Limited Site Investigation

BLYTHEWOOD INDUSTRIAL COMMUNITY ROAD BLYTHEWOOD, RICHLAND COUNTY, SOUTH CAROLINA

February 25, 2022 Terracon Project No. 73227051



Prepared for:

Thomas & Hutton Columbia, South Carolina

Prepared by:

Terracon Consultants, Inc. Columbia, South Carolina

terracon.com



Environmental Facilities Geotechnical Materials

February 25, 2022

lerracon

Thomas & Hutton 1501 Main Street, Suite 760 Columbia, South Carolina 29201

Attn: Mr. Ross Oakley

P: (803) 422-6030 E: oakley.r@tandh.com

Re: Limited Site Investigation

Blythewood Industrial

Blythewood, South Carolina Terracon Project No. 73227051

Dear Mr. Oakley:

Terracon Consultants, Inc. (Terracon) is pleased to submit our report of Limited Site Investigation (LSI) activities completed at the Blythewood Industrial site. The report presents data from field activities that included the collection of soil, groundwater and surface water samples for chemical analysis. This Assessment was performed in accordance with Terracon Proposal No. P73227051 dated February 7, 2022.

Terracon appreciates the opportunity to provide professional environmental services for Thomas & Hutton. Should you have any questions or require additional information, please do not hesitate to contact our office.

Sincerely,

Terracon Consultants, Inc.

Kennedy Krieg Field Engineer Christopher Bartley Senior Scientist



Terracon Consultants Inc. 521 Clemson Road Columbia, SC 29229

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LSI Assessment Report Blythewood Industrial Blythewood, Blythewood County, South Carolina Terracon Project No. 73227051

1.0 INTRODUCTION

The Blythewood Industrial site is located along Community Road in Blythewood, Richland County, South Carolina. The site is an approximately 250-acre tract of land comprised of several Richland County Parcels. The site is largely undeveloped wooded land with cleared areas and surface water streams throughout.

This Limited Site Investigation (LSI) was initiated to establish baseline conditions prior to development as an industrial complex. This initial assessment was performed based on a client-regulated analytical suite at locations requested by the client.

1.1 Standard of Care

Terracon's services were performed in a manner consistent with generally accepted practices of the profession undertaken in similar studies in the same geographical area during the same time. Terracon makes no warranties, either express or implied, regarding the findings, conclusions, or recommendations. Please note that Terracon does not warrant the work of laboratories, regulatory agencies, or other third parties supplying information used in the preparation of the report. These assessment services were performed in accordance with the scope of work agreed with you, our client, as reflected in our proposal and were not restricted by ASTM E1903-11.

1.2 Additional Scope Limitations

Findings, conclusions, and recommendations resulting from these services are based upon information derived from the on-site activities and other services performed under this scope of work; such information is subject to change over time. Certain indicators of the presence of hazardous substances, petroleum products, or other constituents may have been latent, inaccessible, unobservable, nondetectable, or not present during these services. We cannot represent that the site contains no hazardous substances, toxic materials, petroleum products, or other latent conditions beyond those identified during this assessment. Subsurface conditions may vary from those encountered at specific borings or wells or during other surveys, tests, assessments, investigations, or exploratory services. The data, interpretations, findings, and our recommendations are based solely upon data obtained at the time and within the scope of these services.

Blythewood Industrial Blythewood, SC February 25, 2022 Terracon Project No. 73227051



1.3 Reliance

This report has been prepared for the exclusive use of Thomas & Hutton and their subsidiaries, affiliates, successors and assigns and, any authorization for use or reliance by any other party (except a governmental entity having jurisdiction over the site) is prohibited without the express written authorization of Thomas & Hutton and Terracon. Any unauthorized distribution or reuse is at Thomas & Hutton's sole risk. Notwithstanding the foregoing, reliance by authorized parties will be subject to the terms, conditions, and limitations stated in the proposal, this report, and Terracon's Agreement for Services. The limitation of liability defined in the terms and conditions is the aggregate limit of Terracon's liability to Thomas & Hutton and all relying parties unless otherwise agreed in writing.

2.0 CONCEPTUAL SITE MODEL

A Conceptual Site Model (CSM) is a description of the site and site features pertinent to identifying possible site contaminants, determining how those contaminants may behave relative to site conditions, and understanding potential receptor pathways. The findings of this assessment may alter the CSM; any updates to the CSM are described in Section 4.5.

2.1 Site Physical Description

The site is currently undeveloped mostly forested land. The site currently has no on-site operations. Site location maps are included as Exhibits 1 and 2, in Appendix A.

Table 1: Physical Setting

Ph	ysical Setting Information	Source		
Topography	(Refer to Appendix A for an excerpt of the Topograph	ic Map)		
Site Elevation	Approximately 450 – 520 feet above sea level	Richland County		
Surface Runoff/	Sloping generally towards the south-southeast			
Topographic Gradient		GIS		
Closest Surface Water	On-site meandering streams			
	Soil Characteristics			
	Blanton Sand			
Soil Type	Troup Sand	Richland County SC		
	Herndon Silt	USDA-NRCS Web		
	The Blanton series consists of very deep,	Soil Survey		
Description	somewhat excessively drained to moderately well	accessed February		
Description	drained, moderately to slowly permeable soils on	23, 2022		
	uplands and stream terraces in the Coastal Plain.			

Blythewood Industrial Blythewood, SC





Ph	ysical Setting Information	Source	
	They formed in sandy and loamy marine or eolian deposits. The Troup series consists of very deep, somewhat excessively drained soils that formed in unconsolidated sandy and loamy marine sediments. Troup soils are on ridges and hillslopes. The Herndon series consists of very deep, well drained, moderately permeable soils that formed in material mostly weathered from fine-grained metavolcanic rock of the Carolina Slate Belt.		
	Geology/Hydrogeology		
Formation	Recent to Cretaceous-age sediments	Geology of the	
Description	Coastal Plain physiographic province - a seaward thickening wedge of unconsolidated sands, silts, and clays deposited over a rock basement.	Carolinas, Carolina Geological Society,1991	
Estimated Depth to First Occurrence of Groundwater	Approximately 15-20 feet bgs	Terracon's Investigation	
Hydrogeologic Gradient	Not known - may be inferred to be parallel to (primarily to the south-southeast).	topographic gradient	

2.2 Surrounding Properties Development

The site is bound to the north by Blythewood Road, Sandy Level Baptist Church, and Palmetto Citizens Federal Credit Union; to the east by the Blythewood Doko Rodeo, Public Storage, and Interstate I-77; to the south by undeveloped forested land; and to the west by mostly undeveloped forested land and Fairfield Electric Cooperative Inc.

2.3 Areas of Concern / Potential Sources

No current or former areas of concern / potential sources have been identified for the site.

2.4 Potential Pathways Evaluation

Potential Pathways for Contaminant Transport

Contaminant transport is likely limited to transport vertically through on-site soils and horizontally through surface water flow.

Potential Exposure Pathways

Blythewood Industrial Blythewood, SC

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Surface Soils – Currently, the site is not used for any known purpose that would create a soil exposure scenario; however, soil exposure potential may be increased by significant site development activities. The soil pathway evaluation is presented in Sections 4.2 with respect to the proposed site use.

Ground Water – The ground water quality was as discussed in Section 4.3.

Surface Water – The surface water pathway was evaluated as discussed in Sections 4.4 and 4.6.

3.0 SAMPLE COLLECTION

The sample collection approach outlined below was described in the Proposal for Limited Site Investigation dated February 7, 2022. The assessment activities described herein were conducted in general accordance with Terracon Standard Operating Procedures (TSOP) and US EPA Region IV Field Branches Quality System and Technical Procedures. Samples were collected on February 11-12, 2022.

3.1 Soil

Shallow soil borings were located across the site as shown on the attached Figure 2. The soil borings were advanced utilizing direct-push sampling technology (Geoprobe ®) to a depth of 2 feet below ground surface (bgs). The borings were characterized for lithologic description and were reserved for laboratory analysis. Soil samples were submitted for laboratory analyses as specified in Section 2.2.4 of the Proposal dated February 7, 2022.

Sample containers were supplied by the contract analytical laboratory, Access Analytical, Inc. The samples were pre-preserved by the laboratory in accordance with the analytical method to be performed. Samples were placed in a cooler, on ice, and delivered to the laboratory along with chain-of-custody documentation.

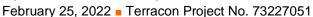
Non-disposable equipment used repeatedly between samples (i.e. stainless-steel spoons, spatulas, etc.) was field decontaminated before mobilization to the site, and subsequent to each use. Field decontamination was accomplished using an Alconox®/tap water solution, followed by a distilled, deionized water rinse, and finally a 70% isopropyl alcohol rinse. Sampling equipment was wrapped in plastic or aluminum foil during transport to prevent contamination.

3.2 Ground Water

Terracon assessed ground water quality at the site through the installation and sampling of three temporary monitoring wells. Terracon encountered tooling refusal without encountering ground

Blythewood Industrial

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water at an additional nine of the proposed temporary groundwater locations. The temporary monitoring wells were installed by a SC-certified well driller in accordance with SCDHEC *R.61-71 South Carolina Well Standards* (April 26, 2002, revised May 2016). Please refer to Figure 2 in Appendix A for a depiction of the monitoring well locations. The soil borings were converted into the temporary monitoring wells. The wells were constructed using one-inch diameter, 0.010-inch machine slotted PVC well screen with a threaded bottom cap, and one-inch diameter, threaded, flush-joint PVC riser pipe to the ground surface. Addition of pre-sieved 20/40 grade silica sand for annular sand pack was installed around the well screen from the bottom of the boring to approximately two feet above the top of the well screen, followed by two feet of hydrated bentonite pellets above the sand pack. The temporary monitoring wells were developed by surging and removing ground water until fluids appeared relatively free of sediments. SCDHEC 1903 forms are included in Appendix C. All IDW was containerized and subsequently discharged to the land surface once data were received indicating no impact.

Ground water levels were gauged at each well with an electric water level meter capable of measuring the depth to the air/liquid interface to within +/- 0.01 foot. The water level indicator was decontaminated before and after use at each well. All ground water level and total depth measurements were made in reference to the established reference point which is the top of the well casing.

Upon completion of the purging activities, ground water samples were collected using a peristaltic pump and new dedicated tubing. Sample containers were supplied by the contract analytical laboratory, Access Analytical, Inc. The samples containers were pre-preserved by the laboratory in accordance with the analytical method to be performed. Ground water samples were submitted for analyses of pH, Fluoride, Metals, and Ammonia.

3.3 Surface Water

12 surface water samples (SW-1 through SW-12) were collected from the on-site streams and ponds as shown on Figure 3. Each surface water sample was collected with minimal sediment disturbance in order to mimic site conditions and not artificially increase turbidity. Surface water samples were collected directly into the laboratory-provided sample containers.

The surface water samples were submitted for analyses as described in Section 2.2.3 and 2.2.4 of the Proposal for Limited Site Investigation dated February 7, 2022.

3.4 Significant Deviations

As noted above, ground water could not be obtained at multiple location due to tooling refusal.

Blythewood Industrial Blythewood, SC February 25, 2022 Terracon Project No. 73227051



4.0 PROJECT DATA

4.1 Geology/Hydrogeology

The site is situated within the Coastal Plain physiographic province. The Coastal Plain sediments, which were deposited over a rock basement, consist of unconsolidated quartz sands, silts and clays.

On-site shallow soil lithology at the southwestern (higher elevation) portion of the site was observed as coarse-grained sands and sandy clays to approximately 5 feet bgs. Refusal was encountered at nine out of the twelve proposed boring locations. Ground water was encountered in three of the borings ranging from a depth of 16 to 18.5 feet.

4.2 Soil Data

Soil data did not indicate significant impacts (Table 2). Laboratory analytical reports are included in Appendix C. Detections were compared to USEPA Regional Screening Levels (RSLs), November 2021, for Residential Soils (i.e. unrestricted use) and Industrial Soils (restricted to commercial use).

Soil laboratory testing indicated chromium, cobalt, lead, and nickel above the method detection limits, but below both the residential and industrial RSLs in all samples. Arsenic was detected above the residential RSL but below the commercial RSL at SB-12. Other detections were not reported.

Soil laboratory testing indicated arsenic above the residential RSL of 0.68 mg/kg, but below the industrial RSL of 3.0 mg/kg in soil sample SB-12. Many elements, including arsenic, may occur naturally in South Carolina soils at concentrations in excess of the RSL. It is often necessary to compare metals data to background values. According to *Conova, J. (1999) Trace Elements in South Carolina Background Soils, South Carolina Geology, v. 41, pp. 11-45*, the background range for arsenic in state-wide soil can range from below detection limits to 45 mg/kg. When compared to these published values, the detected concentrations of arsenic can be attributed to naturally-occurring concentrations in site soils and are not likely indicative of impact.

Given the proposed use, and the spatial positioning of sample locations across the site, indications of a "hot spot" are not apparent. Since the proposed use is as an industrial facility, in Terracon's opinion, further soil study is not warranted.

4.3 Ground Water Data

Ground water laboratory analytical reports are included in Appendix C. Ground water detections are presented in Table 1 in Appendix B. Detections were compared to the South Carolina

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Maximum Contaminant Levels (MCLs) or SCDHEC UST Program Risk-Based Screening Levels (RBSLs).

Sample FSP-3 had a detection of cobalt which exceeded tap water limit ($6\mu g/L$), an MCL has not been established for cobalt. The detection of cobalt is likely a laboratory artifact, in Terracon's opinion, the detected concentrations of cobalt are not likely indicative of impact. Other analytes were not observed above applicable action levels.

In Terracon's opinion, further ground water investigation is not warranted.

4.4 Surface Water Data

Surface water laboratory analytical reports are included in Appendix D. A summary of detections is presented in Table 3 in Appendix B. Surface water detections were compared to the Water & Organism values in Water Classifications and Standards, 6 S.C. Code Ann. Regs. 61-68 (2012, as amended).

Samples SW-1 through SW-12 did not have detections of ammonia above the CMC or CCC. COD-I and pH do not have regulatory values for comparison.

In Terracon's opinion, further surface water investigation is not warranted.

4.5 Updates to the CSM

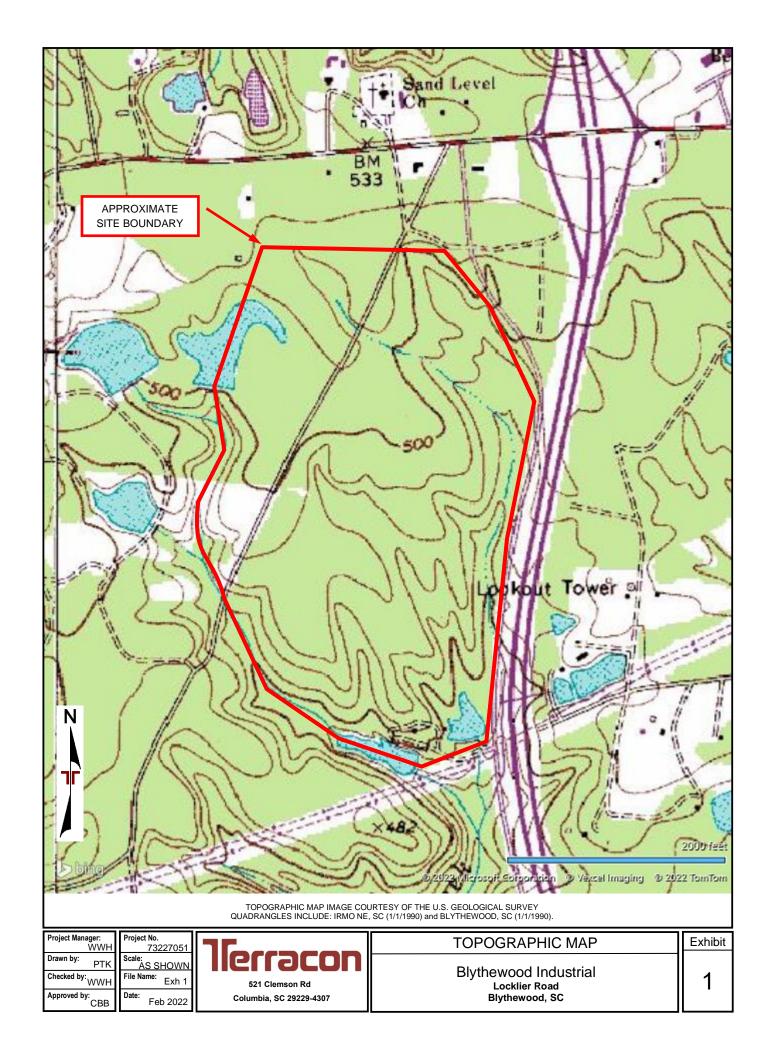
Additional CSM updates were not identified.

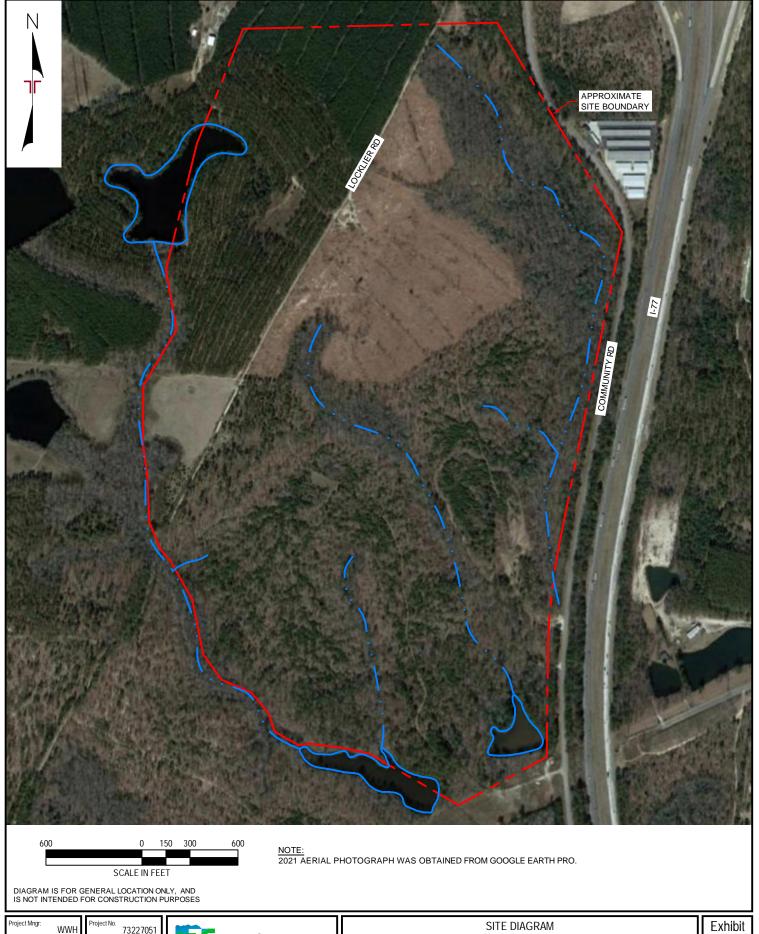
5.0 CONCLUSIONS

Based on the scope of services described in this report and subject to the limitations described herein, Terracon concludes the following:

- On-site surface water did not exhibit analyte detections above their respective regulatory values.
- Ground water sample FSP-3 had a cobalt detection of 12.9 μg/L which exceeds the tap water regulatory value of 6 μg/L. This detection is likely a sampling /laboratory artifact and is not likely indicative of potential impacts.
- Arsenic was detected above the residential RSL of 0.68 mg/kg, but below the industrial RSL of 3.0 mg/kg in soil sample SB-12. The detected concentrations of arsenic can be attributed to naturally-occurring concentrations in site soils and are not likely indicative of impact. No other analytes were observed above applicable action levels in any of the other soils.

