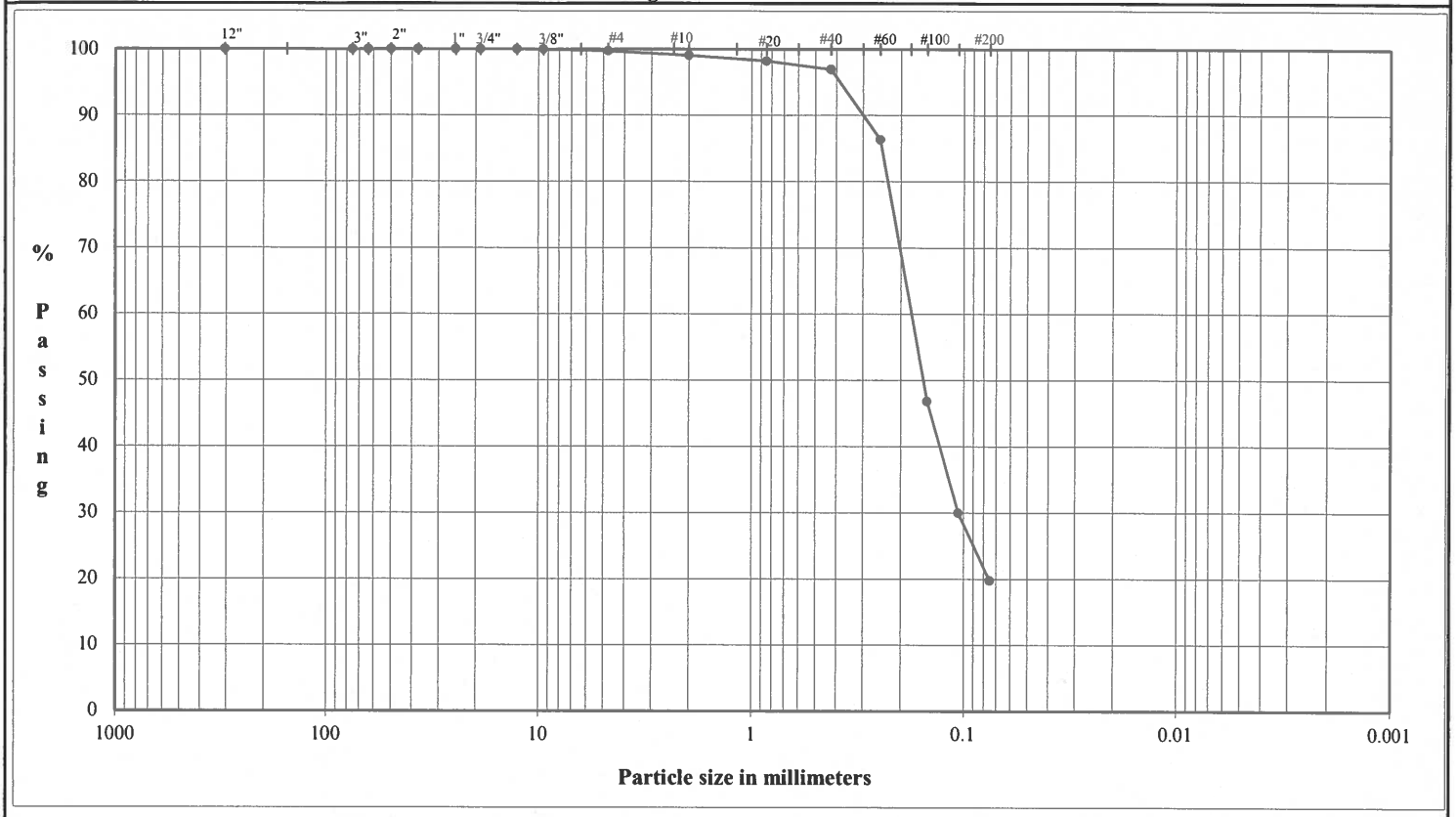
WSP USA

OCTOBER 2025 US-0041868.3924

PARTICLE SIZE DISTRIBUTION & ATTERBERG LIMITS

ASTM D6913 & D4318

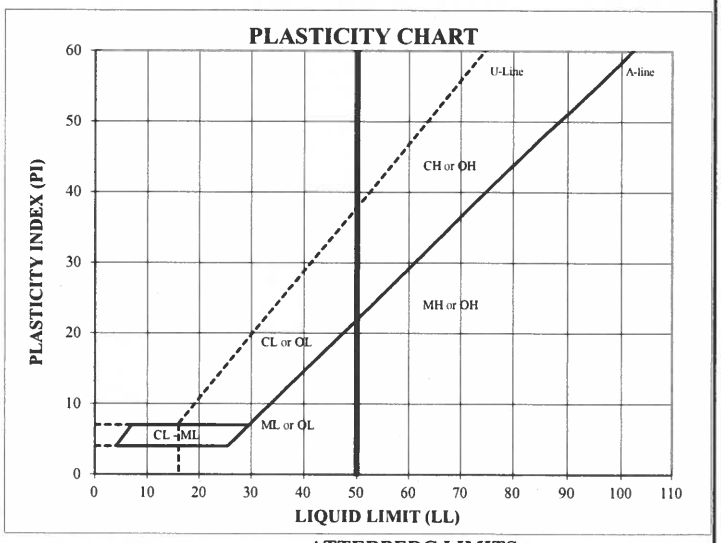
PROJECT NAME: **AEP/CABIN CREEK/GA**
SAMPLE ID: **B-3, S-8** Depth: **28.5-30.0'**
TYPE: **Bag**



	Coarse	Fine	Coarse	Medium	Fine	Silt or Clay
COBBLES	GRAVEL		SAND			FINES

U.S. Standard Sieves Sizes and Numbers

	Particle Size (mm)	% Passing	Particle Size Classification	Percentage
12.0"	304.8	**100.0**		
3.0"	75.0	**100.0**	Cobbles	**0.0**
2.5"	63.5	**100.0**		
2.0"	50.0	**100.0**		
1.5"	37.5	**100.0**		
1.0"	25.0	**100.0**		
0.75"	19.0	**100.0**	Coarse Gravel	**0.0**
0.50"	12.7	**100.0**		
0.375"	9.5	**100.0**		
#4	4.8	**99.7**	Fine Gravel	**0.3**
#10	2.00	**99.0**	Coarse Sand	**0.7**
#20	0.85	**98.2**		
#40	0.43	**96.9**	Medium Sand	**2.1**
#60	0.25	**86.3**		
#100	0.15	**46.8**		
#140	0.11	**30.0**		
#200	0.08	**19.8**	Fine Sand	**77.2**
			Fines	**19.8**



ATTERBERG LIMITS

Method - B (Dry preparation)

M_c	LL	PL	PI	LI
27.4				

LL (oven-dried)
< 0.75 = ORGANIC (OL OH)

DESCRIPTION: -

USCS: -

TECH	EK/JC
DATE	10/7/25
CHECK	
REVIEW	
APPROVE	

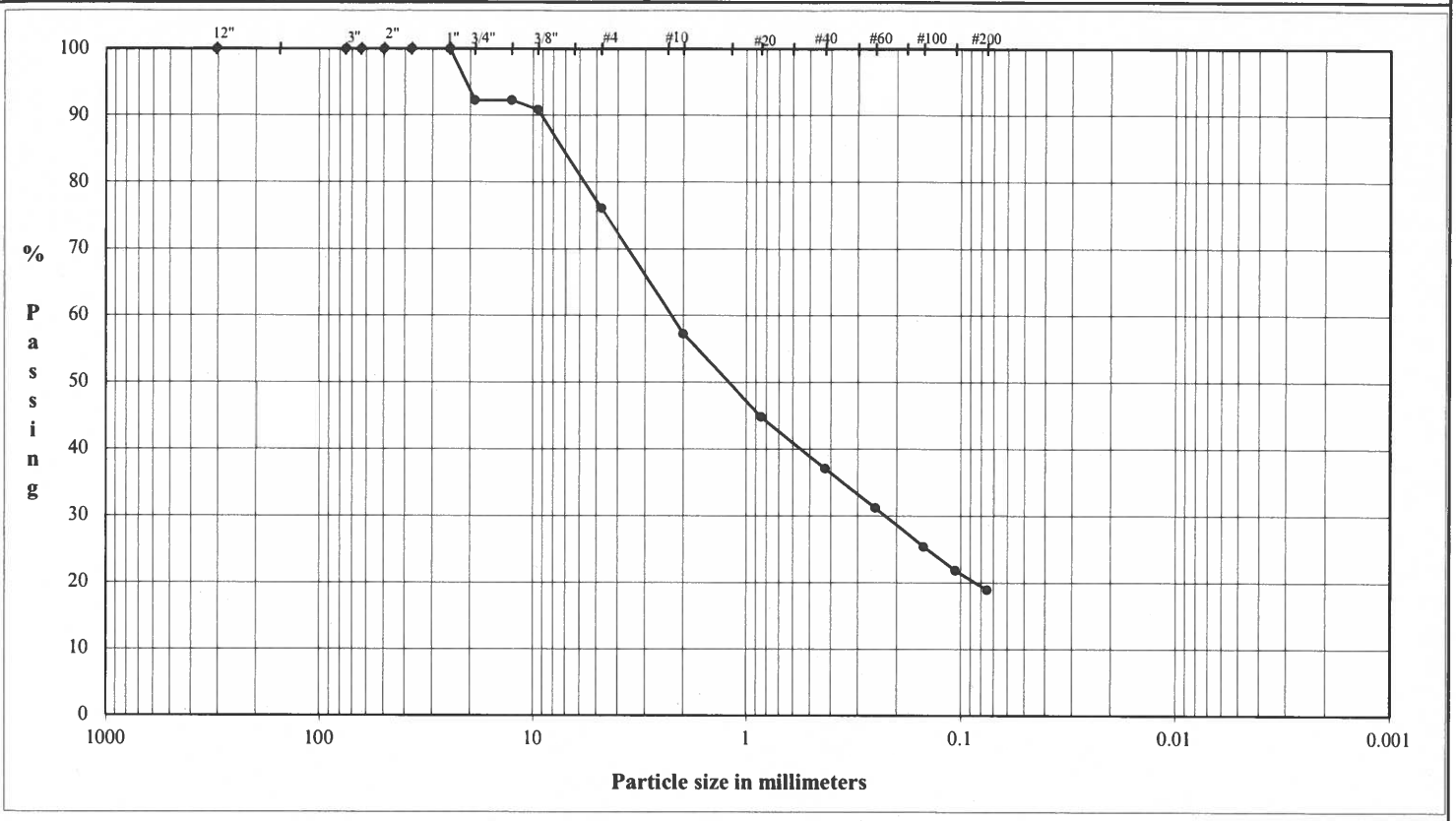
OCTOBER 2025

US-0041868.3924

PARTICLE SIZE DISTRIBUTION & ATTERBERG LIMITS

ASTM D6913 & D4318

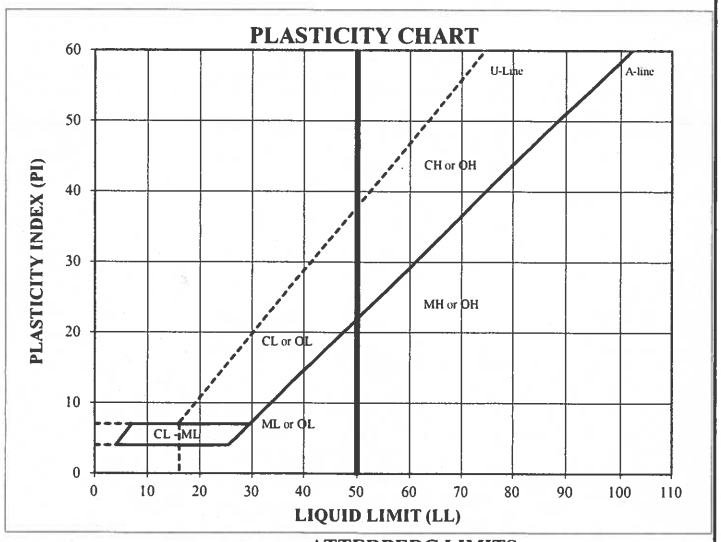
PROJECT NAME: **AEP/CABIN CREEK/GA**
SAMPLE ID: **E-1, S-1** Depth: **0.0-1.5'**
TYPE: **Bag**



COBBLES	Coarse	Fine	Coarse	Medium	Fine	Silt or Clay
	GRAVEL		SAND			FINES

U.S. Standard Sieves Sizes and Numbers

	Particle Size (mm)	% Passing	Particle Size Classification	Percentage
12.0"	304.8	**100.0**		
3.0"	75.0	**100.0**	Cobbles	**0.0**
2.5"	63.5	**100.0**		
2.0"	50.0	**100.0**		
1.5"	37.5	**100.0**		
1.0"	25.0	**100.0**		
0.75"	19.0	**92.2**	Coarse Gravel	**7.8**
0.50"	12.7	**92.2**		
0.375"	9.5	**90.8**		
#4	4.8	**76.1**	Fine Gravel	**16.1**
#10	2.00	**57.2**	Coarse Sand	**18.9**
#20	0.85	**44.8**		
#40	0.43	**37.1**	Medium Sand	**20.2**
#60	0.25	**31.2**		
#100	0.15	**25.4**		
#140	0.11	**21.8**		
#200	0.08	**18.9**	Fine Sand	**18.1**
			Fines	**18.9**



ATTERBERG LIMITS

Method - B (Dry preparation)

M_c	LL	PL	PI	LI
17.8				

DESCRIPTION: -

USCS: -

LL (oven-dried) ____
< 0.75 = ORGANIC (OL OH) ____

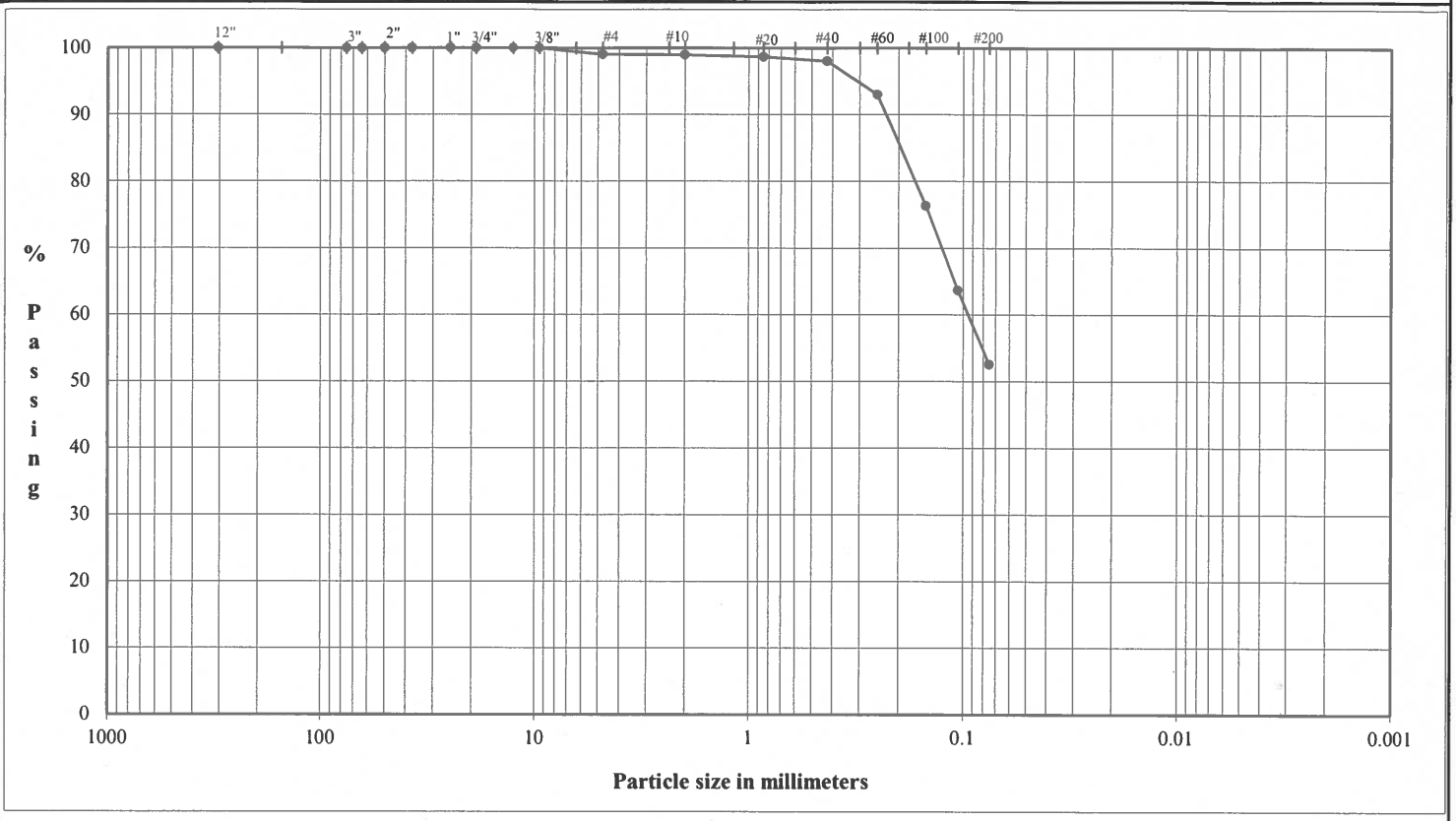
TECH	EK/JC
DATE	10/7/25
CHECK	
REVIEW	
APPROVE	

OCTOBER 2025 US-0041868.3924

PARTICLE SIZE DISTRIBUTION & ATTERBERG LIMITS

ASTM D6913 & D4318

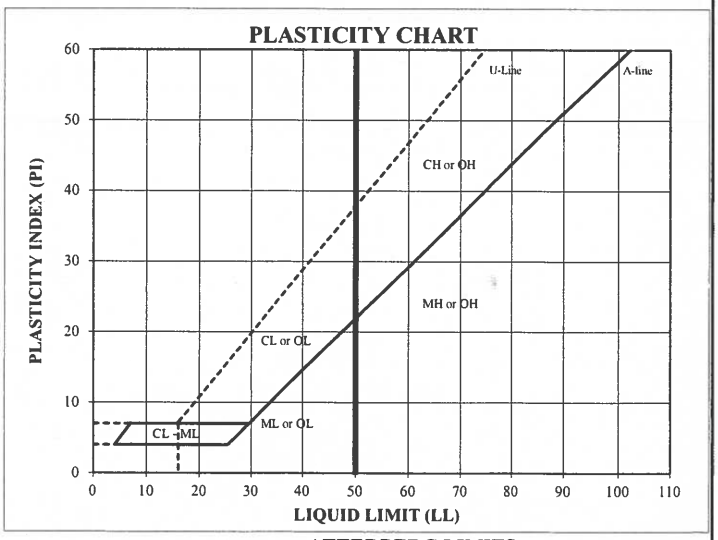
PROJECT NAME: **AEP/CABIN CREEK/GA**
SAMPLE ID: **E-1, S-7** Depth: **25.0-26.5'**
TYPE: **Bag**



	Coarse	Fine	Coarse	Medium	Fine	Silt or Clay
COBBLES	GRAVEL		SAND			FINES

U.S. Standard Sieves Sizes and Numbers

	Particle Size (mm)	% Passing	Particle Size Classification	Percentage
12.0"	304.8	**100.0**		
3.0"	75.0	**100.0**	Cobbles	**0.0**
2.5"	63.5	**100.0**		
2.0"	50.0	**100.0**		
1.5"	37.5	**100.0**		
1.0"	25.0	**100.0**		
0.75"	19.0	**100.0**	Coarse Gravel	**0.0**
0.50"	12.7	**100.0**		
0.375"	9.5	**100.0**		
#4	4.8	**99.1**	Fine Gravel	**0.9**
#10	2.00	**99.0**	Coarse Sand	**0.1**
#20	0.85	**98.7**		
#40	0.43	**98.1**	Medium Sand	**0.9**
#60	0.25	**93.0**		
#100	0.15	**76.3**		
#140	0.11	**63.6**		
#200	0.08	**52.6**	Fine Sand	**45.5**
			Fines	**52.6**



ATTERBERG LIMITS

Method - B (Dry preparation)

M_c	LL	PL	PI	LI
29.2				

LL (oven-dried) < 0.75 = ORGANIC (OL OH)

DESCRIPTION: -

USCS: -

TECH	EK/JC
DATE	10/7/25
CHECK	
REVIEW	
APPROVE	

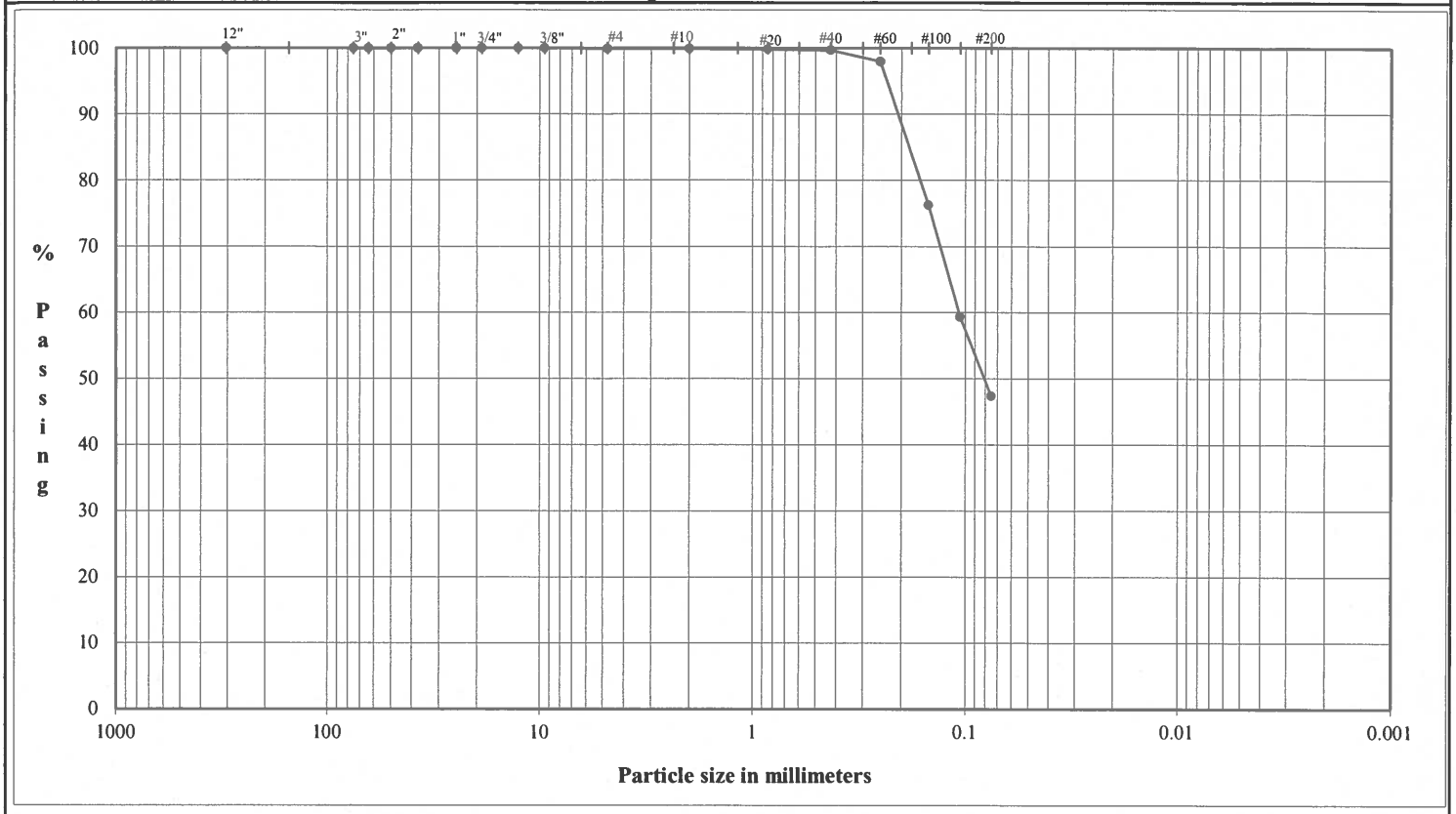
WSP USA

OCTOBER 2025 US-0041868.3924

PARTICLE SIZE DISTRIBUTION & ATTERBERG LIMITS

ASTM D6913 & D4318

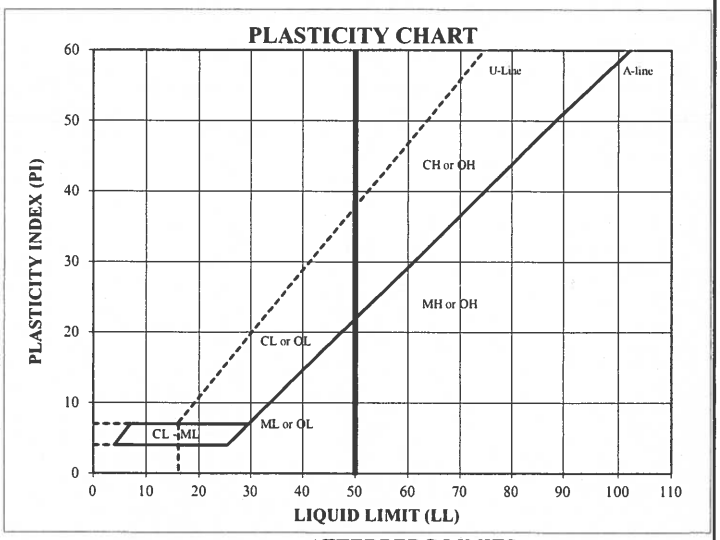
PROJECT NAME: **AEP/CABIN CREEK/GA**
SAMPLE ID: **E-2, S-7** Depth: **23.5-25.0'**
TYPE: **Bag**



	Coarse	Fine	Coarse	Medium	Fine	Silt or Clay
COBBLES	GRAVEL		SAND			FINES

U.S. Standard Sieves Sizes and Numbers

	Particle Size (mm)	% Passing	Particle Size Classification	Percentage
12.0"	304.8	**100.0**		
3.0"	75.0	**100.0**	Cobbles	**0.0**
2.5"	63.5	**100.0**		
2.0"	50.0	**100.0**		
1.5"	37.5	**100.0**		
1.0"	25.0	**100.0**		
0.75"	19.0	**100.0**	Coarse Gravel	**0.0**
0.50"	12.7	**100.0**		
0.375"	9.5	**100.0**		
#4	4.8	**99.9**	Fine Gravel	**0.1**
#10	2.00	**99.9**	Coarse Sand	**0.0**
#20	0.85	**99.8**		
#40	0.43	**99.7**	Medium Sand	**0.2**
#60	0.25	**98.0**		
#100	0.15	**76.2**		
#140	0.11	**59.3**		
#200	0.08	**47.3**	Fine Sand	**52.3**
			Fines	**47.3**



ATTERBERG LIMITS

Method - B (Dry preparation)

M_c	LL	PL	PI	LI
17.7				

LL (oven-dried)
< 0.75 = ORGANIC (OL OH)

DESCRIPTION: -

USCS: -

TECH	EK/JC
DATE	10/7/25
CHECK	
REVIEW	
APPROVE	

WSP USA

AEP/CABIN CREEK/GA
SUMMARY OF SOIL DATA

Borehole I.D.	Sample I.D.	Sample Depth	Sample Type	Soil Classi-fication	As-R'cvd Moisture Content %	Atterberg Limits				Grain Size Distribution			Compaction		Gs	Unit Weight		Permeability (cm/sec)	Additional Tests Conducted (See Notes)
						LL	PL	PI	LI	% Finer No. 4 Sieve	% Finer No. 200 Sieve	% Finer 0.002 mm	Max. Dry Density (pcf)	Optimum Moisture %		Dry Density (pcf)	Moisture Content %		
E-4	S-3	6.0-7.5'	Bag	-	40.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-
E-4	S-6	23.5-25.0'	Bag	-	18.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
E-5	S-1	0.0-1.5'	Bag	-	15.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-
E-5	S-4	8.5-10.0'	Bag	-	41.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-
E-5	S-6	18.5-20.0'	Bag	-	13.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
E-6	S-2	3.5-5.0'	Bag	-	33.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
E-6	S-5	13.5-15.0'	Bag	-	35.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-
E-6	S-7	23.5-25.0'	Bag	-	8.9	-	-	-	-	97.7	22.6	-	-	-	-	-	-	-	-
E-7	S-1	0.0-1.5'	Bag	-	15.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-
E-7	S-6	18.5-20.0'	Bag	-	13.1	-	-	-	-	100.0	41.4	-	-	-	-	-	-	-	-
E-8	S-3	6.0-7.5'	Bag	-	20.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-
E-8	S-5	13.5-15.0'	Bag	-	40.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
E-8	S-7	23.5-25.0'	Bag	-	27.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-
E-8	S-8	28.5-30.0'	Bag	-	37.5	NP	NP	NP	NP	-	-	-	-	-	-	-	-	-	-
E-8	S-9	33.5-35.0'	Bag	-	26.2	-	-	-	-	99.6	22.7	-	-	-	-	-	-	-	-

ABBREVIATIONS: LIQUID LIMIT (LL)
PLASTIC LIMIT (PL)
PLASTICITY INDEX (PI)
LIQUIDITY INDEX (LI)
SPECIFIC GRAVITY (Gs)

NOTES: T = TRIAXIAL TEST
U = UNCONFINED COMPRESSION TEST
C = CONSOLIDATION TEST
DS = DIRECT SHEAR TEST

WATER CONTENT DETERMINATION
ASTM D2216

PROJECT TITLE	AEP/CABIN CREEK/GA
PROJECT NUMBER	US-0041868.3924
REMARKS	

Sample Type	Bag	Bag	Bag	Bag	Bag
Borehole Number	E-4	E-4	E-5	E-5	E-5
Sample Number	S-3	S-6	S-1	S-4	S-6
Depth of Sample (ft)	6.0-7.5'	13.5-15.0'	0.0-1.5'	8.5-10.0'	18.5-20.0'
Weight of Wet Soil + Tare (gm)	269.71	292.71	251.28	245.37	352.64
Weight of Dry Soil + Tare (gm)	207.04	253.72	225.17	188.03	317.69
Weight of Tare (gm)	52.03	42.82	51.67	51.34	51.40
Weight of Water (gm)	62.67	38.99	26.11	57.34	34.95
Weight of Dry Soil (gm)	155.01	210.90	173.50	136.69	266.29
Water Content (%)	40.4	18.5	15.0	41.9	13.1

Sample Type	Bag	Bag	Bag	Bag	Bag
Borehole Number	E-6	E-6	E-7	E-8	E-8
Sample Number	S-2	S-5	S-1	S-3	S-5
Depth of Sample (ft)	3.5-5.0'	13.5-15.0'	0.0-1.5'	6.0-7.5'	13.5-15.0'
Weight of Wet Soil + Tare (gm)	175.98	190.89	224.39	234.97	244.17
Weight of Dry Soil + Tare (gm)	144.73	154.54	201.43	203.91	186.00
Weight of Tare (gm)	51.80	51.80	52.08	51.92	42.47
Weight of Water (gm)	31.25	36.35	22.96	31.06	58.17
Weight of Dry Soil (gm)	92.93	102.74	149.35	151.99	143.53
Water Content (%)	33.6	35.4	15.4	20.4	40.5

Sample Type	Bag				
Borehole Number	E-8				
Sample Number	S-7				
Depth of Sample (ft)	23.5-25.0'				
Weight of Wet Soil + Tare (gm)	331.77				
Weight of Dry Soil + Tare (gm)	270.92				
Weight of Tare (gm)	51.81				
Weight of Water (gm)	60.85				
Weight of Dry Soil (gm)	219.11				
Water Content (%)	27.8				

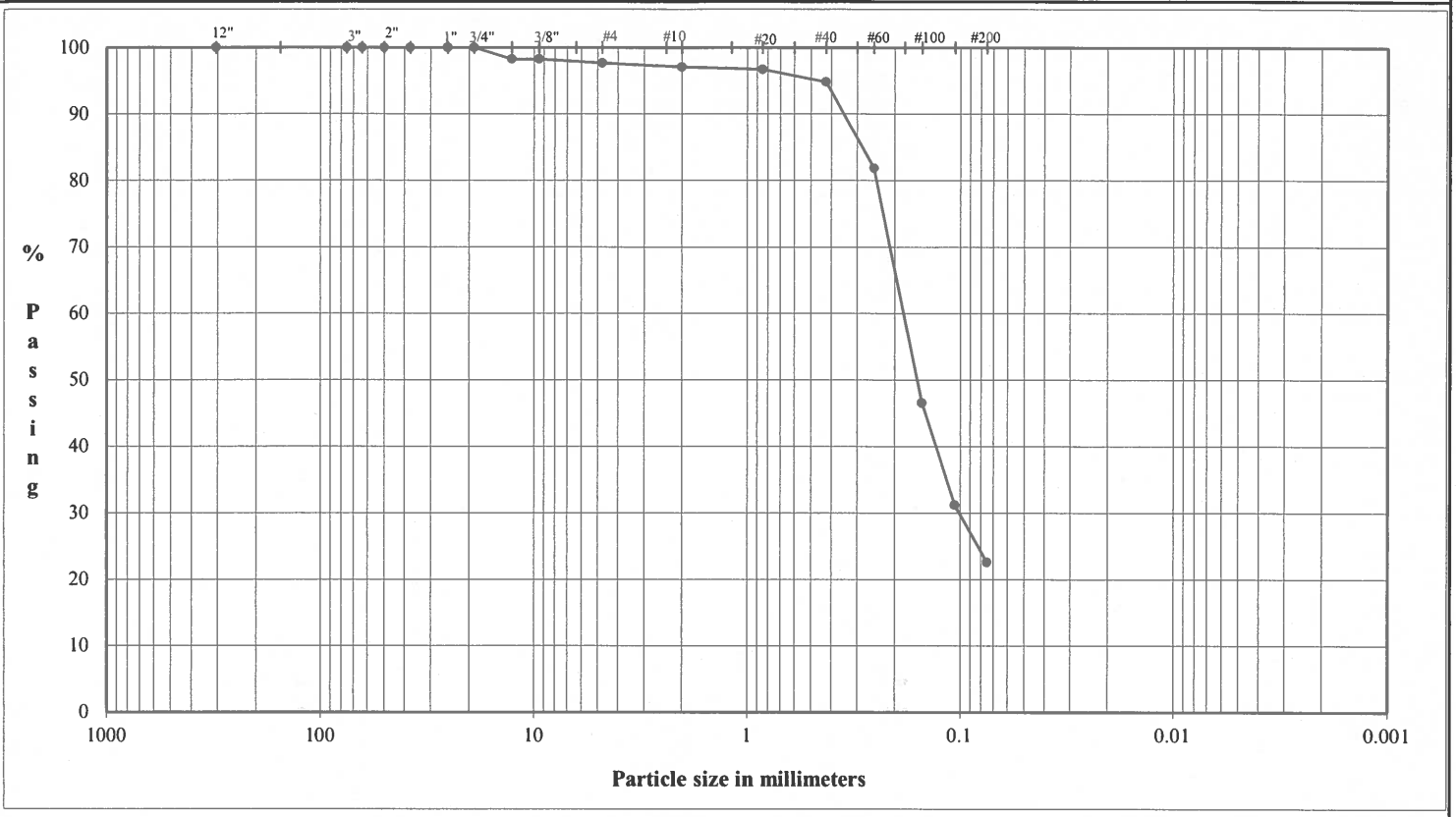
TECH	JC
DATE	10/7/25
CHECK	
REVIEW	
APPROVE	