APPENDIX A - FIGURES





Project Mngr: WWH
Drawn By: PTK
Checked By: WWH
Approved By: CBB

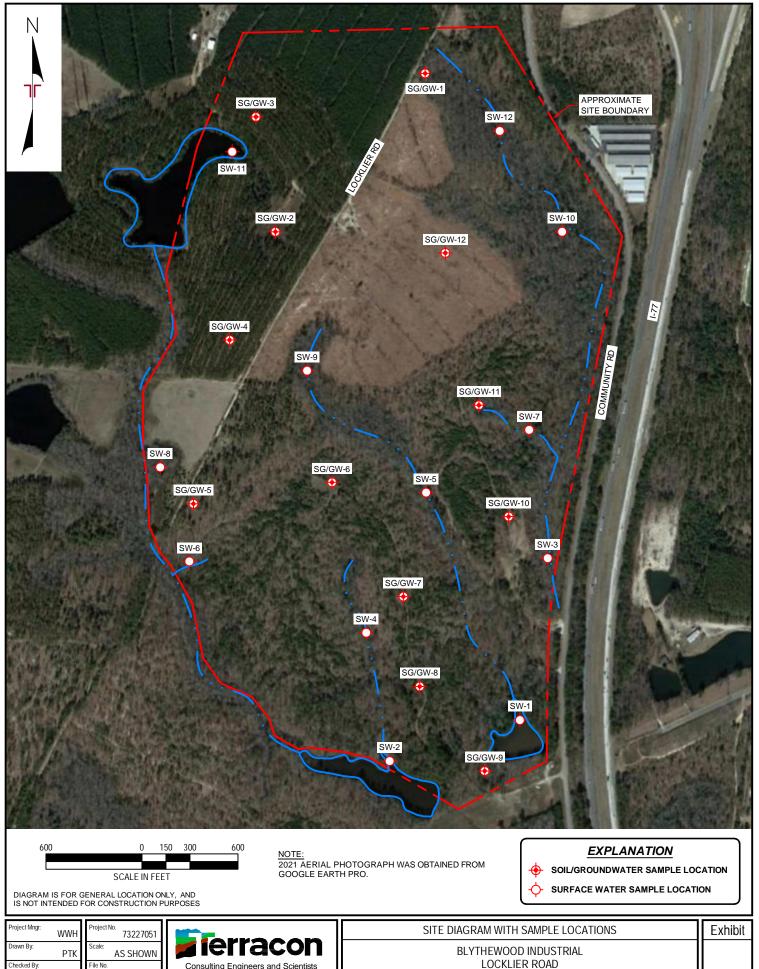
Project No. 73227051
Scale: AS SHOWN
File No. 73227051
Date: FEBRUARY 2022

Consulting Engineers and Scientists

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BLYTHEWOOD INDUSTRIAL LOCKLIER ROAD BLYTHEWOOD, SOUTH CAROLINA

2



Project Mngr:	WWH
Drawn By:	PTK
Checked By:	WWH
Approved By:	CBB

73227051 FEBRUARY 2022



FAX. (803) 741-9900

PH. (803) 741-9000

BLYTHEWOOD, SOUTH CAROLINA

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APPENDIX B - TABLES

Table 1
Ground Water Quality Data (Onsite)
Blythewood Industrial LSI - Blythewood,SC
Terracon Project No. 73227051

			Sample						
Analyte	Tap Water	MCL	FSP-1	FSP-2	FSP-3				
Metals 6010		micrograms per liter (µg/L)							
Cobalt	6	ne	1.2 U	1.5 J	12.9 J				
Fluoride	800	4000	200 U	200 U	250				
Manganese	ne	ne	5.4 J	187	811				
Nickel	390	ne	5.1 U	8.5 J	171				
Nitrogen, Ammonia (As N)	ne	ne	22	578	204				
рН	pH Units								
Method 9045	ne	ne	4.80	6.26	6.39				

- 1) Tap Water USEPA Regional Screening Level (RSL) for Residential Tap Water Values
- 2) MCL Maximum Contaminant Level
- 3) ne an MCL/Tap Water value has not been established for this analyte
- 4) Detections shown in bold exceed the Tap Water value, Detections underlined exceed both the MCI/Tap Water value
- 5) U indicates an analyte was not detected above the Method Detection Limit (MDL)
- 6) J indicates an analyte was detected above the MDL but below the Practical Quantitation Limit
- 7) Data were collected on February 11, 2022

Table 2
Soil Quality Data - Discrete Samples
Blythewood Industrial LSI - Blythewood,SC
Terracon Project No. 73227051

Analyte	Res RSL	Ind RSL		Sample												
Allalyte	NES NOL	IIIU KSL	SB-1	SB-2	SB-3	SB-4	SB-5	SB-6	SB-7	SB-8	SB-9	SB-10	SB-11	SB-12		
PAHs (8270)		milligrams per kilogram (mg/kg)														
Arsenic	0.68	3	0.521 U	0.634 U	0.512 U	0.522 U	0.497 U	0.464 U	0.496 U	0.497 U	0.808 U	0.473 U	0.518 U	2.81		
Cadmium	7.1	100	0.0809 U	0.0985 U	0.0796 U	0.081 U	0.0772 U	0.0721 U	0.077 U	0.0772 U	0.126 U	0.0735 U	0.0806 U	0.117 U		
Chromium	ne	ne	2.13	3.97	2.5	2.27	1.71	1.88	1.53 J	1.56 J	5.34	1.64	3.38	22.2		
Cobalt	23	350	0.435 J	0.372 J	0.39 J	0.156 J	0.109 J	0.137 J	0.15 J	0.119 J	0.325 J	0.0886 J	0.328 J	0.391 J		
Lead	400	800	1.89 J	3.31 J	2.53 J	2.79 J	1.78 J	2.18 J	1.84 J	1.84 J	5.7	1.3 J	3.52	6.12		
Mercury	11	46	0.0451 U	0.0477 U	0.0459 U	0.0419 U	0.0381 U	0.0488 U	0.0395 U	0.0386 U	0.047 U	0.0377 U	0.0395 U	0.0559 J		
Nickel	1500	22000	0.213 J	1.12 J	0.209 U	0.405 J	0.215 J	0.289 J	0.387 J	0.203 U	0.33 U	0.193 U	0.801 J	0.307 U		
рН								pH Units								
Method 9045	ne	ne	5.59	5.11	5.18	5.07	4.88	4.89	5.00	4.99	4.65	5.04	5.04	5.04		

Notes:

- 1) Res. RSL USEPA Regional Screening Level for Residential Soils
- 2) Ind. RSL USEPA Regional Screening Level for Industrial Soils
- 3) ne an RSL has not been established for this analyte
- 4) Detections shown in bold exceed the Residential RSL; detections above Industrial RSLs are underlined
- 5) U indicates an analyte was not detected above the Method Detection Limit (MDL)
- 6) J indicates an analyte was detected above the MDL but below the Practical Quantitation Limit
- 7) Data were collected on Feb 11-12, 2022

Table 3
Surface Water Quality Data - Discrete Samples
Blythewood Industrial LSI - Blythewood,SC
Terracon Project No. 73227051

Analyte		Sample												
	SW-1	SW-2	SW-3	SW-4	SW-5	SW-6	SW-7	SW-8	SW-9	SW-10	SW-11	SW-12		
COD-L (HACH 8000)		miligrams per liter (mg/L)												
	36	19 J	24	17 J	31	17 J	19 J	26	19 J	33	26	19 J		
pH (9045)		pH Units												
	4.44 H	5.12 H	4.38 H	3.93 H	3.98 H	4.69 H	4.01 H	4.99 H	4.26 H	4.11 H	5.36 H	3.95 H		

Ammonia (4500-NH3, D-2011)									
Ammonia (4500-NH3, D-2011)	CMC	ccc	Result						
Sample	miligrams per liter (mg/L)								
SW-1	38.933	7.073	<0.015 J						
SW-2	38.683	7.085	<0.015 J						
SW-3	38.942	7.087	<0.015 J						
SW-4	38.979	7.087	<0.015 J						
SW-5	38.977	7.082	<0.015 J						
SW-6	38.882	7.087	<0.015 J						
SW-7	38.975	7.077	<0.015 J						
SW-8	38.765	7.086	0.0175 J						
SW-9	38.956	7.087	<0.015 J						
SW-10	38.969	7.062	<0.015 J						
SW-11	38.453	7.087	0.0871 J						
SW-12	38.978	7.087	<0.015 J						

Notes:

- 1) Freshwater Sediment Screening Value USEPA Sediment Screening Values for Hazardous Waste Sites
- 2) CMC calculation of freshwater ammonia criterion as a one-hour average, where salmonids are absent as described in EPA R.61-68
- CCC calculation of freshwater ammonia criterion as a thirty-day average, when fish early life stages are present as described in EPA R.61-68
- 4) U indicates an analyte was not detected above the Method Detection Limit (MDL)
- 5) J indicates an analyte was detected above the MDL but below the Practical Quantitation Limit
- 6) Data was collected on February 11, 2022

APPENDIX C – SCDHEC MONITORING WELL APPROVAL, GEOLOGIST'S LOGS and SCDHEC 1903 FORMS



Temporary Monitoring Well Approval

Approval is Chris Bartley/Terracon on behalf of: Jeff Ruble/Richland County Facility: 821 Community Rd County: Richland

This approval is for the installation of 12 temporary groundwater-monitoring wells. The temporary wells are to be installed in the locations as illustrated on the submitted map and per the proposed construction details provided by your correspondence dated 2/8/22. The temporary wells are to be installed following all of the applicable requirements of R.61-71.

Please note that R.61-71 requires the following:

- 1. All wells shall be drilled, constructed, and abandoned by a South Carolina certified well driller per R.61-71.D.1.
- 2. A Water Well Record Form or other form provided or approved by the Department shall be completed and submitted to the Department within 30 days after well completion or abandonment unless the Department has approved another schedule. The form should contain the "as-built" construction details and all other information required by R.61-71.H.1.f
- 3. All analytical data and water levels obtained from each monitoring well shall be submitted to the Department within 30 days of receipt of laboratory results unless another schedule has been approved by the Department as required by R.61-71.H.1.d.
- 4. All temporary monitoring wells shall be abandoned within 5 days of borehole completion using appropriate methods as required by R.61-71.H.4.c.
- 5. If any of the information provided to the Department changes, Karen Morrison (803-898-0792, morrisks@dhec.sc.gov) shall be notified a minimum of twenty-four hours prior to well construction as required by R.61-71.H.1.a.

This approval is pursuant to the provisions of Section 44-55-40 of the 1976 South Carolina Code of Laws and R.61-71 of the South Carolina Well Standards and Regulations, dated April 26, 2002.

Date of Issuance: 2/9/22 **Approval #: MW-13121**

Robert Cole, Manager

Division of Site Assessment Remediation & Revitalization Division (SARR)

Federal & State Site Assessment Section

Bureau of Land & Waste Management



2/9/2022

Jeff Ruble Richland County 1201 Main St, Suite 1110 Columbia, SC 29201

Temporary Monitoring Well Approval Request received 2/8/22 Re:

Richland County Well ID: MW-13121

Dear Mr Ruble:

The South Carolina Department of Health and Environmental Control (SCDHEC) has reviewed and approved the referenced temporary monitoring well approval request submitted 2/8/22. The original temporary monitoring well approval has been sent to Chris Bartley/Terracon, and a copy is enclosed for your records. The analytical results from the groundwater samples should be submitted to my attention on or before 4/9/22. Please note the following:

- > Well construction and sampling derived waste including but not limited to drill cuttings, drilling fluids, and development/purge water should be managed properly and in compliance with applicable requirements. If containerized, each vessel should be clearly labeled with regards to contents, source, and date of activity.
- Monitoring wells are to yield groundwater samples representative of the zone monitored per R.61-71 H.1.c of the South Carolina Well Standards and Regulations (e.g. low flow sampling techniques are recommended for samples to be analyzed for metals to reduce induced turbidity).
- If this investigation is conducted as part of a potential real estate transaction, the potential purchaser may want to contact SCDHEC's Brownfields Program before this work is performed. The Brownfields Program offers a mechanism to avoid liability for contamination that may be found during this investigation. investigation proposed may satisfy part or all of the required assessment if pre-approved by the Brownfields Program. The Brownfields Program may be reached at 1-866-576-3432.

If you have any questions, please contact me at (803) 898-0802.

Robert Cole, Manager

Division of Site Assessment, Remediation & Revitalization (SARR)

Federal & State Site Assessment Section

Monitor well approval enc: SCDHEC EQC Region cc:

Project No.: 73227051 #REF! Project Name: #REF! Blythwood Ind. Boring No.: 38-1 **Boring Advancement** Start (date/lime): 2/10 1130 Latitude: Longitude: Surface Elevation: Offset(s): Finish (date/time): 1215 Operator: Att Cook (THREEDS) Logger: D. Ashood Project Mgr.: #REF! Depth Method Rig Type: 472#REF! Rig No Sample Depth Corrected Sample Description and Lithology To FID FID Filtered for Methane DID DTW From To From \$ 5 (~11/2' relover) Lt. for A-F 3. silly SAND 5 10 Brown A-F a. SAND - demp 6 7 North. (org, red, wht) A. 3. anay 7 13 Hard which Chay (keedin) Well Construction Screen: 5 Z C1210 58-1 Pack: Seal: Grout: Casing: 17 19 Wt. M.F SAND Water Level Observations 19 20 W7 - Ton C.M SAND - wet First Encountered: At Completion: 20 21 Ten C, well worked seturated somo feet, on (date) 21 22 Wht 5 sondy CLAY
22 25 Wht. A-C 5. dayey SAND - wet
20 25 ~ 8" water in labe) feet, on (date) feet, on (date) Water Loss From: Water Loss (%): Cave In: Depth: Artesian: Height: **Boring Abandonment** TD ~ 24' DTW = 18.92 (TOC) Grout: (write mixture below) = 18.23 (655) Well Constructed: (see back) Bentonite Chips:

llerracon

Additional Remarks:

5xple 513-1 (0-2' comp) e 1210

Sheet:	of	

Boring No.: 48-2 Project No.: #REF! Project Name: #REF! Blyfeword						Project Name: #REF! Blyfewood I.P.	Z.P. Boring Advancement					
Latitud				Lon	gitude:				Surface Elevation: Offset(s):	Start (dete/time):	2/10/22	
Operate			#REI			gger: 0.	1		Project Mgr.: #REF!	Finish (date/time):	:	
			7772				<i>p</i> .			Depth	Method	
Rig No			0	Rig Type:	#R	EF!	T p.		arks:	1		
			Samp	Corrected			De	pth	Sample Description and Lithology	-		
From	То	FID	FID Filtered	for Methane FID	PID	DTW	From	1000				
.5	Z	@132	5	53-2			Ø	.5	Top soil Ton V.F. silly SAND Ton Brn 2, Sondy SILT			
							.5	1	Ten V.F. solly SAND	Well Con	nstruction	
							1	4	Ti-Ben a seed Sur	Screen: 5 1		
							4	7	Not. shill CLAY	Pack:		
							7	7	Mott. Shit CLAY	Seal:		
					Arrys		1		Nott. A.F SAND	Grout:		
							15	19	Nott. A. F SAND Ton - What graded M-C Sat. SAND	Casing:		
							19	20	Whit. CLAY	Water Leve	el Observations	
										First Encountered	ed:	
										At Completion:		
										feet, on	(date)	
										feet, on	(date)	
							15	20	GW standing in the	feet, on		
										Water Loss From		
				,						Water Loss (%)		
				,			-			Artesian:		
									TD = 20			
									DTW ≈	Boring A	bandonment	
										Cuttings:		
							-			Grout: (write mixto		
										Well Constructe		
										Bentonite Chips		
										Sand:		
										1		
70		Į.	E		Additio	nal Remai	rks:					
11	6	(a)	COL					13:	z5 (d·2')	Sheet:	of	

1 Hos ja - pH & Mohls

Boring No.:	ring No.: 38-3 Project No.:				:		#RE	F! Project Name: #REF! Blythwood I.P.	Boring Advancement		
Latitude:			Lon	gitude:				Surface Elevation: Offset(s):	Start (dete/time): 2	1.0/22	
Operator:		#REI	=!	Lo	gger:			Project Mgr.: #REF!	Finish (date/time):		
-							_		Depth	Method	
Rig No	(100 Apr (10)	Samp	Rig Type:	#K	EF!	l n	Rema	arks:			
		Samp	Corrected			De	pui	Sample Description and Lithology			
From To	FID	FID Filtered	for Methane FID	PID	DTW	From	100				
						0	.5	Lt. gray/for V.F. SILY SAND Ton A v.s clayer SAND Ton Sondy CLOY			
OZ	38-3	@ 14	50			.5	4	Tan A v.s dayy SAND	Well Consti	ruction	
						4	5	To ende chay	Screen:		
									Pack:		
						15	20		Seal:		
						12	20		Grout:		
									Casing:		
									Water Level Ol	servations	
									First Encountered:		
									At Completion:		
						-			feet, on		
						1	-		feet, on		
									feet, on	(date)	
									Water Loss From:	То:	
									Water Loss (%): Cave In: D	enth:	
						-		TD = 20'	Artesian: H		
								DTW = 6.30			
									Boring Aban		
									Cuttings:		
									Grout: (write mixture b		
									Well Constructed:		
									Bentonite Chips:		
									Sand:		
7Ter	I			Addition							

Borin	g No.:	58-4	'	Pro	ject No.:	7327		#RE	F! Project Name: #REF! Bly the word I.P.		vancement
.atitud	le:			Lon	gitude:				Surface Elevation: Offset(s):	Start (date/time):	2/11
perat	or:		#REI	=!	Log	gger:			Project Mgr.: #REF!	Finish (date/time):	
Rig No				Rig Type:	#R:	EF!		Rema	rke.	Depth	Method
tig ito	Januar .		Samp	Note that the same	777		De	pth			
From	То	FID	FID Filtered	Corrected	PID	DTW	From		Sample Description and Lithology		
							6	1	Topsoil - del bon has silly sould F ton silly sould - 2' return		
0	2	513-4	100-	15			1	2.0	E des will amo	Well Cons	struction
							100	5)	~ 1' when	Screen:	
							1,0	-,	7,000,77	Pack:	
							-			Seal:	
								10	Reheal (on rock?)	Grout:	
										Casing:	
										Water Level	Observations
										First Encountered	
										At Completion:	
										feet, on	(date)
										feet, on	(date)
									Polan I	feet, on	(date)
									No TMW	Water Loss From	: To :
							-		NO TMW	Water Loss (%):	
										Cave In:	Depth:
										Artesian:	Height:
										Boring Ab	andonment
							+			Cuttings:	
							-			Grout: (write mixture	below)
										Well Constructed	: (see back)
										Bentonite Chips:	

llerracon

Additional Remarks:

Suple 9B-4 (0-2') @ 15

Sheet: of

Sand:

Borin	g No.:	33-	5	Pro	ject No.:	705	1	#RE	F! Project Name: #REF! Blythwood I. P.	Boring Advan	cement	
Latituc	de:				gitude:				Surface Elevation: Offset(s):	Start (date/time): 2/	: 8	
Operat	tor:		#REI			ıger:			Project Mgr.: #REF!	Finish (dete/time):		
•							D		Depth	Method		
Rig No			Samp	Rig Type:	#RE	ir:	Do	Rema	RIKS:			
			Samp	Corrected			De	pui	Sample Description and Lithology			
From	То	FID	FID Filtered	for Methane FID	PID	DTW	From	То				
							10	5)	-3' rehen			
_								-	o renea	Well Constru	otion	
. 5	2	<i>5</i> B - 5	075	0			0	. 5	Topsoil (F. dot bon/blk sily sAND) & 100+	Screen:	CHOIT	
							. 5	2	Tom A-F S. Silly SAND	Pack:		
							2	3	Nott (brolton/sry) A sondy CLAY	Seal:		
							_					
							15	70	1/ 1/ 1/ 1/ 1/ 1/ 1/ 1/ 1/ 1/ 1/ 1/ 1/ 1	Grout:		
							"	2.0	flad oht. CLAY (Reolin)	Guorrig.		
									Hard wht. elpy (kaolin) ampled & jammed line	Water Level Obs	ervations	
										First Encountered:		
										At Completion:		
									111 11	feet, on		
							\vdash		Set temp. well & Z5	feet, on	(date)	
									Dry - pull & abon. hole	feet, on Water Loss From:	To;	
										Water Loss (%):	10.	
										Cave In: Dep	oth:	
							1			Artesian: Heig	ght:	
										Boring Aband	lonment	
							-			Cuttings:		
										Grout: (write mixture beld		
										Well Constructed: (se		
										Bentonite Chips:		
							-			Sand:		
71			COL		Addition	nal Remar	ks:	_ 4				
			LUI		Gons	le 90	B-5	(0.5-2) @ 0750	Sheet:	of	
			s Services) on 3/5/20		,	ارم	H, ~	rete	0.5-2) c 0750			