OCTOBER 2025 US-0041868.3924

PARTICLE SIZE DISTRIBUTION & ATTERBERG LIMITS

ASTM D6913 & D4318

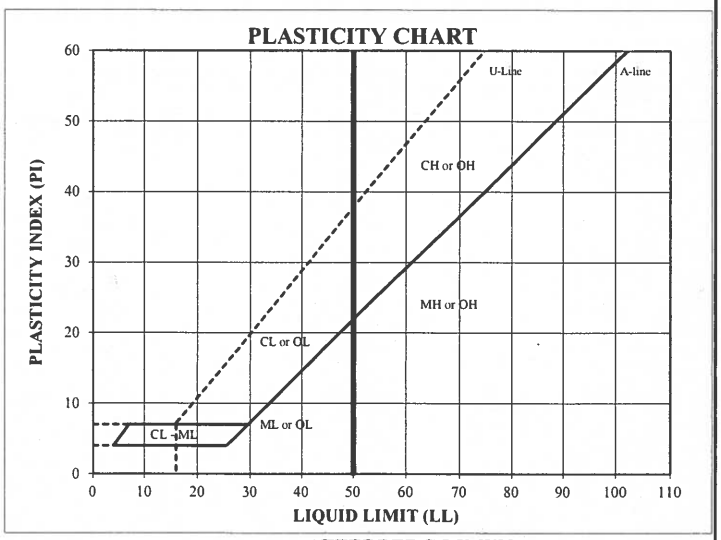
PROJECT NAME: **AEP/CABIN CREEK/GA**
SAMPLE ID: **E-6, S-7** Depth: **23.5-25.0'**
TYPE: **Bag**



	Coarse	Fine	Coarse	Medium	Fine	Silt or Clay
COBBLES	GRAVEL		SAND			FINES

U.S. Standard Sieves Sizes and Numbers

	Particle Size (mm)	% Passing	Particle Size Classification	Percentage
12.0"	304.8	**100.0**		
3.0"	75.0	**100.0**	Cobbles	**0.0**
2.5"	63.5	**100.0**		
2.0"	50.0	**100.0**		
1.5"	37.5	**100.0**		
1.0"	25.0	**100.0**		
0.75"	19.0	**100.0**	Coarse Gravel	**0.0**
0.50"	12.7	**98.3**		
0.375"	9.5	**98.3**		
#4	4.8	**97.7**	Fine Gravel	**2.3**
#10	2.00	**97.1**	Coarse Sand	**0.6**
#20	0.85	**96.7**		
#40	0.43	**94.8**	Medium Sand	**2.2**
#60	0.25	**81.9**		
#100	0.15	**46.5**		
#140	0.11	**31.2**		
#200	0.08	**22.6**	Fine Sand	**72.3**
			Fines	**22.6**



ATTERBERG LIMITS

Method - B (Dry preparation)

M_c	LL	PL	PI	LI
8.9				

LL (oven-dried) < 0.75 = ORGANIC (OL OH)

DESCRIPTION: -

USCS: -

TECH	EK/JC
DATE	10/7/25
CHECK	
REVIEW	
APPROVE	

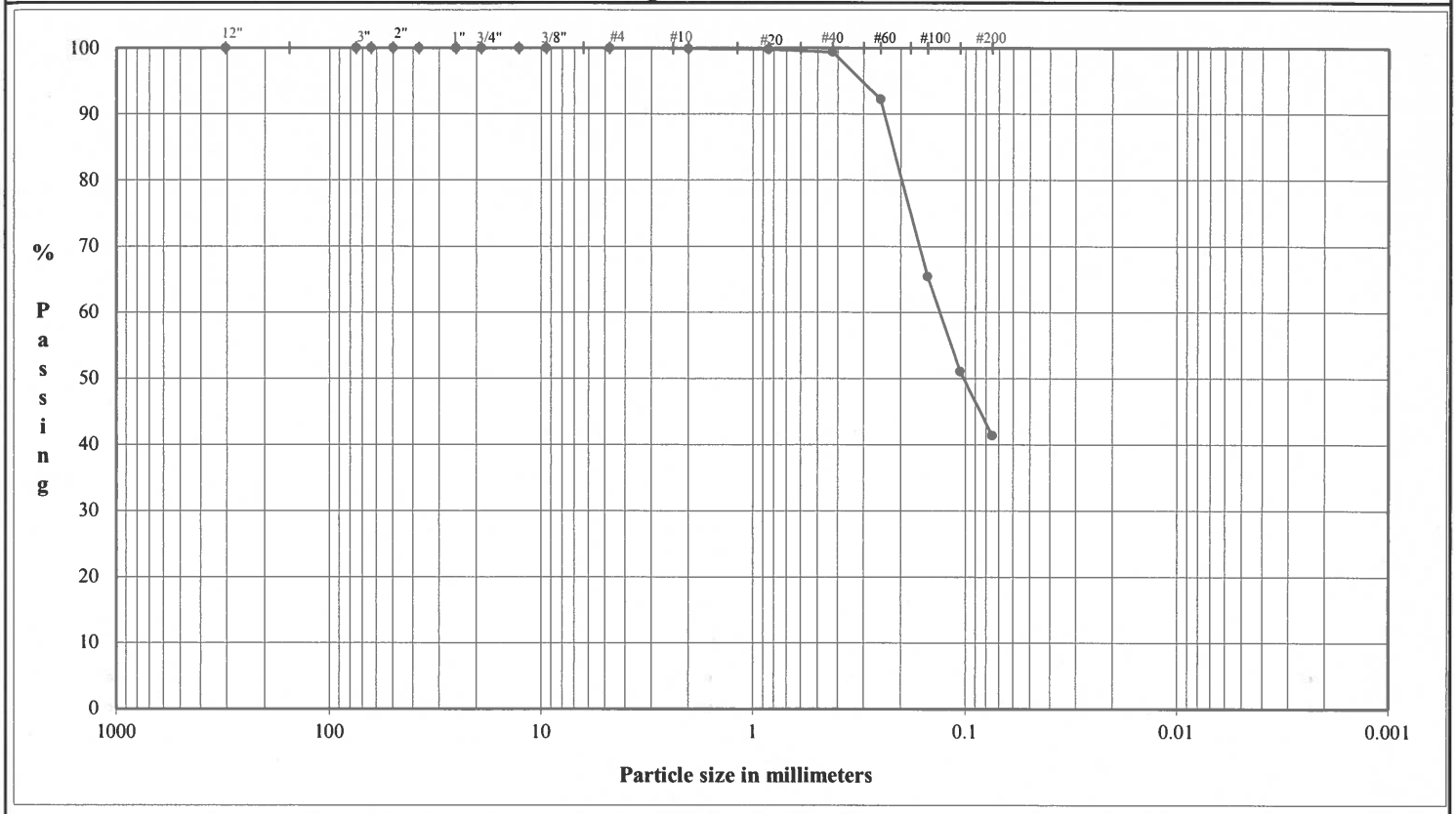
WSP USA

OCTOBER 2025 US-0041868.3924

PARTICLE SIZE DISTRIBUTION & ATTERBERG LIMITS

ASTM D6913 & D4318

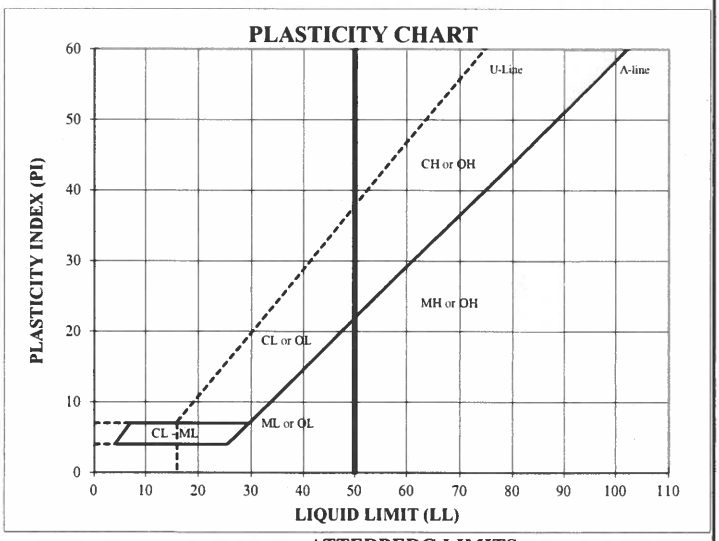
PROJECT NAME: **AEP/CABIN CREEK/GA**
SAMPLE ID: **E-7, S-6** Depth: **18.5-20.0'**
TYPE: **Bag**



COBBLES	Coarse	Fine	Coarse	Medium	Fine	Silt or Clay
	GRAVEL		SAND			FINES

U.S. Standard Sieves Sizes and Numbers

	Particle Size (mm)	% Passing	Particle Size Classification	Percentage
12.0"	304.8	**100.0**		
3.0"	75.0	**100.0**	Cobbles	**0.0**
2.5"	63.5	**100.0**		
2.0"	50.0	**100.0**		
1.5"	37.5	**100.0**		
1.0"	25.0	**100.0**		
0.75"	19.0	**100.0**	Coarse Gravel	**0.0**
0.50"	12.7	**100.0**		
0.375"	9.5	**100.0**		
#4	4.8	**100.0**	Fine Gravel	**0.0**
#10	2.00	**99.9**	Coarse Sand	**0.1**
#20	0.85	**99.8**		
#40	0.43	**99.4**	Medium Sand	**0.5**
#60	0.25	**92.2**		
#100	0.15	**65.5**		
#140	0.11	**51.1**		
#200	0.08	**41.4**	Fine Sand	**58.0**
			Fines	**41.4**



ATTERBERG LIMITS

Method - B (Dry preparation)

M_c	LL	PL	PI	LI
13.1				

DESCRIPTION: -

USCS: -

LL (oven-dried)
< 0.75 = ORGANIC (OL OH)

TECH	EK/JC
DATE	10/7/25
CHECK	
REVIEW	
APPROVE	

WSP USA

ATTERBERG LIMITS

ASTM D4318

PROJECT NAME: AEP/CABIN CREEK/GA
PROJECT NUMBER: US-0041868.3924
SAMPLE ID: E-8, S-8 **SAMPLE DEPTH:** 28.5-30.0'
SAMPLE TYPE: Bag

Sample Preparation: Wet or Dry: Dry Minus #40 Sieve: Yes

	PLASTIC LIMIT		LIQUID LIMIT		AS-RECEIVED MOISTURE
Number of Blows			10	10	
Wt. of Wet Soil & Tare (g)	28.82	25.80	16.04	17.34	351.90
Wt. of Dry Soil & Tare (g)	24.67	22.36	13.27	14.27	272.93
Weight of Tare (g)	11.11	11.21	4.26	4.23	62.22
Weight of Water (g)	4.15	3.44	2.77	3.07	78.97
Weight of Dry Soil (g)	13.56	11.15	9.01	10.04	210.71
Water Content %	30.6	30.9	30.7	30.6	37.5

PLASTIC LIMIT (PL): NP

LIQUID LIMIT (LL): NP

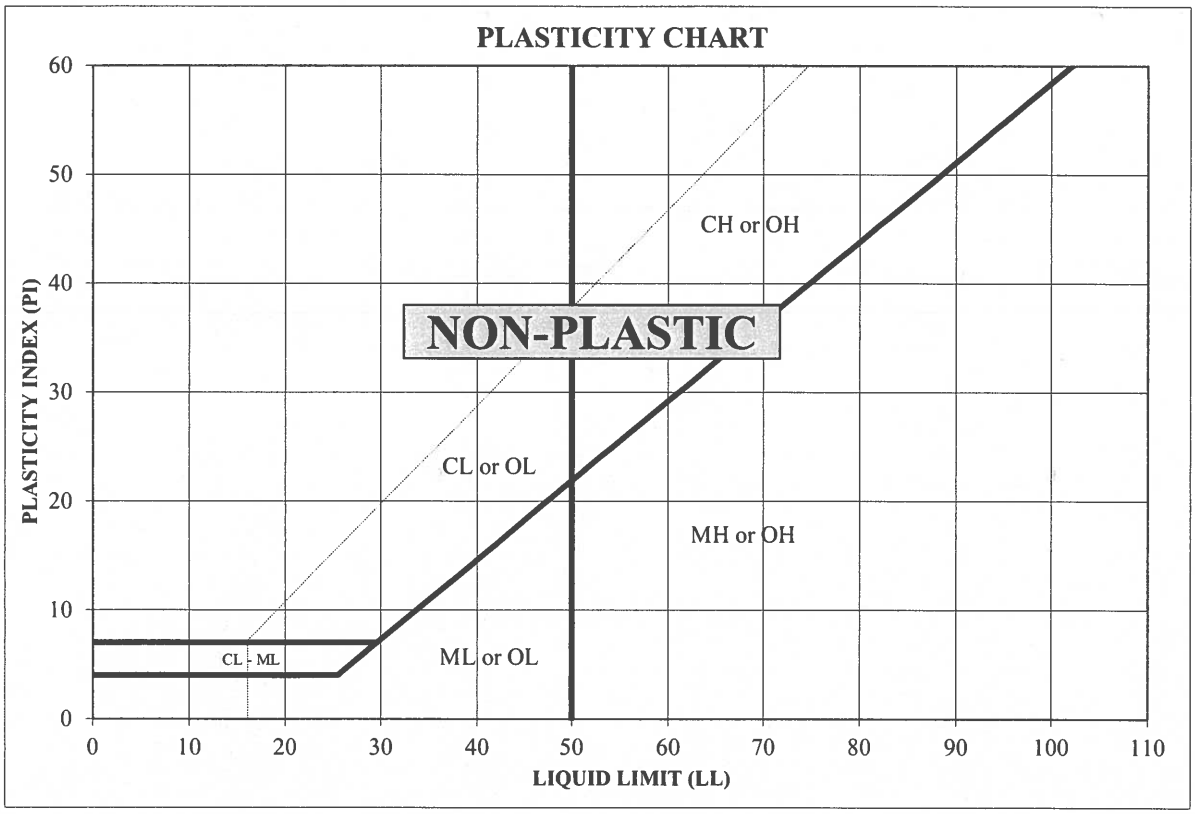
PLASTICITY INDEX (PI): NP

LIQUIDITY INDEX (LI): NP

NOTE:

DESCRIPTION: -

USCS: -



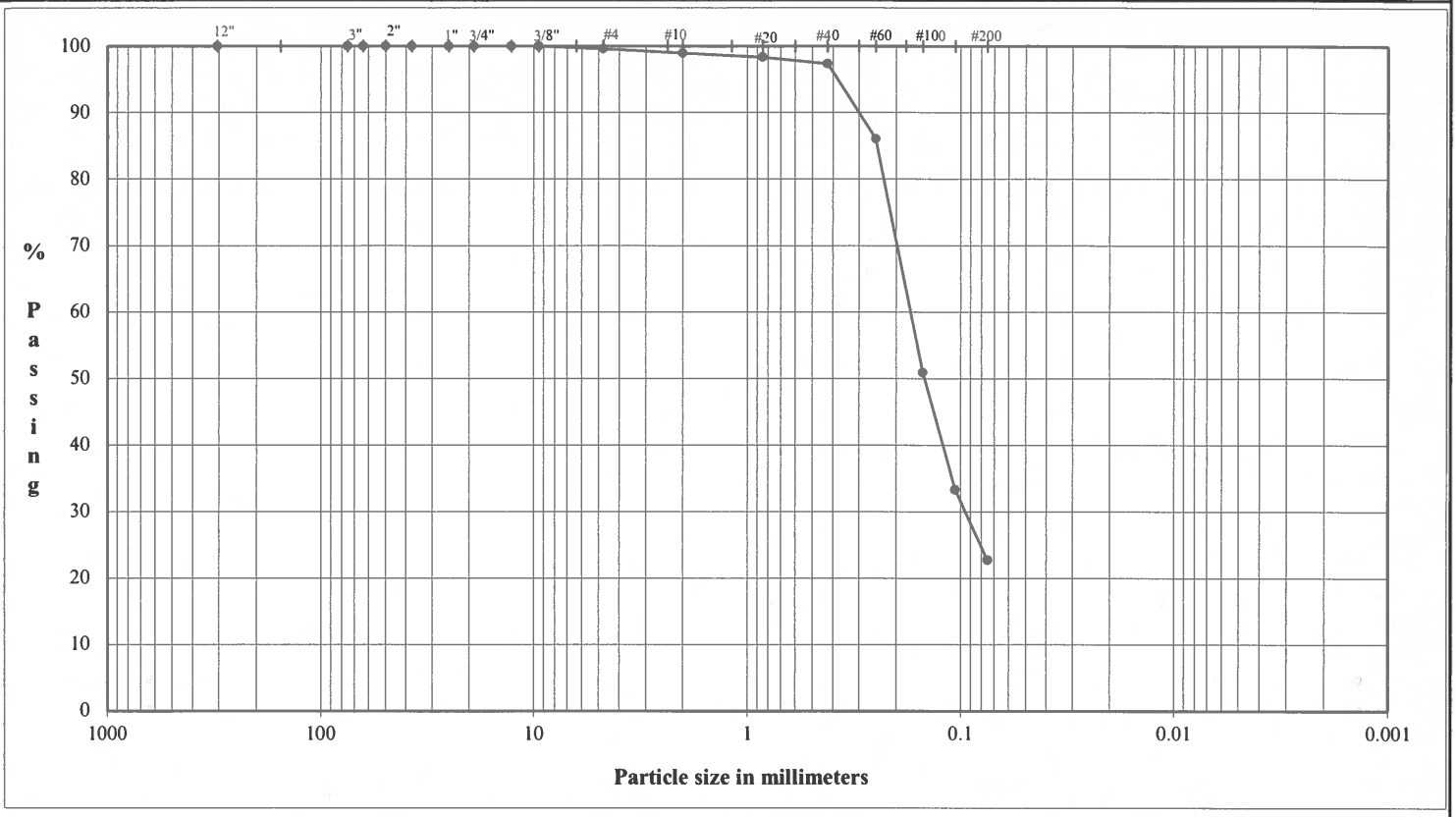
TECH	TB
DATE	10/9/25
CHECK	
REVIEW	
APPROVE	

OCTOBER 2025 US-0041868.3924

PARTICLE SIZE DISTRIBUTION & ATTERBERG LIMITS

ASTM D6913 & D4318

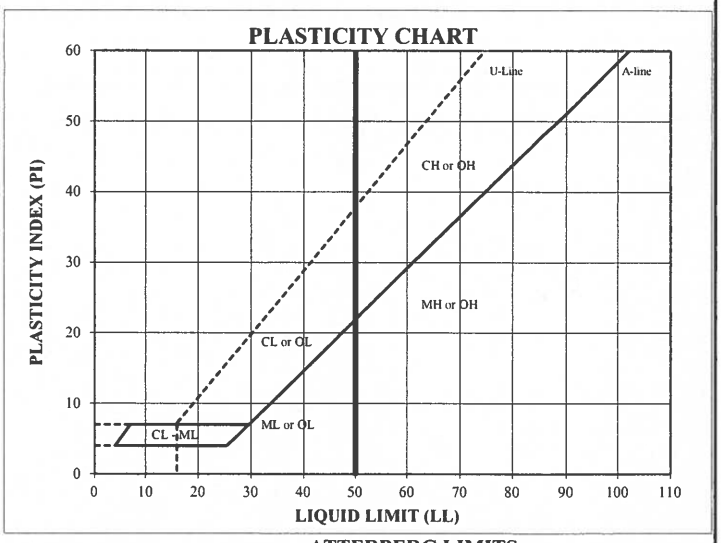
PROJECT NAME: **AEP/CABIN CREEK/GA**
SAMPLE ID: **E-8, S-9** Depth: **33.5-35.0'**
TYPE: **Bag**



	Coarse	Fine	Coarse	Medium	Fine	Silt or Clay
COBBLES	GRAVEL		SAND			FINES

U.S. Standard Sieves Sizes and Numbers

	Particle Size (mm)	% Passing	Particle Size Classification	Percentage
12.0"	304.8	**100.0**		
3.0"	75.0	**100.0**	Cobbles	**0.0**
2.5"	63.5	**100.0**		
2.0"	50.0	**100.0**		
1.5"	37.5	**100.0**		
1.0"	25.0	**100.0**		
0.75"	19.0	**100.0**	Coarse Gravel	**0.0**
0.50"	12.7	**100.0**		
0.375"	9.5	**100.0**		
#4	4.8	**99.6**	Fine Gravel	**0.4**
#10	2.00	**98.9**	Coarse Sand	**0.7**
#20	0.85	**98.3**		
#40	0.43	**97.4**	Medium Sand	**1.6**
#60	0.25	**86.1**		
#100	0.15	**50.9**		
#140	0.11	**33.3**		
#200	0.08	**22.7**	Fine Sand	**74.7**
			Fines	**22.7**



ATTERBERG LIMITS

Method - B (Dry preparation)

M_c	LL	PL	PI	LI
26.2				

LL (oven-dried)
< 0.75 = ORGANIC (OL OH)

DESCRIPTION: -

USCS: -

TECH	EK/JC
DATE	10/7/25
CHECK	
REVIEW	
APPROVE	

AEP/CABIN CREEK/GA
SUMMARY OF SOIL DATA

Borehole I.D.	Sample I.D.	Sample Depth	Sample Type	Soil Classi-fication	As-R'cvd Moisture Content %	Atterberg Limits				Grain Size Distribution			Compaction		Gs	Unit Weight		Permeability (cm/sec)	Additional Tests Conducted (See Notes)
						LL	PL	PI	LI	% Finer No. 4 Sieve	% Finer No. 200 Sieve	% Finer 0.002 mm	Max. Dry Density (pcf)	Optimum Moisture %		Dry Density (pcf)	Moisture Content %		
E-9	S-1	0.0-1.5'	Bag	-	30.1	-	-	-	-	87.4	25.7	-	-	-	-	-	-	-	-
E-9	S-2	3.5-5.0'	Bag	-	6.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-
E-9	S-4	8.5-10.0'	Bag	-	38.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
E-9	S-6	18.5-20.0'	Bag	-	20.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-
E-9	S-8	28.5-30.0'	Bag	-	45.5	-	-	-	-	95.8	38.7	-	-	-	-	-	-	-	-

ABBREVIATIONS: LIQUID LIMIT (LL)
PLASTIC LIMIT (PL)
PLASTICITY INDEX (PI)
LIQUIDITY INDEX (LI)
SPECIFIC GRAVITY (Gs)

NOTES: T = TRIAXIAL TEST
U = UNCONFINED COMPRESSION TEST
C = CONSOLIDATION TEST
DS = DIRECT SHEAR TEST

WATER CONTENT DETERMINATION
ASTM D2216

PROJECT TITLE	AEP/CABIN CREEK/GA
PROJECT NUMBER	US-0041868.3924
REMARKS	

Sample Type	Bag	Bag	Bag		
Borehole Number	E-9	E-9	E-9		
Sample Number	S-2	S-4	S-6		
Depth of Sample (ft)	3.5-5.0'	8.5-10.0'	18.5-20.0'		
Weight of Wet Soil + Tare (gm)	316.37	227.97	338.85		
Weight of Dry Soil + Tare (gm)	299.74	178.99	292.86		
Weight of Tare (gm)	51.61	51.85	62.53		
Weight of Water (gm)	16.63	48.98	45.99		
Weight of Dry Soil (gm)	248.13	127.14	230.33		
Water Content (%)	6.7	38.5	20.0		
Sample Type					
Borehole Number					
Sample Number					
Depth of Sample (ft)					
Weight of Wet Soil + Tare (gm)					
Weight of Dry Soil + Tare (gm)					
Weight of Tare (gm)					
Weight of Water (gm)					
Weight of Dry Soil (gm)					
Water Content (%)					
Sample Type					
Borehole Number					
Sample Number					
Depth of Sample (ft)					
Weight of Wet Soil + Tare (gm)					
Weight of Dry Soil + Tare (gm)					
Weight of Tare (gm)					
Weight of Water (gm)					
Weight of Dry Soil (gm)					
Water Content (%)					

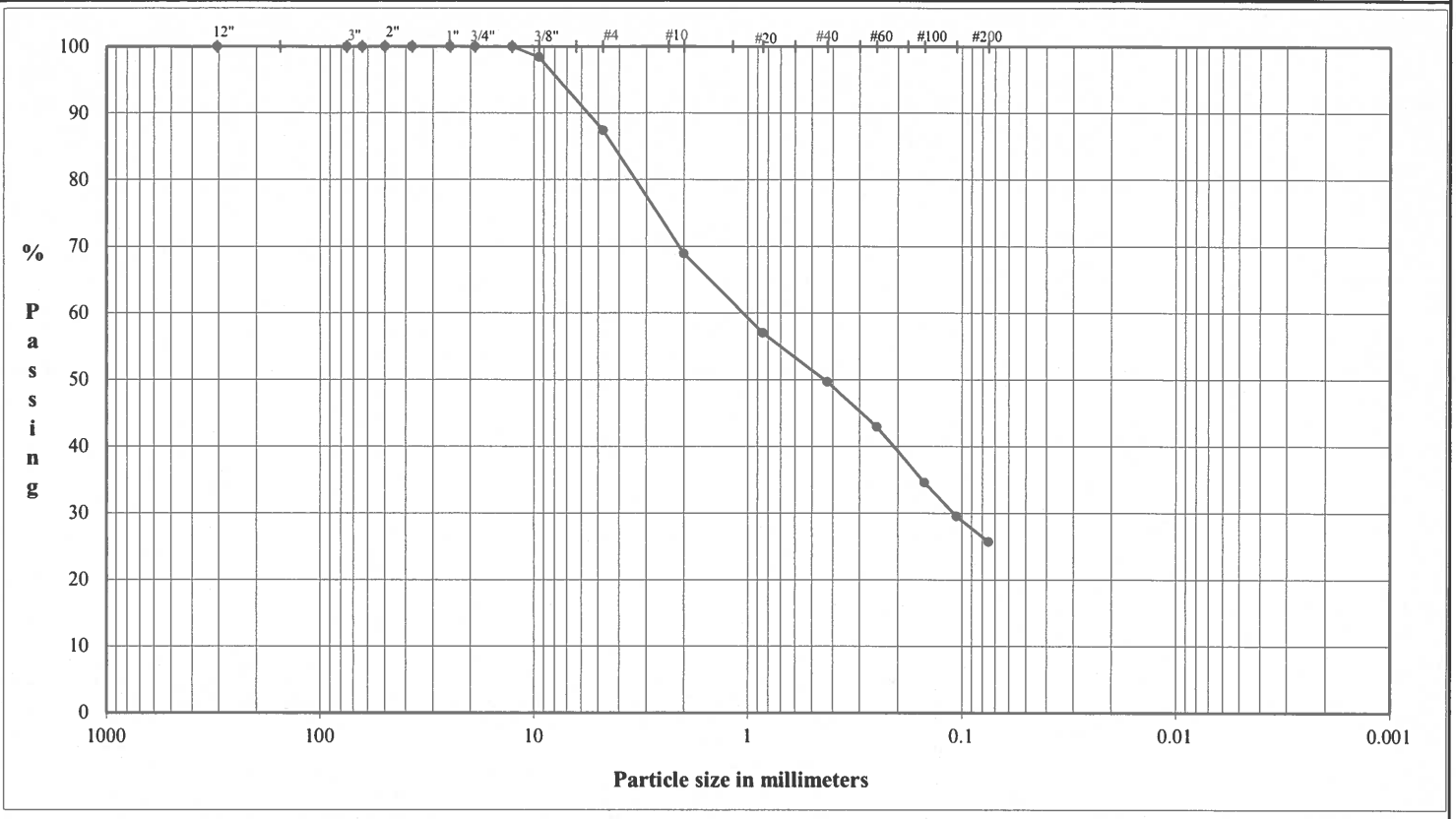
TECH	JC
DATE	10/7/25
CHECK	
REVIEW	
APPROVE	

OCTOBER 2025 US-0041868.3924

PARTICLE SIZE DISTRIBUTION & ATTERBERG LIMITS

ASTM D6913 & D4318

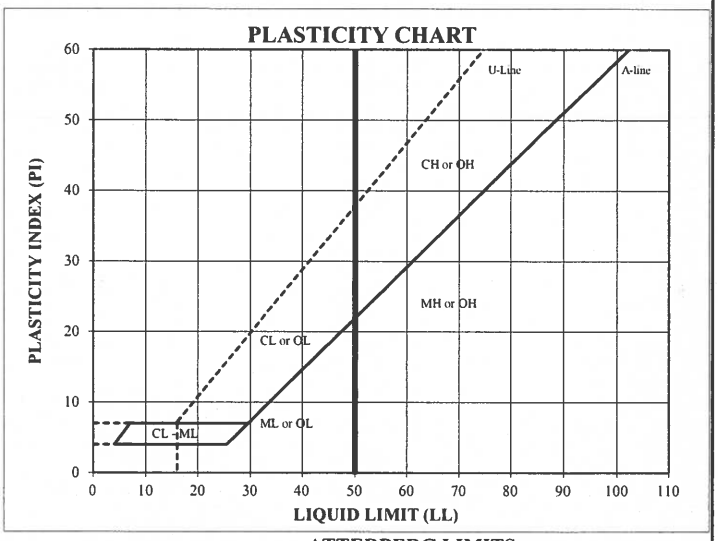
PROJECT NAME: **AEP/CABIN CREEK/GA**
SAMPLE ID: **E-9, S-1** Depth: **0.0-1.5'**
TYPE: **Bag**



	Coarse	Fine	Coarse	Medium	Fine	Silt or Clay
COBBLES	GRAVEL		SAND			FINES

U.S. Standard Sieves Sizes and Numbers

	Particle Size (mm)	% Passing	Particle Size Classification	Percentage
12.0"	304.8	**100.0**		
3.0"	75.0	**100.0**	Cobbles	**0.0**
2.5"	63.5	**100.0**		
2.0"	50.0	**100.0**		
1.5"	37.5	**100.0**		
1.0"	25.0	**100.0**		
0.75"	19.0	**100.0**	Coarse Gravel	**0.0**
0.50"	12.7	**100.0**		
0.375"	9.5	**98.4**		
#4	4.8	**87.4**	Fine Gravel	**12.6**
#10	2.00	**68.9**	Coarse Sand	**18.5**
#20	0.85	**57.0**		
#40	0.43	**49.7**	Medium Sand	**19.2**
#60	0.25	**42.9**		
#100	0.15	**34.6**		
#140	0.11	**29.5**		
#200	0.08	**25.7**	Fine Sand	**24.0**
			Fines	**25.7**



ATTERBERG LIMITS

Method - B (Dry preparation)

M_c	LL	PL	PI	LI
30.2				

LL (oven-dried)
< 0.75 = ORGANIC (OL OH)

DESCRIPTION: -

USCS: -

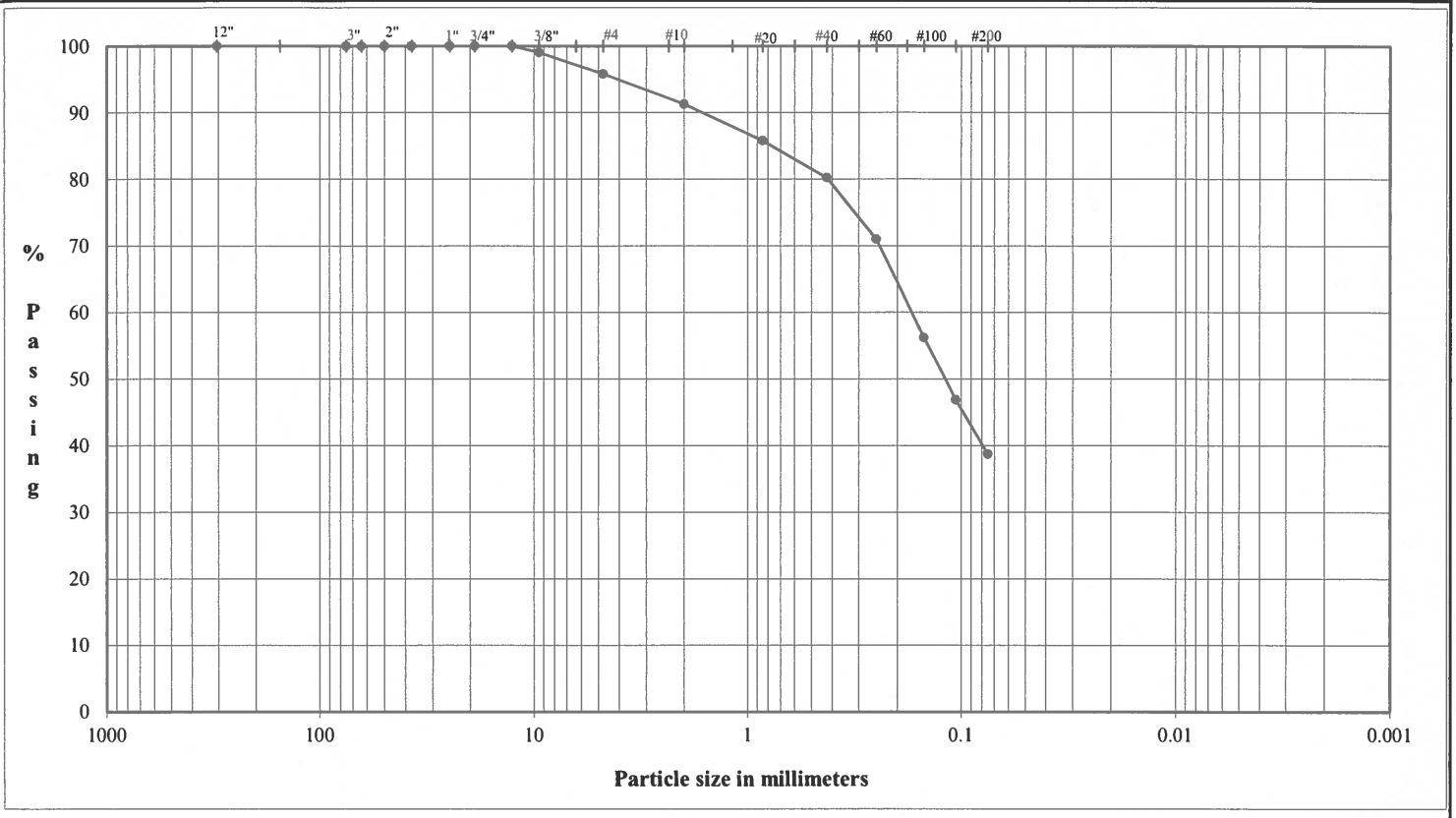
TECH	EK/JC
DATE	10/7/25
CHECK	
REVIEW	
APPROVE	