Boring	g No.:	58-6		Pro	ject No.:	705	71	#RE	F! Project Name: #REF! Blythwood I.P.	Boring Ac	dvancement
Latitud	e:			Lon	gitude:				Surface Elevation: Offset(s):	Start (dete/time):	2/11
Operate	or.		#RE		Log	ger.			Project Mgr.: #REF!	Finish (date/time):	
			MACE						Project Mgr TTACT :	Depth	Method
Rig No	A ROME ALEXA	N. 1/2 (1/2)	Rig Type: #REF!					Rema	arks:	1	
			Samı				De	epth	Samula Description and Litheless		
From	То	FID	FID Filtered	Corrected for Methane FID	PID	DTW	From		Sample Description and Lithology		
							(0	5)	Ton 1-F 3. days SAND Ton 1 brn M days SAND - damp		
0	2	58-	ce	905			0	2	Ton 1-F 3. clypy SAND	Well Cons	struction
							2	3	Toolben of alver SAND - done	Screen:	
										Pack:	
										Seal:	
							/7	25	Hard, slow probing	Grout:	
										Casing:	
										Water Level	Observations
										First Encountered	:d:
								25'	Des	At Completion:	
							1		No TAW		(date)
									NO 7MW	feet, on	(date)
										Water Loss From	
										Water Loss (%):	
										Cave In:	
										Artesian:	Helght:
										Boring Ab	bandonment
										Cuttings:	
							-			Grout: (write mixtur	re below)
										Well Constructed	
										Bentonite Chips:	
										Sand:	
										1	
7					Addition	al Pemai	rke:				
- 110	21	rai			, 10011077	5	mple	50	3-6 (0.2') € 0905	Sheet:	of

pH & Mchals

Boring	No.:	5B.	7	Pro	ject No.	: 405	1	#RE	F! Project Name: #REF! Blythewood I.P.	Boring A	dvancement
Latitud		Longitude:							Surface Elevation: Offset(s):	Start (dete/time):	2/11
Operate	or:		#REI	=!	Lo	gger:			Project Mgr.: #REF!	Finish (date/time):	
								_		Depth	Method
Rig No	No Rig Type: #REF!							Rem	arks:	a	
From	То	FID		Corrected for Methane FID	PID	DTW	From		Sample Description and Lithology		
				FID			(0	5)	-3' rehin Topsoil - F blk silf SAND Brn M-F silf SAND Ton M-F SAND - domp		
0	2	58-	7010	10			0	2"	Topsoil - Fblk silly SAND	Well Con	struction
							2"	1'	Brn A-F silly SAND	Screen:	
							1	2	T- 1= 6010 - 1-	Pack:	
							1	2	1 de la	Seal:	
			-				2	3	Nott (ton/bon/org) Coloque SAND	Grout:	
									Otz gravel / frays @ 3' (5')	Casing:	
										Water Level	Observations
										First Encountere	∌d:
										At Completion:	
											(date)
						-	-			feet, on	
								25	Dry no TMW	feet, on Water Loss From	
									TMW	Water Loss (%):	
										Cave In:	Depth:
										Boring Al	bandonment
							+			Cuttings:	
							-	~~		Grout: (write mixtu	rre below)
										Well Constructe	ed: (see back)
										Bentonite Chips	s:
										Sand:	
-	.				A alalisi =	nal Remar	****				
	2	rai			Augiuo	iai reiliäf	15. 5.	mple	18-7 (0-2') @ 1010	Sheet:	of

Boring	g No.:	33-8 Project No.: 7051							F! Project Name: #REF! Bly therond I.P.	Boring Advancement		
Latitud	e:			Lon	gitude:				Surface Elevation: Offset(s):	Start (date/time):	2/11	
Operate	or:		#RE	F!	Lo	gger:			Project Mgr.: #REF!	Finish (date/time):		
Dia Na				Die Terre						Depth	Method	
Rig No			Samp	Rig Type:	#17	EF!	De	Rema	irks:			
From	То	FID		Corrected for Methane	PID	DTW	From	1	Sample Description and Lithology			
				FID			(0	5)	-4' repen	1		
0	2	58-	80	1050			0)	-4' return Ten 1-F silf SAND Ton 1-C s. dayay SAND - dump	Well Con	struction	
							1	u		Screen:		
							1	'	Two 11-C 3. dayof SAND - dump	Pack:		
							_			Seal:		
					1					Grout:		
										Casing:		
									2/1			
							-	13	Rewsal		Observations	
2										At Completion:	ea.	
										feet, on	(date)	
										feet, on		
							1			feet, on	(date)	
										Water Loss Fron	n: To:	
									NO TMW	Water Loss (%):		
										Cave In:	Depth:	
										Artesian:	Height:	
										Boring At	pandonment	
										Cuttings:		
										Grout: (write mixtur		
							-			Well Constructed		
										Bentonite Chips:		
										Sand:		
										1		
70			Ŀ		Addition	nal Remai	rks:					
	Pr	rai	COL			5	a-ple	. s	18-E (0-2) @ 1050	Sheet:	of	

pH, metals

Boring	g No.:	58-	9	Pro	ject No.:	705	t	#RE	F! Project Name: #REF! Bly hourd I.P.	Boring Advancem	ent	
Latitud		Longitude:							Surface Elevation: Offset(s):	Start (dete/time): 2/1)		
Operate			#REI			gger:			Project Mgr.: #REF!	Finish (dete/time):		
			1,112							Depth Me	ethod	
Rig No	Hor Day 1			Rig Type:	#R	EF!		Rema	arks:			
			Samp				De	epth	Sample Description and Litheless			
From	То	FID	FID Filtered	Corrected for Methane FID	PID	DTW		То	Sample Description and Lithology			
							(0	5)	L+. bro/for soft chay of organics - domp			
0	2	53.	9 e	1/20			0	0.5	L+. bro/for soft Chay w/ orienes - domp	Well Construction	n	
							2.5	2		Screen:		
							0.5	,	- 1	Pack:		
							1	4	Two, sht soft CLAY	Seal:		
							2	4	Ton, sht soft CLAY	Grout:		
									•	Casing:		
										Water Level Observa	itions	
								18	Refusal No TMW	First Encountered:		
									1 1	At Completion:		
									No TMW	feet, on	(date)	
										feet, on	(date)	
										feet, on	(date)	
										Water Loss From: T	o:	
							-			Water Loss (%):		
										Cave In: Depth:		
										Artesian: Height:		
										Boring Abandonm	ent	
							1			Cuttings:		
										Grout; (write mixture below)		
										Well Constructed: (see bed	;k) 🗌	
										Bentonite Chips:		
										Sand:		
								-				
	6 L	ra	COL	1	Additio	nal Remar 2		L	38-9 (0-2.) e 1120	Sheet:of_		
Crea	ted by M. Mal	her (Exploration	Services) on 3/5/20	118.					98-9 (0-2) e 1120 pH : Notals			

Boring	g No.:	5B-	10	Pro	ject No.:	7051	!	#RE	Project Name: #REF! Blythwood I.P.	Boring Advance	:ement	
Latitud	e:			Lon	gitude:				Surface Elevation: Offset(s):	Start (dete/time): Z/1	1	
Operate	or.		#REF! Logger:						Project Mgr.: #REF!	Finish (detertime):		
-										Depth	Method	
Rig No	Magazini in	Rig Type: #REF!				EF!		Rem	arks:			
			Samı				De	pth	County Description and Litheless			
From	То	FID	FID Filtered	Corrected for Methane FID	PID	DTW	From	14000	Sample Description and Lithology			
							(0	5)	~3' reform M-QF Ton sily sand - domp Not. (or, /red/br) A sondy coar			
0	2	58-	10 0	1155			6	2	M-RF Ton soly SOND - domp	Well Construc	tion	
							2	3	And love (+111) And and	Screen:		
									TITT. EUT) TRAIN BON / 11 SING CLEY	Pack:		
							-		Robert on rock	Seal:		
							_	8	Return on rock	Grout:		
										Casing:		
										Water Level Obse	rvations	
										First Encountered:		
										At Completion:		
										feet, on		
							-	_	Rehead	feet, on	(date)	
									No TAW	feet, on	(date)	
										Water Loss From: Water Loss (%):	То:	
										Cave In: Dept	h-	
										Artesian: Helgi		
										Boring Abando	nment	
							1			Cuttings:		
							1			Grout: (write mixture below		
										Well Constructed: (see		
										Bentonite Chips:		
										Sand:		
7-					Addition	nal Remar	ke:					
	er	rai	COL	1	AuditiOi			1	38-10 (0.2') @ 1155	Sheet:o	of	

PH & Mobils

Boring No.	53-	//		Pro	ject No.:	7051		#RE	F! Project Name: #REF! Bwood I. P.	Boring Ach	vancement
.atitude:				Lon	gitude:				Surface Elevation: Offset(s):	Start (date/time): 2	2/11
perator:		,	#REF			ger:			Project Mgr.: #REF!	Finish (date/time):	
										Depth	Method
Rig No			of the last	Rig Type:	#RI	F!	_	Rema	arks:	1	
			Samp				De	pth			
From To	FID	FID Fil	Itered	Corrected for Methane FID	PID	DTW	From	То	Sample Description and Lithology		
									Graded construction area		
1 3	38	-11	2	1245					Connot access votlands area du p 5./t	Well Cons	truction
									fenzio,	Screen:	
										Pack:	
									Lollest simple tran for burn by silt	Seal:	
			20						Lollect suple from low burn by silt home. Perhabely non-native, dishibed	Grout:	
									soil.	Casing:	
							(0	5)	~ 3' rehen	Water Level C	Observations
							0	1	Deb bea / blb A-Fall BAND of and & all	First Encountered	l:
								_	Duk ben / blk A-F only SAND of organics & word frags	At Completion:	
							1	9	Tun/L+bin M-F alger SAND	feet, on _	(date)
										feet, on _	(date)
										feet, on	(date)
										Water Loss From:	To:
										Water Loss (%):	
								9.5	Refusal	Cave In:	Depth:
									Refusal No TMW	Artesian:	Height:
									700	Boring Aba	andonment
										Cuttings:	
										Grout: (write mixture	
										Well Constructed:	
										Bentonite Chips:	
										Sand:	
1le	ra				Addition	al Remari 4.	rs:	51	3-11 (1-3°) @ 1245	Sheet:	of

excluded 0-1' due to wood/mules in simple

Project Name: #REF! Bwood I. P. **Boring Advancement** Boring No.: 38-12 Project No.: 7051 #REF! Start (date/time): 2/11 Surface Elevation: Offset(s): Latitude: Longitude: Finish (date/time): Project Mgr.: #REF! #REF! Logger: Operator: Method Depth #REF! Remarks: Rig Type: **Rig No** Depth Sample Sample Description and Lithology Corrected FID Filtered for Methane PID DTW From To FID From 0 .25 1 L+. bm dyy SAND - Fill? Z 58-12 € 1340 1 5 Kaolin - tractured of bon i red (1000) skining Well Construction Screen: Pack: Seal: Grout: Casing: Water Level Observations First Encountered: At Completion: feet, on (date) (date) feet, on (date) feet, on Water Loss From: To: Water Loss (%): Cave In: Depth: Artesian: Height: **Boring Abandonment** Cuttings: Grout: (write mixture below) Well Constructed: (see back) Bentonite Chips: Sand: Additional Remarks: llerracon Smple 38-12 (0-2') @ 1340 pH & Metals Sheet:

Created by M. Meher (Exploration Services) on 3/5/2018.



Water Well Record Bureau of Water

2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

PROMOTE PROTECT PROSPER								
1. WELL OWNER INFORMATION:			7. PERMIT NUMBER: MW-13121					
Name: Thomas & Hutton			191 99 - 1,5121					
(last)	(firs	st)	8. USE:					
Address: 1501 Main Street, Suite 7	60		☐ Residential ☐ Public Supply ☐ Process					
			☐ Irrigation ☐ Air Conditioning ☐ Emergency					
City: Columbia State: SC	Zip:		☑ Test Well ☐ Monitor Well ☐ Replacement					
Talanhana, Made	Home:		9. WELL DEPTH (completed) Date Started: 2/10/2022					
Telephone: Work: 2. LOCATION OF WELL: CO		and a						
	Citi Richi	and	25 ft. Date Completed: 2/10/2022 10. CASING: ☑ Threaded ☑ Welded					
Name: Blythewood Industrial			Diam.: 1" Height: Above Below ☐					
Street Address: Community Road			Type: PVC Galvanized Surface I ft.					
City: Blythewood	Zip:		Type: ☐ Steel ☐ Other Weight ☐ Ib./ft.					
			0 in. to 20 ft. depth Drive Shoe? ☐ Yes ☑ No					
Latitude: n/a Longitude	: n/a		in. toft. depth					
3. PUBLIC SYSTEM NAME: PU	BLIC SYSTE	M NUMBER:	11. SCREEN: Type: PVC Diam.: 1"					
			Slot/Gauge: 0.010 Length: 5'					
4. ABANDONMENT: ✓ Yes □	No		Set Between: 20 ft. and 25 ft. NOTE: MULTIPLE SCREENS					
			ft. andft. USE SECOND SHEET					
Grouted Depth: from 25 f	t. to <u>0</u>	ft.	Sieve Analysis ☐ Yes (please enclose) ☑ No					
	*Thickness	Depth to	12. STATIC WATER LEVEL 18.23 ft. below land surface after 24 hours					
Formation Description	of	Bottom of						
	Stratum	Stratum	13. PUMPING LEVEL Below Land Surface.					
Light tan M-F slightly silty sand	5	5	ft. after hrs. Pumping G.P.M.					
			Pumping Test: ☐ Yes (please enclose) ☑ No					
Brown M-F coarse sand	1	6	Yield:					
210111111111111111111111111111111111111	1		14. WATER QUALITY					
Mottled M sandy clay	1	7	Chemical Analysis ☐ Yes ☑ No Bacterial Analysis ☐ Yes ☑ No					
Without ivi sandy ciay	1	·	Please enclose lab results.					
Kaolin	6	13	15. ARTIFICIAL FILTER (filter pack) ☑ Yes ☐ No					
Kaomi	0	10	Installed from <u>25</u> ft. to <u>18</u> ft.					
Very F white slightly clayey sand	2	15	Effective size #2 Uniformity Coefficient					
very i winte singlitry elayey saina	_	10	16. WELL GROUTED? ☐ Yes ☑ No					
Kaolin	2	17	□ Neat Cement □ Bentonite □ Bentonite/Cement □ Other					
Kaomi		1,	Depth: From ft. to ft.					
777 '- 3 6 77 1	_	19	17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: ft direction					
White M-F sand	2	19	Type					
T C 1	2*	21	Well Disinfected ☐ Yes ☐ No Type: Amount:					
Tan C sand	2**	21						
			18. PUMP: Date installed: Not installed ☑ Mfr. Name: Model No.:					
White slightly sandy clay	1	22						
With Mr. O. P. Life 1	2*	25	H.P Volts Length of drop pipe ft. Capacity gpm TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine					
White M-C slightly clayey sand	3*	25	☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal					
			_ ` ` ` `					
			19. WELL DRILLER: Owen Astwood CERT. NO.: 1647					
			Address: (Print) Level: A B C D (circle one)					
			521 Clemson Road					
*Indianta Water Degrins 70000			Columbia, SC 29229					
*Indicate Water Bearing Zones			Telephone No.: 803-714-9000 Fax No.:					
(Use a 2nd sheet if needed)			WATER WELL DRILLER'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.					
5. REMARKS:			my anection and this report is the to the best of my knowledge and belief.					
FSP-1			$\Delta \Delta I = I$					
			Signed:					
			Well Driller					
6. TYPE: ☐ Mud Rotary ☐ Jetted	П	Bored	If D Level Driller provide supervising driller's server					
Dug Air Ro	_	Driven	If D Level Driller, provide supervising driller's name:					
☐ Cable tool ☐ Other								



Water Well Record Bureau of Water

2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

PROMOTE PROTECT PROSPER							
1. WELL OWNER INFORMATION:	- 1	7. PERMIT NUMBER: MW-13121					
Name: Thomas & Hutton (last) (first)	_						
` '		8. USE:					
Address: 1501 Main Street, Suite 760	- 1	Residential Public Supply Process					
City: Columbia State: SC Zip:		☐ Irrigation ☐ Air Conditioning ☐ Emergency					
	-	☐ Test Well ☐ Monitor Well ☐ Replacement					
Telephone: Work: Home:		9. WELL DEPTH (completed) Date Started: 2/10/2022					
2. LOCATION OF WELL: COUNTY: Richlan	nd	20 Date Completed: 2/10/2022					
Name: Blythewood Industrial		10. CASING: ☐ Threaded ☐ Welded					
Street Address: Community Road		Diam.: 1" Height: Above ✓ Below ☐					
City: Blythewood Zip:	- 1	Type: ☑ PVC ☐ Galvanized Surface ☐ ft.					
	- 1	O Steel Other Weight Weight Ib./ft.					
Latitude: n/a Longitude: n/a	- 1	U in. to 13 ft. depth					
		The state of the s					
3. PUBLIC SYSTEM NAME: PUBLIC SYSTEM	NUMBER:	11. SCREEN: Type: PVC Diam.: 1"					
		Siot/Gauge: 0.010					
4. ABANDONMENT: ☑ Yes ☐ No		Slot/Gauge: 0.010 Length: 5' Set Between: 15 ft. and 20 ft. NOTE: MULTIPLE SCREENS					
		ft. and ft. USE SECOND SHEET					
Grouted Depth: from 20 ft. to 0	ft.	Sieve Analysis ☐ Yes (please enclose) ☑ No					
	Depth to	12. STATIC WATER LEVEL 17 ft. below land surface after 24 hours					
·	Bottom of Stratum	13. PUMPING LEVEL Below Land Surface.					
		ft. after hrs. Pumping G.P.M.					
Top soil, very F silty sand 1 1		Pumping Test: ☐ Yes (please enclose) ☑ No					
		Yield:					
Tan/brown slightly sandy silt 3 4		14. WATER QUALITY					
		Chemical Analysis ☐ Yes ☑No Bacterial Analysis ☐ Yes ☑ No					
Mottled stiff clay 3		Please enclose lab results.					
26 (4) 12672 1	^	15. ARTIFICIAL FILTER (filter pack) ☑ Yes ☐ No					
Mottled M-F sand 3 1	0	Installed from 20 ft. to 13 ft.					
		Effective size #2 Uniformity Coefficient					
	-	16. WELL GROUTED? ☐ Yes ☑ No					
Direct-push - no additional		□ Neat Cement □ Bentonite □ Bentonite/Cement □ Other					
Direct-push - no additional		Depth: From ft. to ft.					
lith alages available		17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: ft direction					
lithology available		Type					
		Well Disinfected ☐ Yes ☐ No Type: Amount:					
		18. PUMP: Date installed: Not installed ☑					
		Mfr. Name: Model No.:					
		H.P Volts Length of drop pipe ft. Capacity gpm					
		TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine					
		☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal					
		19. WELL DRILLER: Owen Astwood CERT. NO.: 1647					
		Address: (Print) Level: A B C D (circle one)					
	- 1	521 Clemson Road					
		Columbia, SC 29229					
*Indicate Water Bearing Zones		Telephone No.: 803-714-9000 Fax No.:					
(Use a 2nd sheet if needed)		20. WATER WELL DRILLER'S CERTIFICATION: This well was drilled under					
5. REMARKS:		my direction and this report is true to the best of my knowledge and belief.					
	- 1						
FSP-2		O(1)					
		Signed:					
		Well Driller					
6. TYPE: ☐ Mud Rotary ☐ Jetted ☐ Bor	red	If D Level Driller, provide supervising driller's name:					
☐ Dug ☐ Air Rotary ☐ Dri	iven						
☐ Cable tool ☐ Other							



Water Well Record Bureau of Water

2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

1. WELL OWNER INFORMATION:			7. PERMIT NUMBER: MW-13121
Name: Thomas & Hutton (last)	(firs	:+\	
· · ·	•	,,,	8. USE:
Address: 1501 Main Street, Suite 7	ου		□ Residential □ Public Supply □ Process
City: Columbia State: SC	Zip:		☐ Irrigation ☐ Air Conditioning ☐ Emergency ☐ Test Well ☐ Monitor Well ☐ Replacement
Telephone: Work:	Home:		9. WELL DEPTH (completed) Date Started: 2/10/2022
	UNTY: Rich!	and	20 ft. Date Completed: 2/10/2022
Name: Blythewood Industrial	Idom	unu	10. CASING: ☑ Threaded ☑ Welded
Street Address: Community Road			Diam.: 1" Height: Above ✓ Below 🗖
	Zip:		Type: $oldsymbol{arDelta}$ PVC $oldsymbol{\square}$ Galvanized Surface $rac{1}{}$ ft.
Brythewood	•		
Latitude: n/a Longitude:	n/a		in. to 15 ft. depth Drive Shoe? ☐ Yes ☑ No in. to ft. depth
3. PUBLIC SYSTEM NAME: PUB	BLIC SYSTE	M NUMBER:	11 SCREEN
			Type: PVC Diam.: 1" Slot/Gauge: 0.010 Length: 5'
4. ABANDONMENT:	No		Siot/Gauge: 0.010 Length: 5 Set Between: 15 ft. and 20 ft. NOTE: MULTIPLE SCREENS
			ft. and ft. USE SECOND SHEET
Grouted Depth: from 20 ft		ft.	Sieve Analysis Yes (please enclose) No
	*Thickness	Depth to	12. STATIC WATER LEVEL 16 ft. below land surface after 24 hours
Formation Description	of Stratum	Bottom of Stratum	13. PUMPING LEVEL Below Land Surface.
-11.			ft. after hrs. Pumping G.P.M.
Light gray very F silty sand	0.5	0.5	Pumping Test: ☐ Yes (please enclose) ☑ No
Tan M very slightly clayey sand	3.5	4	Yield:
Tan sandy clay	1	5	14. WATER QUALITY Chemical Analysis ☐ Yes ☑ No Bacterial Analysis ☐ Yes ☑ No
zur buruj buj			Please enclose lab results.
			15. ARTIFICIAL FILTER (filter pack) ☑ Yes ☐ No
			Installed from 20 ft. to 13 ft.
Direct-push - no additional			Effective size #2 Uniformity Coefficient
			16. WELL GROUTED? Yes No
lithology available			□ Neat Cement □ Bentonite □ Bentonite/Cement □ Other
			Depth: From ft. to ft.
			17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: ft direction
			Type Well Disinfected □ Yes □ No Type: Amount:
			18. PUMP: Date installed: Not installed ☑
			Mfr. Name: Model No.:
			H.P Volts Length of drop pipe ft. Capacity gpm TYPE: □ Submersible □ Jet (shallow) □ Turbine
			Jet (deep) Reciprocating Centrifugal
			19. WELL DRILLER: Owen Astwood CERT. NO.: 1647
			Address: (Print) 521 Clemson Road Level: A B C D (circle one)
			Columbia, SC 29229
*Indicate Water Bearing Zones			Telephone No.: 803-714-9000 Fax No.:
(Use a 2nd sheet if needed)			20. WATER WELL DRILLER'S CERTIFICATION: This well was drilled under
5. REMARKS:			my direction and this report is true to the best of my knowledge and belief.
FSP-3			
			Signed:
			Well Driller
6. TYPE: ☐ Mud Rotary ☐ Jetted ☐ Dug ☐ Air Rota		Bored Driven	If D Level Driller, provide supervising driller's name:
☐ Cable tool ☐ Other			

APPENDIX D – ANALYTICAL REPORTS AND CHAIN OF CUSTODY



ANALYTICAL REPORT

CLIENT

Terracon Consultants 521 Clemson Rd. Columbia SC 29229

ATTENTION

Walker Hinson

PROJECT ID

Blythewood Ind. Park

LABORATORY REPORT NUMBER

2202F25

DATE

February 18, 2022

Autota P.//L Ashley Amick

Secondary Data Review By

Project Manager, Access Analytical

Chris Pafford

Primary Data Review By

Project Manager, AES aamick@axs-inc.com

PLEASE NOTE:

- Unless otherwise noted, all analysis on this report performed at Analytical Environmental Services Inc. (AES Inc.), 3080 Presidential Drive, Atlanta, GA 30340.
- AES is SCDHEC certified laboratory # 98016, NCDENR certified lab # 562, GA certified lab # FL-E87582, NELAP certified laboratory # E87582
- AIHA-LAP,LLC Laboratory ID:100671 for Industrial Hygiene samples (Organics, Metals, PCM Asbestos, Gravimetric), Environmental Lead (Paint, Soil, Dust Wipes, Air), and Environmental Microbiology (Fungal) **Direct Examination.**
- Local support services for this project are provided by Access Analytical, Inc. Access Analytical is a representative of AES serving client in the SC/NC/GA areas. All questions regarding this report should be directed to your local Access Analytical representative at 803.781.4243 or toll fee at 883.315.4243

Sub La	Lab Report #: b (if applicable): Purchase Order #: Estimate #:	_ •>	Access Analytical, Inc. 15 Thames Valley Rd. ~ Irmo, SC 29063 Phone: 803-781-4243 / Fax: 803-781-4303 / www.axs-inc.com SCDHEC Lab Certification # 32571 NELAC Lab ID # E871145								inc.com	Chain of Custody Record					
Client:	TERRACON					Preserva	tives (see	codes):	0							Fig. 97 97 97 97 10 10 10 10 10 10 10 10 10 10 10 10 10	
Attn:	Walker Hinson					Bottle Ty	ypes (see	codes):	G	\top		\Box		\dagger	*Preservative (odes:	Codes / Bottle Types:
Address:	521 Clampon K	21									+	\Box	\top	+	CH ₃ OH, 7 = Na(ICL, 2 = HNO3, 3 = H ₂ SO ₄ , 4 = N OH/ZnOAC, 8 = H ₂ PO ₄ , 9 = cook cid / HCL, 13 = EDA	$IaOH$, $S = Na_2S_2O_3$, $G = Method 5035 set w/ NaHSO4 & ed to \leq 6^{\circ}C, 10 = cooled to \leq 10^{\circ}C, 11 = Amm.CI-,$
City:	Columbia	54		State: 50	Zip C	ode: 29	229	-									drinking water, SW = surface/storm water, S = soil,
Phone:	803-729-7673	3 Fax:				NOTE:	-	NALY	1						*Program Area	Codes:	other (specify in comments section)
Email:			-					LABA	2						SHW = Solid an	d Hazardous Wastes (for soils,	DWA = Safe Drinking Water Act (for drinking water), ground waters and waste samples)
Project Na	me: al 1)	Horson e Tu	-1-con	1				STED	Metals						*Container Typ	e: G = Glass, P = Plastic	
	by (Signature):	ewood In	1. 1v	1				REQUESTED LAB ANALYSIS:	5								
Lab ID:	Sample Name:	Date Collected:	Time Collec	cted C=Comp	Matrix	Program Area	Total#	—→	Ha							Notes	/ Comments
	3B-I	2/14/22	1210	G-Grab	(see codes	5 HW	Containers 1	# Containers	1	+		\Box	\dashv	+	1 X M	hramium	Cobact
	3B-Z	1	1325	5 1	1	1	1	# Containers	1	\top	\vdash	\forall	\top	\dagger	Nich	al Maca	, Cobaet, nic, Cadmium,
	38-3	1	1450	-+	+		1	# Containers per Test > 2	1	+			+	+	100	LI HISE	ne, countiene,
			7.0			+	+	# Containers		+	\vdash		+	+	Tenc	1, Hay	
		 	1	+	1	+	+	# Containers		-	+	\vdash	+	+			
				+-	-	-	+	per Test > :		+	\vdash	\vdash	+	+			
			ļ	-	-	-	-	per Test > :		-	-	\vdash	+	+	-		
		-	-	_	-	-	+	Containers per Test > :	-	-	-	\vdash	_	+	-		
					-	-	-	Containers per Test > :		-	-	\vdash	_	+			
					-	-		Containers per Test > 3		_	_	Ш		_			
								Containers per Test > 2									
Turnard	ound Time Requested:	Project	Location:	F	telinqui	shed By:	/		1	Receive	d By:				Date:	Time (24hr):	Samples Received on Ice:
Standard		sc	X	On,	1		1		4)	1_					2/10/2	1627	YNN/A
Rush *	X .	NC	19	70	ME				Se 1	JEX					2/10/22		1
*Date	2/17/22	Other	(Specify):		1-10	•			10	301					9190	1100	YNN/A
	ailed/faxed by end of business day on date requir		9030 S														YNN/A
Standard TAT	is 7-10 business days.					0	10-			0	7				02.11.2	2 0945	YNN/A
Chain	of Custody Page of			Received	l in lab	by: <u> </u>	llen			8			_		Sampl Ref: I		l in Lab: <u>니. (</u> (°C) ef: RT2
White C	opy: Lab original / Canary Copy:	Client Copy		NOTE: Re	linquishi	ng samples	via this Cl	hain of (Custody	documer	nt con:	stitutes	client ac	ceptan	ce of Access	Analytical terms an	d conditions.

Page 2 of 14

Client: Terracon ConsultantsProject: Blythewood Ind. Park

Lab ID:

Blythewood Ind. Park
2202F25

Case Narrative

Date:

18-Feb-22

pH Analysis by Method SW9045D:

Samples for pH analysis by Method SW9045D were received and analyzed outside holding time requirement of "immediate or 15 minutes."

Client: Terracon Consultants **Project Name:** Blythewood Ind. Park

Lab ID: 2202F25-001 **Client Sample ID: Collection Date:**

SB-1

Date:

2/10/2022 12:10:00 PM

18-Feb-22

Matrix: Soil

Analyses	Result	Qual	Reporting Limit	MDL	Units	Prepared	Date Analyzed	DF
Total Mercury by SW7473					(SW7	7473)		
Mercury	0.0451	U	0.104	0.0451	mg/Kg-dry	02/17/2022 08:59:00	02/17/2022 10:06	1
Laboratory Hydrogen Ion (pH)	SW9045D				(SW9	0045D)		
рН	5.59	Q	0.01	0.01	pH Units	02/16/2022 09:05:00	02/16/2022 13:25	1
METALS, TOTAL SW6010D					(SW3	3050B)		
Arsenic	0.521	U	1.73	0.521	mg/Kg-dry	02/17/2022 07:55:00	02/17/2022 12:22	1
Cadmium	0.0809	U	1.73	0.0809	mg/Kg-dry	02/17/2022 07:55:00	02/17/2022 12:22	1
Chromium	2.13		1.73	0.640	mg/Kg-dry	02/17/2022 07:55:00	02/17/2022 12:22	1
Cobalt	0.435	I	1.73	0.0871	mg/Kg-dry	02/17/2022 07:55:00	02/17/2022 12:22	1
Lead	1.89	I	3.46	0.304	mg/Kg-dry	02/17/2022 07:55:00	02/17/2022 12:22	1
Nickel	0.213	U	3.46	0.213	mg/Kg-dry	02/17/2022 07:55:00	02/17/2022 12:22	1
PERCENT MOISTURE D221	6							
Percent Moisture	4.01		0	0	wt%		02/13/2022 00:00	1

Indicates that the analyte was detected in both the sample and the method blank FLDEP Qualifiers:

Indicates that the compound was analyzed for but not detected

J Estimated value

Q Sample held beyond the accepted holding time

The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit

AES Laboratory Qualifiers:

Spike recovery outside limits due to matrix

Greater than result value

R RPD outside limits due to matrix

Less than result value

Client: Terracon Consultants **Client Sample ID:** SB-2

Project Name: Blythewood Ind. Park **Collection Date:** 2/10/2022 1:25:00 PM

Lab ID: 2202F25-002 Matrix: Soil

Analyses	Result	Qual	Reporting Limit	MDL	Units	Prepared	Date Analyzed	DF
Total Mercury by SW7473					(SW7	(473)		
Mercury	0.0477	U	0.110	0.0477	mg/Kg-dry	02/17/2022 08:59:00	02/17/2022 10:14	1
Laboratory Hydrogen Ion (pH) S	W9045D				(SW9	0045D)		
pH	5.11	Q	0.01	0.01	pH Units	02/16/2022 09:05:00	02/16/2022 13:31	1
METALS, TOTAL SW6010D					(SW3	6050B)		
Arsenic	0.634	U	2.11	0.634	mg/Kg-dry	02/17/2022 07:55:00	02/17/2022 12:30	1
Cadmium	0.0985	U	2.11	0.0985	mg/Kg-dry	02/17/2022 07:55:00	02/17/2022 12:30	1
Chromium	3.97		2.11	0.780	mg/Kg-dry	02/17/2022 07:55:00	02/17/2022 12:30	1
Cobalt	0.372	I	2.11	0.106	mg/Kg-dry	02/17/2022 07:55:00	02/17/2022 12:30	1
Lead	3.31	I	4.21	0.370	mg/Kg-dry	02/17/2022 07:55:00	02/17/2022 12:30	1
Nickel	1.12	I	4.21	0.259	mg/Kg-dry	02/17/2022 07:55:00	02/17/2022 12:30	1
PERCENT MOISTURE D2216								
Percent Moisture	9.30		0	0	wt%		02/13/2022 00:00	1

Indicates that the analyte was detected in both the sample and the method blank FLDEP Qualifiers:

Indicates that the compound was analyzed for but not detected

Q Sample held beyond the accepted holding time

Date:

18-Feb-22

The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit

Spike recovery outside limits due to matrix **AES Laboratory**

R RPD outside limits due to matrix

Qualifiers: Greater than result value

Less than result value

J Estimated value

Client: Terracon Consultants Client Sample ID: SB-3

Project Name: Blythewood Ind. Park Collection Date: 2/10/2022 2:50:00 PM

Lab ID: 2202F25-003 Matrix: Soil

Analyses	Result	Qual	Reporting Limit	MDL	Units	Prepared	Date Analyzed	DF
Total Mercury by SW7473					(SW7	(473)		
Mercury	0.0459	U	0.106	0.0459	mg/Kg-dry	02/17/2022 08:59:00	02/17/2022 10:22	1
Laboratory Hydrogen Ion (pH) SV	W9045D				(SW9	0045D)		
pH	5.18	Q	0.01	0.01	pH Units	02/16/2022 09:05:00	02/16/2022 13:33	1
METALS, TOTAL SW6010D					(SW3	6050B)		
Arsenic	0.512	U	1.70	0.512	mg/Kg-dry	02/17/2022 07:55:00	02/17/2022 12:33	1
Cadmium	0.0796	U	1.70	0.0796	mg/Kg-dry	02/17/2022 07:55:00	02/17/2022 12:33	1
Chromium	2.50		1.70	0.630	mg/Kg-dry	02/17/2022 07:55:00	02/17/2022 12:33	1
Cobalt	0.390	I	1.70	0.0857	mg/Kg-dry	02/17/2022 07:55:00	02/17/2022 12:33	1
Lead	2.53	I	3.40	0.298	mg/Kg-dry	02/17/2022 07:55:00	02/17/2022 12:33	1
Nickel	0.209	U	3.40	0.209	mg/Kg-dry	02/17/2022 07:55:00	02/17/2022 12:33	1
PERCENT MOISTURE D2216								
Percent Moisture	5.61		0	0	wt%		02/13/2022 00:00	1

 $\textbf{FLDEP} \hspace{1cm} V \hspace{1cm} \textbf{Indicates that the analyte was detected in both the sample and the method blank}$

J Estimated value

Qualifiers: U Indicates that the compound was analyzed for but not detected

Q Sample held beyond the accepted holding time

Date:

18-Feb-22

 $I \quad \ \ The \ reported \ value \ is \ between \ the \ laboratory \ method \ detection \ limit \ and \ the \ laboratory \ practical \ quantitation \ limit$

AES Laboratory Qualifiers: S Spike recovery outside limits due to matrix

R RPD outside limits due to matrix

Greater than result value

< Less than result value

SUMMARY OF ANALYTES DETECTED

Date:

18-Feb-22

Analyses		Result	Qual	MDL	Reporting Limit	Units	BatchID	Dilution Factor
Client Sample ID: Collection Date:	SB-1 2/10/2022 12:10:00 PM				Lab ID: Matrix:	2202F25-001 Soil		
Laboratory Hydroge	en Ion (pH) SW9045D				(SW9045D)			
рН		5.59	Н	0.01	0.01	pH Units	331000	1
METALS, TOTAL	SW6010D				(SW3050B)			
Chromium		2.13		0.640	1.73	mg/Kg-dry	331030	1
Cobalt		0.435	J	0.0871	1.73	mg/Kg-dry	331030	1
Lead		1.89	J	0.304	3.46	mg/Kg-dry	331030	1
PERCENT MOIST	TURE D2216							
Percent Moisture		4.01		0	0	wt%	R477363	1
Client Sample ID:	SB-2				Lab ID:	2202F25-002		
Collection Date:	2/10/2022 1:25:00 PM				Matrix:	Soil		
Laboratory Hydroge	en Ion (pH) SW9045D				(SW9045D)			
pН		5.11	Н	0.01	0.01	pH Units	331000	1
METALS, TOTAL	SW6010D				(SW3050B)			
Chromium		3.97		0.780	2.11	mg/Kg-dry	331030	1
Cobalt		0.372	J	0.106	2.11	mg/Kg-dry	331030	1
Lead		3.31	J	0.370	4.21	mg/Kg-dry	331030	1
Nickel		1.12	J	0.259	4.21	mg/Kg-dry	331030	1
PERCENT MOIST	TURE D2216							
Percent Moisture		9.30		0	0	wt%	R477363	1
Client Sample ID:	SB-3				Lab ID:	2202F25-003		
Collection Date:	2/10/2022 2:50:00 PM				Matrix:	Soil		
Laboratory Hydroge	en Ion (pH) SW9045D				(SW9045D)			
pН		5.18	Н	0.01	0.01	pH Units	331000	1
METALS, TOTAL	SW6010D				(SW3050B)			
Chromium		2.50		0.630	1.70	mg/Kg-dry	331030	1
Cobalt		0.390	J	0.0857	1.70	mg/Kg-dry	331030	1
Lead		2.53	J	0.298	3.40	mg/Kg-dry	331030	1
PERCENT MOIST	TURE D2216							
Percent Moisture		5.61		0	0	wt%	R477363	1

Qualifiers:

BRL Below reporting limit

Narr See case narrative

^{*} Value exceeds maximum contaminant level

H Holding times for preparation or analysis exceeded

N Analyte not NELAC certified

B Analyte detected in the associated method blank

> Greater than Result value

E Estimated (value above quantitation range)

S Spike Recovery outside limits due to matrix

F Analyzed in the lab which is a deviation from the method

< Less than Result value

J Estimated value detected below Reporting Limit



SAMPLE/COOLER RECEIPT CHECKLIST

Clear Save a

1. Client Name: Access Analytical, Inc				AES Work Order Number:	2202F25	
2. Carrier: FedEx UPS USPS Client Courier Othel			-			
	Yes	No	N/A	Details	Comments	
3. Shipping container/cooler received in good condition?	0		\Box	damaged leaking other		
4. Custody seals present on shipping container?	O	0	ΙŌ			
5. Custody seals intact on shipping container?	Õ	10	O			
6. Temperature blanks present?	O	O	Ŏ			
Cooler temperature(s) within limits of 0-6°C? [See item 13 and 14 for	0			Cooling initiated for recently collected samples / ice		
7. temperature recordings.]	0	0		present		
8. Chain of Custody (COC) present?	0		0			
9. Chain of Custody signed, dated, and timed when relinquished and received?	0	Ŏ	δ			
.0. Sampler name and/or signature on COC?	0	M	M			
1. Were all samples received within holding time?	Õ	Ŏ	δ			
2. TAT marked on the COC?	Õ	10	M	If no TAT indicated, proceeded with standard TAT per Ter	rms & Conditions.	
				<u> </u>		
3. Cooler 1 Temperature 4.1 °C Cooler 2 Temperature			°C	Cooler 3 Temperature °C Cooler	4 TemperatureOC	
4. Cooler 5 Temperature OC Cooler 6 Temperature			°C		8 Temperature°C	
.5. Comments:						
						HM 2/11/22
				I certify that I have con	npleted sections 1-15 (dated initials).	11101 2/11/22
	Yes	No	N/A	Details	Comments	
.6. Were sample containers intact upon receipt?	0	\overline{IO}	ГО			
7. Custody seals present on sample containers?	0	0	Ю			
.8. Custody seals intact on sample containers?	O	10	Ō			
19. Do sample container labels match the COC?	0	0	0	incomplete info illegible no label other		
20. Are analyses requested indicated on the COC?	0	\Box	\Box			
21. Were all of the samples listed on the COC received?	0	O	0	samples received but not listed on COC samples listed on COC not received		
2. Was the sample collection date/time noted?	0		\cap			
3. Did we receive sufficient sample volume for indicated analyses?	6	l ŏ	18			
4. Were samples received in appropriate containers?	Õ	18	M			
5. Were VOA samples received without headspace (< 1/4" bubble)?	$ \mathcal{S} $	18	lŏ			
6. Were trip blanks submitted?	$ \mathcal{S} $	18	lŏ	listed on COC not listed on COC		
7. Comments:				instead on eoe		
This section only applies to samples where pH can be				I certify that I have con	npleted sections 16-27 (dated initials).	CD 02/11/22
checked at Sample Receipt.	Yes	No	N/A	Details	Comments	
8. Have containers needing chemical preservation been checked? *		$\overline{\Box}$	10			
29. Containers meet preservation guidelines?	M	۱Ă	18			
10. Was pH adjusted at Sample Receipt?	$\vdash {\sim}$	$\vdash {\sim}$	18			
				Longle Receipt such as Coliforms, VOCs and Oil & Grease/		

Locked

I certify that I have completed sections 28-30 (dated initials).