OCTOBER 2025 US-0041868.3924

PARTICLE SIZE DISTRIBUTION & ATTERBERG LIMITS

ASTM D6913 & D4318

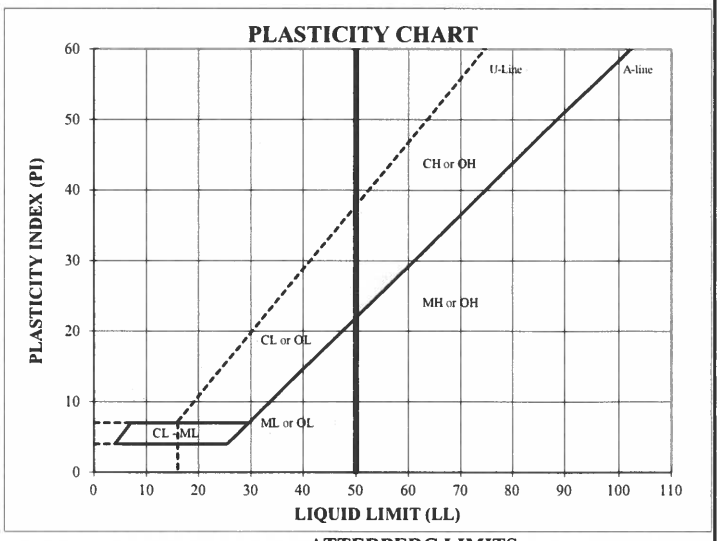
PROJECT NAME: **AEP/CABIN CREEK/GA**
SAMPLE ID: **E-9, S-8** Depth: **28.5-30.0'**
TYPE: **Bag**



	Coarse	Fine	Coarse	Medium	Fine	Silt or Clay
COBBLES	GRAVEL		SAND			FINES

U.S. Standard Sieves Sizes and Numbers

	Particle Size (mm)	% Passing	Particle Size Classification	Percentage
12.0"	304.8	**100.0**		
3.0"	75.0	**100.0**	Cobbles	**0.0**
2.5"	63.5	**100.0**		
2.0"	50.0	**100.0**		
1.5"	37.5	**100.0**		
1.0"	25.0	**100.0**		
0.75"	19.0	**100.0**	Coarse Gravel	**0.0**
0.50"	12.7	**100.0**		
0.375"	9.5	**99.1**		
#4	4.8	**95.8**	Fine Gravel	**4.2**
#10	2.00	**91.3**	Coarse Sand	**4.5**
#20	0.85	**85.8**		
#40	0.43	**80.2**	Medium Sand	**11.0**
#60	0.25	**71.0**		
#100	0.15	**56.2**		
#140	0.11	**46.9**		
#200	0.08	**38.7**	Fine Sand	**41.5**
			Fines	**38.7**



ATTERBERG LIMITS

Method - B (Dry preparation)

M_c	LL	PL	PI	LI
45.5				

LL (oven-dried)
< 0.75 = ORGANIC (OL OH)

DESCRIPTION: -

USCS: -

TECH	EK/JC
DATE	10/7/25
CHECK	
REVIEW	
APPROVE	

WSP USA

AEP/CABIN CREEK/GA
SUMMARY OF SOIL DATA

Borehole I.D.	Sample I.D.	Sample Depth	Sample Type	Soil Classi-fication	As-R'cvd Moisture Content %	Atterberg Limits				Grain Size Distribution			Compaction		Gs	Unit Weight		Permeability (cm/sec)	Additional Tests Conducted (See Notes)
						LL	PL	PI	LI	% Finer No. 4 Sieve	% Finer No. 200 Sieve	% Finer 0.002 mm	Max. Dry Density (pcf)	Optimum Moisture %		Dry Density (pcf)	Moisture Content %		
A-2	TO-1	10.0-12.0'	UD	ML	80.3	NP	NP	NP	NP	100.0	69.6	-	-	-	2.12	36.9	80.3	-	T
A-3	TO-1	5.0-7.0'	UD	ML	51.8	NP	NP	NP	NP	99.9	57.5	-	-	-	-	46.4	51.8	-	-
A-4	TO-1	15.0-17.0'	UD	ML	52.1	NP	NP	NP	NP	92.9	64.0	-	-	-	2.14	56.4	52.1	-	T
B-3	TO-1	35.0-37.0'	UD	(SM)	48.0	-	-	-	-	98.1	37.6	-	-	-	-	65.8	48.0	-	-
E-1	TO-1	35.0-37.0'	UD										-	-				-	T
E-3	TO-1	5.0-7.0'	UD	ML	35.3	NP	NP	NP	NP	98.9	78.6	-	-	-	-	60.0	24.9	-	-
E-9	TO-1	15.0-17.0'	UD										-	-				-	T, DS

ABBREVIATIONS: LIQUID LIMIT (LL)
PLASTIC LIMIT (PL)
PLASTICITY INDEX (PI)
LIQUIDITY INDEX (LI)
SPECIFIC GRAVITY (Gs)

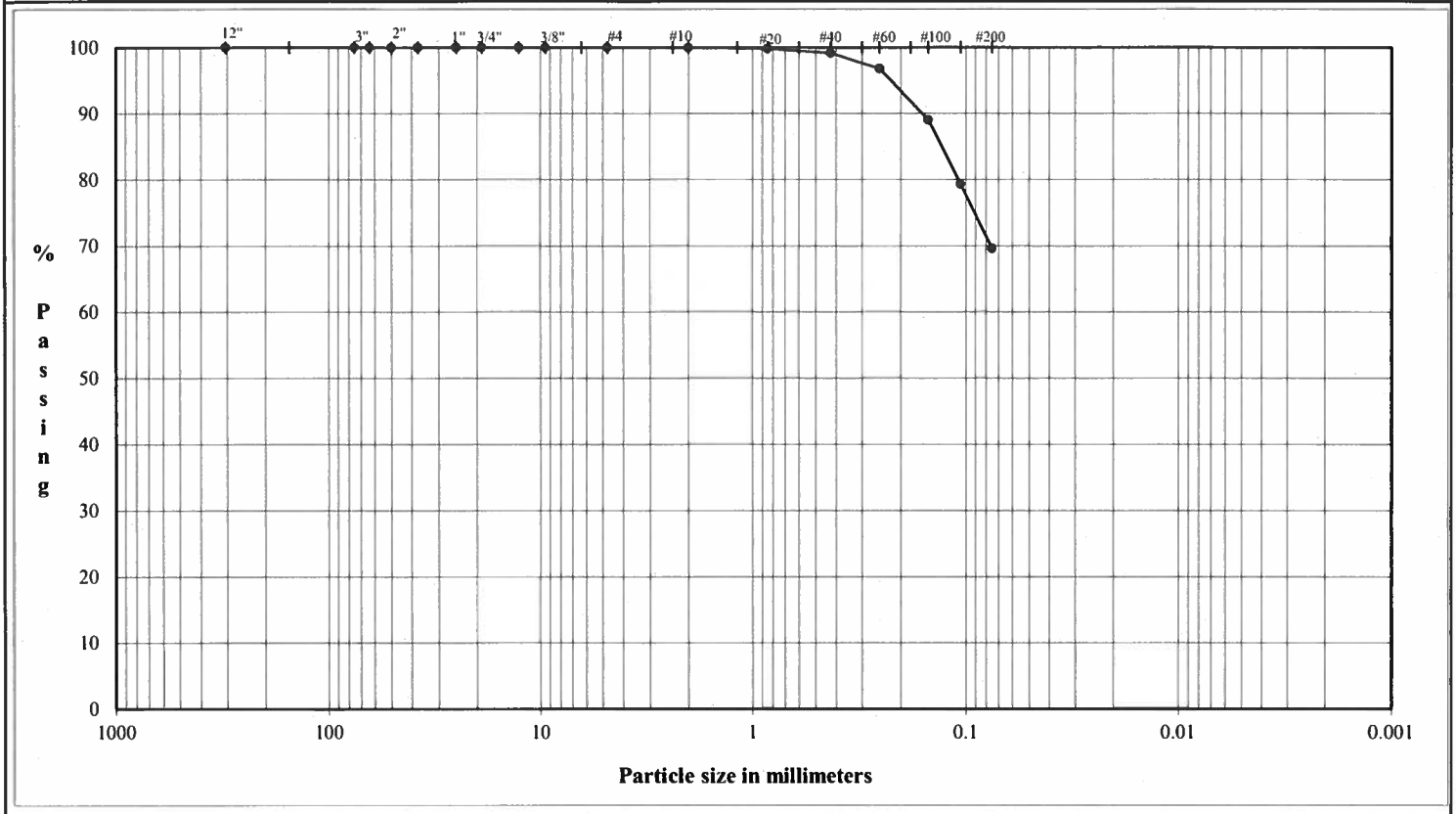
NOTES: T = TRIAXIAL TEST
U = UNCONFINED COMPRESSION TEST
C = CONSOLIDATION TEST
DS = DIRECT SHEAR TEST

OCTOBER 2025 US-0041868.3924

PARTICLE SIZE DISTRIBUTION & ATTERBERG LIMITS

ASTM D6913 & D4318

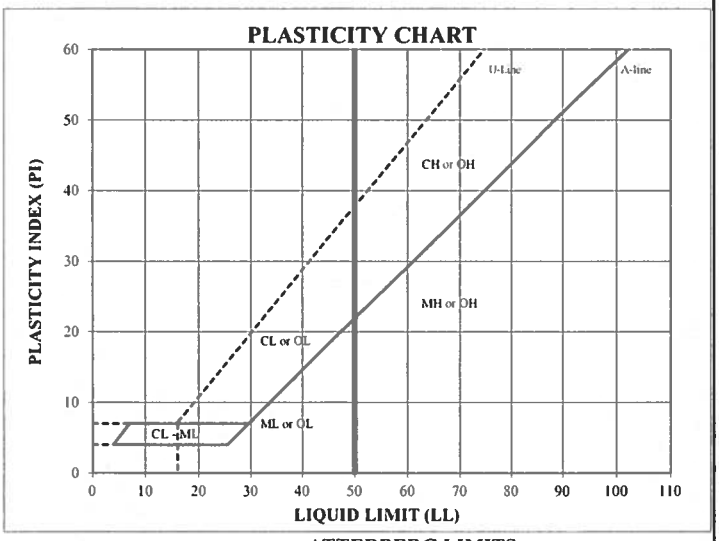
PROJECT NAME: **AEP/CABIN CREEK/GA**
SAMPLE ID: **A-2** **TO-1** Depth: **10.0-12.0'**
TYPE: **UD**



	Coarse	Fine	Coarse	Medium	Fine	Silt or Clay
COBBLES	GRAVEL		SAND			FINES

U.S. Standard Sieves Sizes and Numbers

	Particle Size (mm)	% Passing	Particle Size Classification	Percentage
12.0"	304.8	100.0		
3.0"	75.0	100.0	Cobbles	0.0
2.5"	63.5	100.0		
2.0"	50.0	100.0		
1.5"	37.5	100.0		
1.0"	25.0	100.0		
0.75"	19.0	100.0	Coarse Gravel	0.0
0.50"	12.7	100.0		
0.375"	9.5	100.0		
#4	4.8	100.0	Fine Gravel	0.0
#10	2.00	99.9	Coarse Sand	0.1
#20	0.85	99.8		
#40	0.43	99.1	Medium Sand	0.8
#60	0.25	96.8		
#100	0.15	89.0		
#140	0.11	79.3		
#200	0.08	69.6	Fine Sand	29.6
			Fines	69.6



ATTERBERG LIMITS

Method - B (Dry preparation)

M_c	LL	PL	PI	LI
80.3	NP	NP	NP	NP

DESCRIPTION: sandy SILT, fine to coarse; black.

USCS: ML

LL (oven-dried) / < 0.75 = ORGANIC (OL OH)

TECH	CJ/TT
DATE	10/22/25
CHECK	
REVIEW	
APPROVE	

Boring or Test Pit:	A-2		Boring or Test Pit:	A-2		Boring or Test Pit:	A-2	
Sample:	TO-1		Sample:	TO-1		Sample:	TO-1	
Depth:	10.0-12.0 ft		Depth:	10.0-12.0 ft		Depth:	10.0-12.0 ft	
Point No.:	1		Point No.:	2		Point No.:	3	
Initial			**Initial**			**Initial**		
Length =	6.011	in	Length =	5.989	in	Length =	6.323	in
Diameter =	2.856	in	Diameter =	2.833	in	Diameter =	2.764	in
Wet Mass =	1.332	lb	Wet Mass =	1.589	lb	Wet Mass =	1.476	lb
Area =	6.406	in^2	Area =	6.304	in^2	Area =	6.000	in^2
Volume =	38.508	in^3	Volume =	37.752	in^3	Volume =	37.939	in^3
Specific Gravity =	2.12	(ASTM D854)	Specific Gravity =	2.12	(ASTM D854)	Specific Gravity =	2.12	(ASTM D854)
Dry Mass of Solids =	0.818	lb	Dry Mass of Solids =	0.831	lb	Dry Mass of Solids =	0.789	lb
Moisture Content =	62.7%		Moisture Content =	91.1%		Moisture Content =	87.0%	
Wet Unit Weight =	59.8	pcf	Wet Unit Weight =	72.7	pcf	Wet Unit Weight =	67.2	pcf
Dry Unit Weight =	36.7	pcf	Dry Unit Weight =	38.1	pcf	Dry Unit Weight =	36.0	pcf
Void Ratio =	2.59		Void Ratio =	2.47		Void Ratio =	2.67	
Percent Saturation =	51%		Percent Saturation =	78%		Percent Saturation =	69%	
After Consolidation			**After Consolidation**			**After Consolidation**		
Length =	5.943	in	Length =	5.863	in	Length =	6.175	in
Diameter =	2.763	in	Diameter =	2.763	in	Diameter =	2.671	in
Area =	5.996	in^2 (Method B)	Area =	5.995	in^2 (Method B)	Area =	5.604	in^2 (Method B)
Volume =	35.636	in^3	Volume =	35.148	in^3	Volume =	34.606	in^3
Moisture Content =	109.8%		Moisture Content =	105.2%		Moisture Content =	110.8%	
Wet Unit Weight =	83.3	pcf	Wet Unit Weight =	83.9	pcf	Wet Unit Weight =	83.1	pcf
Dry Unit Weight =	39.7	pcf	Dry Unit Weight =	40.9	pcf	Dry Unit Weight =	39.4	pcf
Void Ratio =	2.32		Void Ratio =	2.23		Void Ratio =	2.35	
Percent Saturation =	100%		Percent Saturation =	100%		Percent Saturation =	100%	
B Parameter =	1.00		B Parameter =	1.00		B Parameter =	0.99	
Shear Rate =	0.089%	/min.	Shear Rate =	0.092%	/min.	Shear Rate =	0.092%	/min.
t_{50} =	0.15	min.	t_{50} =	0.14	min.	t_{50} =	0.14	min.
Strain at Failure =	8.0%		Strain at Failure =	10.0%		Strain at Failure =	12.5%	
Cell Pressure =	74.0	psi	Cell Pressure =	88.0	psi	Cell Pressure =	102.0	psi
Back Pressure =	60.0	psi	Back Pressure =	60.0	psi	Back Pressure =	60.0	psi
Confining Pressure =	14.0	psi	Confining Pressure =	28.0	psi	Confining Pressure =	42.0	psi

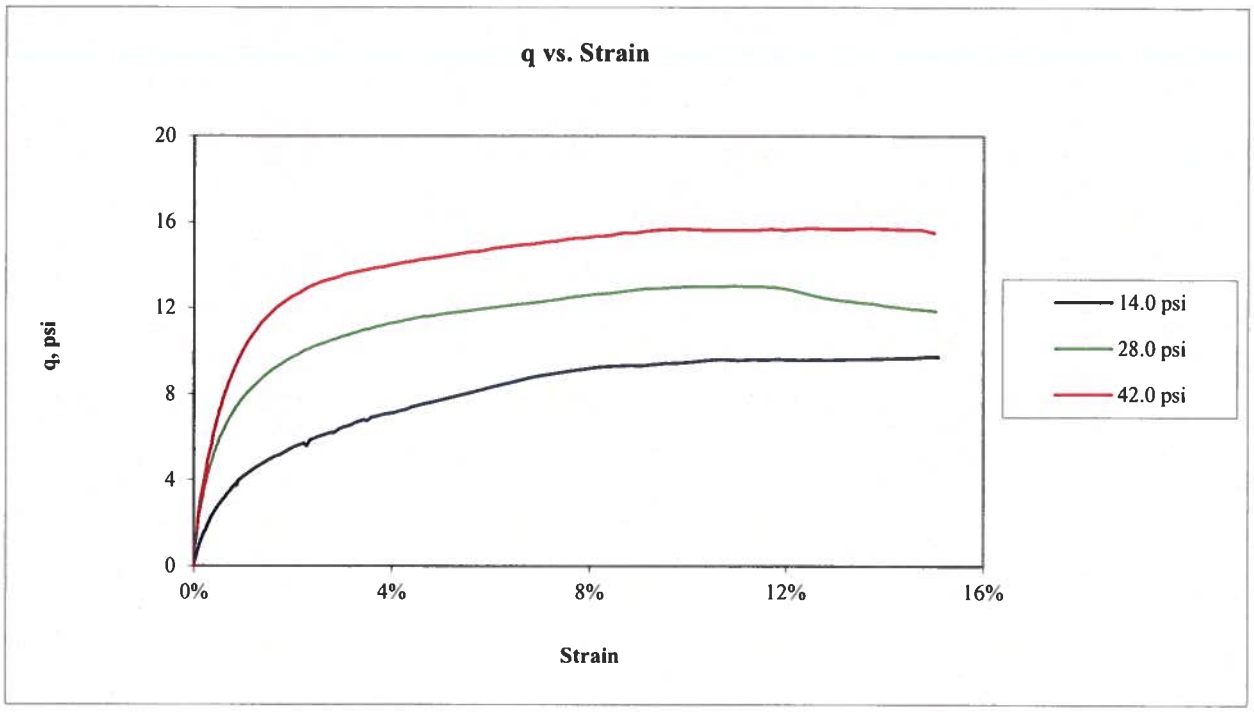
Notes: Sample description: ML - sandy SILT, fine to coarse; black.

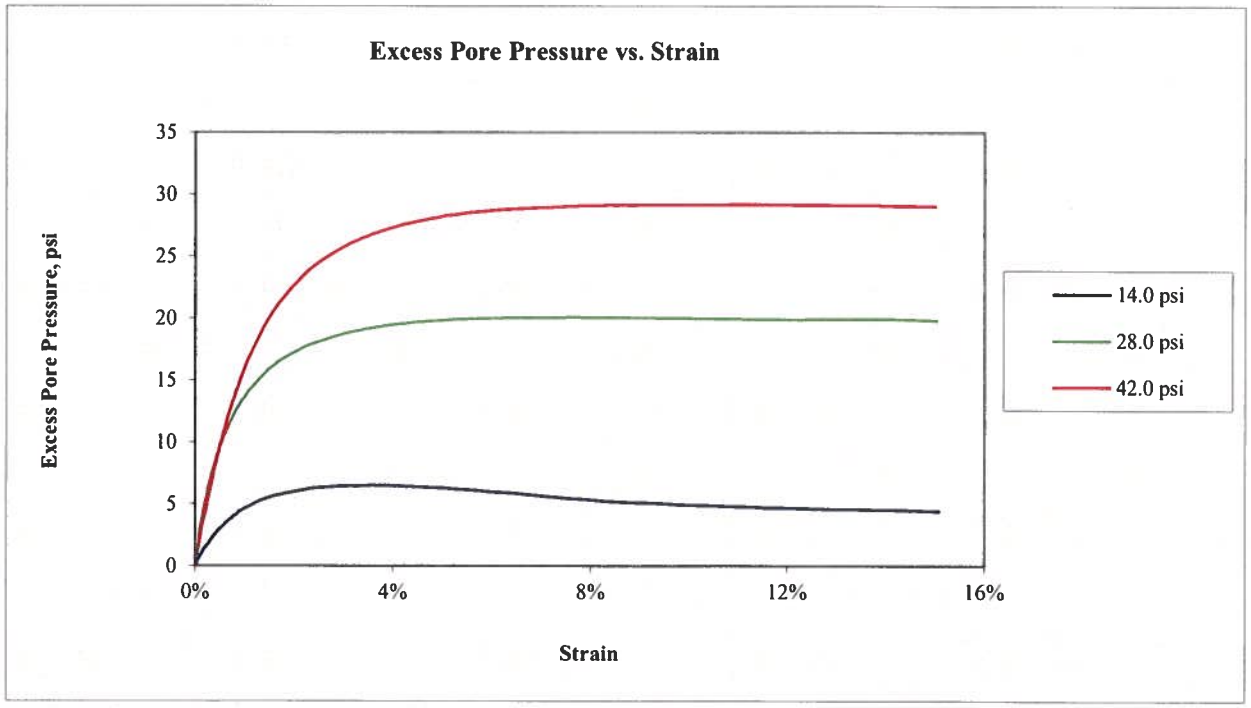
Atterberg limits: LL = NP PL = NP PI = NP (ASTM D4318)

Percent finer: 3/4 in. = 100% No. 4 = 100% No. 200 = 70% (ASTM D422, refer to separate report for gradation curve)

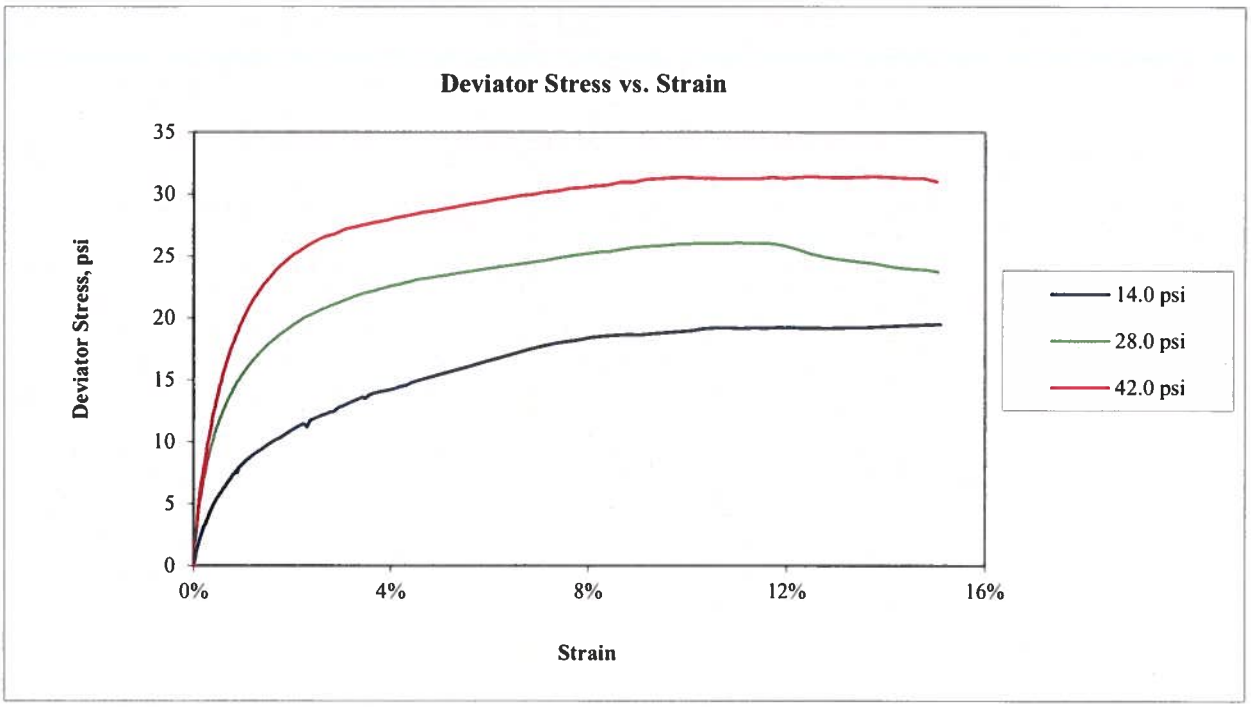
Specimen type:	X	Intact		Reconstituted
Moisture from:		Cuttings	X	Entire specimen
Saturation method:	X	Wet		Dry
Failure criterion:	X	$(\sigma'_1/\sigma'_3)_{max}$		$(\sigma'_1-\sigma'_3)_{max}$ ____ % strain
Membrane effect:	X	Corrected		Not Corrected

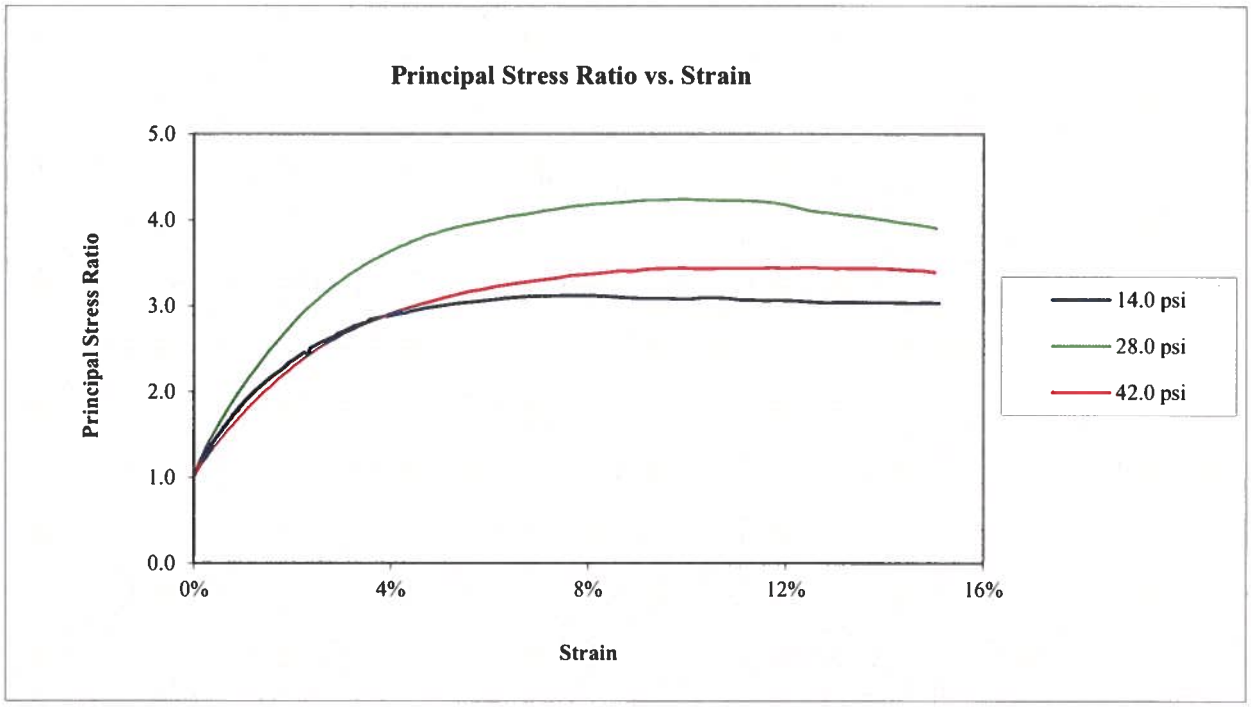
WSP USA **Norcross, Georgia**	**Title:** **ASTM D4767** **CONSOLIDATED UNDRAINED TRIAXIAL COMPRESSION TEST REPORT** **SAMPLE AND TEST DATA**				
Job Short Title: **AEP/CABIN CREEK/GA**					
Sample: **A-2, TO-1, 10.0-12.0'**	**Technician:** **CJ/FT** **Check:** DA	**Reviewed:** L **Approved:**	**Start Date:** **10/21/2025**	**Job Number:** **US-0041868.3924**	**Figure:** **1**



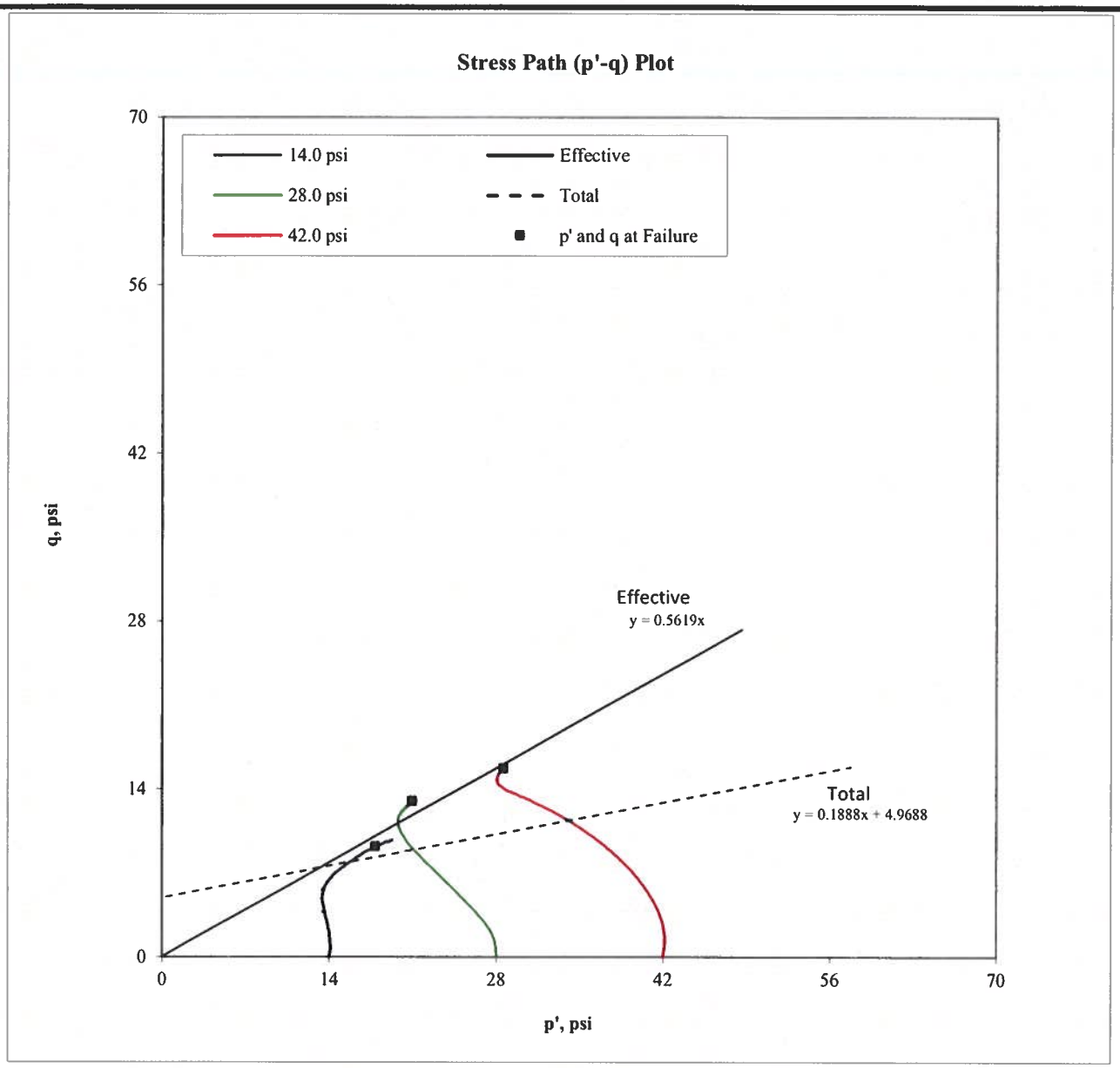


WSP USA **Norcross, Georgia**	**Title:** **ASTM D4767** **CONSOLIDATED UNDRAINED TRIAXIAL COMPRESSION TEST REPORT** **q AND EXCESS PORE PRESSURE PLOTS**				
Job Short Title: **AEP/CABIN CREEK/GA**					
Sample: **A-2, TO-1, 10.0-12.0'**	**Technician:** **CJ/FT** **Check:** DA	**Reviewed:** **Approved:**	**Start Date:** **10/21/2025**	**Job Number:** **US-0041868.3924**	**Figure:** **2**





WSP USA **Norcross, Georgia**	**Title:** **ASTM D4767** **CONSOLIDATED UNDRAINED TRIAXIAL COMPRESSION TEST REPORT** **DEVIATOR STRESS AND PRINCIPAL STRESS RATIO PLOT**				
Job Short Title: **AEP/CABIN CREEK/GA**					
Sample: **A-2, TO-1, 10.0-12.0'**	**Technician:** **CJ/FT** **Check:** DA	**Reviewed:** **Approved:**	**Start Date:** **10/21/2025**	**Job Number:** **US-0041868.3924**	**Figure:** **3**



Confining Pressure (psi)	p at failure (psi)	p' at failure (psi)	q at failure (psi)
14.0	23.2	17.9	9.2
28.0	41.0	21.0	13.0
42.0	57.7	28.6	15.7

Effective

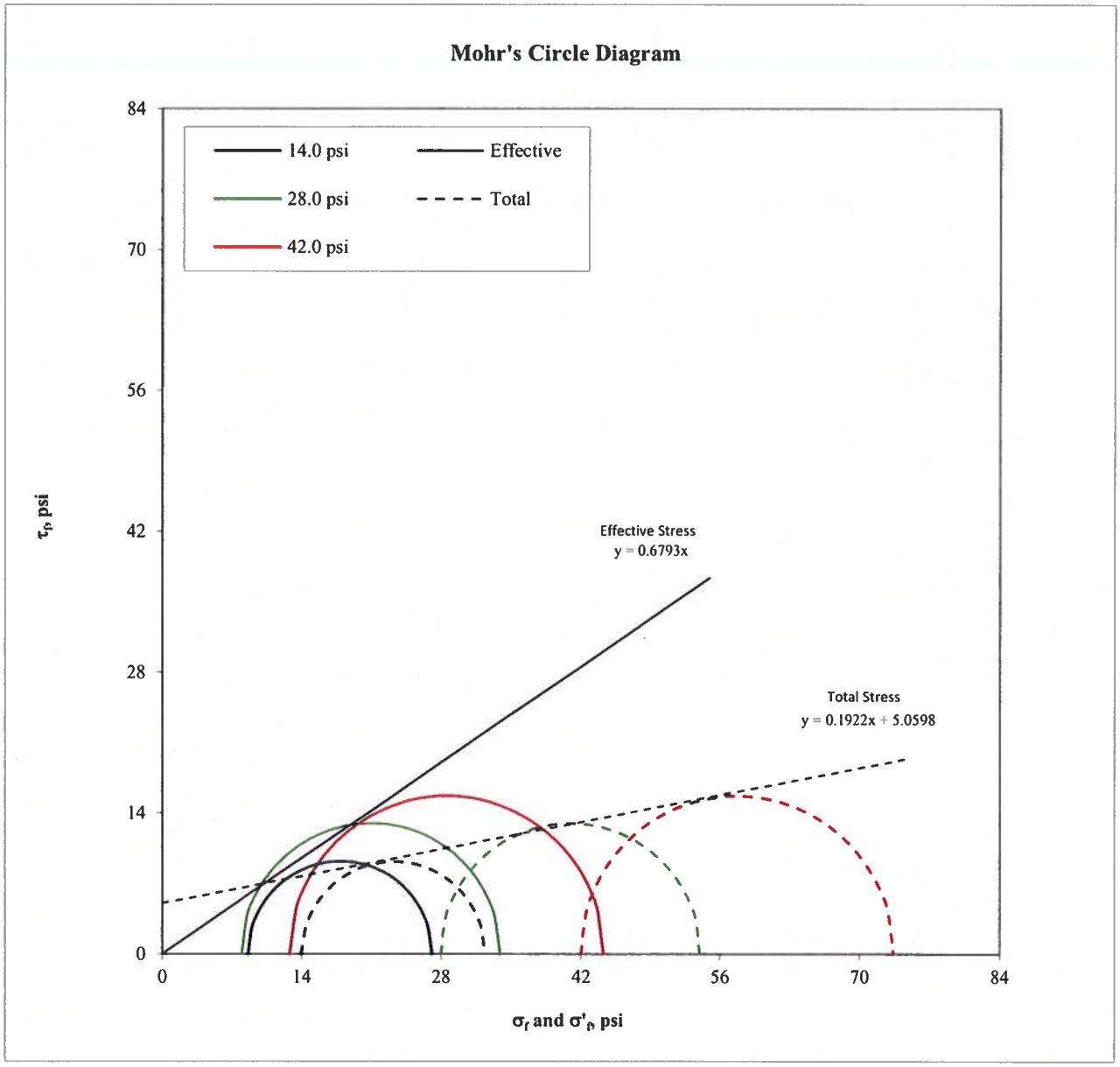
α ' =	29.3	degree
a' =	0.0	psi

Total

α =	10.7	degree
a =	5.0	psi

Note: The laboratory testing relates only to the sample tested. WSP USA neither accepts responsibility for nor makes claims to the final use and purpose of the material.