This also excludes metals by EPA 200.7, 200.8 and 245.1 which will be verified between 16 and 24 hours after preservation.

CD 02/11/22

Client: Terracon Consultants
Project Name: Blythewood Ind. Park

Lab Order: 2202F25

Dates Report

Date: 18-Feb-22

Lab Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	TCLP Date	Prep Date	Analysis Date
2202F25-001A	SB-1	2/10/2022 12:10:00PM	Soil	TOTAL METALS BY ICP		2/17/2022 7:55:00AM	02/17/2022
2202F25-001A	SB-1	2/10/2022 12:10:00PM	Soil	TOTAL METALS BY ICP		2/17/2022 7:55:00AM	02/17/2022
2202F25-001A	SB-1	2/10/2022 12:10:00PM	Soil	Mercury by SW7473		2/17/2022 8:59:00AM	02/17/2022
2202F25-001A	SB-1	2/10/2022 12:10:00PM	Soil	Laboratory Hydrogen Ion (pH)		2/16/2022 9:05:00AM	02/16/2022
2202F25-001A	SB-1	2/10/2022 12:10:00PM	Soil	PERCENT MOISTURE			02/13/2022
2202F25-002A	SB-2	2/10/2022 1:25:00PM	Soil	TOTAL METALS BY ICP		2/17/2022 7:55:00AM	02/17/2022
2202F25-002A	SB-2	2/10/2022 1:25:00PM	Soil	TOTAL METALS BY ICP		2/17/2022 7:55:00AM	02/17/2022
2202F25-002A	SB-2	2/10/2022 1:25:00PM	Soil	Mercury by SW7473		2/17/2022 8:59:00AM	02/17/2022
2202F25-002A	SB-2	2/10/2022 1:25:00PM	Soil	Laboratory Hydrogen Ion (pH)		2/16/2022 9:05:00AM	02/16/2022
2202F25-002A	SB-2	2/10/2022 1:25:00PM	Soil	PERCENT MOISTURE			02/13/2022
2202F25-003A	SB-3	2/10/2022 2:50:00PM	Soil	TOTAL METALS BY ICP		2/17/2022 7:55:00AM	02/17/2022
2202F25-003A	SB-3	2/10/2022 2:50:00PM	Soil	TOTAL METALS BY ICP		2/17/2022 7:55:00AM	02/17/2022
2202F25-003A	SB-3	2/10/2022 2:50:00PM	Soil	Mercury by SW7473		2/17/2022 8:59:00AM	02/17/2022
2202F25-003A	SB-3	2/10/2022 2:50:00PM	Soil	Laboratory Hydrogen Ion (pH)		2/16/2022 9:05:00AM	02/16/2022
2202F25-003A	SB-3	2/10/2022 2:50:00PM	Soil	PERCENT MOISTURE			02/13/2022

Client: Terracon Consultants
Project Name: Blythewood Ind. Park

ANALYTICAL QC SUMMARY REPORT

Date:

18-Feb-22

Workorder: 2202F25

BatchID: 331000

Sample ID: LCS-331000 SampleType: LCS	Client ID: TestCode: Laboratory Hydrogen Ion (pH) SW9045D				Uni Bat	its: pH Uni chID: 331000		ep Date: nalysis Date:	02/16/2022 02/16/2022	Run No: Seq No:	477702 11033709
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Re	f Val %RPI) RPD	Limit Qual
рН	6.998	0.01	7.000		100.0	90	110				
Sample ID: 2202F25-001ADUP	Client ID: S	SB-1			Uni	its: pH Uni	ts Pi	ep Date:	02/16/2022	Run No:	477702
SampleType: DUP	TestCode: L	Laboratory Hydrogen Io	n (pH) SW904	5D	Bat	chID: 331000	A	nalysis Date:	02/16/2022	Seq No:	11033739
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Re	f Val %RPI) RPD	Limit Qual
рН	5.536	0.01						5.589	0.953	3 1	0 H
Sample ID: 2202G57-001ADUP	Client ID:				Uni	its: pH Uni	ts Pr	ep Date:	02/16/2022	Run No:	477702
SampleType: DUP	TestCode: L	Laboratory Hydrogen Io	n (pH) SW904	5D	Bat	chID: 331000	A	nalysis Date:	02/16/2022	Seq No:	11033714
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Re	f Val %RPI) RPD	Limit Qual
рН	4.983	0.01						5.069	1.71	1	0 Н

Qualifiers: > Greater than Result value

BRL Below reporting limit

Rpt Lim Reporting Limit

J Estimated value detected below Reporting Limit

< Less than Result value

E Estimated (value above quantitation range)

N Analyte not NELAC certified

S Spike Recovery outside limits due to matrix

B Analyte detected in the associated method blank

H Holding times for preparation or analysis exceeded

R RPD outside limits due to matrix

Date: 18-Feb-22

Client: Terracon Consultants
Project Name: Blythewood Ind. Park

ANALYTICAL QC SUMMARY REPORT

Workorder: 2202F25

BatchID: 331030

Sample ID: MB-331030 SampleType: MBLK	Client ID: TestCode:	METALS, TOTAL S	W6010D		Un: Bat	ts: mg/Kg chID: 331030		p Date: 02/1 alysis Date: 02/1		Run No: 477881 Seq No: 1103861	3
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit ()ual
Arsenic	BRL	2.50									
Cadmium	BRL	2.50									
Chromium	BRL	2.50									
Cobalt	BRL	2.50									
Lead	BRL	5.00									
Nickel	BRL	5.00									
Sample ID: LCS-331030 SampleType: LCS	Client ID: TestCode:	METALS, TOTAL S	W6010D		Un Bat	its: mg/Kg chID: 331030		ep Date: 02/1 alysis Date: 02/1		Run No: 477881 Seq No: 1103861	4
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit ()ual
Arsenic	45.50	2.50	50.00		91.0	80	120				
Cadmium	47.94	2.50	50.00		95.9	80	120				
Chromium	50.76	2.50	50.00		102	80	120				
Cobalt	50.53	2.50	50.00		101	80	120				
Lead	48.77	5.00	50.00		97.5	80	120				
Nickel	49.93	5.00	50.00		99.9	80	120				
Sample ID: 2202K43-001AMS SampleType: MS	Client ID: TestCode:	METALS, TOTAL S	W6010D		Un: Bat	its: mg/Kg chID: 331030		ep Date: 02/1 alysis Date: 02/1		Run No: 477881 Seq No: 1103861	6
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit ()ual
Arsenic	67.77	1.97	39.39	36.55	79.2	75	125				
Cadmium	38.74	1.97	39.39	5.019	85.6	75	125				
Chromium	75.53	1.97	39.39	42.74	83.2	75	125				
Cobalt	45.79	1.97	39.39	16.08	75.4	75	125				
Lead	3990	3.94	39.39	2446	3920	75	125				S
Nickel	102.5	3.94	39.39	75.43	68.9	75	125				S
Qualifiers: > Greater than Result val	ue		< Less	than Result value			В	Analyte detected in the as	sociated method b	olank	
BRL Below reporting limit			E Estim	ated (value above quantita	ation range)		Н	Holding times for prepara	tion or analysis ex	xceeded	
J Estimated value detect	ted below Reporting	Limit	N Analy	te not NELAC certified			R	RPD outside limits due to	matrix		
Rpt Lim Reporting Limit			S Spike	Recovery outside limits of	lue to matrix						

Client: Terracon Consultants ANALYTICAL QC SUMMARY REPORT

Date:

18-Feb-22

Blythewood Ind. Park **Project Name:**

BatchID: 331030 Workorder: 2202F25

Sample ID: 2202K43-001AMSD SampleType: MSD	Client ID: TestCode:	METALS, TOTAL	SW6010D		Uni Bat	ts: mg/Kg chID: 331030		Date: 02/17 lysis Date: 02/17		Run No: 47788 Seq No: 11038	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	67.08	1.97	39.41	36.55	77.4	75	125	67.77	1.02	20	
Cadmium	39.33	1.97	39.41	5.019	87.1	75	125	38.74	1.50	20	
Chromium	79.59	1.97	39.41	42.74	93.5	75	125	75.53	5.23	20	
Cobalt	48.45	1.97	39.41	16.08	82.1	75	125	45.79	5.63	20	
Lead	2411	3.94	39.41	2446	-88.1	75	125	3990	49.3	20	SR
Nickel	97.59	3.94	39.41	75.43	56.2	75	125	102.5	4.96	20	S

BRL Below reporting limit

Estimated value detected below Reporting Limit

Rpt Lim Reporting Limit

Less than Result value

E Estimated (value above quantitation range)

N Analyte not NELAC certified

S Spike Recovery outside limits due to matrix

B Analyte detected in the associated method blank

Holding times for preparation or analysis exceeded

R RPD outside limits due to matrix

Client: Terracon Consultants **Project Name:**

ANALYTICAL QC SUMMARY REPORT Blythewood Ind. Park

BatchID: 331044 Workorder: 2202F25

Sample ID: MB-331044	Client ID:				Uni	its: mg/Kg	Pre	p Date:	02/17/2022	Run No: 477817
SampleType: MBLK	TestCode:	Total Mercury by SW7473	;		Bat	chID: 331044	An	alysis Date:	02/17/2022	Seq No: 11037454
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref	f Val %RPI	RPD Limit Qual
Mercury	BRL	0.100								
Sample ID: LCS-331044	Client ID:				Uni	ts: mg/Kg	Pre	p Date:	02/17/2022	Run No: 477817
SampleType: LCS	TestCode:	Total Mercury by SW7473	;		Bat	chID: 331044	An	alysis Date:	02/17/2022	Seq No: 11037456
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref	f Val %RPI	RPD Limit Qual
Mercury	0.8676	0.100	1.000		86.8	80	120			
Sample ID: 2202F25-003AMS	Client ID:	SB-3			Uni	its: mg/Kg-d	lry Pre	p Date:	02/17/2022	Run No: 477817
SampleType: MS	TestCode:	Total Mercury by SW7473	\$		Bat	chID: 331044	An	alysis Date:	02/17/2022	Seq No: 11037481
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref	f Val %RPI	RPD Limit Qual
Mercury	0.8249	0.106	1.029		80.2	80	120			
Sample ID: 2202F25-003AMSD	Client ID:	SB-3			Uni	its: mg/Kg-d	lry Pre	p Date:	02/17/2022	Run No: 477817
SampleType: MSD	TestCode:	Total Mercury by SW7473	3		Bat	chID: 331044	An	alysis Date:	02/17/2022	Seq No: 11037482
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref	f Val %RPE	RPD Limit Qual
Mercury	0.9833	0.106	1.029		95.6	80	120	0.8249	9 17.5	20

Qualifiers: Greater than Result value

> BRL Below reporting limit

Rpt Lim Reporting Limit

Estimated value detected below Reporting Limit

Less than Result value

E Estimated (value above quantitation range)

N Analyte not NELAC certified

S Spike Recovery outside limits due to matrix

B Analyte detected in the associated method blank

Holding times for preparation or analysis exceeded

R RPD outside limits due to matrix

18-Feb-22

Date:

End of Report



ANALYTICAL REPORT

CLIENT

Terracon Consultants 521 Clemson Rd. Columbia SC 29229

ATTENTION

Walker Hinson

PROJECT ID

Blythewood Ind. Park

LABORATORY REPORT NUMBER

2202G57

DATE

February 18, 2022

Primary Data Review By Secondary Data Review By

Clutzh P.// C

Chris Pafford

Project Manager, Access Analytical aamick@axs-inc.com

PLEASE NOTE:

- Unless otherwise noted, all analysis on this report performed at Analytical Environmental Services Inc. (AES Inc), 3080 Presidential Drive, Atlanta, GA 30340.
- AES is SCDHEC certified laboratory # 98016, NCDENR certified lab # 562, GA certified lab # FL-E87582, NELAP certified laboratory # E87582
- AIHA-LAP,LLC Laboratory ID:100671 for Industrial Hygiene samples (Organics, Metals, PCM Asbestos, Gravimetric), Environmental Lead (Paint, Soil, Dust Wipes, Air), and Environmental Microbiology (Fungal) Direct Examination.
- Local support services for this project are provided by Access Analytical, Inc. Access Analytical is a
 representative of AES serving client in the SC/NC/GA areas. All questions regarding this report should be directed
 to your local Access Analytical representative at 803.781.4243 or toll fee at 883.315.4243

Access Lab Report #:							Access A	nalytical	Inc						-	7252667
Sub Lab (if applicable):	_ / Sub Repor	t #:	- 0	~	Aceres	1	5 Tham	es Valley	Rd. ~ Irn			222 /			Chain	202657 Custody Record
Client Purchase Order #:			- 0	000	Access Analytical,	, Inc. S	CDHEC	Lab Cert	4243 / Fa fication #	ix: 803 # 3257:	3-781-4 1	303 / W	ww.axs	-inc.com	Chain of	custody Record
Access Estimate #: 1004			-			P	NELAC La	ib ID # E	871145					-		
Client: TERRACON					Preserva	atives (see	codes):	0					T			
Attn: Walker Hinson					Bottle T	ypes (see	codes):	G						*Preservative C	odes:	Codes / Bottle Types:
Address: 521 Clenson Rd	1						 						1	CH ₃ OH, 7 = NaC	ICL, 2 = HNO3, 3 = H ₂ SO ₄ , 4 = I DH/ZnOAC, 8 = H ₂ PO ₄ , 9 = cool cid / HCL, 13 = EDA	NaOH, $5 = \text{Na}_1\text{S}_2\text{O}_3$, $6 = \text{Method } 5035 \text{ set w/ NaHSO}_4$ & ed to $\leq 6^{\circ}\text{C}$, $10 = \text{cooled to } \leq 10^{\circ}\text{C}$, $11 = \text{Amm.Cl-}$,
City: Columbia		Sta	te: 3C	Zip Co	ode: 292	229	YSIS:	*			-			*Matrix Codes: GW = ground w	ater, WW = waste water, DW	= drinking water, SW = surface/storm water, S = soil, other (specify in comments section)
Phone: 803-729-7673	Fax:						REQUESTED LAB ANALYSIS:	-20				+		*Program Area	Codes:	DWA = Safe Drinking Water Act (for drinking water)
Email: Walker.	Hinson C	Terraco	n . 60	200) LAB	tal				4		SHW = Solid and	d Hazardous Wastes (for soils, e: G = Glass, P = Plastic	ground waters and waste samples)
Project Name: Bly the	wood 2	nd. Par	4				ESTE	Me								
Sampled By (Signature):	11						REQU	H	- 4							
Lab ID: Sample Name:	Date Collected:	Time Collected	C=Comp G=Grab	Matrix (see codes)	Program Area (see codes)	Total # Containers	\rightarrow	3							Notes	/ Comments
38-4	2/11/22	0715	C	5	SHW	1	# Containers per Test >>	i	1					* CV	romium	. Cobart.
38-5		0750	1			ı	# Containers per Test >>	, ,						Nid	cel. Avs	enic Cadmiun
58-6		0905				1	# Containers per Test >>)						Lec	id, Me	, Cobart, enic, Cadmiun roury
5B-7		1010				ı	# Containers per Test > >	1					1			
33-8		1050				l	# Containers per Test >>	1								
58-9		1120				(# Containers per Test >>	1							5	
58-10		1155				1	# Containers per Test > >	1								
5B-11		1245				1	# Containers per Test >>	1								·
5B-1Z	ı	1340	1	V	b	l	# Containers per Test > >	1								
							# Containers per Test >>									
Turnaround Time Requested:	Project I	ocation:	R	elinquis	hed By:	/	,	1 CR	eceivec	By:				Date:	Time (24hr):	Samples Received on Ice:
Standard	SC	X	In	A.	4	_								2/11/22	1520	Xy_n_n/a1,20
Rush *	NC		1	10	<u> </u>		I	ec	EX		1	•		2/14/22	1700	YNN/A
Date Required 2-17-22	Other (Specify):														YNN/A
tush data emailed/faxed by end of business day on date required tandard TAT is 7-10 business days.	l.														_	YNN/A
Chain of Custody Page of	2_	Re	ceived	in lab b	y: Ta	8Hm	love	7	112/22	ار	,iZ0	_		Sample Ref: R	Temp. Received Γ1 Re	
White Copy: Lab original / Canary Copy: (Client Copy	NO	OTE: Reli	nquishin	g samples v	via this Ch	nain of C	ustody o	locument	const	itutes c	lient acc	eptanc	e of Access A	analytical terms and	conditions.

		Ball transfer of	O BOOLEGE STO															
Sub L Client	s Lab Report #: ab (if applicable): : Purchase Order #: s Estimate #: 00 4	_ / Sub Report	t #:	Ph Inc. SC	ccess Ar 5 Thame hone: 8 CDHEC L ELAC La	es Valle 03-781 ab Cer	ey Rd. 1-4243 tificat	/ Fax: ion # 3	803-	-781-4	303 / wv	vw.axs-	inc.com	Chain of	202687 Custody Record			
Client:	TERRACON					Preservat	tives (see	codes):	0	Z	3				T			
Attn:	Weller Hinson						pes (see		P	P	P				+	*Preservative C		n Codes / Bottle Types:
Address:									Ė			7	_	+	+-	0 = None, 1 = H CH ₂ OH, 7 = NaO	CL, 2 = HNO3, 3 = H2SO4, 4 = 1	NaOH, $5 = \text{Na}_2\text{S}_2\text{O}_3$, $6 = \text{Method } 5035 \text{ set w/ NaHSO}_4$ led to $\leq 6^{\circ}\text{C}$, $10 = \text{cooled to } \leq 10^{\circ}\text{C}$, $11 = \text{Amm.Cl-}$,
City:			St	ate:	Zip Co	ode:		SIS:	¥							*Matrix Codes: GW = ground w	ater, WW = waste water, DW	= drinking water, SW = surface/storm water, S = soil,
Phone:		Fax:						NALY	le7		-	2				*Program Area	air, IW = industrial waste, O = Codes:	e other (specify in comments section)
Email:								REQUESTED LAB ANALYSIS:	2010	*	Y		- 1	-		SHW = Solid and	Hazardous Wastes (for soils,	SDWA = Safe Drinking Water Act (for drinking water), , ground waters and waste samples)
Project N	Name: Blytho	200d I	-1 P	1				STED	100	北个	3					*Container Type	e: G = Glass, P = Plastic	
Sampled	By (Signature):	good In	- 18. 12					REQUE	1	Lal	1							
Lab ID:	Sample Name:	Date Collected:	Time Collecte	100	Matrix (see codes)	Program Area (see codes)	Total # Containers		Hd	Men	4						Notes	/ Comments
	F3P-1	2/11/22	0800	G	GW	SHW	3	# Containers per Test > >	l	ı	1					**	Nickel.	Cobact, margane
	F5P-2		0900		1	i	3	# Containers per Test >>	1	1	1)	State of the
	F5P-3	L	0930	-	1	1	3	# Containers per Test >>	1	1	1							
								# Containers per Test >>										\
								# Containers per Test >>										1
								# Containers per Test >>										
								# Containers per Test > >										
								# Containers per Test >>										
								# Containers per Test >>						-4				
								# Containers per Test >>				7						
Turnar	ound Time Requested:	Project L	ocation:	Re	elinquis	hed By:				Rece	ived E	Зу:				Date:	Time (24hr):	Samples Received on Ice:
Standard		SC	X	m	4	1	_/	-	1	J						2/11/22	1520	Xy_N_N/A 1.2
Rush *	X	NC		M	EV				Pe	d	E	X				2/14/22		YNN/A
Date Required		Other (S	Specify):						,									
ush data en tandard TA	nailed/faxed by end of business day on date required. F is 7-10 business days.																	YNN/A
Chain	of Custody Page _ Z of _2	2_	Re	eceived	in lab b	y: The	Sithm	Love		7/17	L/IZ	. 17	1:20	-		Sample Ref: R		in Lab: 2, 0 (°C)
White 0	Copy: Lab original / Canary Copy: C	Client Copy	N	IOTE: Reli	nquishing	g samples v	ia this Cha	ain of Cu	ıstody	docur	nent c	onstit	tutes c	lient acc	eptance	of Access A	nalytical terms and	d conditions.
																		3 A T-2 P-25 C M

Client: Terracon Consultants **Project:** Blythewood Ind. Park

Lab ID: 2202G57 **Case Narrative**

Date:

18-Feb-22

pH Analysis by Method E150.1/SM4500 H+ B/SW9045D:

Samples for pH analysis by Method E150.1/SM4500 H+ B/SW9045D were received and analyzed outside holding time requirement of "immediate or 15 minutes."