WSP USA **Norcross, Georgia**	**Title:** **ASTM D4767** **CONSOLIDATED UNDRAINED TRIAXIAL COMPRESSION TEST REPORT** **STRESS PATH PLOT**				
Job Short Title: **AEP/CABIN CREEK/GA**					
Sample: **A-2, TO-1, 10.0-12.0'**	**Technician:** **CJ/FT** **Check:** DA	**Reviewed:** **Approved:**	**Start Date:** **10/21/2025**	**Job Number:** **US-0041868.3924**	**Figure:** **4**



Confining Pressure (psi)	σ'_1 at failure (psi)	σ'_3 at failure (psi)	σ_1 at failure (psi)	σ_3 at failure (psi)
14.0	27.1	8.7	32.4	14.0
28.0	34.0	8.0	54.0	28.0
42.0	44.3	12.9	73.4	42.0

Effective

ϕ' =	34.2	degree
c' =	0.0	psi

Total

ϕ =	10.9	degree
c =	5.1	psi

Note: The laboratory testing relates only to the sample tested. WSP USA neither accepts responsibility for nor makes claims to the final use and purpose of the material.

WSP USA **Norcross, Georgia**	**Title:** **ASTM D4767** **CONSOLIDATED UNDRAINED TRIAXIAL COMPRESSION TEST REPORT** **MOHR'S CIRCLE DIAGRAM**				
Job Short Title: **AEP/CABIN CREEK/GA**					
Sample: **A-2, TO-1, 10.0-12.0'**	**Technician:** **CJ/FT** **Check:**	**Reviewed:** **Approved:**	**Start Date:** **10/21/2025**	**Job Number:** **US-0041868.3924**	**Figure:** **5**

14.0 psi

28.0 psi

42.0 psi

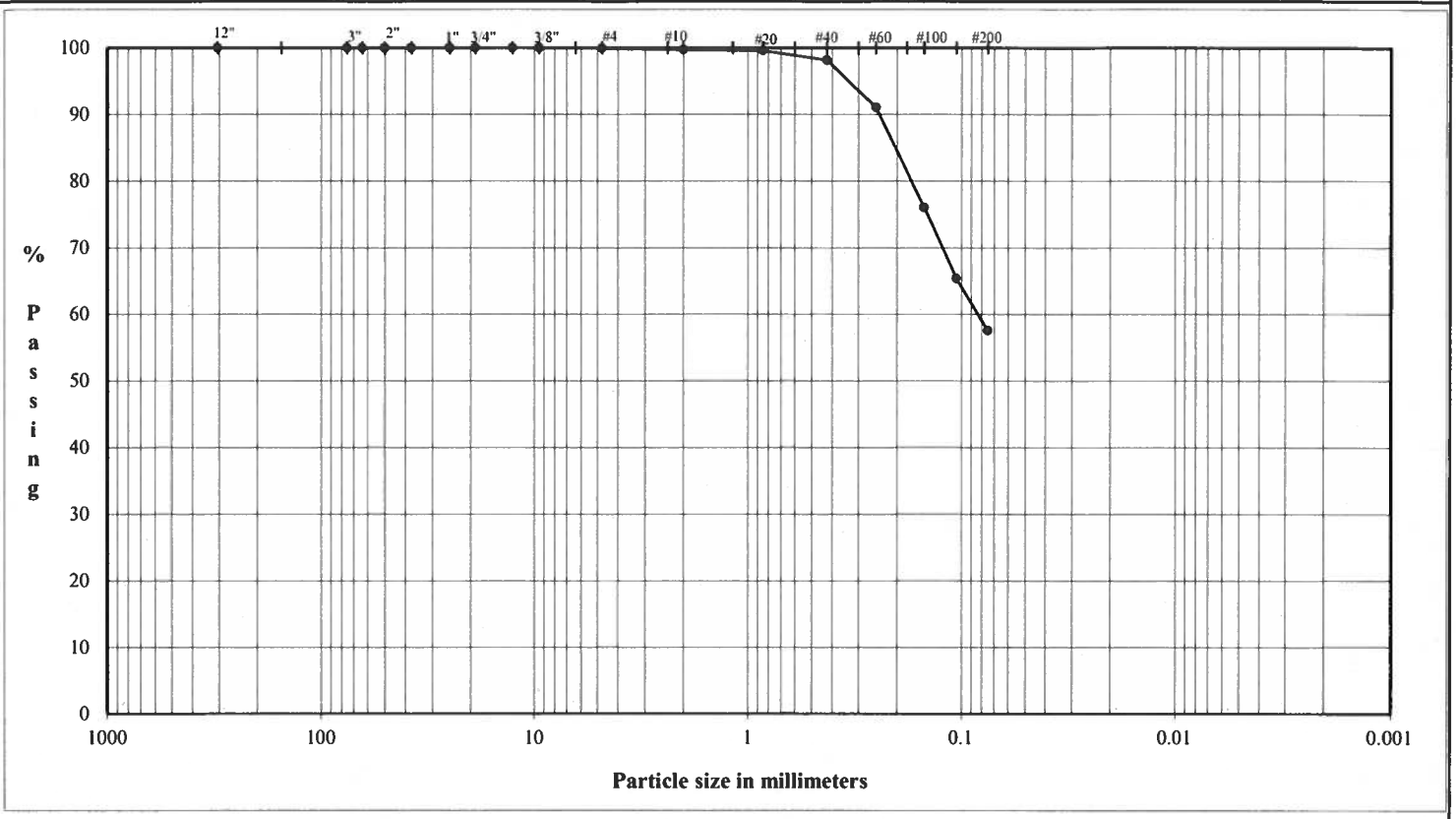
WSP USA **Norcross, Georgia**	**Title:** ASTM D4767 CONSOLIDATED UNDRAINED TRIAXIAL COMPRESSION TEST REPORT SPECIMENS PHOTOGRAPH - 14.0 28.0 42.0 psi				
Job Short Title: AEP/CABIN CREEK/GA					
Sample: A-2, TO-1, 10.0-12.0'	**Technician:** CJ/FT **Check:** DB	**Reviewed:** **Approved:**	**Start Date:** 10/21/2025	**Job Number:** US-0041868.3924	**Figure:** 6

OCTOBER 2025 US-0041868.3924

PARTICLE SIZE DISTRIBUTION & ATTERBERG LIMITS

ASTM D6913 & D4318

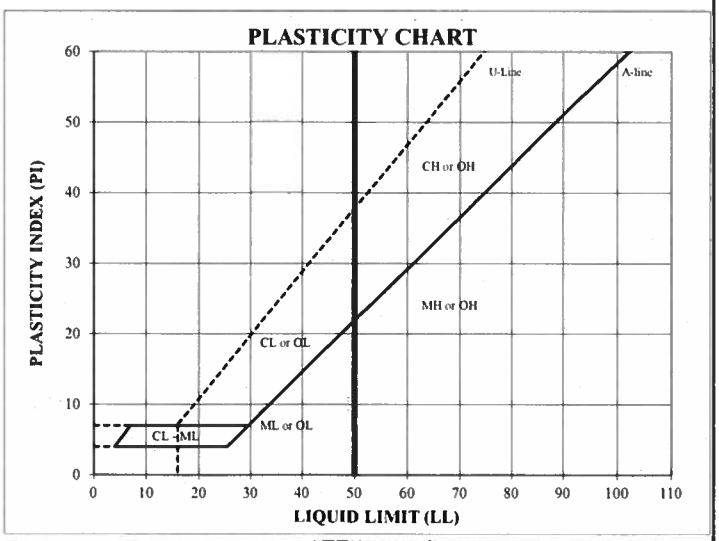
PROJECT NAME: **AEP/CABIN CREEK/GA**
SAMPLE ID: **A-3** **TO-1** Depth: **5.0-7.0'**
TYPE: **UD**



COBBLES	Coarse	Fine	Coarse	Medium	Fine	Silt or Clay
	GRAVEL		SAND			FINES

U.S. Standard Sieves Sizes and Numbers

	Particle Size (mm)	% Passing	Particle Size Classification	Percentage
12.0"	304.8	100.0		
3.0"	75.0	100.0	Cobbles	0.0
2.5"	63.5	100.0		
2.0"	50.0	100.0		
1.5"	37.5	100.0		
1.0"	25.0	100.0		
0.75"	19.0	100.0	Coarse Gravel	0.0
0.50"	12.7	100.0		
0.375"	9.5	100.0		
#4	4.8	99.9	Fine Gravel	0.1
#10	2.00	99.7	Coarse Sand	0.2
#20	0.85	99.6		
#40	0.43	98.2	Medium Sand	1.5
#60	0.25	91.1		
#100	0.15	76.1		
#140	0.11	65.4		
#200	0.08	57.5	Fine Sand	40.7
			Fines	57.5



ATTERBERG LIMITS

Method - B (Dry preparation)

M_c	LL	PL	PI	LI
51.8	NP	NP	NP	NP

DESCRIPTION: SILT and fine SAND; black.

USCS: ML

LL (oven-dried) ____
< 0.75 = ORGANIC (OL OH) ____

TECH	TB/CJ/JC
DATE	10/9/25
CHECK	
REVIEW	
APPROVE	

UNIT WEIGHT DETERMINATION

ASTM D7263

PROJECT NAME: AEP/CABIN CREEK/GA
SAMPLE ID: A-3 TO-1 **DEPTH:** 5.0-7.0'
TYPE: UD

WEIGHT OF SOIL (g)	662.08
LENGTH OF SAMPLE (in)	5.664
DIAMETER OF SAMPLE (in)	2.837
AREA OF SAMPLE (in²)	6.32
VOLUME OF SAMPLE (in^3)	35.80
VOLUME OF SAMPLE (cm^3)	586.65

WET UNIT WEIGHT (pcf)	70.5

WEIGHT WET SOIL & TARE (g)	380.30
WEIGHT DRY SOIL & TARE (g)	295.62
WEIGHT OF TARE (g)	132.23
WEIGHT OF WATER (g)	84.68
WEIGHT OF DRY SOIL (g)	163.39
WATER CONTENT (%)	**51.8**

DRY UNIT WEIGHT (pcf)	**46.4**

DESCRIPTION: SILT and fine SAND; black.

USCS: ML

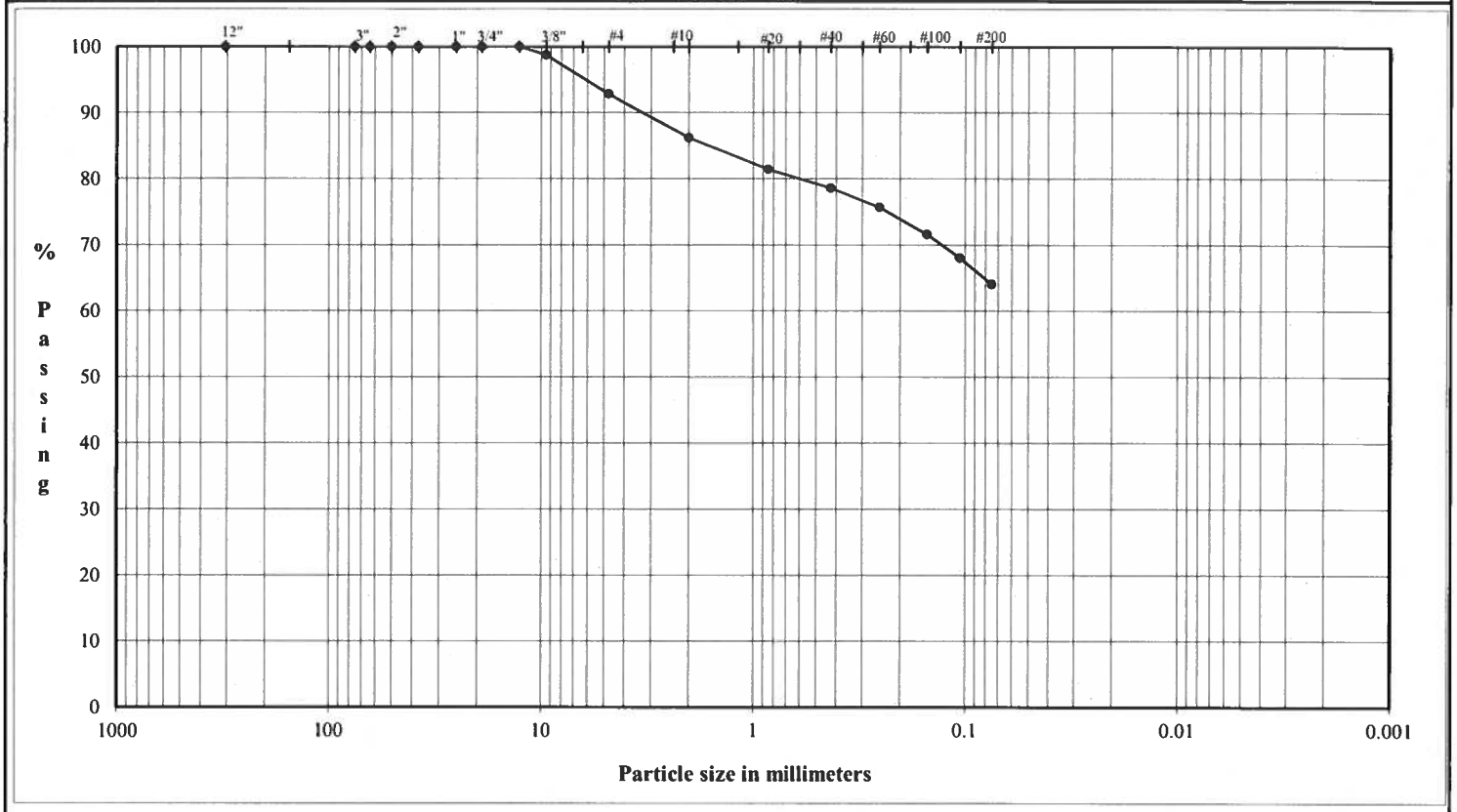
TECH	CJ
DATE	10/9/25
CHECK	DA
REVIEW	
APPROVE	

OCTOBER 2025 US-0041868.3924

PARTICLE SIZE DISTRIBUTION & ATTERBERG LIMITS

ASTM D6913 & D4318

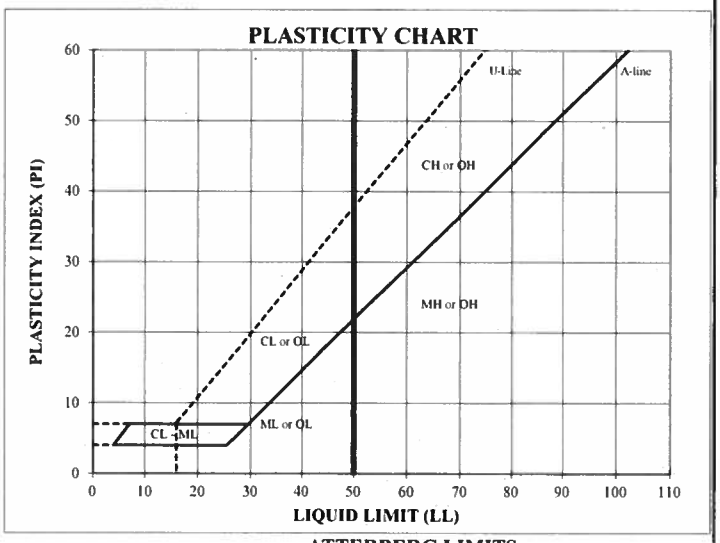
PROJECT NAME: **AEP/CABIN CREEK/GA**
SAMPLE ID: **A-4** **TO-1** Depth: **15.0-17.0'**
TYPE: **UD**



COBBLES	Coarse	Fine	Coarse	Medium	Fine	Silt or Clay
	GRAVEL		SAND			FINES

U.S. Standard Sieves Sizes and Numbers

	Particle Size (mm)	% Passing	Particle Size Classification	Percentage
12.0"	304.8	**100.0**		
3.0"	75.0	**100.0**	Cobbles	**0.0**
2.5"	63.5	**100.0**		
2.0"	50.0	**100.0**		
1.5"	37.5	**100.0**		
1.0"	25.0	**100.0**		
0.75"	19.0	**100.0**	Coarse Gravel	**0.0**
0.50"	12.7	**100.0**		
0.375"	9.5	**98.7**		
#4	4.8	**92.9**	Fine Gravel	**7.1**
#10	2.00	**86.2**	Coarse Sand	**6.7**
#20	0.85	**81.4**		
#40	0.43	**78.6**	Medium Sand	**7.6**
#60	0.25	**75.7**		
#100	0.15	**71.6**		
#140	0.11	**68.0**		
#200	0.08	**64.0**	Fine Sand	**14.6**
			Fines	**64.0**



ATTERBERG LIMITS

Method - B (Dry preparation)

M_c	LL	PL	PI	LI
52.1	**NP**	**NP**	**NP**	**NP**

DESCRIPTION: sandy SILT, fine to coarse, some fine gravel; black.

USCS: ML

LL (oven-dried) / < 0.75 = ORGANIC (OL OH)

TECH	FT/JC
DATE	10/13/25
CHECK	DA
REVIEW	
APPROVE	

Boring or Test Pit:	A-4		Boring or Test Pit:	A-4		Boring or Test Pit:	A-4	
Sample:	TO-1		Sample:	TO-1		Sample:	TO-1	
Depth:	15.0-17.0 ft		Depth:	15.0-17.0 ft		Depth:	15.0-17.0 ft	
Point No.:	1		Point No.:	2		Point No.:	3	
Initial			**Initial**			**Initial**		
Length =	6.004	in	Length =	5.770	in	Length =	5.925	in
Diameter =	2.859	in	Diameter =	2.861	in	Diameter =	2.851	in
Wet Mass =	1.956	lb	Wet Mass =	1.832	lb	Wet Mass =	1.818	lb
Area =	6.420	in^2	Area =	6.429	in^2	Area =	6.384	in^2
Volume =	38.544	in^3	Volume =	37.094	in^3	Volume =	37.824	in^3
Specific Gravity =	2.14	(ASTM D854)	Specific Gravity =	2.14	(ASTM D854)	Specific Gravity =	2.14	(ASTM D854)
Dry Mass of Solids =	1.356	lb	Dry Mass of Solids =	1.244	lb	Dry Mass of Solids =	1.104	lb
Moisture Content =	44.3%		Moisture Content =	47.3%		Moisture Content =	64.6%	
Wet Unit Weight =	87.7	pcf	Wet Unit Weight =	85.3	pcf	Wet Unit Weight =	83.0	pcf
Dry Unit Weight =	60.8	pcf	Dry Unit Weight =	57.9	pcf	Dry Unit Weight =	50.4	pcf
Void Ratio =	1.19		Void Ratio =	1.30		Void Ratio =	1.64	
Percent Saturation =	79%		Percent Saturation =	78%		Percent Saturation =	84%	
After Consolidation			**After Consolidation**			**After Consolidation**		
Length =	5.864	in	Length =	5.669	in	Length =	5.788	in
Diameter =	2.828	in	Diameter =	2.735	in	Diameter =	2.791	in
Area =	6.280	in^2 (Method B)	Area =	5.876	in^2 (Method B)	Area =	6.118	in^2 (Method B)
Volume =	36.825	in^3	Volume =	33.313	in^3	Volume =	35.411	in^3
Moisture Content =	51.2%		Moisture Content =	49.8%		Moisture Content =	68.9%	
Wet Unit Weight =	96.2	pcf	Wet Unit Weight =	96.7	pcf	Wet Unit Weight =	91.0	pcf
Dry Unit Weight =	63.6	pcf	Dry Unit Weight =	64.5	pcf	Dry Unit Weight =	53.9	pcf
Void Ratio =	1.09		Void Ratio =	1.07		Void Ratio =	1.47	
Percent Saturation =	100%		Percent Saturation =	100%		Percent Saturation =	100%	
B Parameter =	0.98		B Parameter =	1.00		B Parameter =	0.98	
Shear Rate =	0.090%	/min.	Shear Rate =	0.091%	/min.	Shear Rate =	0.090%	/min.
t_{50} =	0.23	min.	t_{50} =	0.15	min.	t_{50} =	0.13	min.
Strain at Failure =	11.2%		Strain at Failure =	7.9%		Strain at Failure =	7.1%	
Cell Pressure =	74.0	psi	Cell Pressure =	88.0	psi	Cell Pressure =	102.0	psi
Back Pressure =	60.0	psi	Back Pressure =	60.0	psi	Back Pressure =	60.0	psi
Confining Pressure =	14.0	psi	Confining Pressure =	28.0	psi	Confining Pressure =	42.0	psi

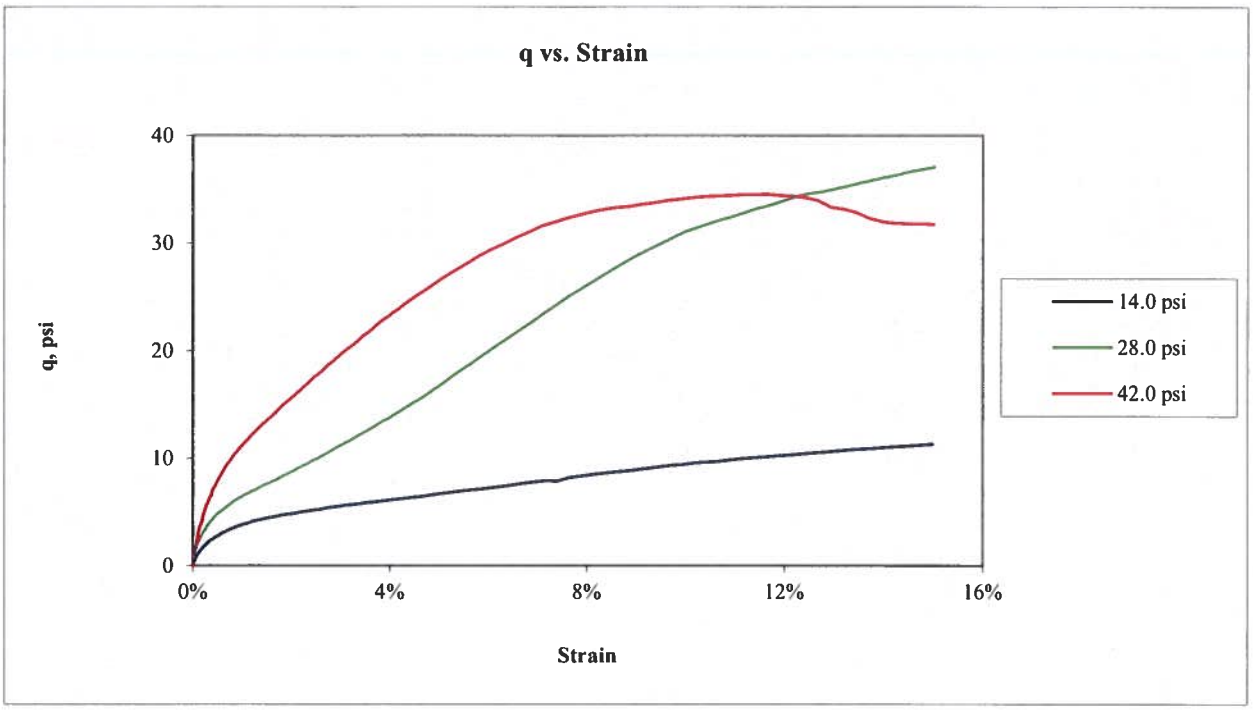
Notes: Sample description: ML - sandy SILT, fine to coarse, some fine gravel; black.

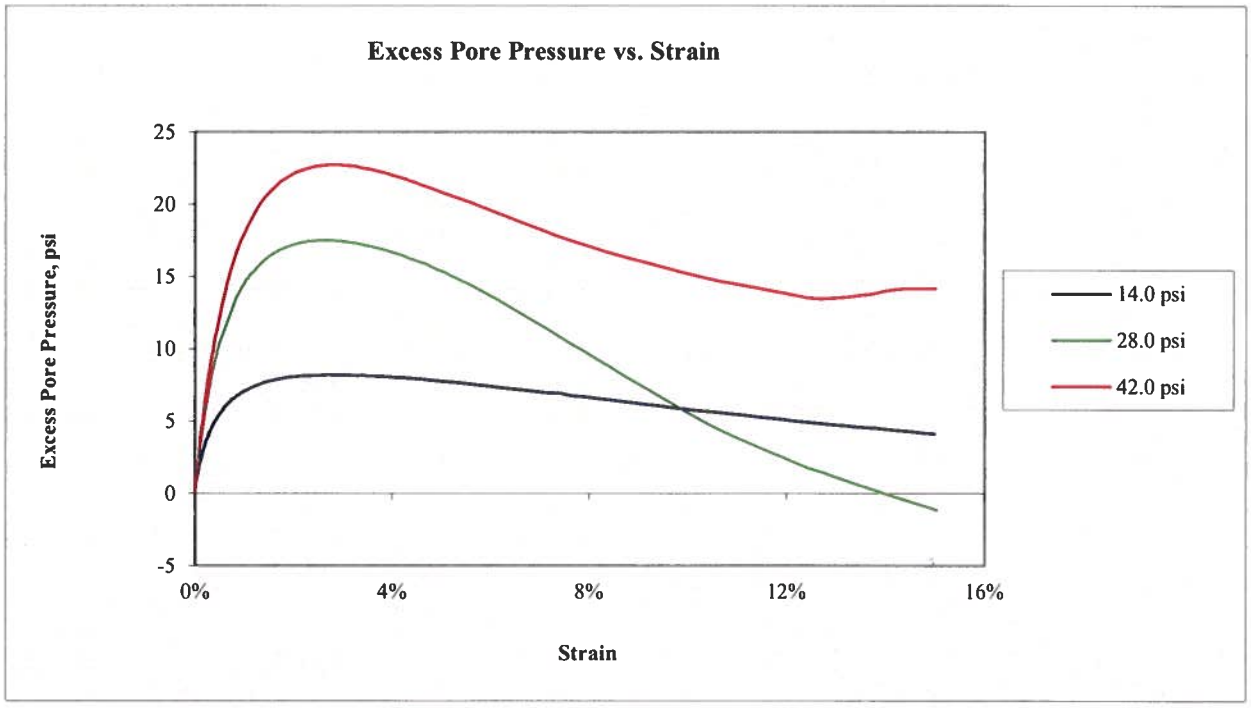
Atterberg limits: LL = NP PL = NP PI = NP (ASTM D4318)

Percent finer: 3/4 in. = 100% No. 4 = 93% No. 200 = 64% (ASTM D422, refer to separate report for gradation curve)

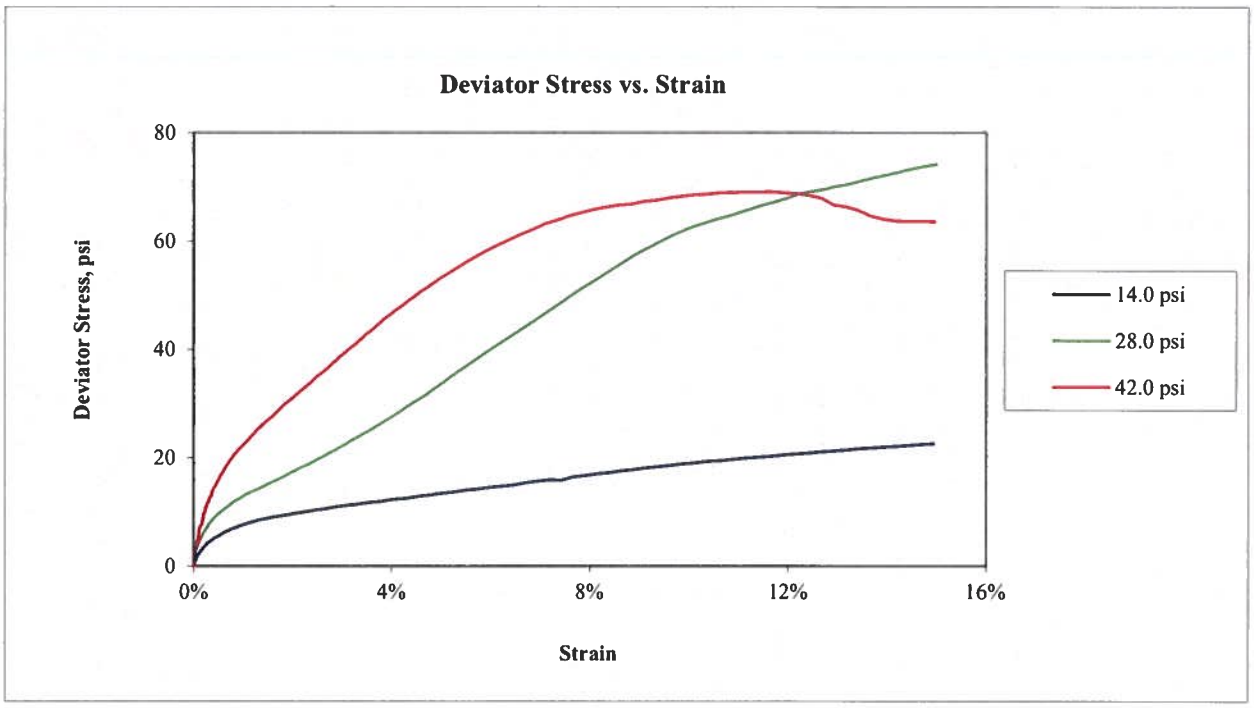
Specimen type:	X	Intact		Reconstituted
Moisture from:		Cuttings	X	Entire specimen
Saturation method:	X	Wet		Dry
Failure criterion:	X	$(\sigma'_1/\sigma'_3)_{max}$		$(\sigma'_1-\sigma'_3)_{max}$ ____ % strain
Membrane effect:	X	Corrected		Not Corrected

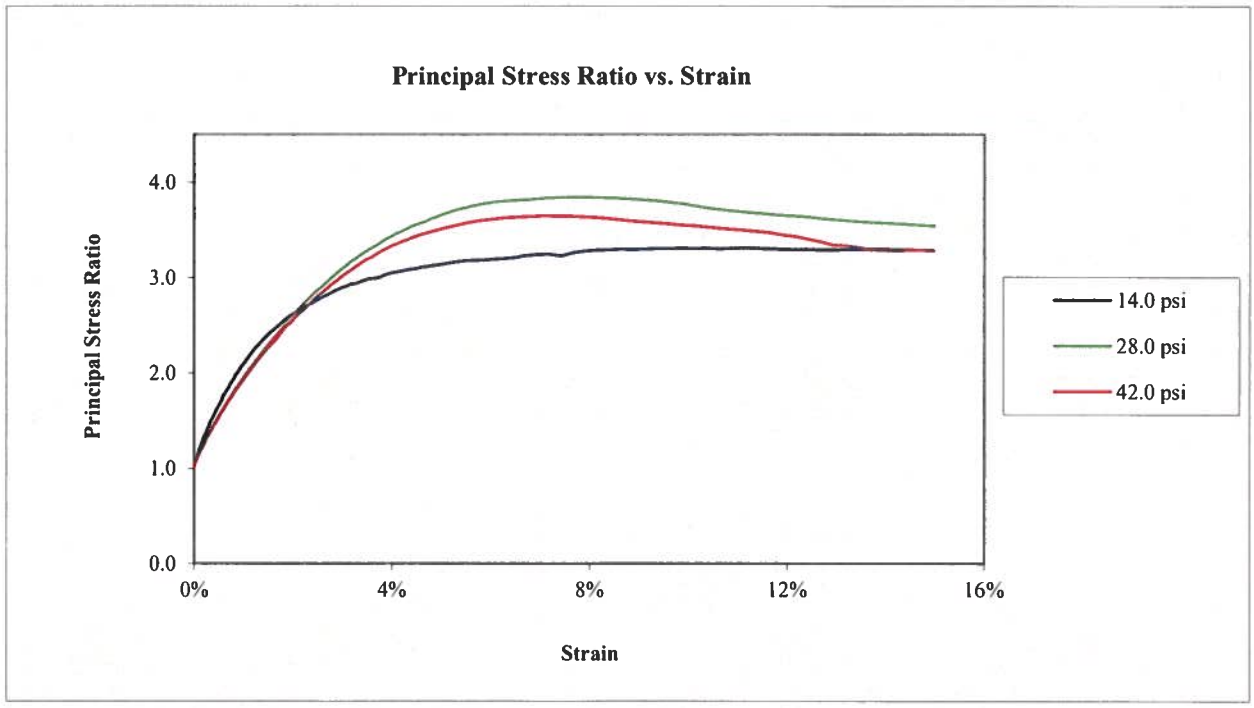
WSP USA **Norcross, Georgia**	**Title:** **ASTM D4767** **CONSOLIDATED UNDRAINED TRIAXIAL COMPRESSION TEST REPORT** **SAMPLE AND TEST DATA**				
Job Short Title: **AEP/CABIN CREEK/GA**					
Sample: **A-4, TO-1, 15.0-17.0'**	**Technician:** **FT/CJ** **Check:** DA	**Reviewed:** **Approved:**	**Start Date:** **10/13/2025**	**Job Number:** **US-0041868.3924**	**Figure:** **1**