Client: Terracon Consultants
Project Name: Blythewood Ind. Park

Lab ID: 2202G57-001

Client Sample ID: Collection Date: SB-4

Date:

2/11/2022 7:15:00 AM

18-Feb-22

Matrix: Soil

Analyses	Result	Qual	Reporting Limit	MDL	Units	Prepared	Date Analyzed	DF
Total Mercury by SW7473					(SW7	(473)		
Mercury	0.0419	U	0.0969	0.0419	mg/Kg-dry	02/15/2022 10:39:10	02/15/2022 17:09	1
Laboratory Hydrogen Ion (pH) S	W9045D				(SW9	045D)		
pH	5.07	Q	0.01	0.01	pH Units	02/16/2022 09:05:00	02/16/2022 12:49	1
METALS, TOTAL SW6010D					(SW3	050B)		
Arsenic	0.522	U	1.73	0.522	mg/Kg-dry	02/15/2022 08:11:00	02/15/2022 18:05	1
Cadmium	0.0810	U	1.73	0.0810	mg/Kg-dry	02/15/2022 08:11:00	02/15/2022 18:05	1
Chromium	2.27		1.73	0.641	mg/Kg-dry	02/15/2022 08:11:00	02/15/2022 18:05	1
Cobalt	0.156	I	1.73	0.0873	mg/Kg-dry	02/15/2022 08:11:00	02/15/2022 18:05	1
Lead	2.79	I	3.46	0.304	mg/Kg-dry	02/15/2022 08:11:00	02/15/2022 18:05	1
Nickel	0.405	I	3.46	0.213	mg/Kg-dry	02/15/2022 08:11:00	02/15/2022 18:05	1
PERCENT MOISTURE D2216								
Percent Moisture	12.2		0	0	wt%		02/14/2022 00:00	1

 $\textbf{FLDEP} \hspace{1cm} V \hspace{1cm} \textbf{Indicates that the analyte was detected in both the sample and the method blank}$

 $\begin{tabular}{lll} \textbf{Qualifiers:} & & U & Indicates that the compound was analyzed for but not detected \\ \end{tabular}$

Q Sample held beyond the accepted holding time

I The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit

AES Laboratory Qualifiers: S Spike recovery outside limits due to matrix

Greater than result value

R RPD outside limits due to matrix

< Less than result value

J Estimated value

Client: Terracon Consultants **Client Sample ID:** SB-5

Project Name: Blythewood Ind. Park **Collection Date:** 2/11/2022 7:50:00 AM

Lab ID: 2202G57-002 Matrix: Soil

Analyses	Result	Qual	Reporting Limit	MDL	Units	Prepared	Date Analyzed	DF
Total Mercury by SW7473					(SW7	(473)		
Mercury	0.0381	U	0.0880	0.0381	mg/Kg-dry	02/15/2022 10:39:10	02/15/2022 17:18	1
Laboratory Hydrogen Ion (pH)	SW9045D				(SW9	0045D)		
pH	4.88	Q	0.01	0.01	pH Units	02/16/2022 09:05:00	02/16/2022 12:56	1
METALS, TOTAL SW6010D					(SW3	6050B)		
Arsenic	0.497	U	1.65	0.497	mg/Kg-dry	02/15/2022 08:11:00	02/15/2022 18:07	1
Cadmium	0.0772	U	1.65	0.0772	mg/Kg-dry	02/15/2022 08:11:00	02/15/2022 18:07	1
Chromium	1.71		1.65	0.611	mg/Kg-dry	02/15/2022 08:11:00	02/15/2022 18:07	1
Cobalt	0.109	I	1.65	0.0832	mg/Kg-dry	02/15/2022 08:11:00	02/15/2022 18:07	1
Lead	1.78	I	3.30	0.290	mg/Kg-dry	02/15/2022 08:11:00	02/15/2022 18:07	1
Nickel	0.215	I	3.30	0.203	mg/Kg-dry	02/15/2022 08:11:00	02/15/2022 18:07	1
PERCENT MOISTURE D2216								
Percent Moisture	12.1		0	0	wt%		02/14/2022 00:00	1

Indicates that the analyte was detected in both the sample and the method blank FLDEP Qualifiers:

J Estimated value

Indicates that the compound was analyzed for but not detected

Q Sample held beyond the accepted holding time

Date:

18-Feb-22

The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit

AES Laboratory Qualifiers:

Spike recovery outside limits due to matrix

R RPD outside limits due to matrix

Greater than result value

Less than result value

Client: Terracon Consultants **Client Sample ID:** SB-6

Project Name: Blythewood Ind. Park **Collection Date:** 2/11/2022 9:05:00 AM

Lab ID: 2202G57-003 Matrix: Soil

Analyses	Result	Qual	Reporting Limit	MDL	Units	Prepared	Date Analyzed	DF
Total Mercury by SW7473					(SW)	7473)		
Mercury	0.0488	U	0.113	0.0488	mg/Kg-dry	02/15/2022 10:39:10	02/15/2022 17:26	1
Laboratory Hydrogen Ion (pH) SV	V9045D				(SW9	9045D)		
pН	4.89	Q	0.01	0.01	pH Units	02/16/2022 09:05:00	02/16/2022 12:59	1
METALS, TOTAL SW6010D					(SW3	3050B)		
Arsenic	0.464	U	1.54	0.464	mg/Kg-dry	02/15/2022 08:11:00	02/15/2022 18:10	1
Cadmium	0.0721	U	1.54	0.0721	mg/Kg-dry	02/15/2022 08:11:00	02/15/2022 18:10	1
Chromium	1.88		1.54	0.571	mg/Kg-dry	02/15/2022 08:11:00	02/15/2022 18:10	1
Cobalt	0.137	I	1.54	0.0776	mg/Kg-dry	02/15/2022 08:11:00	02/15/2022 18:10	1
Lead	2.18	I	3.08	0.271	mg/Kg-dry	02/15/2022 08:11:00	02/15/2022 18:10	1
Nickel	0.289	I	3.08	0.190	mg/Kg-dry	02/15/2022 08:11:00	02/15/2022 18:10	1
PERCENT MOISTURE D2216								
Percent Moisture	12.2		0	0	wt%		02/14/2022 00:00	1

Indicates that the analyte was detected in both the sample and the method blank FLDEP Qualifiers:

Indicates that the compound was analyzed for but not detected

Q Sample held beyond the accepted holding time

Date:

18-Feb-22

The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit

Spike recovery outside limits due to matrix **AES Laboratory**

R RPD outside limits due to matrix Less than result value

J Estimated value

Qualifiers: Greater than result value

Client: Terracon Consultants **Client Sample ID:** SB-7

Project Name: Blythewood Ind. Park **Collection Date:** 2/11/2022 10:10:00 AM

Lab ID: 2202G57-004 Matrix: Soil

Analyses	Result	Qual	Reporting Limit	MDL	Units	Prepared	Date Analyzed	DF
Total Mercury by SW7473					(SW7	(473)		
Mercury	0.0395	U	0.0913	0.0395	mg/Kg-dry	02/15/2022 10:39:1(02/15/2022 17:34	1
Laboratory Hydrogen Ion (pH) SV	V9045D				(SW9	045D)		
pH	5.00	Q	0.01	0.01	pH Units	02/16/2022 09:05:00	02/16/2022 13:01	1
METALS, TOTAL SW6010D					(SW3	050B)		
Arsenic	0.496	U	1.65	0.496	mg/Kg-dry	02/15/2022 08:11:00	02/15/2022 18:13	1
Cadmium	0.0770	U	1.65	0.0770	mg/Kg-dry	02/15/2022 08:11:00	02/15/2022 18:13	1
Chromium	1.53	I	1.65	0.609	mg/Kg-dry	02/15/2022 08:11:00	02/15/2022 18:13	1
Cobalt	0.150	I	1.65	0.0829	mg/Kg-dry	02/15/2022 08:11:00	02/15/2022 18:13	1
Lead	1.84	I	3.29	0.289	mg/Kg-dry	02/15/2022 08:11:00	02/15/2022 18:13	1
Nickel	0.387	I	3.29	0.203	mg/Kg-dry	02/15/2022 08:11:00	02/15/2022 18:13	1
PERCENT MOISTURE D2216								
Percent Moisture	11.5		0	0	wt%		02/14/2022 00:00	1

Indicates that the analyte was detected in both the sample and the method blank FLDEP Qualifiers:

Indicates that the compound was analyzed for but not detected

Q Sample held beyond the accepted holding time

R RPD outside limits due to matrix

Date:

18-Feb-22

The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit

Spike recovery outside limits due to matrix **AES Laboratory**

J Estimated value

Qualifiers: Greater than result value

Less than result value

Client: Terracon Consultants Client Sample ID: SB-8

Project Name: Blythewood Ind. Park Collection Date: 2/11/2022 10:50:00 AM

Lab ID: 2202G57-005 Matrix: Soil

Analyses	Result	Qual	Reporting Limit	MDL	Units	Prepared	Date Analyzed	DF
Total Mercury by SW7473					(SW7	(473)		
Mercury	0.0386	U	0.0892	0.0386	mg/Kg-dry	02/15/2022 10:39:1(02/15/2022 18:01	1
Laboratory Hydrogen Ion (pH) SV	V9045D				(SW9	045D)		
pH	4.99	Q	0.01	0.01	pH Units	02/16/2022 09:05:00	02/16/2022 13:04	1
METALS, TOTAL SW6010D					(SW3	050B)		
Arsenic	0.497	U	1.65	0.497	mg/Kg-dry	02/15/2022 08:11:00	02/15/2022 18:16	1
Cadmium	0.0772	U	1.65	0.0772	mg/Kg-dry	02/15/2022 08:11:00	02/15/2022 18:16	1
Chromium	1.56	I	1.65	0.611	mg/Kg-dry	02/15/2022 08:11:00	02/15/2022 18:16	1
Cobalt	0.119	I	1.65	0.0831	mg/Kg-dry	02/15/2022 08:11:00	02/15/2022 18:16	1
Lead	1.84	I	3.30	0.290	mg/Kg-dry	02/15/2022 08:11:00	02/15/2022 18:16	1
Nickel	0.203	U	3.30	0.203	mg/Kg-dry	02/15/2022 08:11:00	02/15/2022 18:16	1
PERCENT MOISTURE D2216								
Percent Moisture	8.82		0	0	wt%		02/14/2022 00:00	1

 $\textbf{FLDEP} \hspace{1cm} V \hspace{1cm} \textbf{Indicates that the analyte was detected in both the sample and the method blank}$

J Estimated value

Qualifiers: U Indicates that the compound was analyzed for but not detected

Q Sample held beyond the accepted holding time

Date:

18-Feb-22

 $I \quad \ \ The \ reported \ value \ is \ between \ the \ laboratory \ method \ detection \ limit \ and \ the \ laboratory \ practical \ quantitation \ limit$

AES Laboratory Qualifiers: S Spike recovery outside limits due to matrix

R RPD outside limits due to matrix

> Greater than result value

< Less than result value

Client: Terracon Consultants Client Sample ID: SB-9

Project Name: Blythewood Ind. Park Collection Date: 2/11/2022 11:20:00 AM

Lab ID: 2202G57-006 Matrix: Soil

Analyses	Result	Qual	Reporting Limit	MDL	Units	Prepared	Date Analyzed	DF
Total Mercury by SW7473					(SW7	(473)		
Mercury	0.0470	U	0.109	0.0470	mg/Kg-dry	02/15/2022 10:39:10	02/15/2022 18:09	1
Laboratory Hydrogen Ion (pH) S	W9045D				(SW9	0045D)		
pH	4.65	Q	0.01	0.01	pH Units	02/16/2022 09:05:00	02/16/2022 13:06	1
METALS, TOTAL SW6010D					(SW3	6050B)		
Arsenic	0.808	U	2.68	0.808	mg/Kg-dry	02/15/2022 08:11:00	02/15/2022 18:24	1
Cadmium	0.126	U	2.68	0.126	mg/Kg-dry	02/15/2022 08:11:00	02/15/2022 18:24	1
Chromium	5.34		2.68	0.993	mg/Kg-dry	02/15/2022 08:11:00	02/15/2022 18:24	1
Cobalt	0.325	I	2.68	0.135	mg/Kg-dry	02/15/2022 08:11:00	02/15/2022 18:24	1
Lead	5.70		5.36	0.471	mg/Kg-dry	02/15/2022 08:11:00	02/15/2022 18:24	1
Nickel	0.330	U	5.36	0.330	mg/Kg-dry	02/15/2022 08:11:00	02/15/2022 18:24	1
PERCENT MOISTURE D2216								
Percent Moisture	27.5		0	0	wt%		02/14/2022 00:00	1

FLDEP V Indicates that the analyte was detected in both the sample and the method blank

Qualifiers: U Indicates that the compound was analyzed for but not detected

Q Sample held beyond the accepted holding time

Date:

18-Feb-22

U Indicates that the compound was analyzed for but not detected Q Sample he
The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit

AES Laboratory S Spike recovery outside limits due to matrix

Greater than result value

Qualifiers:

R RPD outside limits due to matrix
< Less than result value

J Estimated value

Client: Terracon Consultants Client Sample ID: SB-10

Project Name: Blythewood Ind. Park Collection Date: 2/11/2022 11:55:00 AM

Lab ID: 2202G57-007 Matrix: Soil

Analyses	Result	Qual	Reporting Limit	MDL	Units	Prepared	Date Analyzed	DF
Total Mercury by SW7473					(SW7	7473)		
Mercury	0.0377	U	0.0871	0.0377	mg/Kg-dry	02/15/2022 10:39:10	02/15/2022 18:17	1
Laboratory Hydrogen Ion (pH) S	W9045D				(SW9	9045D)		
pH	5.04	Q	0.01	0.01	pH Units	02/16/2022 09:05:00	02/16/2022 13:09	1
METALS, TOTAL SW6010D					(SW3	3050B)		
Arsenic	0.473	U	1.57	0.473	mg/Kg-dry	02/15/2022 08:11:00	02/15/2022 18:27	1
Cadmium	0.0735	U	1.57	0.0735	mg/Kg-dry	02/15/2022 08:11:00	02/15/2022 18:27	1
Chromium	1.64		1.57	0.582	mg/Kg-dry	02/15/2022 08:11:00	02/15/2022 18:27	1
Cobalt	0.0886	I	1.57	0.0791	mg/Kg-dry	02/15/2022 08:11:00	02/15/2022 18:27	1
Lead	1.30	I	3.14	0.276	mg/Kg-dry	02/15/2022 08:11:00	02/15/2022 18:27	1
Nickel	0.193	U	3.14	0.193	mg/Kg-dry	02/15/2022 08:11:00	02/15/2022 18:27	1
PERCENT MOISTURE D2216								
Percent Moisture	8.52		0	0	wt%		02/14/2022 00:00	1

 $\textbf{FLDEP} \hspace{1cm} V \hspace{1cm} \textbf{Indicates that the analyte was detected in both the sample and the method blank}$

J Estimated value

Qualifiers: U Indicates that the compound was analyzed for but not detected

Q Sample held beyond the accepted holding time

Date:

18-Feb-22

I The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit

AES Laboratory Qualifiers: S Spike recovery outside limits due to matrix

R RPD outside limits due to matrix

> Greater than result value

< Less than result value

Client: Terracon Consultants Client Sample ID: SB-11

Project Name: Blythewood Ind. Park Collection Date: 2/11/2022 12:45:00 PM

Lab ID: 2202G57-008 Matrix: Soil

Analyses	Result	Qual	Reporting Limit	MDL	Units	Prepared	Date Analyzed	DF
Total Mercury by SW7473					(SW7	(473)		
Mercury	0.0395	U	0.0912	0.0395	mg/Kg-dry	02/15/2022 10:39:1(02/15/2022 18:25	1
Laboratory Hydrogen Ion (pH) SV	V9045D				(SW9	045D)		
pH	5.16	Q	0.01	0.01	pH Units	02/16/2022 09:05:00	02/16/2022 13:15	1
METALS, TOTAL SW6010D					(SW3	050B)		
Arsenic	0.518	U	1.72	0.518	mg/Kg-dry	02/15/2022 08:11:00	02/15/2022 18:30	1
Cadmium	0.0806	U	1.72	0.0806	mg/Kg-dry	02/15/2022 08:11:00	02/15/2022 18:30	1
Chromium	3.38		1.72	0.638	mg/Kg-dry	02/15/2022 08:11:00	02/15/2022 18:30	1
Cobalt	0.328	I	1.72	0.0867	mg/Kg-dry	02/15/2022 08:11:00	02/15/2022 18:30	1
Lead	3.52		3.44	0.302	mg/Kg-dry	02/15/2022 08:11:00	02/15/2022 18:30	1
Nickel	0.801	I	3.44	0.212	mg/Kg-dry	02/15/2022 08:11:00	02/15/2022 18:30	1
PERCENT MOISTURE D2216								
Percent Moisture	12.1		0	0	wt%		02/14/2022 00:00	1

 $\textbf{FLDEP} \hspace{1cm} V \hspace{1cm} \textbf{Indicates that the analyte was detected in both the sample and the method blank}$

J Estimated value

Qualifiers: U Indicates that the compound was analyzed for but not detected

Q Sample held beyond the accepted holding time

Date:

18-Feb-22

I The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit

AES Laboratory Qualifiers: S Spike recovery outside limits due to matrix

R RPD outside limits due to matrix

> Greater than result value

< Less than result value

Client: Terracon Consultants **Client Sample ID:** SB-12

Project Name: Blythewood Ind. Park **Collection Date:** 2/11/2022 1:40:00 PM

Lab ID: 2202G57-009 Matrix: Soil

Analyses	Result	Qual	Reporting Limit	MDL	Units	Prepared	Date Analyzed	DF
Total Mercury by SW7473					(SW7	(473)		
Mercury	0.0559	I	0.110	0.0477	mg/Kg-dry	02/15/2022 10:39:10	02/15/2022 18:34	1
Laboratory Hydrogen Ion (pH) S	W9045D				(SW9	045D)		
pH	5.00	Q	0.01	0.01	pH Units	02/16/2022 09:05:00	02/16/2022 13:17	1
METALS, TOTAL SW6010D					(SW3	050B)		
Arsenic	2.81		2.49	0.751	mg/Kg-dry	02/15/2022 08:11:00	02/15/2022 18:33	1
Cadmium	0.117	U	2.49	0.117	mg/Kg-dry	02/15/2022 08:11:00	02/15/2022 18:33	1
Chromium	22.2		2.49	0.924	mg/Kg-dry	02/15/2022 08:11:00	02/15/2022 18:33	1
Cobalt	0.391	I	2.49	0.126	mg/Kg-dry	02/15/2022 08:11:00	02/15/2022 18:33	1
Lead	6.12		4.99	0.438	mg/Kg-dry	02/15/2022 08:11:00	02/15/2022 18:33	1
Nickel	0.307	U	4.99	0.307	mg/Kg-dry	02/15/2022 08:11:00	02/15/2022 18:33	1
PERCENT MOISTURE D2216								
Percent Moisture	28.0		0	0	wt%		02/14/2022 00:00	1

Date:

18-Feb-22

Indicates that the analyte was detected in both the sample and the method blank FLDEP Qualifiers:

J Estimated value Q Sample held beyond the accepted holding time Indicates that the compound was analyzed for but not detected

The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit

Spike recovery outside limits due to matrix **AES Laboratory**

Qualifiers:

Greater than result value Less than result value

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R RPD outside limits due to matrix

Client: Terracon Consultants Client Sample ID: FSP-1

Project Name: Blythewood Ind. Park Collection Date: 2/11/2022 8:00:00 AM

Lab ID: 2202G57-010 Matrix: Groundwater

Analyses	Result	Qual	Reporting Limit	MDL	Units	Prepared	Date Analyzed	DF
Nitrogen, Ammonia (as N) E350.1					(E350	0.1)		
Nitrogen, Ammonia (As N)	0.022		0.020	0.018	mg/L	02/17/2022 07:00:00	02/17/2022 13:29	1
ION SCAN SW9056A								
Fluoride	0.20	U	0.20	0.20	mg/L		02/16/2022 15:28	1
Hydrogen Ion (pH) by SM4500H+B								
pH	4.80	Q	0.0100	0.0100	pH Units		02/14/2022 16:41	1
METALS, TOTAL SW6010D					(SW3	010A)		
Cobalt	0.0012	U	0.0200	0.0012	mg/L	02/15/2022 08:40:00	02/15/2022 19:41	1
Manganese	0.0054	I	0.0150	0.0012	mg/L	02/15/2022 08:40:00	02/15/2022 19:41	1
Nickel	0.0051	U	0.0200	0.0051	mg/L	02/15/2022 08:40:00	02/15/2022 19:41	1