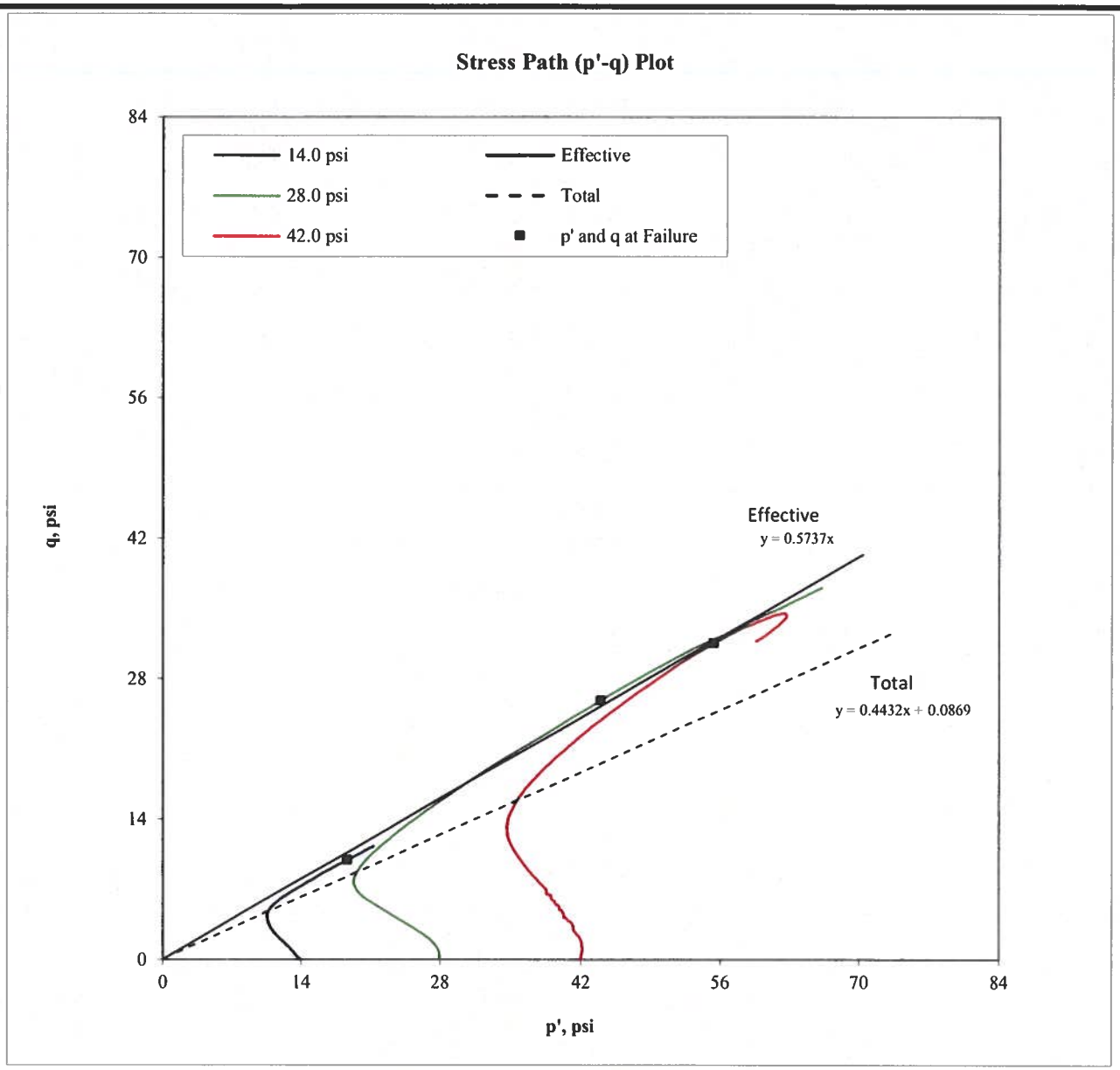


WSP USA **Norcross, Georgia**	**Title:** **ASTM D4767** **CONSOLIDATED UNDRAINED TRIAXIAL COMPRESSION TEST REPORT** **q AND EXCESS PORE PRESSURE PLOTS**				
Job Short Title: **AEP/CABIN CREEK/GA**					
Sample: **A-4, TO-1, 15.0-17.0'**	**Technician:** **FT/CJ** **Check:** DA	**Reviewed:** **Approved:**	**Start Date:** **10/13/2025**	**Job Number:** **US-0041868.3924**	**Figure:** **2**





WSP USA **Norcross, Georgia**	**Title:** **ASTM D4767** **CONSOLIDATED UNDRAINED TRIAXIAL COMPRESSION TEST REPORT** **DEVIATOR STRESS AND PRINCIPAL STRESS RATIO PLOT**				
Job Short Title: **AEP/CABIN CREEK/GA**					
Sample: **A-4, TO-1, 15.0-17.0'**	**Technician:** **FT/CJ** **Check:** DAS	**Reviewed:** **Approved:**	**Start Date:** **10/13/2025**	**Job Number:** **US-0041868.3924**	**Figure:** **3**



Confining Pressure (psi)	p at failure (psi)	p' at failure (psi)	q at failure (psi)
14.0	24.0	18.6	10.0
28.0	53.8	44.0	25.8
42.0	73.6	55.4	31.6

Effective

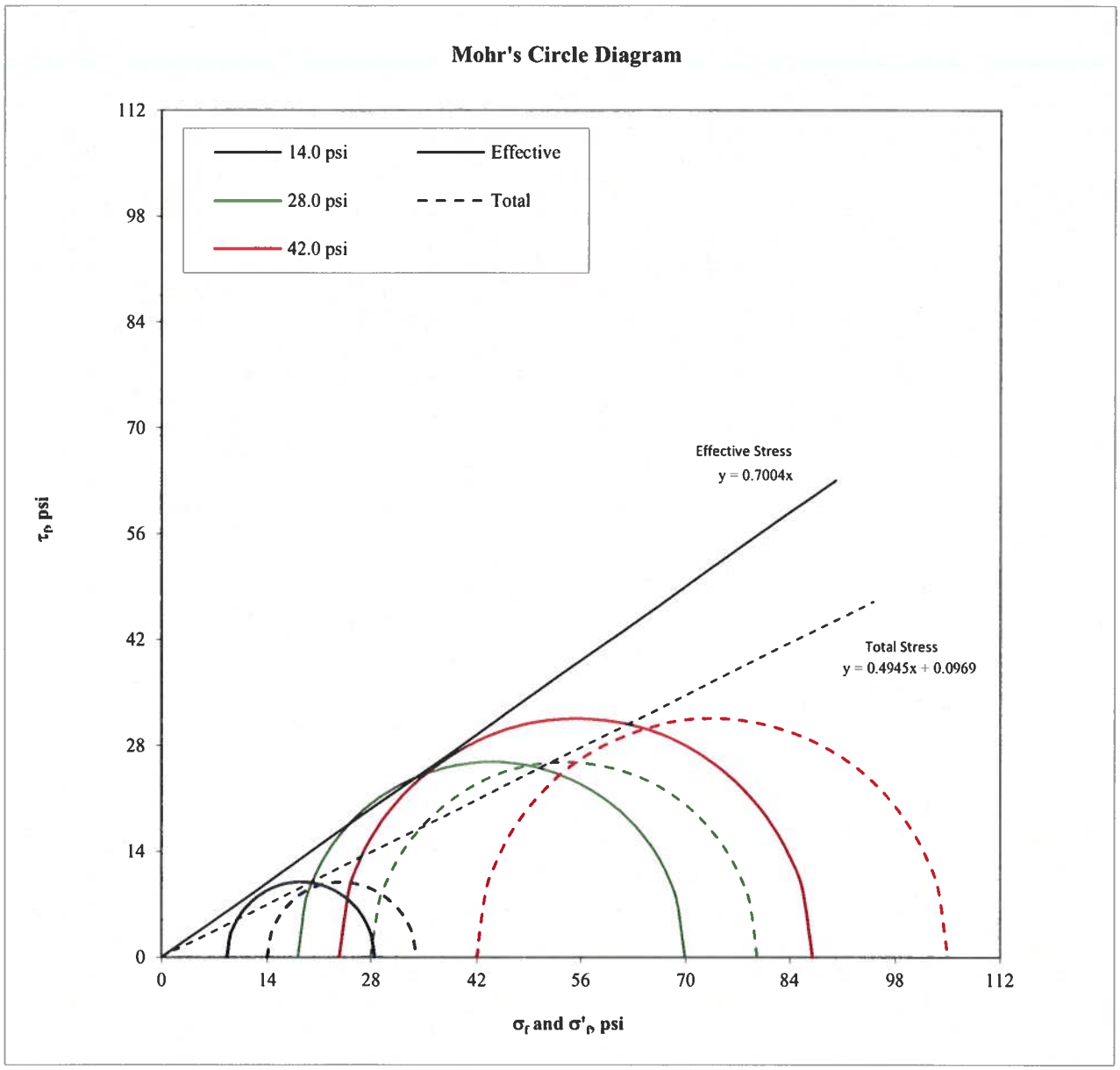
α ' =	29.8	degree
a' =	0.0	psi

Total

α =	23.9	degree
a =	0.1	psi

Note: The laboratory testing relates only to the sample tested. WSP USA neither accepts responsibility for nor makes claims to the final use and purpose of the material.

WSP USA **Norcross, Georgia**	**Title:** **ASTM D4767** **CONSOLIDATED UNDRAINED TRIAXIAL COMPRESSION TEST REPORT** **STRESS PATH PLOT**				
Job Short Title: **AEP/CABIN CREEK/GA**					
Sample: **A-4, TO-1, 15.0-17.0'**	**Technician:** **FT/CJ** **Check:** DS	**Reviewed:** **Approved:**	**Start Date:** **10/13/2025**	**Job Number:** **US-0041868.3924**	**Figure:** **4**



Confining Pressure (psi)	σ'_1 at failure (psi)	σ'_3 at failure (psi)	σ_1 at failure (psi)	σ_3 at failure (psi)
14.0	28.5	8.6	33.9	14.0
28.0	69.8	18.2	79.7	28.0
42.0	86.9	23.8	105.1	42.0

Effective

ϕ' = 35.0 degree

c' = 0.0 psi

Total

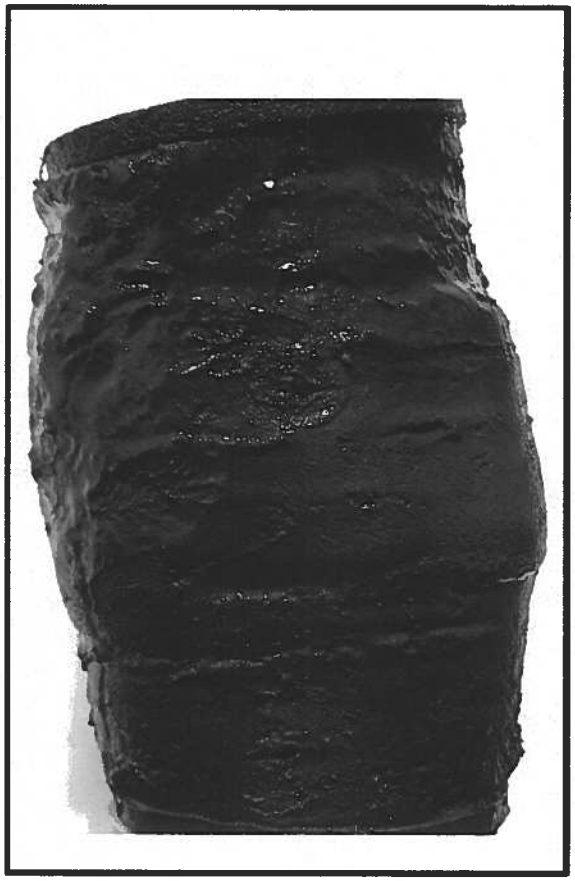
ϕ = 26.3 degree

c = 0.1 psi

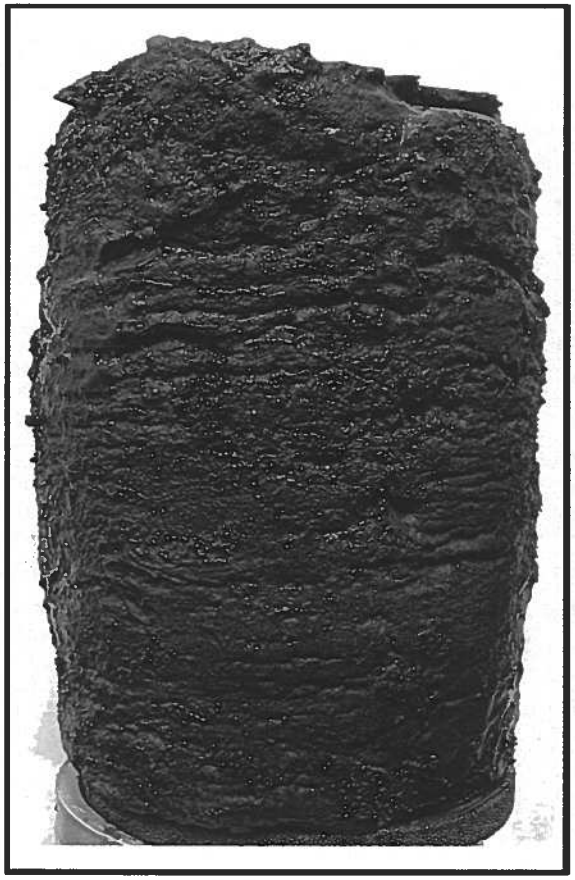
Note: The laboratory testing relates only to the sample tested. WSP USA neither accepts responsibility for nor makes claims to the final use and purpose of the material.

WSP USA **Norcross, Georgia**	**Title:** **ASTM D4767** **CONSOLIDATED UNDRAINED TRIAXIAL COMPRESSION TEST REPORT** **MOHR'S CIRCLE DIAGRAM**				
Job Short Title: **AEP/CABIN CREEK/GA**					
Sample: **A-4, TO-1, 15.0-17.0'**	**Technician:** **FT/CJ** **Check:** DA	**Reviewed:** **Approved:**	**Start Date:** **10/13/2025**	**Job Number:** **US-0041868.3924**	**Figure:** **5**

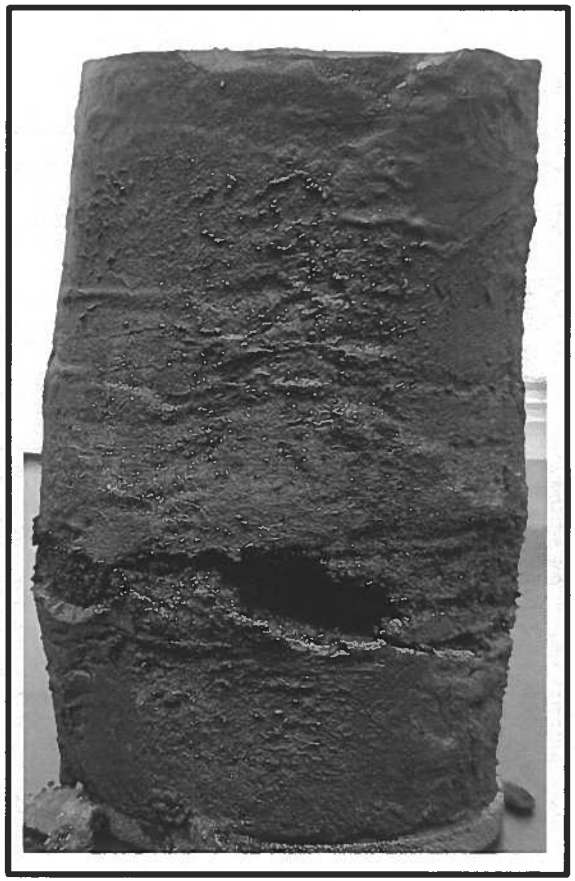
14.0 psi



28.0 psi



42.0 psi



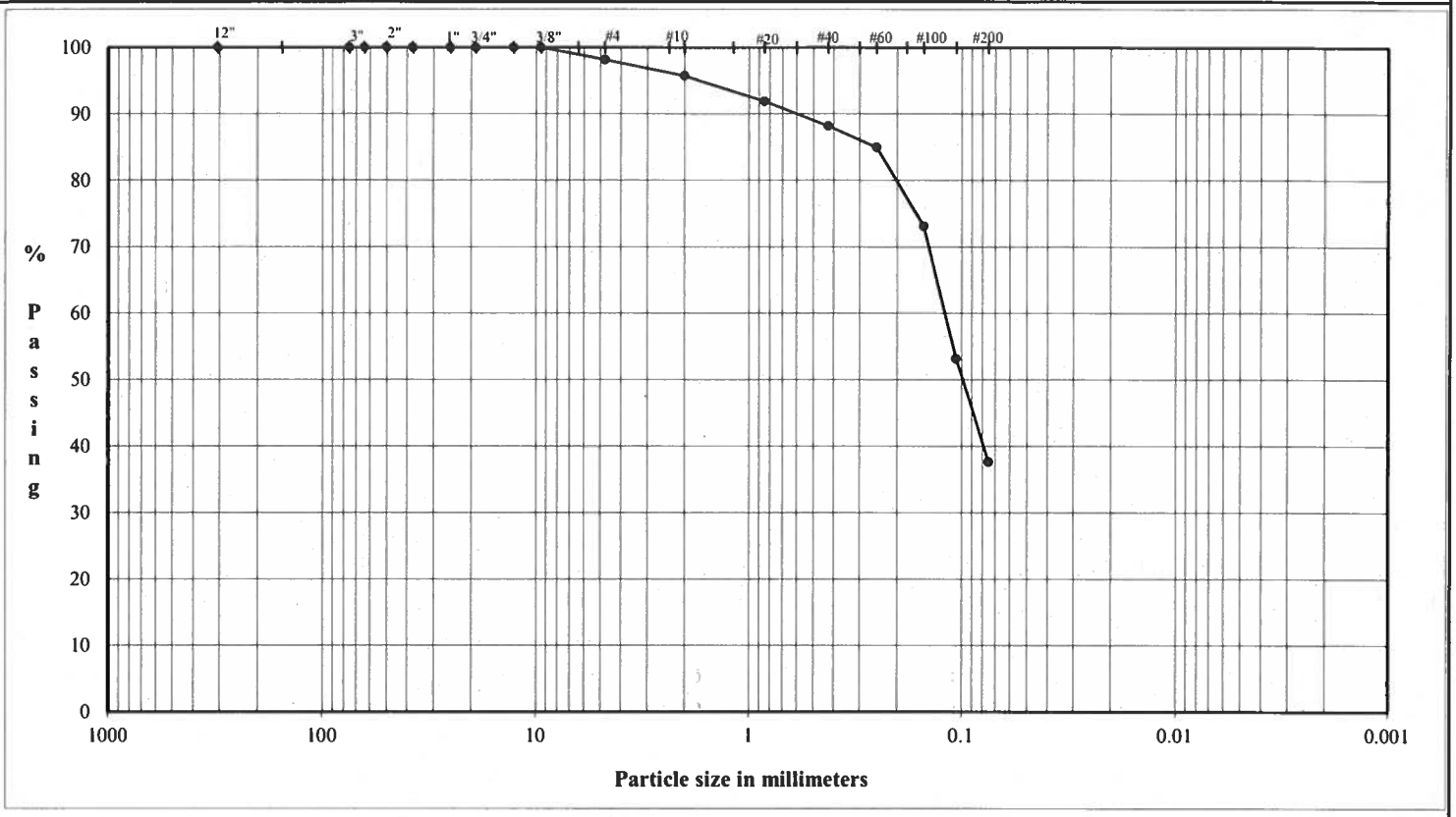
WSP USA **Norcross, Georgia**	**Title:** **ASTM D4767** **CONSOLIDATED UNDRAINED TRIAXIAL COMPRESSION TEST REPORT** **SPECIMENS PHOTOGRAPH - 14.0 28.0 42.0 psi**				
Job Short Title: **AEP/CABIN CREEK/GA**					
Sample: **A-4, TO-1, 15.0-17.0'**	**Technician:** **FT/CJ** **Check:** DA	**Reviewed:** **Approved:**	**Start Date:** **10/13/2025**	**Job Number:** **US-0041868.3924**	**Figure:** **6**

OCTOBER 2025 US-0041868.3924

PARTICLE SIZE DISTRIBUTION & ATTERBERG LIMITS

ASTM D6913 & D4318

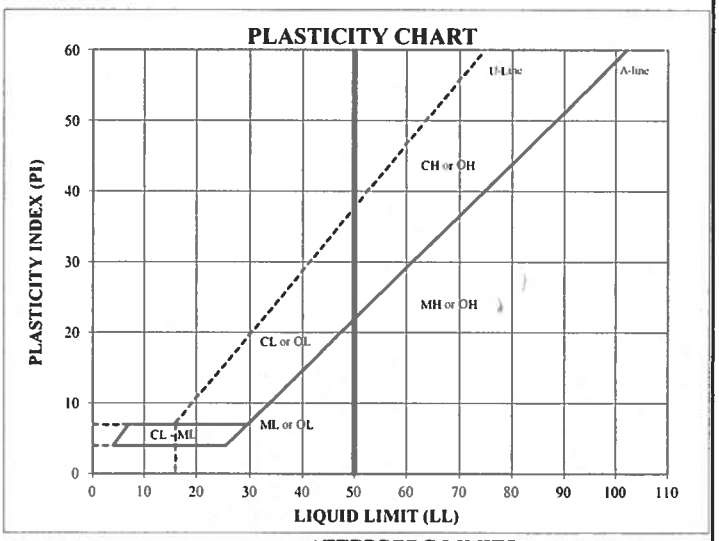
PROJECT NAME: **AEP/CABIN CREEK/GA**
SAMPLE ID: **B-3** **TO-1** Depth: **35.0-37.0'**
TYPE: **UD**



COBBLES	Coarse	Fine	Coarse	Medium	Fine	Silt or Clay
	GRAVEL		SAND			FINES

U.S. Standard Sieves Sizes and Numbers

	Particle Size (mm)	% Passing	Particle Size Classification	Percentage
12.0"	304.8	100.0		
3.0"	75.0	100.0	Cobbles	0.0
2.5"	63.5	100.0		
2.0"	50.0	100.0		
1.5"	37.5	100.0		
1.0"	25.0	100.0		
0.75"	19.0	100.0	Coarse Gravel	0.0
0.50"	12.7	100.0		
0.375"	9.5	100.0		
#4	4.8	98.1	Fine Gravel	1.9
#10	2.00	95.7	Coarse Sand	2.4
#20	0.85	91.9		
#40	0.43	88.1	Medium Sand	7.6
#60	0.25	85.0		
#100	0.15	73.1		
#140	0.11	53.1		
#200	0.08	37.6	Fine Sand	50.5
			Fines	37.6



ATTERBERG LIMITS

Method - B (Dry preparation)

M_c	LL	PL	PI	LI
48.0				

LL (oven-dried) ____
< 0.75 = ORGANIC (OL OH) ____

DESCRIPTION: SAND and SILT, fine to coarse, trace fine gravel; very dark grayish brown.

USCS: (SM)

TECH	CJ/TT
DATE	10/23/25
CHECK	
REVIEW	
APPROVE	

UNIT WEIGHT DETERMINATION

ASTM D7263

PROJECT NAME: AEP/CABIN CREEK/GA
SAMPLE ID: B-3 TO-1 **DEPTH:** 35.0-37.0'
TYPE: UD

WEIGHT OF SOIL (g)	291.28
LENGTH OF SAMPLE (in)	4.156
DIAMETER OF SAMPLE (in)	1.869
AREA OF SAMPLE (in²)	2.74
VOLUME OF SAMPLE (in^3)	11.40
VOLUME OF SAMPLE (cm^3)	186.81

WET UNIT WEIGHT (pcf)	97.4

WEIGHT WET SOIL & TARE (g)	393.63
WEIGHT DRY SOIL & TARE (g)	310.70
WEIGHT OF TARE (g)	137.85
WEIGHT OF WATER (g)	82.93
WEIGHT OF DRY SOIL (g)	172.85
WATER CONTENT (%)	**48.0**

DRY UNIT WEIGHT (pcf)	**65.8**

DESCRIPTION: SAND and SILT, fine to coarse, trace fine gravel; very dark grayish brown.

USCS: (SM)

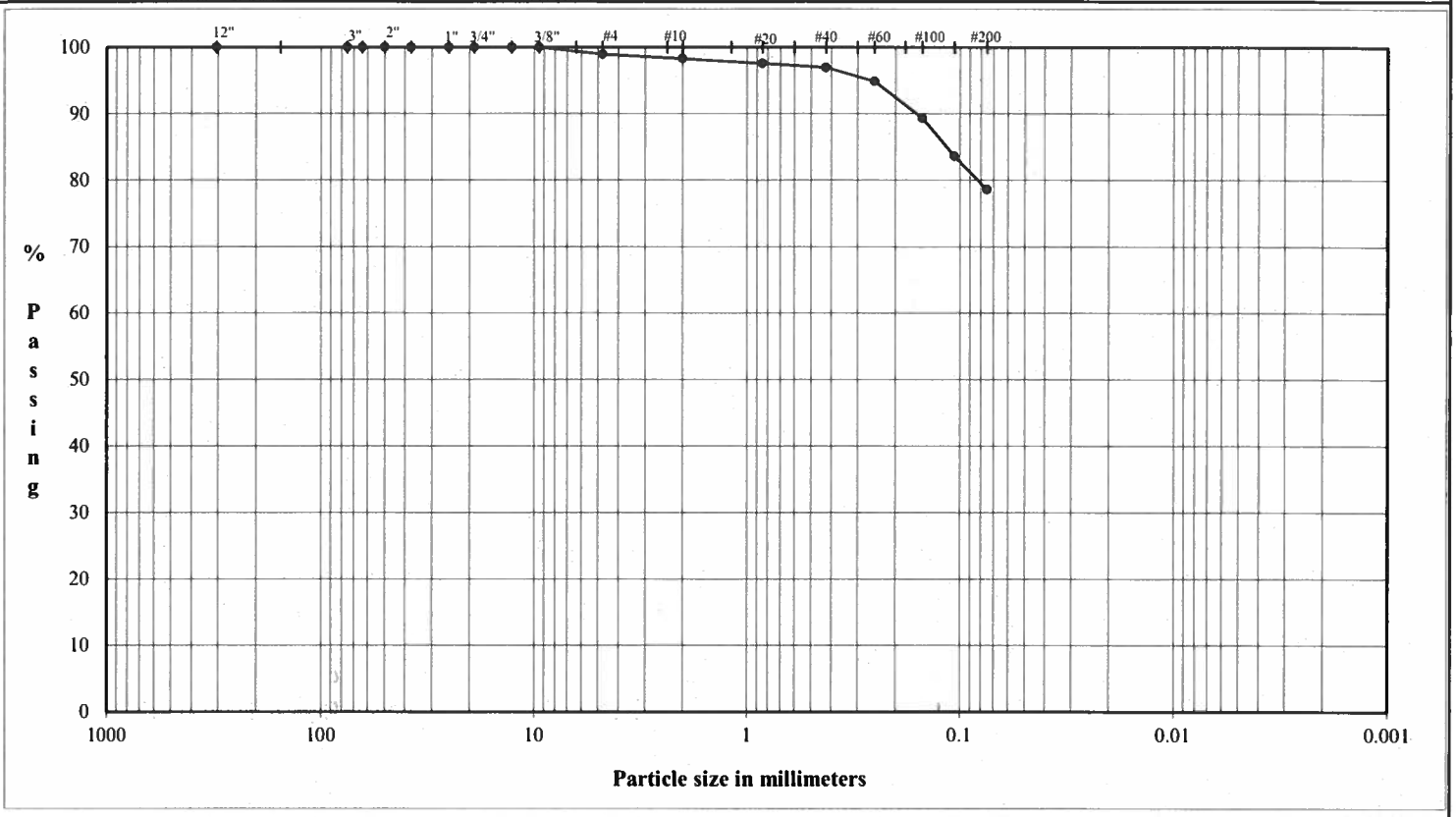
TECH	CJ
DATE	10/23/25
CHECK	DA
REVIEW	
APPROVE	

OCTOBER 2025 US-0041868.3924

PARTICLE SIZE DISTRIBUTION & ATTERBERG LIMITS

ASTM D6913 & D4318

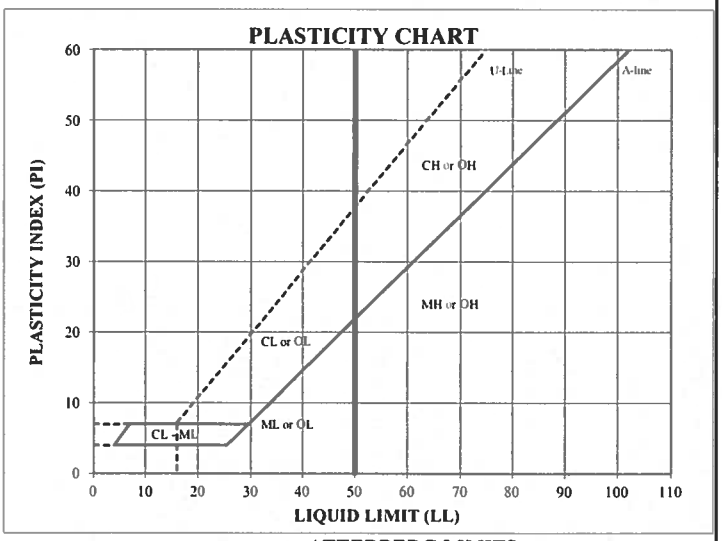
PROJECT NAME: **AEP/CABIN CREEK/GA**
SAMPLE ID: **E-3** **TO-1** Depth: **5.0-7.0'**
TYPE: **UD**



COBBLES	Coarse	Fine	Coarse	Medium	Fine	Silt or Clay
	GRAVEL		SAND			FINES

U.S. Standard Sieves Sizes and Numbers

	Particle Size (mm)	% Passing	Particle Size Classification	Percentage
12.0"	304.8	100.0		
3.0"	75.0	100.0	Cobbles	0.0
2.5"	63.5	100.0		
2.0"	50.0	100.0		
1.5"	37.5	100.0		
1.0"	25.0	100.0		
0.75"	19.0	100.0	Coarse Gravel	0.0
0.50"	12.7	100.0		
0.375"	9.5	100.0		
#4	4.8	98.9	Fine Gravel	1.1
#10	2.00	98.3	Coarse Sand	0.6
#20	0.85	97.6		
#40	0.43	96.9	Medium Sand	1.3
#60	0.25	94.9		
#100	0.15	89.3		
#140	0.11	83.6		
#200	0.08	78.6	Fine Sand	18.4
			Fines	78.6



ATTERBERG LIMITS

Method - B (Dry preparation)

M_c	LL	PL	PI	LI
35.3	NP	NP	NP	NP

DESCRIPTION: sandy SILT, fine to coarse, trace fine gravel; black, organics.

USCS: ML

LL (oven-dried) / < 0.75 = ORGANIC (OL OH)

TECH	CJ/TT
DATE	10/22/25
CHECK	DA
REVIEW	
APPROVE	

UNIT WEIGHT DETERMINATION

ASTM D7263

PROJECT NAME: AEP/CABIN CREEK/GA
SAMPLE ID: E-3 TO-1 **DEPTH:** 5.0-7.0'
TYPE: UD

WEIGHT OF SOIL (g)	256.14
LENGTH OF SAMPLE (in)	2.012
DIAMETER OF SAMPLE (in)	2.872
AREA OF SAMPLE (in²)	6.48
VOLUME OF SAMPLE (in^3)	13.03
VOLUME OF SAMPLE (cm^3)	213.52

WET UNIT WEIGHT (pcf)	74.9

WEIGHT WET SOIL & TARE (g)	306.82
WEIGHT DRY SOIL & TARE (g)	255.97
WEIGHT OF TARE (g)	51.49
WEIGHT OF WATER (g)	50.85
WEIGHT OF DRY SOIL (g)	204.48
WATER CONTENT (%)	**24.9**

DRY UNIT WEIGHT (pcf)	**60.0**

DESCRIPTION: sandy SILT, fine to coarse, trace fine gravel; black, organics.

USCS: ML

TECH	CJ
DATE	10/22/25
CHECK	DA
REVIEW	
APPROVE	

AEP/CABIN CREEK/GA
SUMMARY OF SOIL DATA

Borehole I.D.	Sample I.D.	Sample Depth	Sample Type	Soil Classi-fication	As-R'cvd Moisture Content %	Atterberg Limits				Grain Size Distribution			Compaction		Gs	Unit Weight		Permeability (cm/sec)	Additional Tests Conducted (See Notes)
						LL	PL	PI	LI	% Finer No. 4 Sieve	% Finer No. 200 Sieve	% Finer 0.002 mm	Max. Dry Density (pcf)	Optimum Moisture %		Dry Density (pcf)	Moisture Content %		
A-2	TO-1	10.0-12.0'	UD	ML	80.3	NP	NP	NP	NP	100.0	69.6	-	-	-	2.12	36.9	80.3	-	T
A-3	TO-1	5.0-7.0'	UD	ML	51.8	NP	NP	NP	NP	99.9	57.5	-	-	-	-	46.4	51.8	-	-
A-4	TO-1	15.0-17.0'	UD	ML	52.1	NP	NP	NP	NP	92.9	64.0	-	-	-	2.14	56.4	52.1	-	T
B-3	TO-1	35.0-37.0'	UD	(SM)	48.0	-	-	-	-	98.1	37.6	-	-	-	-	65.8	48.0	-	-
E-1	TO-1	35.0-37.0'	UD	CL-ML	22.6	23	18	5	0.91	99.9	56.6	-	-	-	2.72	104.1	22.6	-	T
E-3	TO-1	5.0-7.0'	UD	ML	35.3	NP	NP	NP	NP	98.9	78.6	-	-	-	-	60.0	24.9	-	-
E-9	TO-1	15.0-17.0'	UD	SM	28.0	NP	NP	NP	NP	98.6	39.9	-	-	-	-	72.6	27.0	-	T
E-9	TO-1	15.0-17.0'	UD	-	-	-	-	-	-	-	-	-	-	-	2.33	40.6	28.0	-	DS

ABBREVIATIONS: LIQUID LIMIT (LL)
PLASTIC LIMIT (PL)
PLASTICITY INDEX (PI)
LIQUIDITY INDEX (LI)
SPECIFIC GRAVITY (Gs)

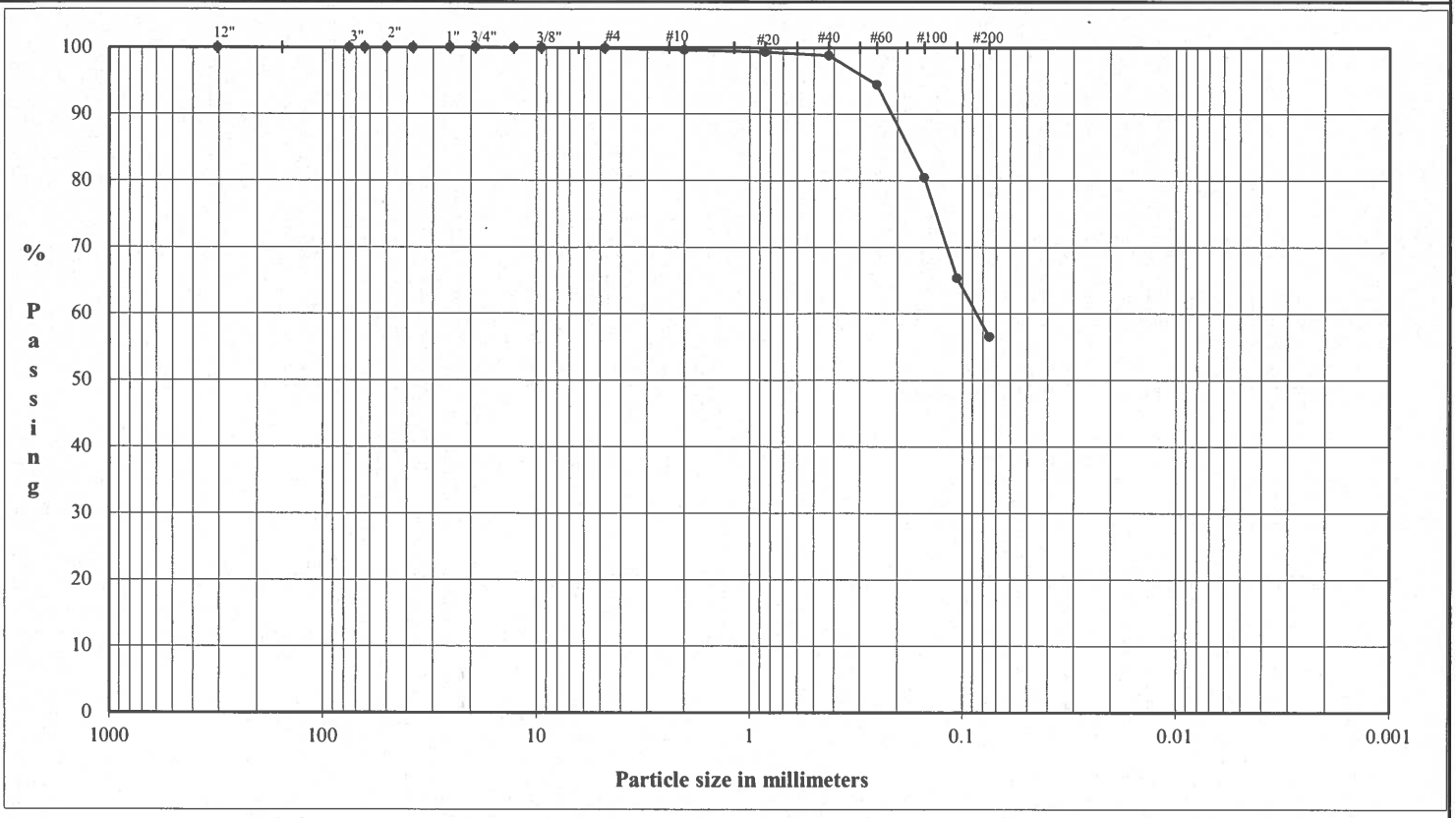
NOTES: T = TRIAXIAL TEST
U = UNCONFINED COMPRESSION TEST
C = CONSOLIDATION TEST
DS = DIRECT SHEAR TEST

OCTOBER 2025 US-0041868.3924

PARTICLE SIZE DISTRIBUTION & ATTERBERG LIMITS

ASTM D6913 & D4318

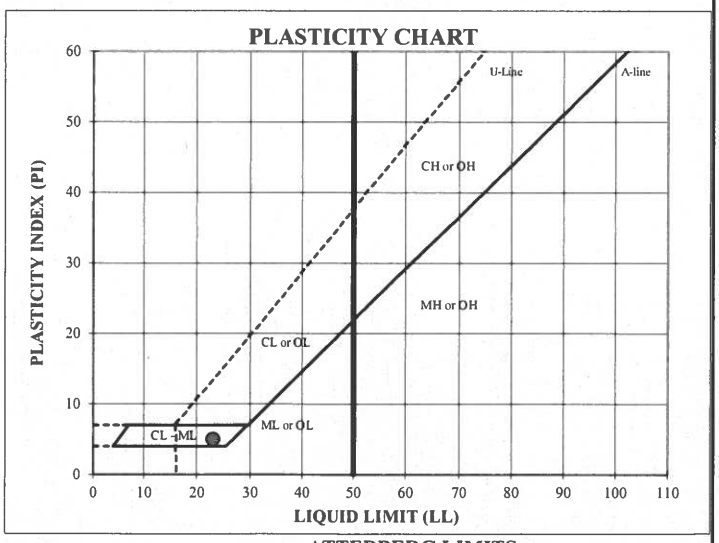
PROJECT NAME: **AEP/CABIN CREEK/GA**
SAMPLE ID: **E-1** **TO-1** Depth: **35.0-37.0'**
TYPE: **UD**



COBBLES	Coarse	Fine	Coarse	Medium	Fine	Silt or Clay
	GRAVEL		SAND			FINES

U.S. Standard Sieves Sizes and Numbers

	Particle Size (mm)	% Passing	Particle Size Classification	Percentage
12.0"	304.8	**100.0**		
3.0"	75.0	**100.0**	Cobbles	**0.0**
2.5"	63.5	**100.0**		
2.0"	50.0	**100.0**		
1.5"	37.5	**100.0**		
1.0"	25.0	**100.0**		
0.75"	19.0	**100.0**	Coarse Gravel	**0.0**
0.50"	12.7	**100.0**		
0.375"	9.5	**100.0**		
#4	4.8	**99.9**	Fine Gravel	**0.1**
#10	2.00	**99.6**	Coarse Sand	**0.2**
#20	0.85	**99.3**		
#40	0.43	**98.8**	Medium Sand	**0.8**
#60	0.25	**94.4**		
#100	0.15	**80.5**		
#140	0.11	**65.4**		
#200	0.08	**56.6**	Fine Sand	**42.2**
			Fines	**56.6**



ATTERBERG LIMITS

Method - B (Dry preparation)

M_c	LL	PL	PI	LI
22.6	**23**	**18**	**5**	**0.91**

DESCRIPTION: SILTY CLAY and fine SAND; olive brown.

USCS: CL-ML

LL (oven-dried) < 0.75 = ORGANIC (OL/OH)

TECH	CJ/JC
DATE	10/21/25
CHECK	
REVIEW	
APPROVE	

Boring or Test Pit:	E-1		Boring or Test Pit:	E-1		Boring or Test Pit:	E-1	
Sample:	TO-1		Sample:	TO-1		Sample:	TO-1	
Depth:	15.0-17.0 ft		Depth:	15.0-17.0		Depth:	15.0-17.0	
Point No.:	1		Point No.:	2		Point No.:	1	
Initial								
Length =	6.094	in	Length =	5.993	in	Length =	6.085	in
Diameter =	2.853	in	Diameter =	2.829	in	Diameter =	2.732	in
Wet Mass =	2.834	lb	Wet Mass =	2.823	lb	Wet Mass =		lb
Area =	6.393	in^2	Area =	6.286	in^2	Area =		in^2
Volume =	38.958	in^3	Volume =	37.670	in^3	Volume =		in^3
Specific Gravity =	2.72	(ASTM D854)	Specific Gravity =	2.72	(ASTM D854)	Specific Gravity =		(ASTM D854)
Dry Mass of Solids =	2.310	lb	Dry Mass of Solids =	2.305	lb	Dry Mass of Solids =		lb
Moisture Content =	22.7%		Moisture Content =	22.5%		Moisture Content =		
Wet Unit Weight =	125.7	pcf	Wet Unit Weight =	129.5	pcf	Wet Unit Weight =		pcf
Dry Unit Weight =	102.5	pcf	Dry Unit Weight =	105.7	pcf	Dry Unit Weight =		pcf
Void Ratio =	0.65		Void Ratio =	0.60		Void Ratio =		
Percent Saturation =	94%		Percent Saturation =	102%		Percent Saturation =		
After Consolidation			**After Consolidation**			**After Consolidation**		
Length =	6.085	in	Length =	5.847	in	Length =	5.936	in
Diameter =	2.732	in	Diameter =	2.766	in	Diameter =	2.766	in
Area =			Area =	6.011		Area =	6.010	in^2 (Method B)
Volume =			Volume =	35.144		Volume =	35.681	in^3
Moisture Content =			Moisture Content =	18.2%		Moisture Content =	18.9%	
Wet Unit Weight =			Wet Unit Weight =	133.9		Wet Unit Weight =	133.0	pcf
Dry Unit Weight =			Dry Unit Weight =	113.3		Dry Unit Weight =	111.9	pcf
Void Ratio =			Void Ratio =	0.49		Void Ratio =	0.51	
Percent Saturation =			Percent Saturation =	100%		Percent Saturation =	100%	
B Parameter =	1.00		B Parameter =	0.99		B Parameter =	1.00	
Shear Rate =	0.054%	/min.	Shear Rate =	0.017%	/min.	Shear Rate =	0.056%	/min.
t_{50} =	6.62	min.	t_{50} =	19.13	min.	t_{50} =	9.88	min.
Strain at Failure =	2.4%		Strain at Failure =	11.0%		Strain at Failure =	9.0%	
Cell Pressure =	74.0	psi	Cell Pressure =	88.0	psi	Cell Pressure =	102.0	psi
Back Pressure =	60.0	psi	Back Pressure =	60.0	psi	Back Pressure =	60.0	psi
Confining Pressure =	14.0	psi	Confining Pressure =	28.0	psi	Confining Pressure =	42.0	psi

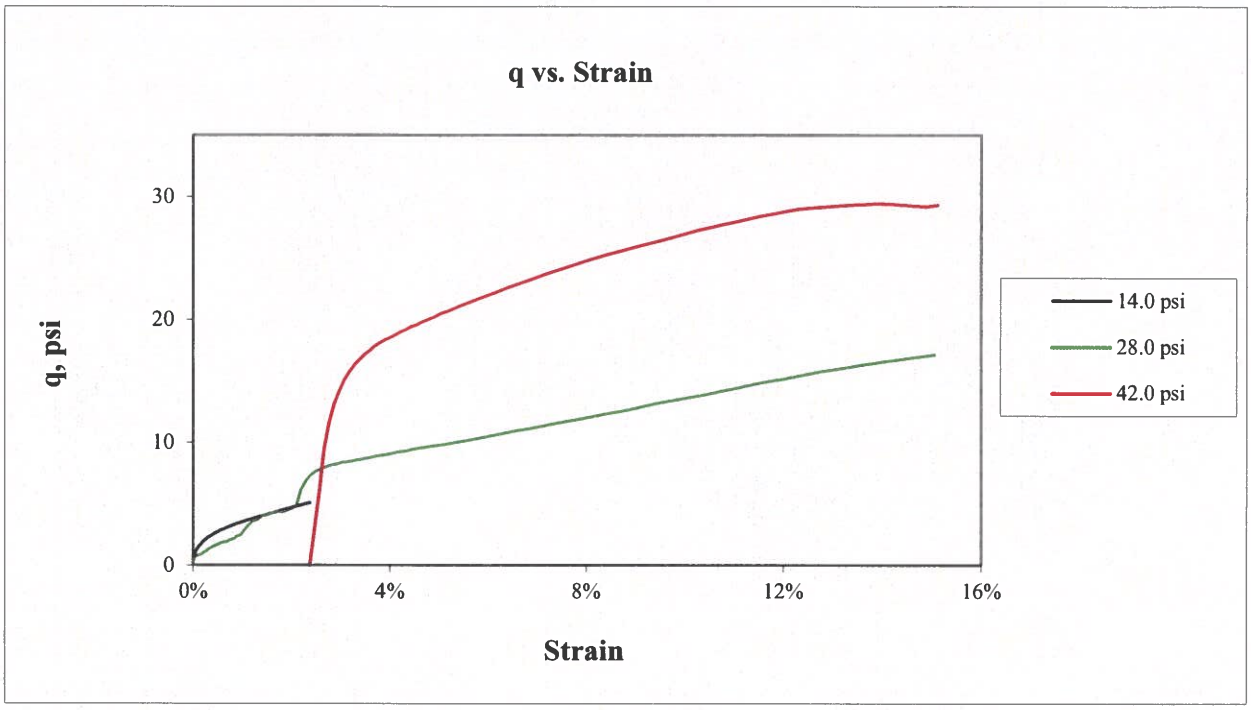
Notes: Sample description: CL-ML - SILTY CLAY and fine SAND; olive brown.

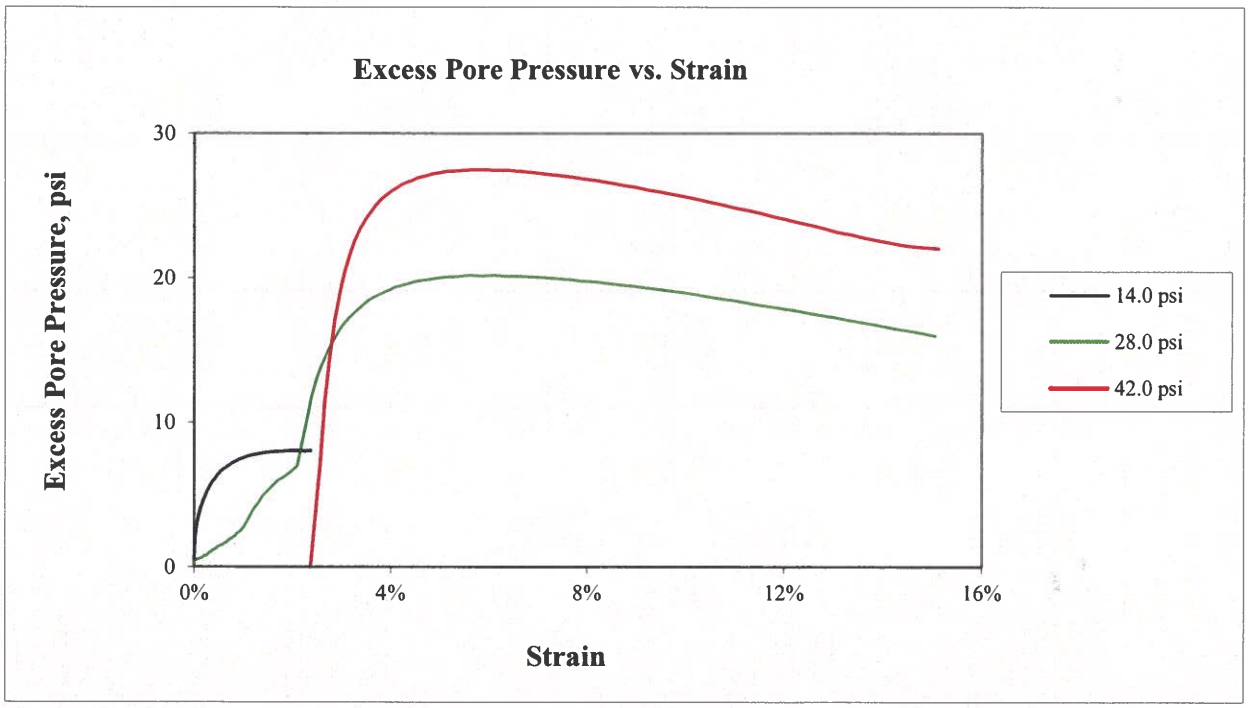
Atterberg limits: LL = 23 PL = 18 PI = 5 (ASTM D4318)

Percent finer: 3/4 in. = 100.0% No. 4 = 99.9% No. 200 = 56.6% (ASTM D422, refer to separate report for gradation curve)

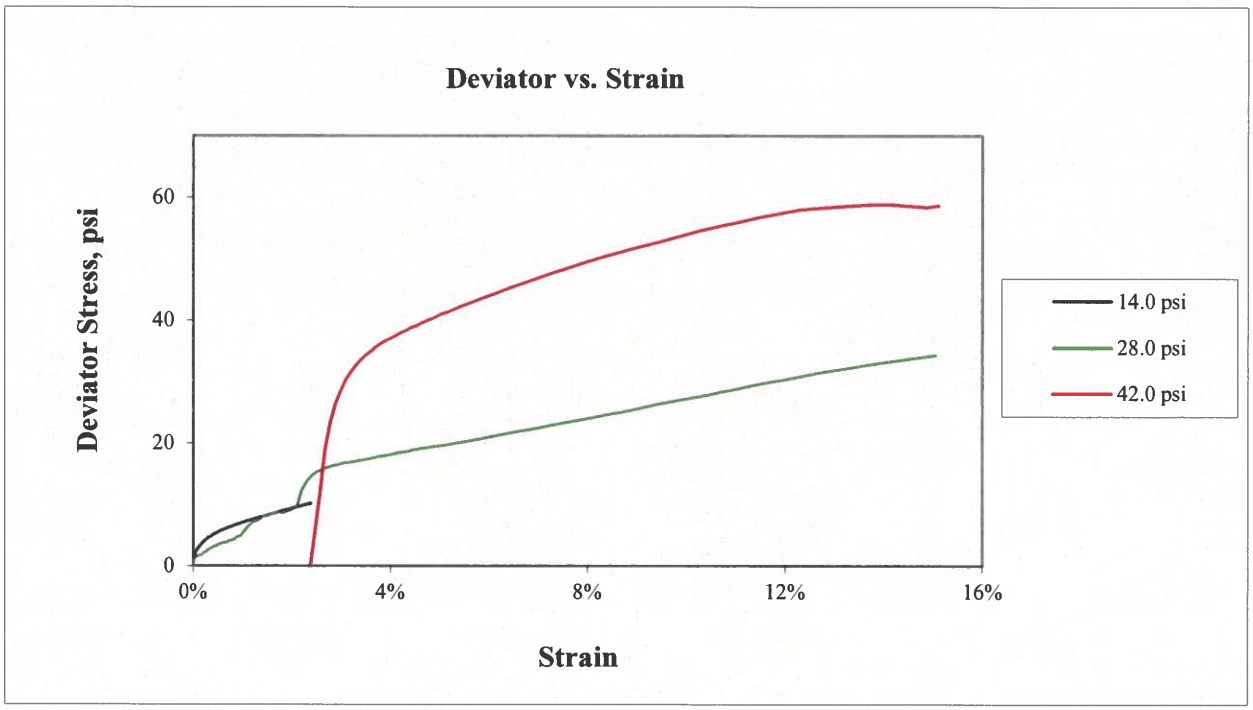
Specimen type:	X	Intact		Reconstituted
Moisture from:		Cuttings	X	Entire specimen
Saturation method:	X	Wet		Dry
Failure criterion:	X	$(\sigma'_1/\sigma'_3)_{max}$		$(\sigma'_1-\sigma'_3)_{max}$ ____ % strain
Membrane effect:	X	Corrected		Not Corrected

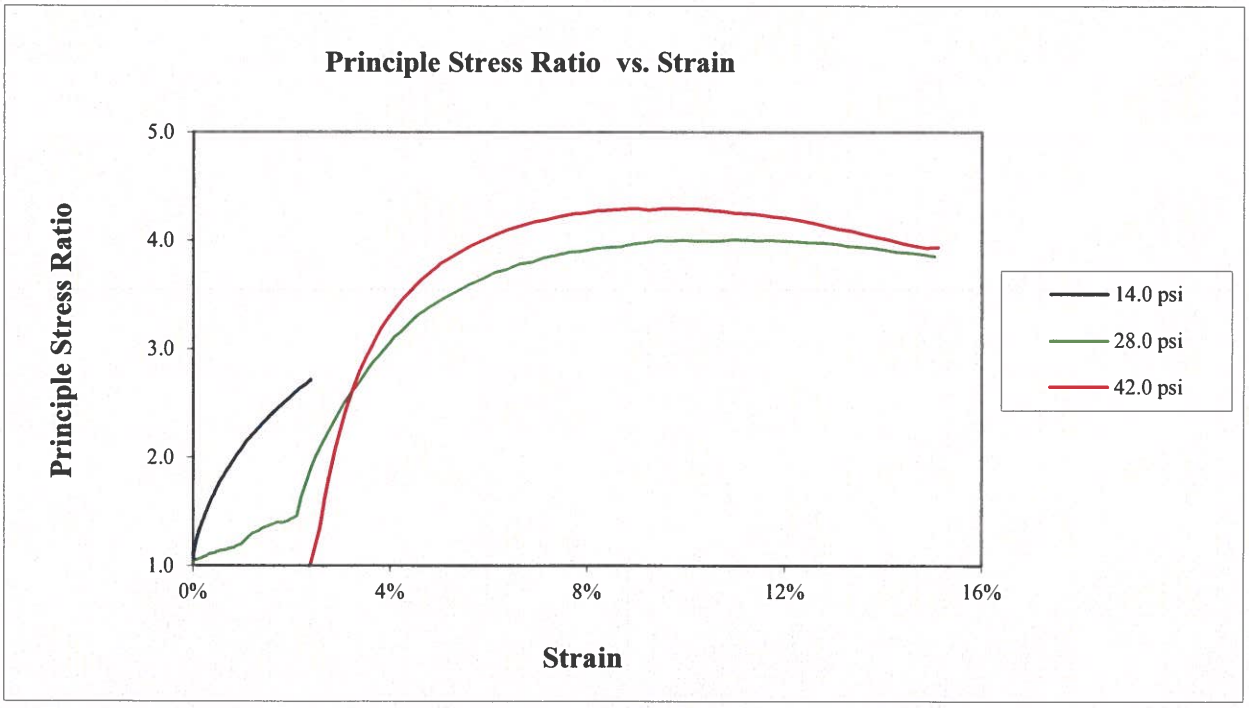
WSP USA **Norcross, Georgia**	**Title:** **MODIFIED (Multi-Stage) - ASTM D4767** **CONSOLIDATED UNDRAINED TRIAXIAL COMPRESSION TEST REPORT** **SAMPLE AND TEST DATA**				
Job Short Title: **AEP/CABIN CREEK/GA**					
Sample: **E-1, TO-1, 35.0-37.0'**	**Technician:** **FT/CJ** **Check:** DA	**Reviewed:** **Approved:**	**Start Date:** **10/21/2025**	**Job Number:** **US-0041868.3924**	**Figure:** **1**



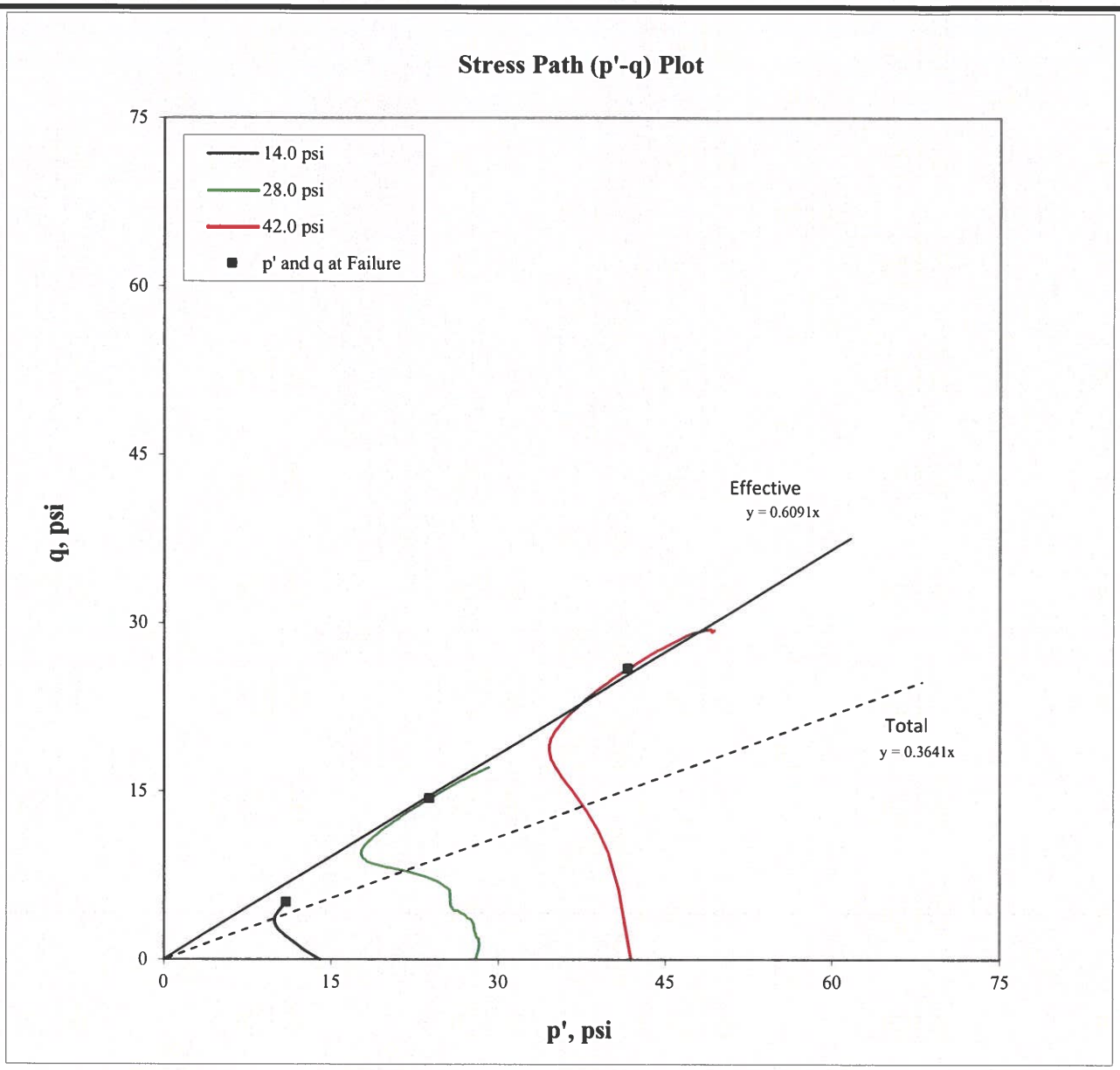


WSP USA **Norcross, Georgia**	**Title:** **MODIFIED (Multi-Stage) - ASTM D4767** **CONSOLIDATED UNDRAINED TRIAXIAL COMPRESSION TEST REPORT** **q AND EXCESS PORE PRESSURE PLOTS**				
Job Short Title: **AEP/CABIN CREEK/GA**					
Sample: **E-1, TO-1, 35.0-37.0'**	**Technician:** **FT/CJ** **Check:** JA	**Reviewed:** **Approved:**	**Start Date:** **10/21/2025**	**Job Number:** **US-0041868.3924**	**Figure:** **2**





WSP USA **Norcross, Georgia**	**Title:** **MODIFIED (Multi-Stage) - ASTM D4767** **CONSOLIDATED UNDRAINED TRIAXIAL COMPRESSION TEST REPORT** **q AND EXCESS PORE PRESSURE PLOTS**				
Job Short Title: **AEP/CABIN CREEK/GA**					
Sample: **E-1, TO-1, 35.0-37.0'**	**Technician:** **FT/CJ** **Check:** DA	**Reviewed:** **Approved:**	**Start Date:** **10/21/2025**	**Job Number:** **US-0041868.3924**	**Figure:** **3**



Confining Pressure (psi)	p at failure (psi)	p' at failure (psi)	q at failure (psi)
14.0	19.1	11.0	5.1
28.0	42.4	23.9	14.4
42.0	67.9	41.6	25.9

Effective

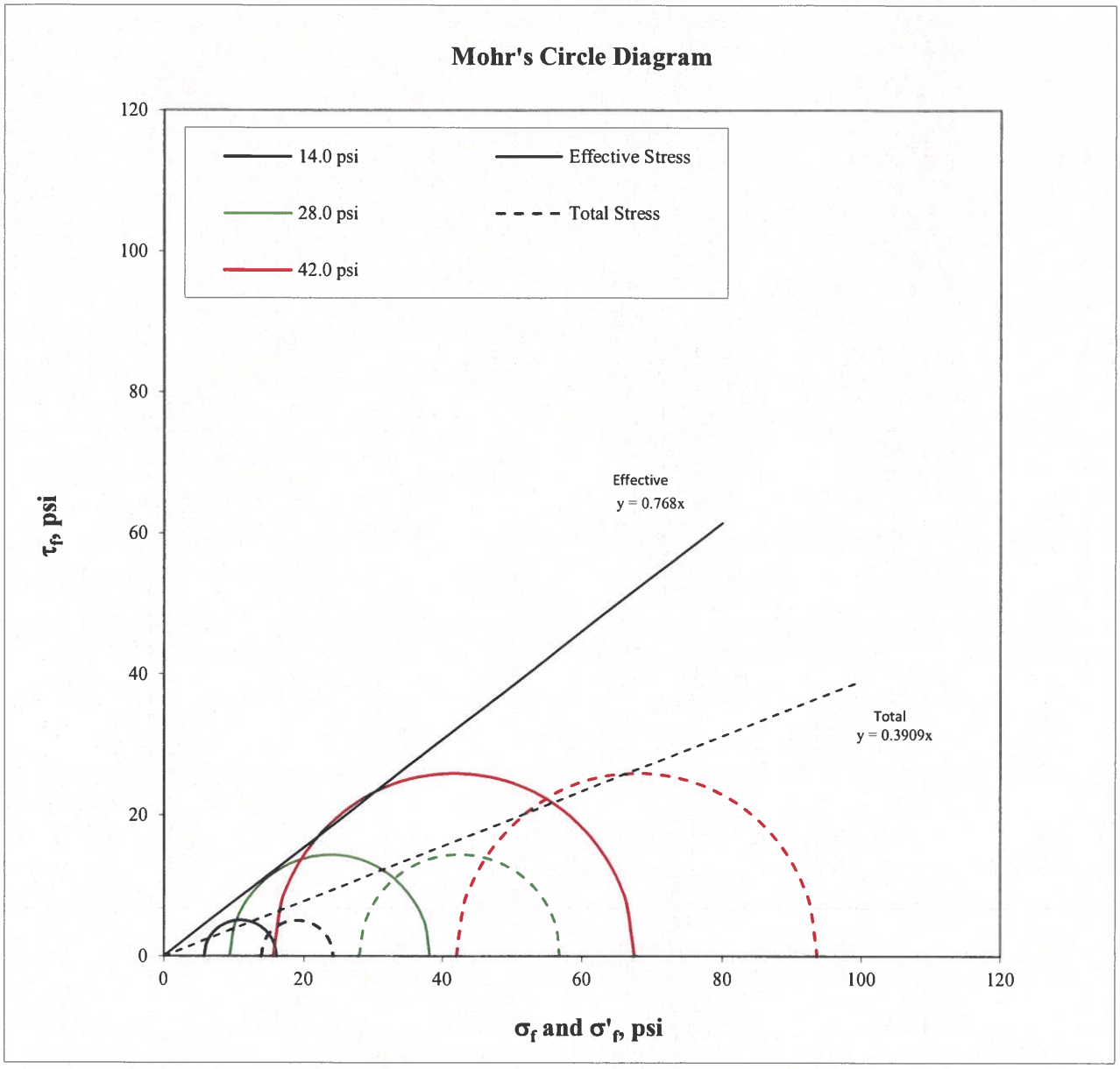
α ' =	31.3	degree
a' =	0.0	psi

Total

α =	20.0	degree
a =	0.0	psi

Note: The laboratory testing relates only to the sample tested. WSP neither accepts responsibility for nor makes claims to the final use and purpose of the material.

WSP USA **Norcross, Georgia**	**Title:** **MODIFIED (Multi-Stage) - ASTM D4767** **CONSOLIDATED UNDRAINED TRIAXIAL COMPRESSION TEST REPORT** **STRESS PATH PLOT**				
Job Short Title: **AEP/CABIN CREEK/GA**					
Sample: **E-1, TO-1, 35.0-37.0'**	**Technician:** **FT/CJ** **Check:** DA	**Reviewed:** **Approved:**	**Start Date:** **10/21/2025**	**Job Number:** **US-0041868.3924**	**Figure:** **4**



Confining Pressure (psi)	σ'_1 at failure (psi)	σ'_3 at failure (psi)	σ_1 at failure (psi)	σ_3 at failure (psi)
14.0	16.1	5.9	24.2	14.0
28.0	38.3	9.5	56.7	28.0
42.0	67.6	15.7	93.8	42.0

Effective

ϕ' = 37.5 degree

c' = 0.0 psi

Total

ϕ = 21.4 degree

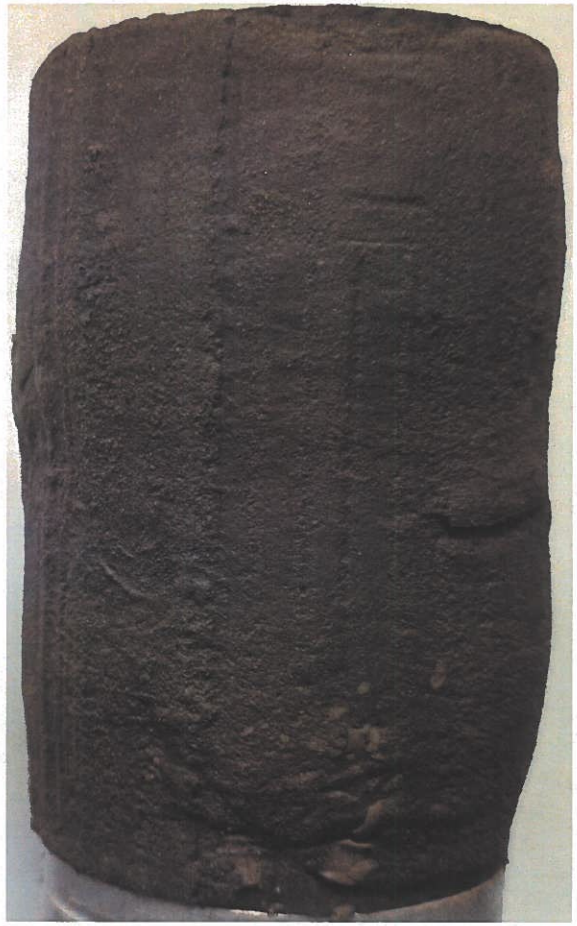
c = 0.0 psi

Note: The laboratory testing relates only to the sample tested. WSP neither accepts responsibility for nor makes claims to the final use and purpose of the material.