Date:

18-Feb-22

 $\textbf{FLDEP} \hspace{1cm} V \hspace{1cm} \textbf{Indicates that the analyte was detected in both the sample and the method blank}$

Qualifiers:

U Indicates that the compound was analyzed for but not detected Q Sample held beyond the accepted holding time

J Estimated value

R RPD outside limits due to matrix

I The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit

AES Laboratory S Spike recovery outside limits due to matrix

Qualifiers:

Greater than result value < Less than result value

Client: Terracon Consultants **Client Sample ID:** FSP-2

Project Name: Blythewood Ind. Park **Collection Date:** 2/11/2022 9:00:00 AM

Lab ID: 2202G57-011 Matrix: Groundwater

Analyses	Result	Qual	Reporting Limit	MDL	Units	Prepared	Date Analyzed	DF
Nitrogen, Ammonia (as N) E350.1					(E35	0.1)		
Nitrogen, Ammonia (As N)	0.578		0.020	0.018	mg/L	02/17/2022 07:00:00	02/17/2022 13:31	1
ION SCAN SW9056A								
Fluoride	0.20	U	0.20	0.20	mg/L		02/16/2022 15:44	1
Hydrogen Ion (pH) by SM4500H+B								
pH	6.26	Q	0.0100	0.0100	pH Units		02/14/2022 16:47	1
METALS, TOTAL SW6010D					(SW:	3010A)		
Cobalt	0.0015	I	0.0200	0.0012	mg/L	02/15/2022 08:40:00	02/15/2022 19:44	1
Manganese	0.187		0.0150	0.0012	mg/L	02/15/2022 08:40:00	02/15/2022 19:44	1
Nickel	0.0085	I	0.0200	0.0051	mg/L	02/15/2022 08:40:00	02/15/2022 19:44	1

Indicates that the analyte was detected in both the sample and the method blank FLDEP Qualifiers:

Indicates that the compound was analyzed for but not detected

Q Sample held beyond the accepted holding time

Date:

18-Feb-22

The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit

Spike recovery outside limits due to matrix **AES Laboratory** Qualifiers:

R RPD outside limits due to matrix

J Estimated value

Greater than result value Less than result value

Client: Terracon Consultants Client Sample ID: FSP-3

Project Name: Blythewood Ind. Park **Collection Date:** 2/11/2022 9:30:00 AM

Lab ID: 2202G57-012 Matrix: Groundwater

Analyses	Result	Qual	Reporting Limit	MDL	Units	Prepared	Date Analyzed	DF
Nitrogen, Ammonia (as N) E350.1					(E350	.1)		
Nitrogen, Ammonia (As N)	0.204		0.020	0.018	mg/L	02/17/2022 07:00:00	02/17/2022 13:34	1
ION SCAN SW9056A								
Fluoride	0.25		0.20	0.20	mg/L		02/16/2022 16:00	1
Hydrogen Ion (pH) by SM4500H+B								
pH	6.39	Q	0.0100	0.0100	pH Units		02/14/2022 16:50	1
METALS, TOTAL SW6010D					(SW3	010A)		
Cobalt	0.0129	I	0.0200	0.0012	mg/L	02/15/2022 08:40:00	02/15/2022 19:47	1
Manganese	0.811		0.0150	0.0012	mg/L	02/15/2022 08:40:00	02/15/2022 19:47	1
Nickel	0.171		0.0200	0.0051	mg/L	02/15/2022 08:40:00	02/15/2022 19:47	1

Date:

18-Feb-22

FLDEP V Indicates that the analyte was detected in both the sample and the method blank

Qualifiers: U Indicates that the compound was analyzed for but not detected

U Indicates that the compound was analyzed for but not detected Q Sample held beyond the accepted holding time

J Estimated value

R RPD outside limits due to matrix

I The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit

AES Laboratory S Spike recovery outside limits due to matrix

Qualifiers:

Greater than result value < Less than result value

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SUMMARY OF ANALYTES DETECTED

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	Dilution Factor
Client Sample ID: SB-4 Collection Date: 2/11/2022 7:15:00 AM				Lab ID: Matrix:	2202G57-001 Soil		
Laboratory Hydrogen Ion (pH) SW9045D				(SW9045D)			
рН	5.07	Н	0.01	0.01	pH Units	331000	1
METALS, TOTAL SW6010D				(SW3050B)			
Chromium	2.27		0.641	1.73	mg/Kg-dry	330880	1
Cobalt	0.156	J	0.0873	1.73	mg/Kg-dry	330880	1
Lead	2.79	J	0.304	3.46	mg/Kg-dry	330880	1
Nickel	0.405	J	0.213	3.46	mg/Kg-dry	330880	1
PERCENT MOISTURE D2216							
Percent Moisture	12.2		0	0	wt%	R477366	1
Client Sample ID: SB-5 Collection Date: 2/11/2022 7:50:00 AM				Lab ID: Matrix:	2202G57-002 Soil		
Laboratory Hydrogen Ion (pH) SW9045D				(SW9045D)	1		
рН	4.88	Н	0.01	0.01	pH Units	331000	1
METALS, TOTAL SW6010D				(SW3050B)	-		
Chromium	1.71		0.611	1.65	mg/Kg-dry	330880	1
Cobalt	0.109	J	0.0832	1.65	mg/Kg-dry	330880	1
Lead	1.78	J	0.290	3.30	mg/Kg-dry	330880	1
Nickel	0.215	J	0.203	3.30	mg/Kg-dry	330880	1
PERCENT MOISTURE D2216							
Percent Moisture	12.1		0	0	wt%	R477366	1
Client Sample ID: SB-6 Collection Date: 2/11/2022 9:05:00 AM				Lab ID: Matrix:	2202G57-003 Soil		
Laboratory Hydrogen Ion (pH) SW9045D				(SW9045D)			
рН	4.89	Н	0.01	0.01	pH Units	331000	1
METALS, TOTAL SW6010D				(SW3050B)			
Chromium	1.88		0.571	1.54	mg/Kg-dry	330880	1
Cobalt	0.137	J	0.0776	1.54	mg/Kg-dry	330880	1
Lead	2.18	J	0.271	3.08	mg/Kg-dry	330880	1
Nickel	0.289	J	0.190	3.08	mg/Kg-dry	330880	1
PERCENT MOISTURE D2216							
Percent Moisture	12.2		0	0	wt%	R477366	1
Client Sample ID: SB-7 Collection Date: 2/11/2022 10:10:00 AM				Lab ID: Matrix:	2202G57-004 Soil		
Laboratory Hydrogen Ion (pH) SW9045D				(SW9045D)			
рН	5.00	Н	0.01	0.01	pH Units	331000	1
METALS, TOTAL SW6010D	5.00	11	0.01	(SW3050B)	•	231000	1
Chromium	1.53	J	0.609	1.65	mg/Kg-dry	330880	1
Cobalt	0.150	J	0.0829	1.65	mg/Kg-dry	330880	1
Lead	1.84	J	0.289	3.29	mg/Kg-dry	330880	1
Nickel	0.387	J	0.203	3.29	mg/Kg-dry	330880	1
PERCENT MOISTURE D2216							
Percent Moisture	11.5		0	0	wt%	R477366	1
Client Sample ID: SB-8				Lab ID:	2202G57-005		

Page 17 of 32

Date: 18-Feb-22

SUMMARY OF ANALYTES DETECTED

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	Dilution Factor
Collection Date: 2/11/2022 10:50:00 AM				Matrix:	Soil		
Laboratory Hydrogen Ion (pH) SW9045D				(SW9045D)			
pH	4.99	Н	0.01	0.01	pH Units	331000	1
METALS, TOTAL SW6010D				(SW3050B)			
Chromium	1.56	J	0.611	1.65	mg/Kg-dry	330880	1
Cobalt	0.119	J	0.0831	1.65	mg/Kg-dry	330880	1
Lead	1.84	J	0.290	3.30	mg/Kg-dry	330880	1
PERCENT MOISTURE D2216							
Percent Moisture	8.82		0	0	wt%	R477366	1
Client Sample ID: SB-9				Lab ID:	2202G57-006		
Collection Date: 2/11/2022 11:20:00 AM				Matrix:	Soil		
Laboratory Hydrogen Ion (pH) SW9045D				(SW9045D)			
pН	4.65	Н	0.01	0.01	pH Units	331000	1
METALS, TOTAL SW6010D				(SW3050B)			
Chromium	5.34		0.993	2.68	mg/Kg-dry	330880	1
Cobalt	0.325	J	0.135	2.68	mg/Kg-dry	330880	1
Lead	5.70		0.471	5.36	mg/Kg-dry	330880	1
PERCENT MOISTURE D2216							
Percent Moisture	27.5		0	0	wt%	R477366	1
Client Sample ID: SB-10 Collection Date: 2/11/2022 11:55:00 AM				Lab ID: Matrix:	2202G57-007 Soil		
Laboratory Hydrogen Ion (pH) SW9045D				(SW9045D)	3011		
	5.04	**	0.01		nII I Inita	221000	,
pH	5.04	Н	0.01	0.01	pH Units	331000	1
METALS, TOTAL SW6010D				(SW3050B)			
Chromium	1.64		0.582	1.57	mg/Kg-dry	330880	1
Cobalt	0.0886	J	0.0791	1.57	mg/Kg-dry	330880	1
Lead	1.30	J	0.276	3.14	mg/Kg-dry	330880	1
PERCENT MOISTURE D2216							
Percent Moisture	8.52		0	0	wt%	R477366	1
Client Sample ID: SB-11				Lab ID:	2202G57-008		
Collection Date: 2/11/2022 12:45:00 PM				Matrix:	Soil		
Laboratory Hydrogen Ion (pH) SW9045D				(SW9045D)			
pH	5.16	Н	0.01	0.01	pH Units	331000	1
METALS, TOTAL SW6010D				(SW3050B)			
Chromium	3.38		0.638	1.72	mg/Kg-dry	330880	1
Cobalt	0.328	J	0.0867	1.72	mg/Kg-dry	330880	1
Lead	3.52		0.302	3.44	mg/Kg-dry	330880	1
Nickel	0.801	J	0.212	3.44	mg/Kg-dry	330880	1
PERCENT MOISTURE D2216							
Percent Moisture	12.1		0	0	wt%	R477366	1
Client Sample ID: SB-12				Lab ID:	2202G57-009		
Collection Date: 2/11/2022 1:40:00 PM				Matrix:	Soil		
Total Mercury by SW7473				(SW7473)			
Mercury	0.0559	J	0.0477	0.110	mg/Kg-dry	330912	1
Laboratory Hydrogen Ion (pH) SW9045D		-		(SW9045D)		-	
(P11) 2 (V) (D)				(=, 0)			

SUMMARY OF ANALYTES DETECTED

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	Dilution Factor
Client Sample ID: SB-12 Collection Date: 2/11/2022 1:40:00 PM				Lab ID: Matrix:	2202G57-009 Soil		
Laboratory Hydrogen Ion (pH) SW9045D				(SW9045D)			
pН	5.00	Н	0.01	0.01	pH Units	331000	1
METALS, TOTAL SW6010D				(SW3050B)			
Arsenic	2.81		0.751	2.49	mg/Kg-dry	330880	1
Chromium	22.2		0.924	2.49	mg/Kg-dry	330880	1
Cobalt	0.391	J	0.126	2.49	mg/Kg-dry	330880	1
Lead	6.12		0.438	4.99	mg/Kg-dry	330880	1
PERCENT MOISTURE D2216							
Percent Moisture	28.0		0	0	wt%	R477366	1
Client Sample ID: FSP-1				Lab ID:	2202G57-010		
Collection Date: 2/11/2022 8:00:00 AM				Matrix:	Groundwater		
Nitrogen, Ammonia (as N) E350.1				(E350.1)			
Nitrogen, Ammonia (As N)	0.022		0.018	0.020	mg/L	331040	1
Hydrogen Ion (pH) by SM4500H+B							
pН	4.80	Н	0.0100	0.0100	pH Units	R477495	1
METALS, TOTAL SW6010D				(SW3010A)			
Manganese	0.0054	J	0.0012	0.0150	mg/L	330879	1
Client Sample ID: FSP-2				Lab ID:	2202G57-011		
Collection Date: 2/11/2022 9:00:00 AM				Matrix:	Groundwater		
Nitrogen, Ammonia (as N) E350.1				(E350.1)			
Nitrogen, Ammonia (As N)	0.578		0.018	0.020	mg/L	331040	1
Hydrogen Ion (pH) by SM4500H+B							
рН	6.26	Н	0.0100	0.0100	pH Units	R477495	1
METALS, TOTAL SW6010D				(SW3010A)			
Cobalt	0.0015	J	0.0012	0.0200	mg/L	330879	1
Manganese	0.187		0.0012	0.0150	mg/L	330879	1
Nickel	0.0085	J	0.0051	0.0200	mg/L	330879	1
Client Sample ID: FSP-3				Lab ID:	2202G57-012		
Collection Date: 2/11/2022 9:30:00 AM Nitrogen, Ammonia (as N) E350.1				Matrix: (E350.1)	Groundwater		
• • • • • • • • • • • • • • • • • • • •	0.204		0.010			221040	
Nitrogen, Ammonia (As N)	0.204		0.018	0.020	mg/L	331040	1
ION SCAN SW9056A					-		
Fluoride	0.25		0.20	0.20	mg/L	R477806	1
Hydrogen Ion (pH) by SM4500H+B							
рН	6.39	Н	0.0100	0.0100	pH Units	R477495	1
METALS, TOTAL SW6010D				(SW3010A)			
Cobalt	0.0129	J	0.0012	0.0200	mg/L	330879	1
Manganese	0.811		0.0012	0.0150	mg/L	330879	1
Nickel	0.171		0.0051	0.0200	mg/L	330879	1

Qualifiers:

Narr See case narrative

18-Feb-22

Date:

Value exceeds maximum contaminant level

BRL Below reporting limit

H Holding times for preparation or analysis exceeded

E Estimated (value above quantitation range)

S Spike Recovery outside limits due to matrix

SUMMARY OF ANALYTES DETECTED

Analyses		Result	Qual	MDL	Reporting Limit	Units	BatchID	Dilution Factor
N	Analyte not NELAC certified			F	Analyzed in the lab which is a	deviation from the r	nethod	
В	Analyte detected in the associated method blank			<	Less than Result value			
>	Greater than Result value			J	Estimated value detected below	Reporting Limit		

Date: 18-Feb-22



SAMPLE/COOLER RECEIPT CHECKLIST

Clear	Save as
-------	---------

1. Client Name: TERRACON		AES Work Order Number: 2202G57				
2. Carrier: FedEx UPS USPS Client Courier Other						
	Yes	No	- N/A	Details	Comments	
3. Shipping container/cooler received in good condition?	10			damaged leaking other	Comments	
4. Custody seals present on shipping container?	18	18	18			
5. Custody seals intact on shipping container?	$\vdash \bowtie$	18	10			
6. Temperature blanks present?	18	10	18			
7. Cooler temperature(s) within limits of 0-6°C? [See item 13 and 14 for temperature recordings.]	0	Ŏ	O	Cooling initiated for recently collected samples /	ice	
8. Chain of Custody (COC) present?	0	0		present		
9. Chain of Custody signed, dated, and timed when relinquished and received?		$+ \times$	$+ \times$			
10. Sampler name and/or signature on COC?	18	18	$+ \times$			
11. Were all samples received within holding time?	18	$+ \times$	$+ \times$			
12. TAT marked on the COC?	18	$+ \times$	$+ \times$	If no TAT indicated, proceeded with standard TA	T nor Torms & Conditions	
12. TAT Marked on the coc:				In no TAT indicated, proceeded with standard TA	r per rernis & conditions.	
13. Cooler 1 Temperature 2.0 °C Cooler 2 Temperature			°C	Cooler 3 Temperature°C	Cooler 4 Temperature °C	
14. Cooler 5 Temperature °C Cooler 6 Temperature			°C	Cooler 7 Temperature °C	Cooler 8 Temperature °C	
<u> </u>				<u> </u>	<u></u>	
15. Comments:						
				L certify that L	have completed sections 1-15 (dated initials). CH 2/12/2022	
	.,					
AC Wan and a satisfied interpretation	Yes	No	N/A	Details	Comments	
16. Were sample containers intact upon receipt?	10	10	10			
17. Custody seals present on sample containers?	$+ \mathcal{Q}$	0	I Q			
18. Custody seals intact on sample containers?	O	0	0			
19. Do sample container labels match the COC?	0	0	0	incomplete info illegible no label other		
20. Are analyses requested indicated on the COC?	0		О			
21. Were all of the samples listed on the COC received?	0	0	0	samples received but not listed on COC samples listed on COC not received		
22. Was the sample collection date/time noted?	0	0	\cap			
23. Did we receive sufficient sample volume for indicated analyses?	10	10	18			
24. Were samples received in appropriate containers?	Ŏ	Ŏ	M			
25. Were VOA samples received without headspace (< 1/4" bubble)?	18	18	Ŏ			
26. Were trip blanks submitted?	M	ΙŎ	Ŏ	listed on COC not listed on COC		
27. Comments:						
This section only applies to samples where pH can be				I certify that I	have completed sections 16-27 (dated initials). CH 2/12/2023	
checked at Sample Receipt.	Yes	No	N/A	Details	Comments	
28. Have containers needing chemical preservation been checked? *	0	Ю	ΙÓ			
29. Containers meet preservation guidelines?	Ŏ	Ŏ	ΙŎ			
30 Was nH adjusted at Sample Receipt?	$\vdash \overset{\frown}{\frown}$	18	18	1		

This also excludes metals by EPA 200.7, 200.8 and 245.1 which will be verified between 16 and 24 hours after preservation.

I certify that I have completed sections 28-30 (dated initials).

CH 2/12/2022

^{*} Note: Certain analyses require chemical preservation but must be checked in the laboratory and not upon Sample Receipt such as Coliforms, VOCs and Oil & Grease/TPH.