WSP USA **Norcross, Georgia**	**Title:** **MODIFIED (Multi-Stage) - ASTM D4767** **CONSOLIDATED UNDRAINED TRIAXIAL COMPRESSION TEST REPORT** **MOHR'S CIRCLE DIAGRAM**				
Job Short Title: **AEP/CABIN CREEK/GA**					
Sample: **E-1, TO-1, 35.0-37.0'**	**Technician:** **FT/CJ** **Check:** DA	**Reviewed:** **Approved:**	**Start Date:** **10/21/2025**	**Job Number:** **US-0041868.3924**	**Figure:** **5**

28 psi

14 & 42 psi



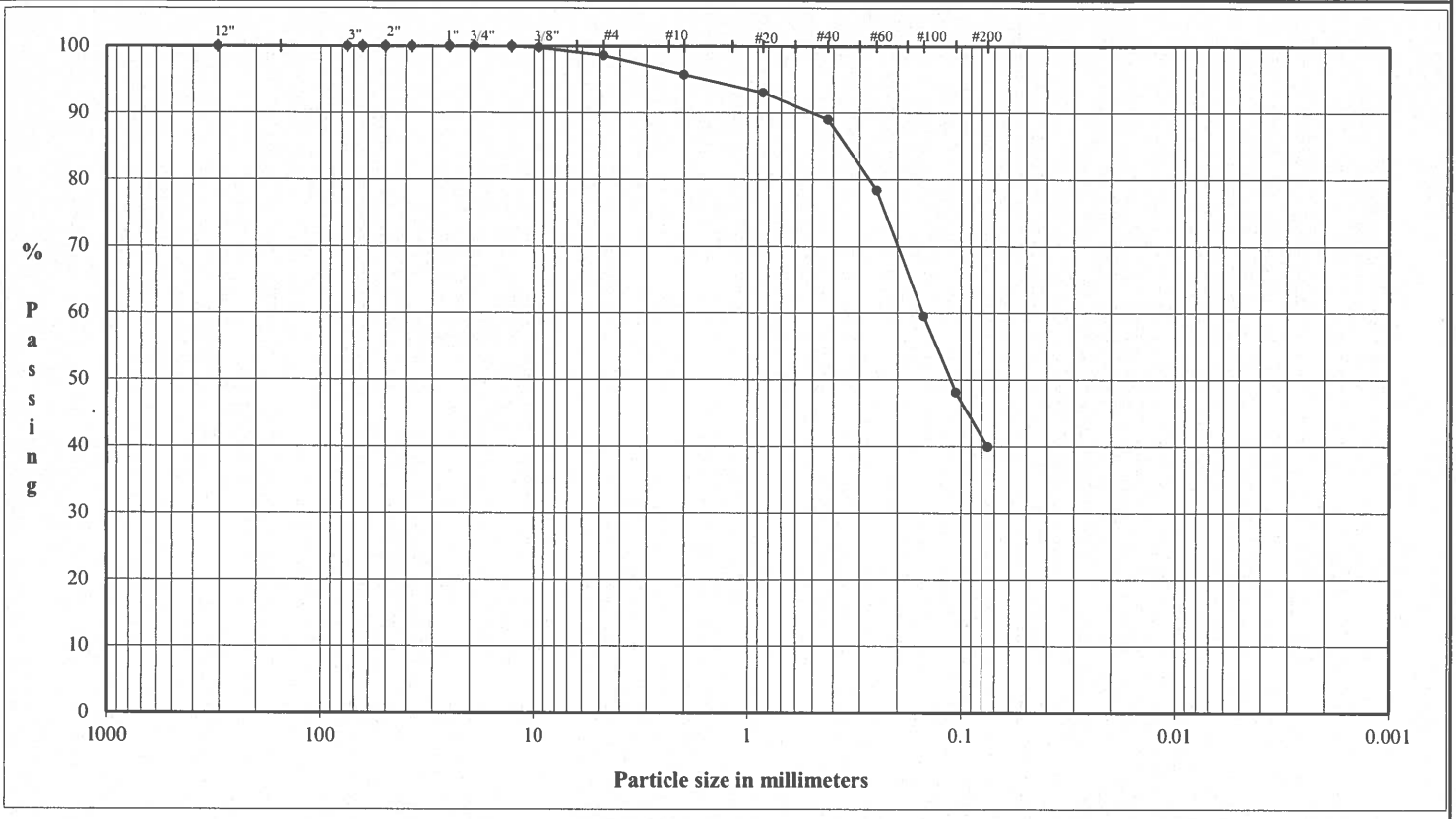
WSP USA **Norcross, Georgia**	**Title:** **MODIFIED (Multi-Stage) - ASTM D4767** **CONSOLIDATED UNDRAINED TRIAXIAL COMPRESSION TEST REPORT** **SPECIMEN PHOTOGRAPHS - 2 Specimens**				
Job Short Title: **AEP/CABIN CREEK/GA**					
Sample: **E-1, TO-1, 35.0-37.0'**	**Technician:** **FT/CJ** **Check:** DA	**Reviewed:** **Approved:**	**Start Date:** **10/21/2025**	**Job Number:** **US-0041868.3924**	**Figure:** **6**

OCTOBER 2025 US-0041868.3924

PARTICLE SIZE DISTRIBUTION & ATTERBERG LIMITS

ASTM D6913 & D4318

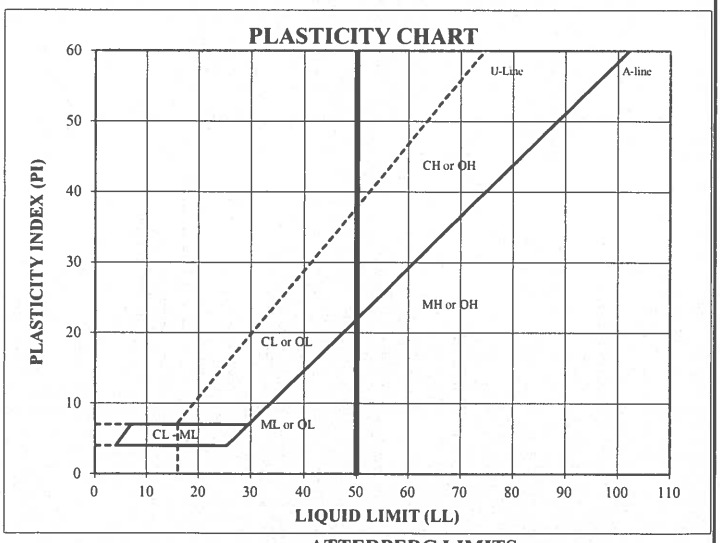
PROJECT NAME: **AEP/CABIN CREEK/GA**
SAMPLE ID: **E-9** **TO-1** Depth: **15.0-17.0'**
TYPE: **UD**



COBBLES	Coarse	Fine	Coarse	Medium	Fine	Silt or Clay
	GRAVEL		SAND			FINES

U.S. Standard Sieves Sizes and Numbers

	Particle Size (mm)	% Passing	Particle Size Classification	Percentage
12.0"	304.8	**100.0**		
3.0"	75.0	**100.0**	Cobbles	**0.0**
2.5"	63.5	**100.0**		
2.0"	50.0	**100.0**		
1.5"	37.5	**100.0**		
1.0"	25.0	**100.0**		
0.75"	19.0	**100.0**	Coarse Gravel	**0.0**
0.50"	12.7	**100.0**		
0.375"	9.5	**99.8**		
#4	4.8	**98.6**	Fine Gravel	**1.4**
#10	2.00	**95.8**	Coarse Sand	**2.9**
#20	0.85	**93.1**		
#40	0.43	**89.0**	Medium Sand	**6.7**
#60	0.25	**78.4**		
#100	0.15	**59.5**		
#140	0.11	**48.1**		
#200	0.08	**39.9**	Fine Sand	**49.1**
			Fines	**39.9**



ATTERBERG LIMITS

Method - B (Dry preparation)

M_c	LL	PL	PI	LI
28.0	**NP**	**NP**	**NP**	**NP**

DESCRIPTION: SAND and SILT, fine to coarse, trace fine gravel; yellowish brown and black.

USCS: SM

LL (oven-dried) ____
< 0.75 = ORGANIC (OL OH) ____

TECH	CJ/TT
DATE	10/22/25
CHECK	JA
REVIEW	
APPROVE	

Boring or Test Pit:	E-9		Boring or Test Pit:			Boring or Test Pit:		
Sample:	TO-1		Sample:			Sample:		
Depth:	15.0-17.0 ft		Depth:			Depth:		
Point No.:	1		Point No.:			Point No.:		
Initial								
Length =	6.010	in	Length =	5.864		Length =	5.676	
Diameter =	2.859	in	Diameter =	2.750		Diameter =	2.795	
Wet Mass =	2.058	lb	Wet Mass =			Wet Mass =		
Area =	6.420	in^2	Area =			Area =		
Volume =	38.583	in^3	Volume =			Volume =		
Specific Gravity =	2.33	(ASTM D854)	Specific Gravity =			Specific Gravity =		
Dry Mass of Solids =	1.621	lb	Dry Mass of Solids =			Dry Mass of Solids =		
Moisture Content =	27.0%		Moisture Content =			Moisture Content =		
Wet Unit Weight =	92.2	pcf	Wet Unit Weight =			Wet Unit Weight =		
Dry Unit Weight =	72.6	pcf	Dry Unit Weight =			Dry Unit Weight =		
Void Ratio =	1.00		Void Ratio =			Void Ratio =		
Percent Saturation =	63%		Percent Saturation =			Percent Saturation =		
After Consolidation			**After Consolidation**			**After Consolidation**		
Length =	5.864	in	Length =	5.676	in	Length =	5.484	in
Diameter =	2.750	in	Diameter =	2.795	in	Diameter =	2.844	in
Area =	5.941		Area =	6.138		Area =	6.352	in^2 (Method B)
Volume =	34.837		Volume =	34.837		Volume =	34.837	in^3
Moisture Content =			Moisture Content =			Moisture Content =	34.6%	
Wet Unit Weight =			Wet Unit Weight =			Wet Unit Weight =	108.3	pcf
Dry Unit Weight =			Dry Unit Weight =			Dry Unit Weight =	80.4	pcf
Void Ratio =			Void Ratio =			Void Ratio =	0.81	
Percent Saturation =			Percent Saturation =			Percent Saturation =	100%	
B Parameter =	1.00		B Parameter =	--		B Parameter =	--	
Shear Rate =	0.091%	/min.	Shear Rate =	0.098%	/min.	Shear Rate =	0.101%	/min.
t_{50} =	0.59	min.	t_{50} =	1.13	min.	t_{50} =	2.80	min.
Strain at Failure =	3.2%		Strain at Failure =	6.6%		Strain at Failure =	9.9%	
Cell Pressure =	74.0	psi	Cell Pressure =	88.0	psi	Cell Pressure =	102.0	psi
Back Pressure =	60.0	psi	Back Pressure =	60.0	psi	Back Pressure =	60.0	psi
Confining Pressure =	14.0	psi	Confining Pressure =	28.0	psi	Confining Pressure =	42.0	psi

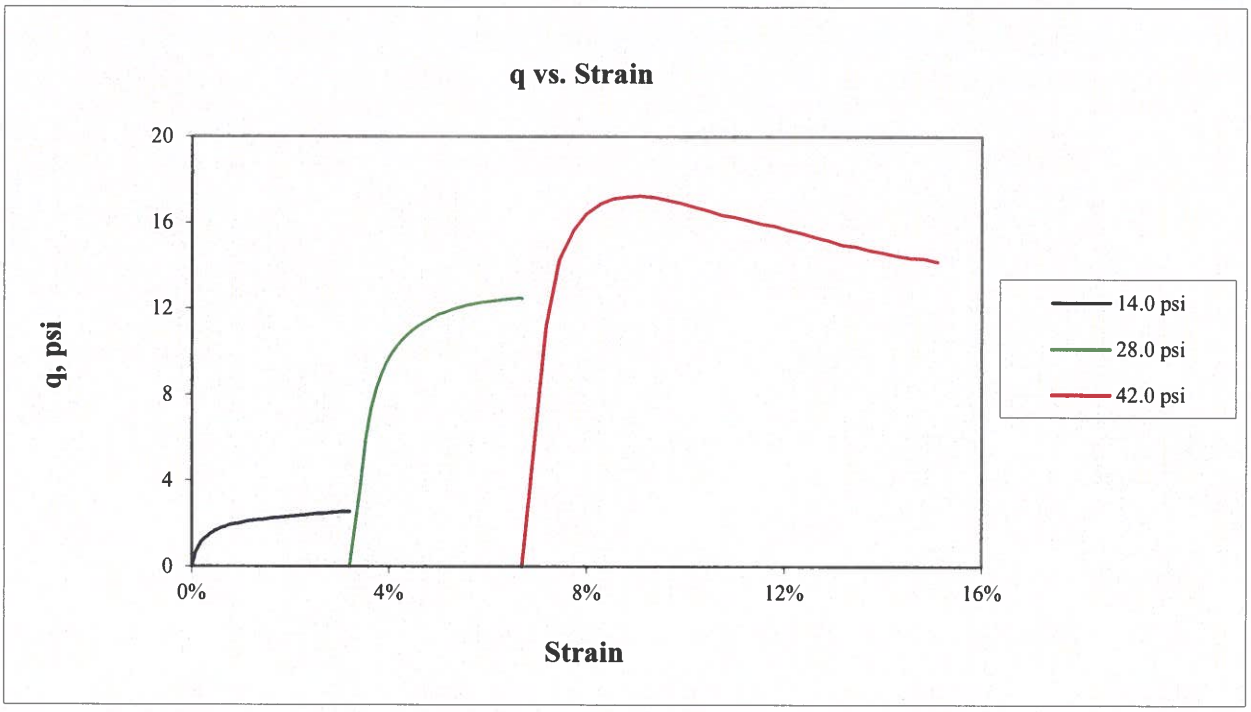
Notes: Sample description: SM - SAND and SILT, fine to coarse, trace fine gravel; yellowish brown and black.

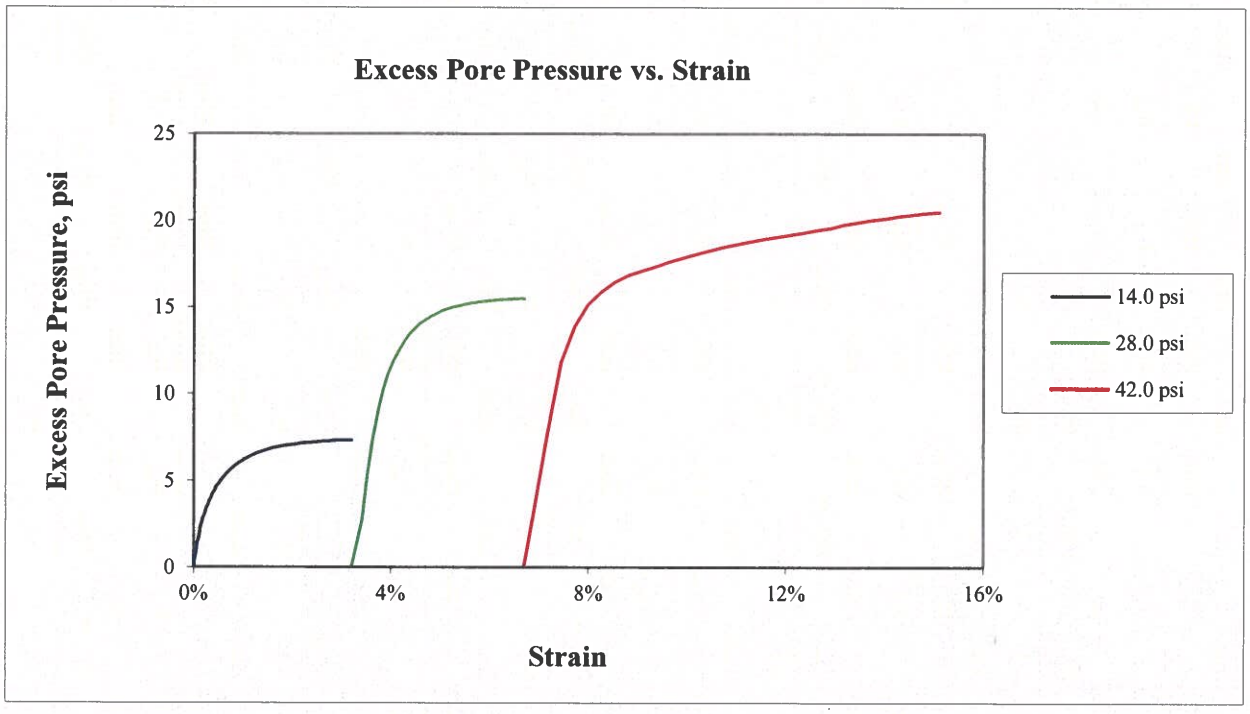
Atterberg limits: LL = NP PL = NP PI = NP (ASTM D4318)

Percent finer: 3/4 in. = 100% No. 4 = 99% No. 200 = 40% (ASTM D422, refer to separate report for gradation curve)

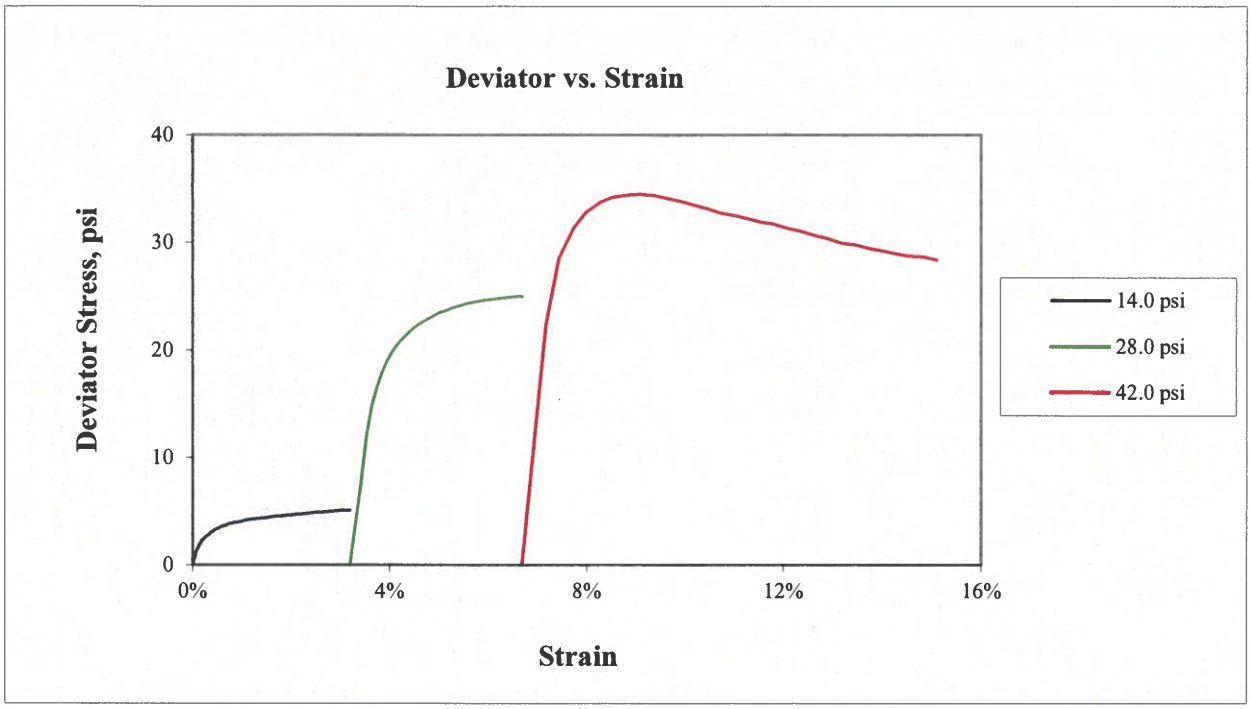
Specimen type:	X	Intact		Reconstituted
Moisture from:		Cuttings	X	Entire specimen
Saturation method:	X	Wet		Dry
Failure criterion:	X	$(\sigma'_1/\sigma'_3)_{max}$		$(\sigma'_1-\sigma'_3)_{max}$ ____ % strain
Membrane effect:	X	Corrected		Not Corrected

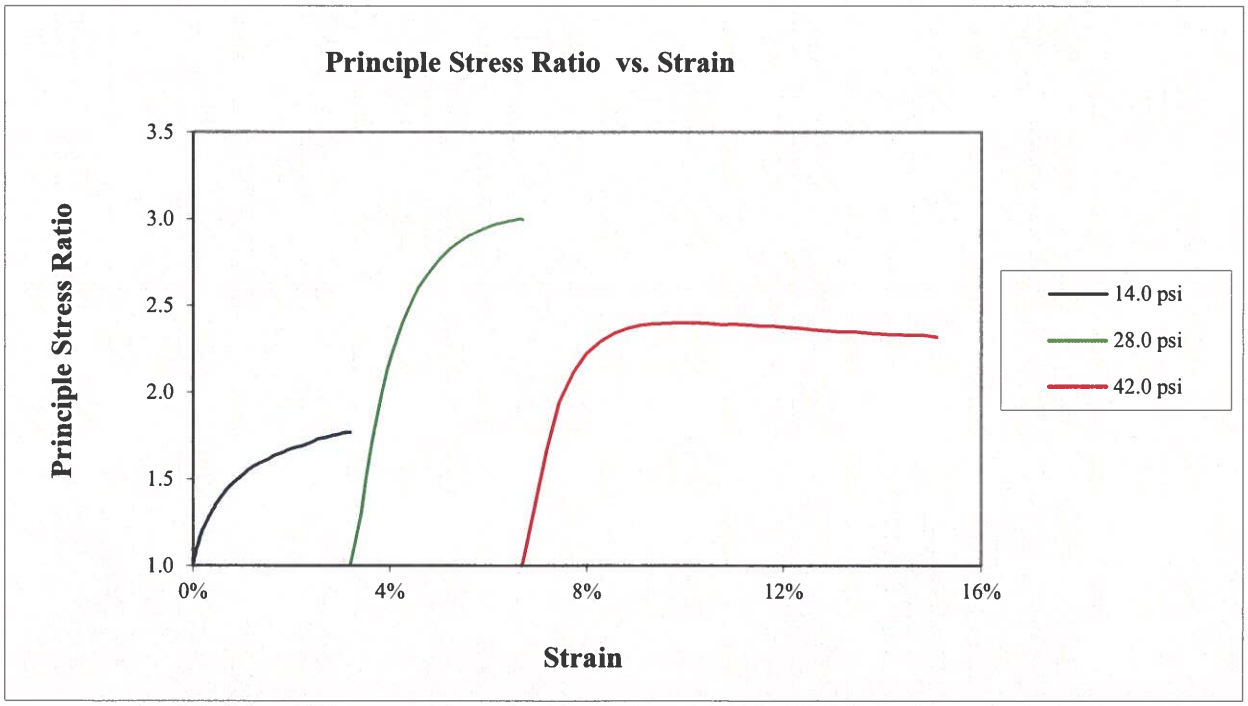
WSP USA **Norcross, Georgia**	**Title:** **MODIFIED (Multi-Stage) - ASTM D4767** **CONSOLIDATED UNDRAINED TRIAXIAL COMPRESSION TEST REPORT** **SAMPLE AND TEST DATA**				
Job Short Title: **AEP/CABIN CREEK/GA**					
Sample: **E-9, TO-1, 15.0-17.0'**	**Technician:** **CJ/FT** **Check:** DA	**Reviewed:** **Approved:**	**Start Date:** **10/22/2025**	**Job Number:** **US-0041868.3924**	**Figure:** **1**



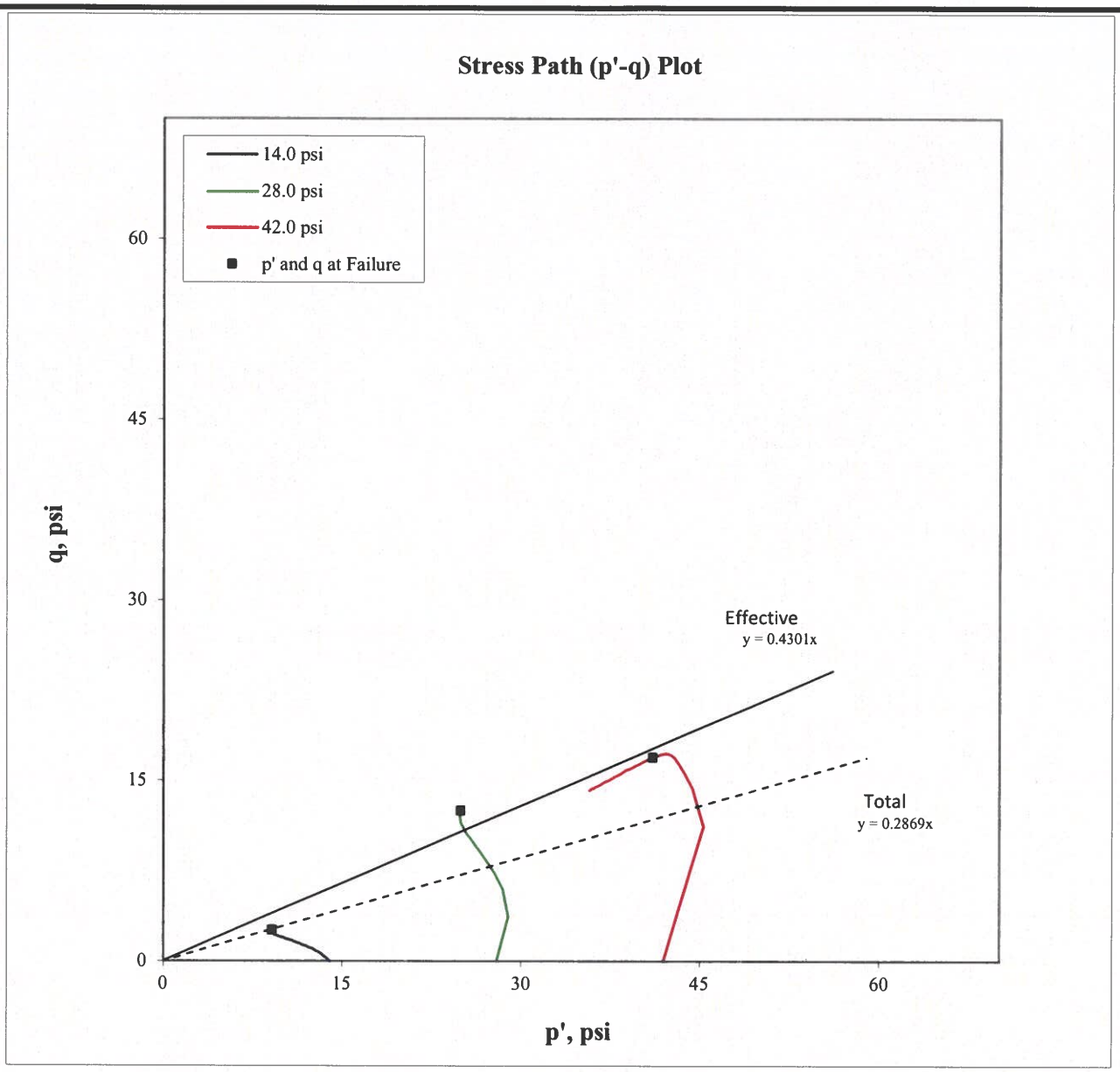


WSP USA **Norcross, Georgia**	**Title:** **MODIFIED (Multi-Stage) - ASTM D4767** **CONSOLIDATED UNDRAINED TRIAXIAL COMPRESSION TEST REPORT** **q AND EXCESS PORE PRESSURE PLOTS**				
Job Short Title: **AEP/CABIN CREEK/GA**					
Sample: **E-9, TO-1, 15.0-17.0'**	**Technician:** **CJ/FT** **Check:** DA	**Reviewed:** **Approved:**	**Start Date:** **10/22/2025**	**Job Number:** **US-0041868.3924**	**Figure:** **2**





WSP USA **Norcross, Georgia**	**Title:** **MODIFIED (Multi-Stage) - ASTM D4767** **CONSOLIDATED UNDRAINED TRIAXIAL COMPRESSION TEST REPORT** **q AND EXCESS PORE PRESSURE PLOTS**				
Job Short Title: **AEP/CABIN CREEK/GA**					
Sample: **E-9, TO-1, 15.0-17.0'**	**Technician:** **CJ/FT** **Check:** DA	**Reviewed:** **Approved:**	**Start Date:** **10/22/2025**	**Job Number:** **US-0041868.3924**	**Figure:** **3**



Confining Pressure (psi)	p at failure (psi)	p' at failure (psi)	q at failure (psi)
14.0	16.6	9.2	2.6
28.0	40.5	25.0	12.5
42.0	58.9	41.1	16.9

Effective

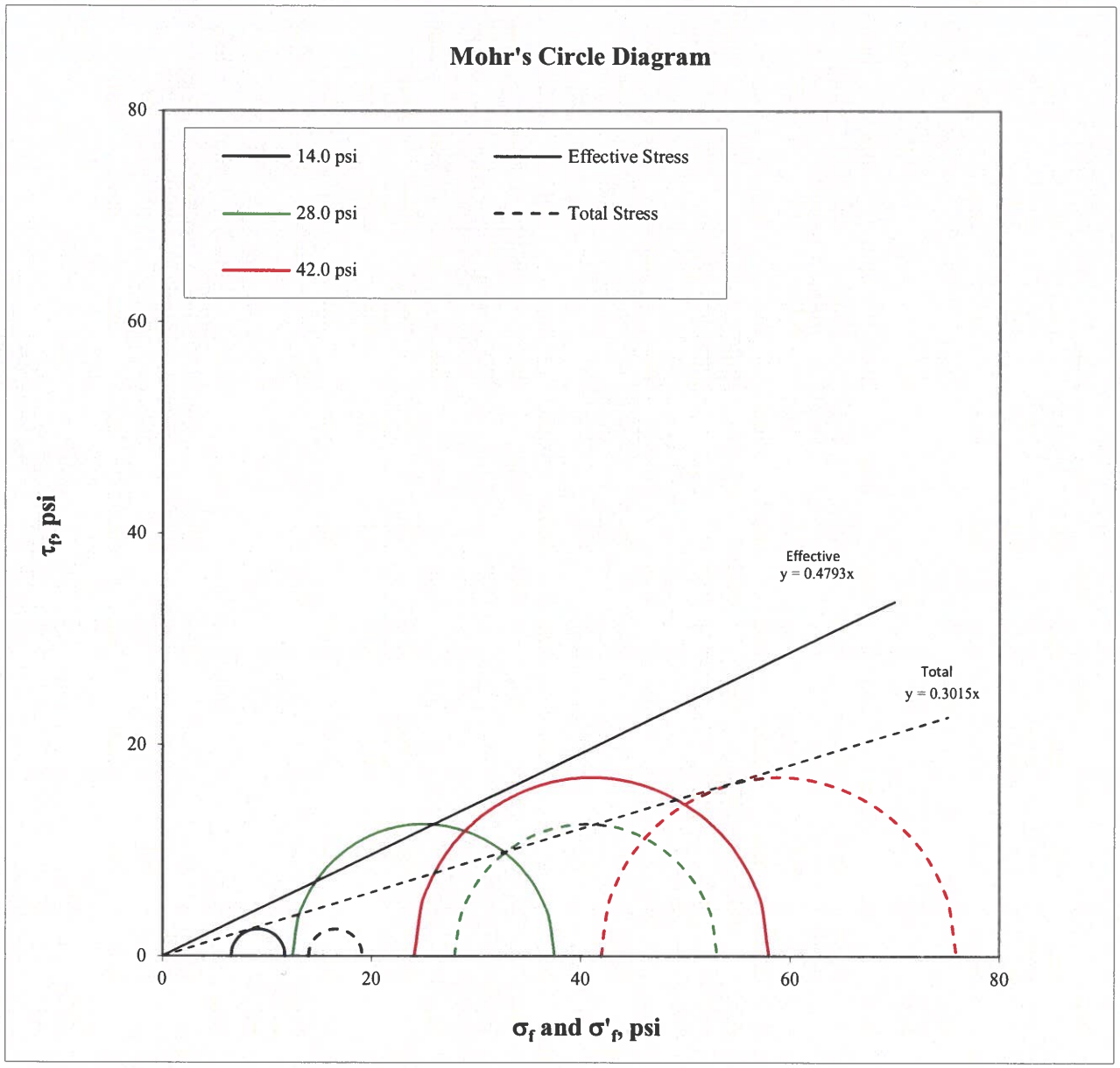
α ' =	23.4	degree
a' =	0.0	psi

Total

α =	16.1	degree
a =	0.0	psi

Note: The laboratory testing relates only to the sample tested. WSP USA neither accepts responsibility for nor makes claims to the final use and purpose of the material.

WSP USA **Norcross, Georgia**	**Title:** **MODIFIED (Multi-Stage) - ASTM D4767** **CONSOLIDATED UNDRAINED TRIAXIAL COMPRESSION TEST REPORT** **STRESS PATH PLOT**				
Job Short Title: **AEP/CABIN CREEK/GA**					
Sample: **E-9, TO-1, 15.0-17.0'**	**Technician:** **CJ/FT** **Check:** DA	**Reviewed:** **Approved:**	**Start Date:** **10/22/2025**	**Job Number:** **US-0041868.3924**	**Figure:** **4**



Confining Pressure (psi)	σ'_1 at failure (psi)	σ'_3 at failure (psi)	σ_1 at failure (psi)	σ_3 at failure (psi)
14.0	11.8	6.7	19.1	14.0
28.0	37.5	12.5	53.0	28.0
42.0	58.0	24.2	75.8	42.0

Effective

ϕ' = 25.6 degree

c' = 0.0 psi

Total

ϕ = 16.8 degree

c = 0.0 psi

Note: The laboratory testing relates only to the sample tested. WSP USA neither accepts responsibility for nor makes claims to the final use and purpose of the material.

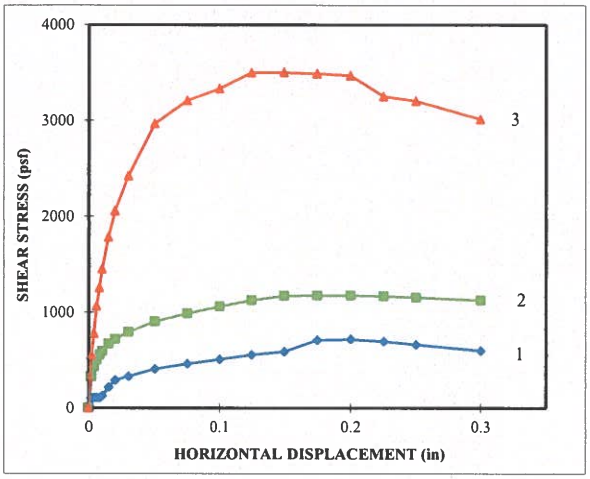
WSP USA Norcross, Georgia	Title: MODIFIED (Multi-Stage) - ASTM D4767 CONSOLIDATED UNDRAINED TRIAXIAL COMPRESSION TEST REPORT MOHR'S CIRCLE DIAGRAM				
Job Short Title: AEP/CABIN CREEK/GA					
Sample: E-9, TO-1, 15.0-17.0'	Technician: CJ/FT Check: DA	Reviewed: Approved:	Start Date: 10/22/2025	Job Number: US-0041868.3924	Figure: 5

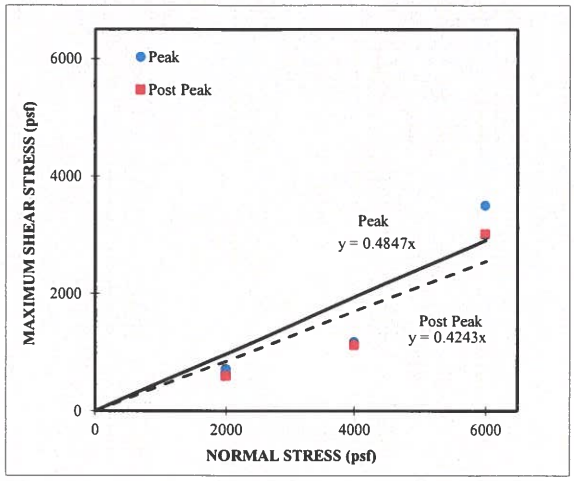
WSP USA Norcross, Georgia	Title: MODIFIED (Multi-Stage) - ASTM D4767 CONSOLIDATED UNDRAINED TRIAXIAL COMPRESSION TEST REPORT SPECIMEN PHOTOGRAPH - Single Specimen				
Job Short Title: AEP/CABIN CREEK/GA					
Sample: E-9, TO-1, 15.0-17.0'	Technician: CJ/FT Check: DA	Reviewed: Approved:	Start Date: 10/22/2025	Job Number: US-0041868.3924	Figure: 6

DIRECT SHEAR

ASTM D3080

PROJECT NAME: AEP/CABIN CREEK/GA
PROJECT NUMBER: US-0041868.3924
SAMPLE ID: E-9 TO-1 **DEPTH:** 15.0-17.0'





	Peak	
f =	25.9	0
C=	0	psf

	Post Peak	
f =	23.0	0
C=	0	psf

SPECIMEN 1	
Normal Stress (psf)	2000
t_{50} (min)	1.17
Speed (in/min)	0.003
Sample Diameter (in)	2.50
Moisture Content (%)	28.0
Wet Density (pcf)	55.6
Dry Density (pcf)	43.4
Void Ratio	2.35
Saturation (%)	27.8

Horizontal Displacement (in)	Shear Stress (psf)
0.000	0
0.002	103
0.004	106
0.006	106
0.008	106
0.010	123
0.015	214
0.020	287
0.030	329
0.050	405
0.075	461
0.100	508
0.125	554
0.150	587
0.175	707
0.200	716
0.225	695
0.250	660
0.300	596

716
Max Shear Stress

SPECIMEN 2	
Normal Stress (psf)	4000
t_{50} (min)	0.69
Speed (in/min)	0.005
Sample Diameter (in)	2.50
Moisture Content (%)	28.0
Wet Density (pcf)	49.5
Dry Density (pcf)	38.6
Void Ratio	2.76
Saturation (%)	23.6

Horizontal Displacement (in)	Shear Stress (psf)
0.000	0
0.002	326
0.004	428
0.006	499
0.008	554
0.010	590
0.015	669
0.020	719
0.030	792
0.050	901
0.075	986
0.100	1059
0.125	1124
0.150	1170
0.175	1173
0.200	1173
0.225	1165
0.250	1153
0.300	1124

1173
Max Shear Stress

SPECIMEN 3	
Normal Stress (psf)	6000
t_{50} (min)	0.62
Speed (in/min)	0.005
Sample Diameter (in)	2.50
Moisture Content (%)	28.0
Wet Density (pcf)	50.8
Dry Density (pcf)	39.7
Void Ratio	2.67
Saturation (%)	24.5

Horizontal Displacement (in)	Shear Stress (psf)
0.000	0
0.002	552
0.004	777
0.006	1062
0.008	1253
0.010	1452
0.015	1781
0.020	2056
0.030	2423
0.050	2966
0.075	3209
0.100	3333
0.125	3500
0.150	3503
0.175	3488
0.200	3470
0.225	3253
0.250	3206
0.300	3013

3503
Max Shear Stress

REMARKS

DESCRIPTION SAND and SILT, fine to coarse, trace fine gravel; yellowish brown and black.

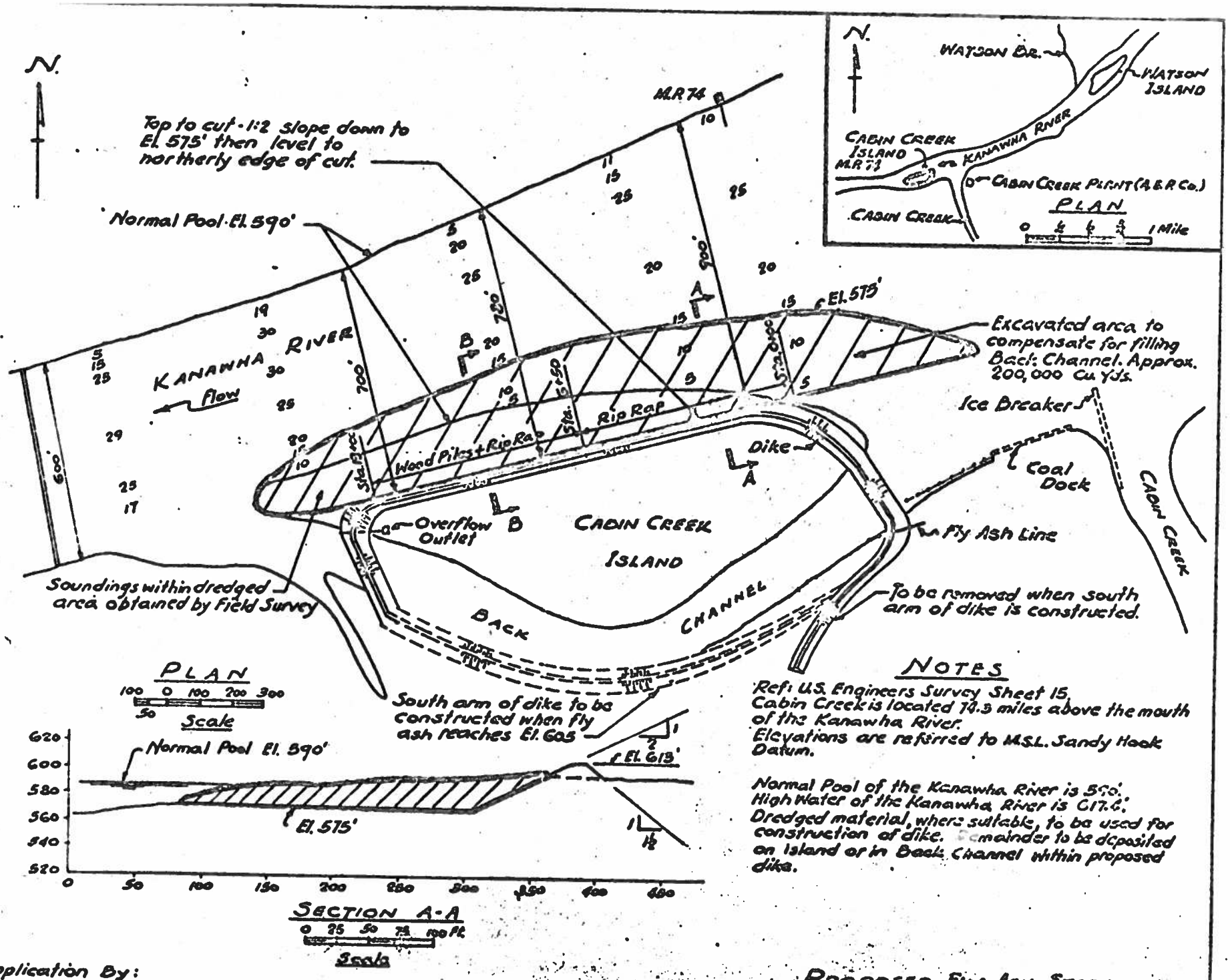
USCS SM

TECH	FT
DATE	10/30/25
CHECK	DA
REVIEW	
APROVE	

wsp.com

ATTACHMENT C

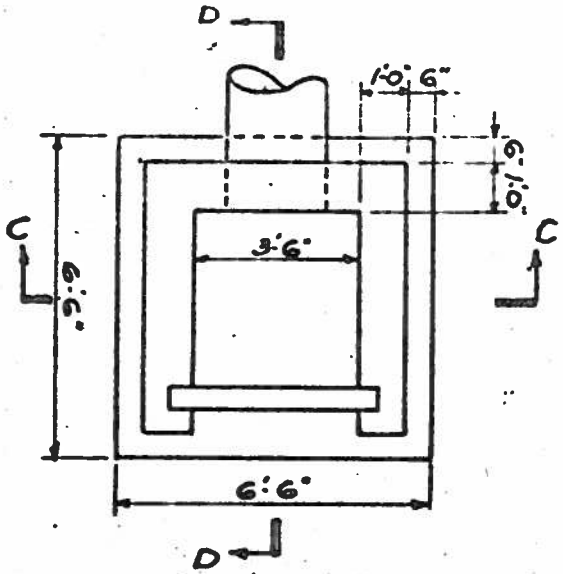
DESIGN DRAWINGS



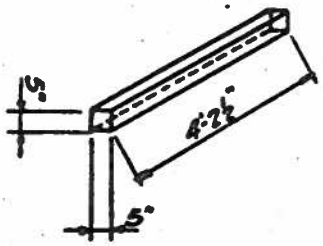
Application By:
Appalachian Electric Power Company.
Cabin Creek, West Virginia.
October 21, 1953

Revised 2-18-54

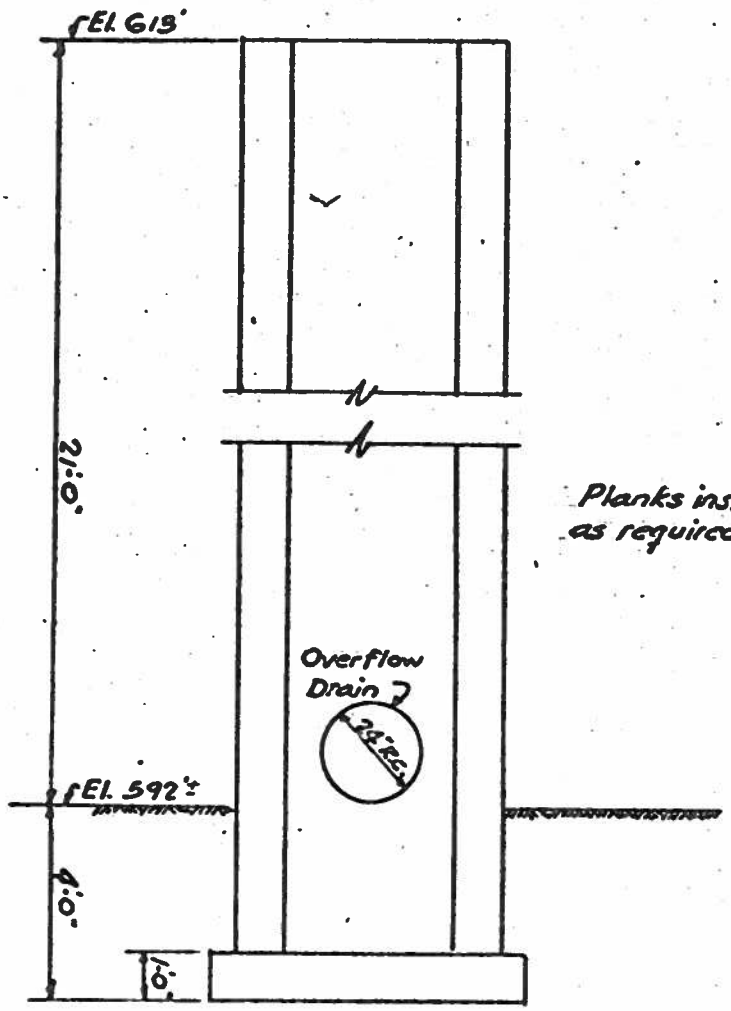
PROPOSED FLY ASH STORAGE
AT CABIN CREEK ISLAND
CABIN CREEK POWER PLANT



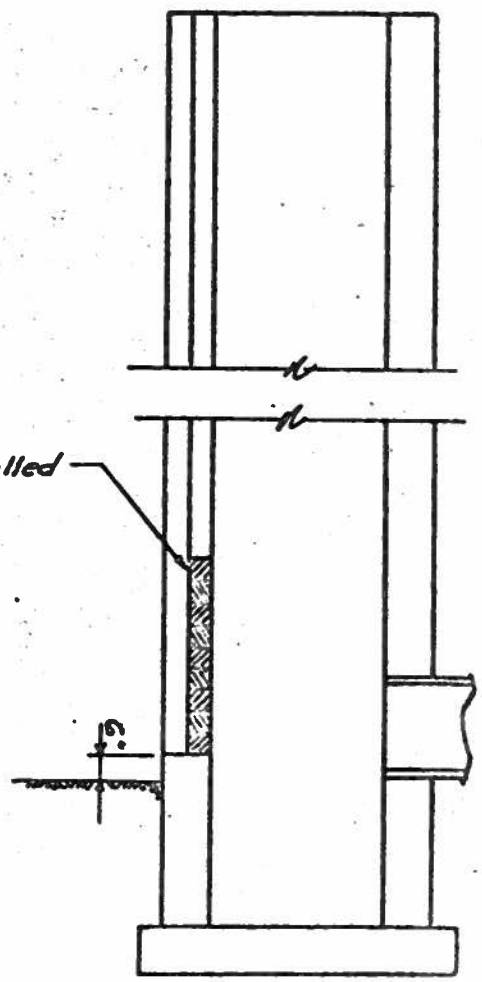
PLAN



DETAIL OF CONCRETE PLANK



SECTION C-C



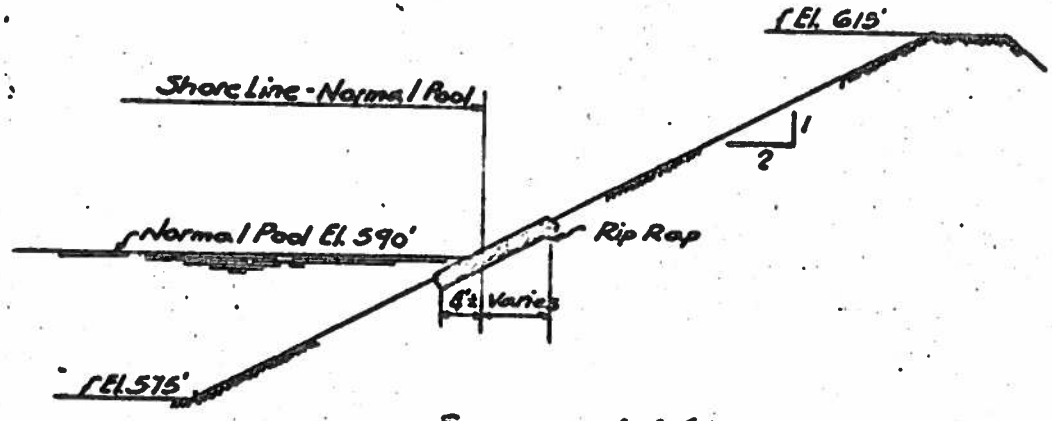
SECTION D-D

DETAIL OF OVERFLOW OUTLET
IN FLY ASH STORAGE AREA
AT CABIN CREEK ISLAND
CABIN CREEK POWER PLANT

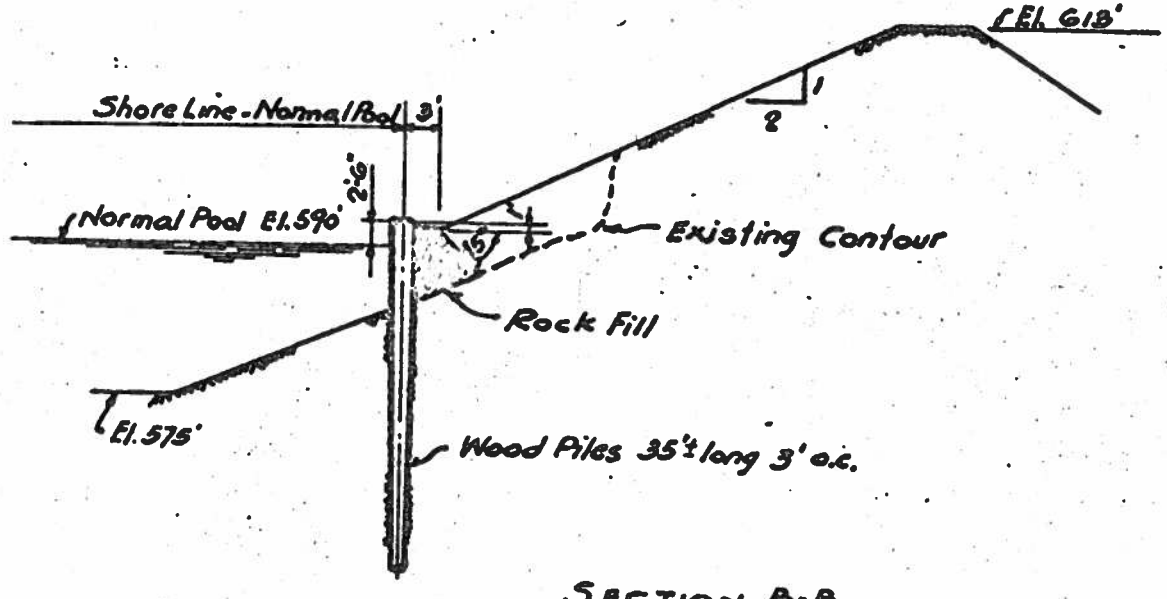
Application By:
Appalachian Electric Power Company
Cabin Creek, West Virginia
October 24, 1958

Revised 1-6-58

Dwg No 5-[illegible]-1958



SECTION A-A (ENLARGED)
Typical For Stations 0+00 - 6+50



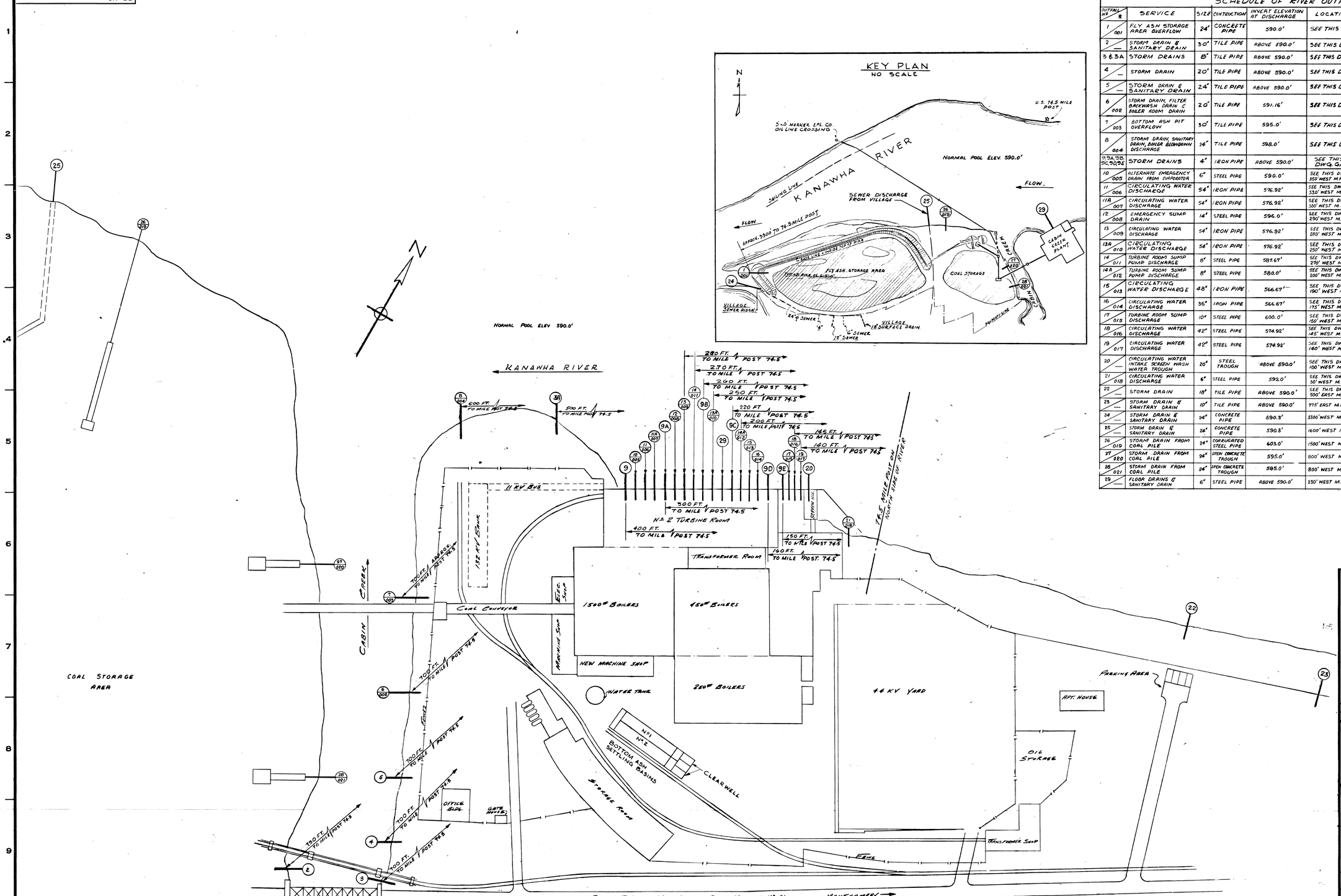
SECTION B-B
Typical For Stations 6+50 - 13+00

0 5 10 15 20
Scale

Application By:
Appalachian Electric Power Company
Cabin Creek, West Virginia
January 6, 1956

PROPOSED FLY ASH STORAGE
AT CABIN CREEK ISLAND
CABIN CREEK POWER PLANT

DR. NO. WR-60-5000



* ARMY CORPS OF ENGINEERS DISCHARGE SERIAL NUMBER

SCHEDULE OF RIVER OUTFALLS

OUTFALL NO. / *	SERVICE	SIZE	CONSTRUCTION	INVERT ELEVATION AT DISCHARGE	LOCATION	REMARKS
1 / 001	FLY ASH STORAGE AREA OVERFLOW	24"	CONCRETE PIPE	590.0'	SEE THIS DWG. H/3	INTERMITTENT FLOW — WEIR & SKIMMER FOR SOLIDS RETENTION AT OVERFLOW
2 / —	STORM DRAIN & SANITARY DRAIN	30"	TILE PIPE	ABOVE 590.0'	SEE THIS DWG. C/9	UNCONTAMINATED STORM WATER & TREATED SANITARY WASTES
3 & 3A	STORM DRAINS	8"	TILE PIPE	ABOVE 590.0'	SEE THIS DWG. D/9	UNCONTAMINATED STORM WATER (2 PIPES)
4 / —	STORM DRAIN	20"	TILE PIPE	ABOVE 590.0'	SEE THIS DWG. D/9	UNCONTAMINATED STORM WATER
5 / —	STORM DRAIN & SANITARY DRAIN	24"	TILE PIPE	ABOVE 590.0'	SEE THIS DWG. D/8	UNCONTAMINATED STORM WATER & TREATED SANITARY WASTES
6 / 002	STORM DRAIN, FILTER BACKWASH DRAIN & BOILER ROOM DRAIN	20"	TILE PIPE	591.16'	SEE THIS DWG. D/7	UNCONTAMINATED STORM WATER & INTERMITTENT DISCHARGE OF PROCESS WASTES FROM FILTERS
7 / 003	BOTTOM ASH PIT OVERFLOW	30"	TILE PIPE	595.0'	SEE THIS DWG. D/6	WEIR & SKIMMER FOR SOLIDS RETENTION AT OVERFLOW
8 / 004	STORM DRAIN, SANITARY DRAIN, BOILER BLOWDOWN DISCHARGE	24"	TILE PIPE	598.0'	SEE THIS DWG. F/5	UNCONTAMINATED STORM WATER, TREATED SANITARY WASTES, UNTREATED PROCESS WASTES
9A, 9B, 9C, 9D & 9E	STORM DRAINS	4"	IRON PIPE	ABOVE 590.0'	SEE THIS DWG. G/6, H/6	UNCONTAMINATED STORM WATER (6 PIPES)
10 / 005	ALTERNATE EMERGENCY DRAIN FROM EVAPORATOR	6"	STEEL PIPE	590.0'	SEE THIS DWG. G/5 350' WEST M.P. 74.5	EMERGENCY PROCESS DRAIN UNTREATED PROCESS WASTES
11 / 006	CIRCULATING WATER DISCHARGE	54"	IRON PIPE	576.92'	SEE THIS DWG. G/5 330' WEST M.P. 74.5	UNCONTAMINATED COOLING WATER CONDENSER #9
11A / 007	CIRCULATING WATER DISCHARGE	54"	IRON PIPE	576.92'	SEE THIS DWG. G/5 300' WEST M.P. 74.5	UNCONTAMINATED COOLING WATER, CONDENSER #9
12 / 008	EMERGENCY SUMP DRAIN	14"	STEEL PIPE	596.0'	SEE THIS DWG. G/5 290' WEST M.P. 74.5	UNCONTAMINATED TURBINE ROOM FLOOR DRAINS
13 / 009	CIRCULATING WATER DISCHARGE	54"	IRON PIPE	576.92'	SEE THIS DWG. G/5 280' WEST M.P. 74.5	UNCONTAMINATED COOLING WATER CONDENSER #8
13A / 010	CIRCULATING WATER DISCHARGE	54"	IRON PIPE	576.92'	SEE THIS DWG. G/5 250' WEST M.P. 74.5	UNCONTAMINATED COOLING WATER CONDENSER #8
14 / 011	TURBINE ROOM SUMP PUMP DISCHARGE	8"	STEEL PIPE	587.67'	SEE THIS DWG. G/5 270' WEST M.P. 74.5	INTERMITTENT DISCHARGE UNTREATED PROCESS WASTES
14A / 012	TURBINE ROOM SUMP PUMP DISCHARGE	8"	STEEL PIPE	580.0'	SEE THIS DWG. H/5 200' WEST M.P. 74.5	INTERMITTENT DISCHARGE UNTREATED PROCESS WASTES
15 / 013	CIRCULATING WATER DISCHARGE	48"	IRON PIPE	566.67'	SEE THIS DWG. H/5 190' WEST M.P. 74.5	UNCONTAMINATED COOLING WATER, CONDENSER #6 INACTIVE — COLD RESERVE
16 / 014	CIRCULATING WATER DISCHARGE	36"	IRON PIPE	566.67'	SEE THIS DWG. H/5 175' WEST M.P. 74.5	UNCONTAMINATED COOLING WATER CONDENSER #5, INACTIVE — COLD RESERVE
17 / 015	TURBINE ROOM SUMP DISCHARGE	10"	STEEL PIPE	600.0'	SEE THIS DWG. H/5 150' WEST M.P. 74.5	INACTIVE — NO FLOW #3 & 4 TURBINE DEACTIVATED
18 / 016	CIRCULATING WATER DISCHARGE	42"	STEEL PIPE	574.92'	SEE THIS DWG. H/5 145' WEST M.P. 74.5	UNCONTAMINATED COOLING WATER CONDENSER #3 & 4 INACTIVE COLD RESERVE
19 / 017	CIRCULATING WATER DISCHARGE	42"	STEEL PIPE	574.92'	SEE THIS DWG. H/5 140' WEST M.P. 74.5	UNCONTAMINATED COOLING WATER — CONDENSER #3 INACTIVE COLD RESERVE
20 / —	CIRCULATING WATER INTAKE SCREEN WASH WATER TROUGH	20"	STEEL TROUGH	ABOVE 590.0'	SEE THIS DWG. H/5 100' WEST M.P. 74.5	THE RETURN TO THE RIVER OF RIVER TRASH WASHED OFF THE INTAKE SCREENS
21 / 018	CIRCULATING WATER DISCHARGE	6"	STEEL PIPE	592.0'	SEE THIS DWG. J/6 30' WEST M.P. 74.5	UNCONTAMINATED COOLING WATER FROM TRANSFORMERS
22 / —	STORM DRAIN	18"	TILE PIPE	ABOVE 590.0'	SEE THIS DWG. M/7 500' EAST M.P. 74.5	UNCONTAMINATED STORM WATER
23 / —	STORM DRAIN & SANITARY DRAIN	10"	TILE PIPE	ABOVE 590.0'	775' EAST M.P. 74.5	UNCONTAMINATED STORM WATER & TREATED SANITARY WASTES
24 / —	STORM DRAIN & SANITARY DRAIN	24"	CONCRETE PIPE	590.3'	3300' WEST M.P. 74.5	UNCONTAMINATED STORM WATER & SANITARY WASTES FROM VILLAGE OF CABIN CREEK
25 / —	STORM DRAIN & SANITARY DRAIN	24"	CONCRETE PIPE	590.3'	1600' WEST M.P. 74.5	UNCONTAMINATED STORM WATER & SANITARY WASTES FROM VILLAGE OF CABIN CREEK
26 / 019	STORM DRAIN FROM COAL PILE	24"	CORRUGATED STEEL PIPE	603.0'	1500' WEST M.P. 74.5	STORM WATER RUNOFF FROM COAL STORAGE AREA
27 / 020	STORM DRAIN FROM COAL PILE	24"	OPEN CONCRETE TROUGH	595.0'	800' WEST M.P. 74.5	STORM WATER RUNOFF FROM COAL STORAGE AREA
28 / 021	STORM DRAIN FROM COAL PILE	24"	OPEN CONCRETE TROUGH	595.0'	800' WEST M.P. 74.5	STORM WATER RUNOFF FROM COAL STORAGE AREA
29 / —	FLOOR DRAINS & SANITARY DRAIN	6"	STEEL PIPE	ABOVE 590.0'	230' WEST M.P. 74.5	UNCONTAMINATED FLOOR DRAINS & SANITARY WASTES FROM VILLAGE OF CABIN CREEK

DATE	NO.	DESCRIPTION	APPD.
3/28/72	3	ADDED: ARMY CORPS OF ENGINEERS DISCH. SERIAL NO'S FOR OUTFALLS NO'S 6, 7, 10, 11, 11A, 12, 13, 13A, 14, 14A, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29; OUTFALLS NO'S 2, 3, 3A, 4, 5, 8, 9A, 9B, 9C, 9D, 9E, 11, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29; OUTFALLS NO'S 1, 2, 3, 3A, 4, 5, 6, 7, 8, 9A, 9B, 9C, 9D, 9E, 10, 11, 11A, 12, 13, 13A, 14, 14A, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29 TO VILLAGE SEWER DISCHARGES; NO. 29 N/A. REVISED: SCHEDULE OF RIVER OUTFALLS TABLE, N/12.	LWB
2/19/70	2	ADDED: SEWER DISCH. FROM VILLAGE, L/13. REVISED: SCHEDULE OF RIVER OUTFALLS TABLE, N/12. WR-5081/70	LWB
12/20/69	1	ADDED KEY PLAN & NOTE. WR-5041/69	LWB

REVISIONS

APPALACHIAN POWER CO.
CABIN CREEK PLANT
KANAWHA COUNTY
WEST VIRGINIA

PLANT LAYOUT OUTFALLS TO RIVER

DR. NO. WR-60-5000-3

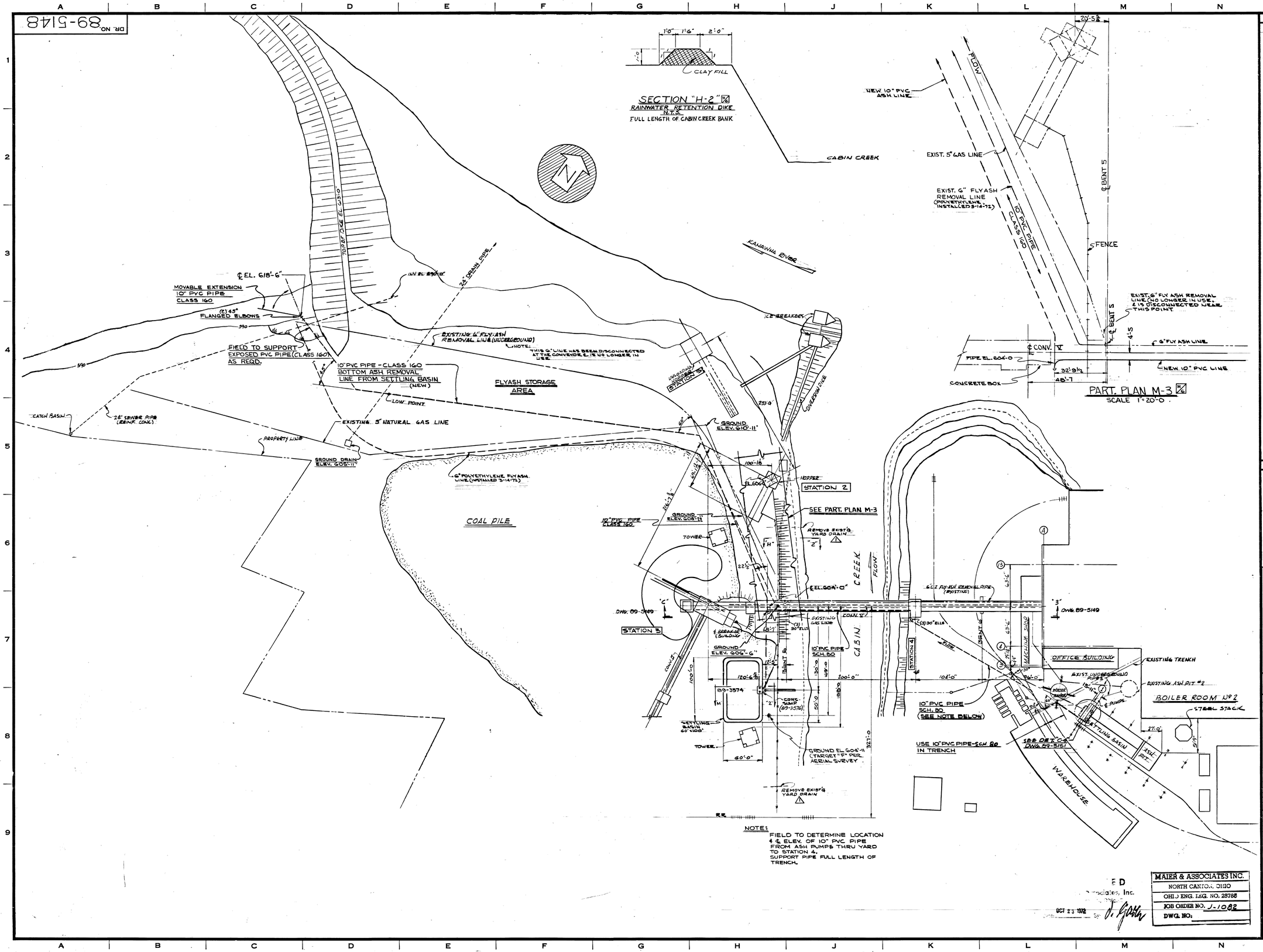
ARCH.	ELEC.	MECH.	STR.

SCALE 1"=50'
DR. R.S. Hall
CH. N.S.
SQ. LDR. R.S.
DATE 4-1-69
APPROVED BY — ENGINEERING DIV. H.H. Williams — TAM
DESIGN DIV. — LWB

AMERICAN ELECTRIC POWER SERVICE CORP.
2 BROADWAY NEW YORK

14-1-C

DR. NO. 89-5148



GENERAL NOTES

SEE DWG. Nº 89-5151

REFERENCE DWGS

SECTIONS & DETAILS	89-5149
SECTIONS & DETAILS	89-5150
SECTIONS & DETAILS	89-5151

DATE	NO.	DESCRIPTION	APPD.
1/20/72	1	REMOVED EXIST. DRAIN FROM COAL PILE TO CREEK ADDED SUMP SECT. "H-2"; REV. 10" BOTTOM ASH LINE / SETTLING BASIN.	

REVISIONS

APPALACHIAN ELECTRIC POWER CO.
CABIN CREEK PLANT
CABIN CREEK, W. VA.

BOILER Nºs 81, 82, 91, & 92
ASH SETTLING BASIN
BOTTOM ASH REMOVAL PIPE

DR. NO. 89-5148-1

ARCH. | ELEC | MECH. | STR.

SCALE: 1"=50'-0"
DR. JGC & FA
CH
SQ. LDR
DATE 8-18-71

APPROVED BY: ENGINEERING DIV. CP Lugmm 1/20/72; DESIGN DIV.

AMERICAN ELECTRIC POWER SERVICE CORP.
P. O. BOX 487 CANTON, OHIO, 44701

MAIER & ASSOCIATES INC.
NORTH CANTON, OHIO
OHIO ENG. REG. NO. 23788
JOB ORDER NO. J-1082
DWG. NO.

ED
Associates, Inc.
OCT 23 1972