Terracon Consultants Project Name: Blythewood Ind. Park

2202G57 Lab Order:

Client:

Dates Report

Date: 18-Feb-22

Lab Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	TCLP Date	Prep Date	Analysis Date
2202G57-001A	SB-4	2/11/2022 7:15:00AM	Soil	TOTAL METALS BY ICP		2/15/2022 8:11:00AM	02/15/2022
2202G57-001A	SB-4	2/11/2022 7:15:00AM	Soil	Mercury by SW7473		2/15/2022 10:39:10AM	02/15/2022
2202G57-001A	SB-4	2/11/2022 7:15:00AM	Soil	Laboratory Hydrogen Ion (pH)		2/16/2022 9:05:00AM	02/16/2022
2202G57-001A	SB-4	2/11/2022 7:15:00AM	Soil	PERCENT MOISTURE			02/14/2022
2202G57-002A	SB-5	2/11/2022 7:50:00AM	Soil	TOTAL METALS BY ICP		2/15/2022 8:11:00AM	02/15/2022
2202G57-002A	SB-5	2/11/2022 7:50:00AM	Soil	Mercury by SW7473		2/15/2022 10:39:10AM	02/15/2022
2202G57-002A	SB-5	2/11/2022 7:50:00AM	Soil	Laboratory Hydrogen Ion (pH)		2/16/2022 9:05:00AM	02/16/2022
2202G57-002A	SB-5	2/11/2022 7:50:00AM	Soil	PERCENT MOISTURE			02/14/2022
2202G57-003A	SB-6	2/11/2022 9:05:00AM	Soil	TOTAL METALS BY ICP		2/15/2022 8:11:00AM	02/15/2022
2202G57-003A	SB-6	2/11/2022 9:05:00AM	Soil	Mercury by SW7473		2/15/2022 10:39:10AM	02/15/2022
2202G57-003A	SB-6	2/11/2022 9:05:00AM	Soil	Laboratory Hydrogen Ion (pH)		2/16/2022 9:05:00AM	02/16/2022
2202G57-003A	SB-6	2/11/2022 9:05:00AM	Soil	PERCENT MOISTURE			02/14/2022
2202G57-004A	SB-7	2/11/2022 10:10:00AM	Soil	TOTAL METALS BY ICP		2/15/2022 8:11:00AM	02/15/2022
2202G57-004A	SB-7	2/11/2022 10:10:00AM	Soil	Mercury by SW7473		2/15/2022 10:39:10AM	02/15/2022
2202G57-004A	SB-7	2/11/2022 10:10:00AM	Soil	Laboratory Hydrogen Ion (pH)		2/16/2022 9:05:00AM	02/16/2022
2202G57-004A	SB-7	2/11/2022 10:10:00AM	Soil	PERCENT MOISTURE			02/14/2022
2202G57-005A	SB-8	2/11/2022 10:50:00AM	Soil	TOTAL METALS BY ICP		2/15/2022 8:11:00AM	02/15/2022
2202G57-005A	SB-8	2/11/2022 10:50:00AM	Soil	Mercury by SW7473		2/15/2022 10:39:10AM	02/15/2022
2202G57-005A	SB-8	2/11/2022 10:50:00AM	Soil	Laboratory Hydrogen Ion (pH)		2/16/2022 9:05:00AM	02/16/2022
2202G57-005A	SB-8	2/11/2022 10:50:00AM	Soil	PERCENT MOISTURE			02/14/2022
2202G57-006A	SB-9	2/11/2022 11:20:00AM	Soil	TOTAL METALS BY ICP		2/15/2022 8:11:00AM	02/15/2022
2202G57-006A	SB-9	2/11/2022 11:20:00AM	Soil	Mercury by SW7473		2/15/2022 10:39:10AM	02/15/2022
2202G57-006A	SB-9	2/11/2022 11:20:00AM	Soil	Laboratory Hydrogen Ion (pH)		2/16/2022 9:05:00AM	02/16/2022
2202G57-006A	SB-9	2/11/2022 11:20:00AM	Soil	PERCENT MOISTURE			02/14/2022
2202G57-007A	SB-10	2/11/2022 11:55:00AM	Soil	TOTAL METALS BY ICP		2/15/2022 8:11:00AM	02/15/2022
2202G57-007A	SB-10	2/11/2022 11:55:00AM	Soil	Mercury by SW7473		2/15/2022 10:39:10AM	02/15/2022
2202G57-007A	SB-10	2/11/2022 11:55:00AM	Soil	Laboratory Hydrogen Ion (pH)		2/16/2022 9:05:00AM	02/16/2022
2202G57-007A	SB-10	2/11/2022 11:55:00AM	Soil	PERCENT MOISTURE			02/14/2022
2202G57-008A	SB-11	2/11/2022 12:45:00PM	Soil	TOTAL METALS BY ICP		2/15/2022 8:11:00AM	02/15/2022

Client: Terracon Consultants
Project Name: Blythewood Ind. Park

Lab Order: 2202G57

Dates Report

Date: 18-Feb-22

Lab Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	TCLP Date	Prep Date	Analysis Date
2202G57-008A	SB-11	2/11/2022 12:45:00PM	Soil	Mercury by SW7473		2/15/2022 10:39:10AM	02/15/2022
2202G57-008A	SB-11	2/11/2022 12:45:00PM	Soil	Laboratory Hydrogen Ion (pH)		2/16/2022 9:05:00AM	02/16/2022
2202G57-008A	SB-11	2/11/2022 12:45:00PM	Soil	PERCENT MOISTURE			02/14/2022
2202G57-009A	SB-12	2/11/2022 1:40:00PM	Soil	TOTAL METALS BY ICP		2/15/2022 8:11:00AM	02/15/2022
2202G57-009A	SB-12	2/11/2022 1:40:00PM	Soil	Mercury by SW7473		2/15/2022 10:39:10AM	02/15/2022
2202G57-009A	SB-12	2/11/2022 1:40:00PM	Soil	Laboratory Hydrogen Ion (pH)		2/16/2022 9:05:00AM	02/16/2022
2202G57-009A	SB-12	2/11/2022 1:40:00PM	Soil	PERCENT MOISTURE			02/14/2022
2202G57-010A	FSP-1	2/11/2022 8:00:00AM	Groundwater	ION SCAN			02/16/2022
2202G57-010A	FSP-1	2/11/2022 8:00:00AM	Groundwater	Hydrogen Ion (pH) by SM4500 H+ B			02/14/2022
2202G57-010B	FSP-1	2/11/2022 8:00:00AM	Groundwater	TOTAL METALS BY ICP		2/15/2022 8:40:00AM	02/15/2022
2202G57-010C	FSP-1	2/11/2022 8:00:00AM	Groundwater	Nitrogen, Ammonia (as N)		2/17/2022 7:00:00AM	02/17/2022
2202G57-011A	FSP-2	2/11/2022 9:00:00AM	Groundwater	ION SCAN			02/16/2022
2202G57-011A	FSP-2	2/11/2022 9:00:00AM	Groundwater	Hydrogen Ion (pH) by SM4500 H+ B			02/14/2022
2202G57-011B	FSP-2	2/11/2022 9:00:00AM	Groundwater	TOTAL METALS BY ICP		2/15/2022 8:40:00AM	02/15/2022
2202G57-011C	FSP-2	2/11/2022 9:00:00AM	Groundwater	Nitrogen, Ammonia (as N)		2/17/2022 7:00:00AM	02/17/2022
2202G57-012A	FSP-3	2/11/2022 9:30:00AM	Groundwater	ION SCAN			02/16/2022
2202G57-012A	FSP-3	2/11/2022 9:30:00AM	Groundwater	Hydrogen Ion (pH) by SM4500 H+ B			02/14/2022
2202G57-012B	FSP-3	2/11/2022 9:30:00AM	Groundwater	TOTAL METALS BY ICP		2/15/2022 8:40:00AM	02/15/2022
2202G57-012C	FSP-3	2/11/2022 9:30:00AM	Groundwater	Nitrogen, Ammonia (as N)		2/17/2022 7:00:00AM	02/17/2022

Date: 18-Feb-22

Client: Terracon Consultants

ANALYTICAL QC SUMMARY REPORT

Project Name: Blythewood Ind. Park **Workorder:** 2202G57

Qualifiers:

BRL

Greater than Result value

Estimated value detected below Reporting Limit

Below reporting limit

Rpt Lim Reporting Limit

BatchID: 330879

Sample ID: MB-330879	Client ID:				Uni	ts: mg/L	Prej	p Date: 02/1	5/2022	Run No: 477677
SampleType: MBLK	TestCode:	METALS, TOTAL S	W6010D		Bat	chID: 330879	Ana	alysis Date: 02/1	5/2022	Seq No: 11034851
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit Qua
Cobalt	BRL	0.0200								
Manganese	BRL	0.0150								
Nickel	BRL	0.0200								
Sample ID: LCS-330879	Client ID:				Uni	ts: mg/L	Pre	p Date: 02/1	5/2022	Run No: 477677
SampleType: LCS	TestCode:	METALS, TOTAL S	W6010D		Bat	chID: 330879	Ana	alysis Date: 02/1	5/2022	Seq No: 11034854
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit Qua
Cobalt	1.061	0.0200	1.000		106	80	120			
Manganese	1.057	0.0150	1.000		106	80	120			
Nickel	1.074	0.0200	1.000		107	80	120			
Sample ID: 2202F22-001BMS	Client ID:				Uni	ts: mg/L	Prej	p Date: 02/1	5/2022	Run No: 477677
SampleType: MS	TestCode:	METALS, TOTAL S	W6010D		Bat	chID: 330879	Ana	alysis Date: 02/1	5/2022	Seq No: 11034856
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit Qua
Cobalt	1.070	0.0200	1.000	0.003780	107	75	125			
Manganese	1.068	0.0150	1.000	0.006540	106	75	125			
Nickel	1.080	0.0200	1.000		108	75	125			
Sample ID: 2202F22-001BMSD	Client ID:				Uni	U				Run No: 477677
SampleType: MSD	TestCode:	METALS, TOTAL S	W6010D		Bat	chID: 330879	Ana	alysis Date: 02/1	5/2022	Seq No: 11034857
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit Qua
Cobalt	1.048	0.0200	1.000	0.003780	104	75	125	1.070	2.14	20
Manganese	1.045	0.0150	1.000	0.006540	104	75	125	1.068	2.22	20
Nickel	1.054	0.0200	1.000		105	75	125	1.080	2.40	20

Less than Result value

N Analyte not NELAC certified

E Estimated (value above quantitation range)

S Spike Recovery outside limits due to matrix

B Analyte detected in the associated method blank

R RPD outside limits due to matrix

Holding times for preparation or analysis exceeded

Date: 18-Feb-22

Client: Terracon Consultants
Project Name: Blythewood Ind. Park

ANALYTICAL QC SUMMARY REPORT

Workorder: 2202G57

BatchID: 330880

Sample ID: MB-330880 SampleType: MBLK	Client ID: TestCode:	METALS, TOTAL S	W6010D		Uni Bat	its: mg/Kg schID: 330880		rep Date: analysis Date:	02/15/2022 02/15/2022	Run No: 477669 Seq No: 11034785
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limi	t RPD Re	f Val %RI	PD RPD Limit Qua
Arsenic	BRL	2.50								
Cadmium	BRL	2.50								
Chromium	BRL	2.50								
Cobalt	BRL	2.50								
ead	BRL	5.00								
lickel	BRL	5.00								
Sample ID: LCS-330880 SampleType: LCS	Client ID: TestCode:	METALS, TOTAL S	W6010D		Uni Bat	its: mg/Kg cchID: 330880		rep Date: analysis Date:	02/15/2022 02/15/2022	Run No: 477669 Seq No: 11034786
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limi	t RPD Re	f Val %RI	PD RPD Limit Qua
Arsenic	45.88	2.50	50.00		91.8	80	120			
Cadmium	47.65	2.50	50.00		95.3	80	120			
Chromium	50.79	2.50	50.00		102	80	120			
Cobalt	50.55	2.50	50.00		101	80	120			
ead	49.01	5.00	50.00		98.0	80	120			
Nickel	51.10	5.00	50.00		102	80	120			
Sample ID: 2202C47-001BMS SampleType: MS	Client ID: TestCode:	METALS, TOTAL S	W6010D		Uni Bat	its: mg/Kg- chID: 330880	-	rep Date: analysis Date:	02/15/2022 02/15/2022	Run No: 477669 Seq No: 11034790
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limi	t RPD Re	f Val %RI	PD RPD Limit Qua
rsenic	34.03	2.08	41.68		81.7	75	125			
Cadmium	39.74	2.08	41.68	0.3797	94.4	75	125			
Chromium	51.20	2.08	41.68	7.890	104	75	125			
Cobalt	41.23	2.08	41.68	0.5497	97.6	75	125			
Lead	53.22	4.17	41.68	13.20	96.0	75	125			
Nickel	42.51	4.17	41.68	1.025	99.5	75	125			
Qualifiers: > Greater than Result val	ue		< Less	than Result value			В	Analyte detected	in the associated meth	od blank
BRL Below reporting limit			E Estim	ated (value above quantit	ation range)		Н	Holding times for	or preparation or analy	sis exceeded
J Estimated value detec	ted below Reporting	g Limit	N Analy	rte not NELAC certified			R	RPD outside lin	nits due to matrix	
Rpt Lim Reporting Limit			S Spike	Recovery outside limits of	due to matrix					

Client: Terracon Consultants
Project Name: Blythewood Ind. Park

ANALYTICAL QC SUMMARY REPORT

Workorder: 2202G57

BatchID: 330880

Date:

18-Feb-22

Sample ID: 2202C47-001BMSD SampleType: MSD	Client ID: TestCode:	METALS, TOTAL S	W6010D		Uni Bat	ts: mg/Kg chID: 330880		p Date: 02/1 alysis Date: 02/1		Run No: 477669 Seq No: 11034792	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit Qu	al
Arsenic	34.15	2.09	41.81		81.7	75	125	34.03	0.337	20	
Cadmium	40.15	2.09	41.81	0.3797	95.1	75	125	39.74	1.03	20	
Chromium	51.92	2.09	41.81	7.890	105	75	125	51.20	1.40	20	
Cobalt	41.68	2.09	41.81	0.5497	98.4	75	125	41.23	1.09	20	
Lead	52.72	4.18	41.81	13.20	94.5	75	125	53.22	0.943	20	
Nickel	43.02	4.18	41.81	1.025	100	75	125	42.51	1.20	20	

BRL Below reporting limit

J Estimated value detected below Reporting Limit

Rpt Lim Reporting Limit

< Less than Result value

E Estimated (value above quantitation range)

N Analyte not NELAC certified

S Spike Recovery outside limits due to matrix

B Analyte detected in the associated method blank

H Holding times for preparation or analysis exceeded

Client: Terracon Consultants

ANALYTICAL QC SUMMARY REPORT

Date:

18-Feb-22

Blythewood Ind. Park **Project Name:** Workorder: 2202G57

BatchID: 330912

Sample ID: MB-330912	Client ID:				Uni	ts: mg/Kg	Pro	ep Date:	02/15/2022	Run No: 477632	2
SampleType: MBLK	TestCode:	Total Mercury by SW747	3		Bat	chID: 330912	Ar	nalysis Date:	02/15/2022	Seq No: 110322	252
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Re	f Val %RPI	RPD Limit	Qual
Mercury	BRL	0.100									
Sample ID: LCS-330912	Client ID:				Uni	ts: mg/Kg	Pro	ep Date:	02/15/2022	Run No: 477632	2
SampleType: LCS	TestCode:	Total Mercury by SW747	3		Bat	chID: 330912	Ar	nalysis Date:	02/15/2022	Seq No: 110322	251
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Re	f Val %RPI	RPD Limit	Qual
Mercury	0.8872	0.100	1.000		88.7	80	120				
Sample ID: 2202B31-006AMS	Client ID:				Uni	its: mg/Kg-	dry Pro	ep Date:	02/15/2022	Run No: 477632	2
SampleType: MS	TestCode:	Total Mercury by SW747	3		Bat	chID: 330912	Ar	nalysis Date:	02/15/2022	Seq No: 110322	271
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Re	f Val %RPI	RPD Limit	Qual
Mercury	2.537	0.112	1.120	1.261	114	80	120				
Sample ID: 2202B31-006AMSD	Client ID:				Uni	its: mg/Kg-	dry Pro	ep Date:	02/15/2022	Run No: 477632	2
SampleType: MSD	TestCode:	Total Mercury by SW747	3		Bat	chID: 330912	Ar	nalysis Date:	02/15/2022	Seq No: 110322	272
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Re	f Val %RPI	RPD Limit	Qual
Mercury	1.774	0.112	1.120	1.261	45.8	80	120	2.537	35.4	20	SR

Qualifiers: Greater than Result value

> BRL Below reporting limit

Rpt Lim Reporting Limit

Estimated value detected below Reporting Limit

Less than Result value

E Estimated (value above quantitation range)

N Analyte not NELAC certified

S Spike Recovery outside limits due to matrix

B Analyte detected in the associated method blank

Holding times for preparation or analysis exceeded

Client: Terracon Consultants

ANALYTICAL QC SUMMARY REPORT

Date:

18-Feb-22

Project Name: Blythewood Ind. Park
Workorder: 2202G57

BatchID: 331000

Sample ID: LCS-331000	Client ID:				Uni	ts: pH Unit	-	Date:	02/16/2022	Run No:	477702
SampleType: LCS	TestCode:	Laboratory Hydrogen Ion	ı (pH) SW9045	SD	Bate	chID: 331000	Ana	llysis Date:	02/16/2022	Seq No:	11033709
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref	Val %RPD	RPD 1	Limit Qual
pН	6.998	0.01	7.000		100.0	90	110				
Sample ID: 2202F25-001ADUP	Client ID:				Uni	ts: pH Unit	ts Prep	Date:	02/16/2022	Run No:	477702
SampleType: DUP	TestCode:	Laboratory Hydrogen Ion	(pH) SW9045	SD	Bato	chID: 331000	Ana	lysis Date:	02/16/2022	Seq No:	11033739
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref	Val %RPD	RPD	Limit Qual
рН	5.536	0.01						5.589	0.953	10) Н
Sample ID: 2202G57-001ADUP	Client ID:	SB-4			Uni	ts: pH Unit	ts Prep	Date:	02/16/2022	Run No:	477702
SampleType: DUP	TestCode:	Laboratory Hydrogen Ion	(pH) SW9045	SD	Bato	chID: 331000	Ana	lysis Date:	02/16/2022	Seq No:	11033714
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref	Val %RPD	RPD	Limit Qual
pН	4.983	0.01						5.069	1.71	10) Н

Qualifiers: > Greater than Result value

BRL Below reporting limit

Rpt Lim Reporting Limit

J Estimated value detected below Reporting Limit

< Less than Result value

E Estimated (value above quantitation range)

N Analyte not NELAC certified

S Spike Recovery outside limits due to matrix

B Analyte detected in the associated method blank

H Holding times for preparation or analysis exceeded

Client: Terracon Consultants

Project Name: Blythewood Ind. Park

Workorder: 2202G57

ANALYTICAL QC SUMMARY REPORT

Date:

18-Feb-22

BatchID: 331040

Sample ID: MB-331040	Client ID:				Uni	ts: mg/L	Prep Date:	02/17/2022	Run No: 477761
SampleType: MBLK	TestCode:	Nitrogen, Ammonia (as N)	E350.1		Bato	chID: 331040	Analysis Date	e: 02/17/2022	Seq No: 11037577
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit RPD F	tef Val %RP	D RPD Limit Qual
Nitrogen, Ammonia (As N)	BRL	0.020							
Sample ID: LCS-331040	Client ID:				Uni	ts: mg/L	Prep Date:	02/17/2022	Run No: 477761
SampleType: LCS	TestCode:	Nitrogen, Ammonia (as N)	E350.1		Bato	chID: 331040	Analysis Date	2: 02/17/2022	Seq No: 11037578
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit RPD F	tef Val %RP	D RPD Limit Qual
Nitrogen, Ammonia (As N)	0.4992	0.020	0.5000		99.8	90	110		
Sample ID: 2202C51-001AMS	Client ID:				Uni	ts: mg/L	Prep Date:	02/17/2022	Run No: 477761
SampleType: MS	TestCode:	Nitrogen, Ammonia (as N)	E350.1		Bato	chID: 331040	Analysis Date	e: 02/17/2022	Seq No: 11037614
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit RPD R	tef Val %RP	D RPD Limit Qual
Nitrogen, Ammonia (As N)	0.5127	0.020	0.5000		103	90	110		
Sample ID: 2202C75-004AMS	Client ID:				Uni	ts: mg/L	Prep Date:	02/17/2022	Run No: 477761
SampleType: MS	TestCode:	Nitrogen, Ammonia (as N)	E350.1		Bato	chID: 331040	Analysis Date	e: 02/17/2022	Seq No: 11037619
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit RPD R	tef Val %RP	D RPD Limit Qual
Nitrogen, Ammonia (As N)	0.5480	0.020	0.5000	0.04340	101	90	110		
Sample ID: 2202C51-001AMSD	Client ID:				Uni	ts: mg/L	Prep Date:	02/17/2022	Run No: 477761
SampleType: MSD	TestCode:	Nitrogen, Ammonia (as N)	E350.1		Bato	chID: 331040	Analysis Date	2: 02/17/2022	Seq No: 11037617
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit RPD R	tef Val %RP	D RPD Limit Qual
Nitrogen, Ammonia (As N)	0.5151	0.020	0.5000		103	90	110 0.51	27 0.46	30

Qualifiers: > Greater than Result value

BRL Below reporting limit

J Estimated value detected below Reporting Limit

Below reporting limit

Rpt Lim Reporting Limit

< Less than Result value

E Estimated (value above quantitation range)

N Analyte not NELAC certified

S Spike Recovery outside limits due to matrix

B Analyte detected in the associated method blank

H Holding times for preparation or analysis exceeded

Client: Terracon Consultants

Project Name:

Terracon Consultants
Blythewood Ind. Park

ANALYTICAL QC SUMMARY REPORT

Workorder: 2202G57 **BatchID: R477495**

Sample ID: LCS-R477495 SampleType: LCS	Client ID: TestCode:	Hydrogen Ion (pH) by SM	14500H+B			its: pH Unit chID: R477495	-	Date: lysis Date:	02/14/2022	Run No: 477495 Seq No: 11027884
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref	Val %RPD	RPD Limit Qual
рН	7.010	0.0100	7.000		100	90	110			
Sample ID: 2202C37-001ADUP	Client ID:				Un	its: pH Unit	s Prep	Date:		Run No: 477495
SampleType: DUP	TestCode:	Hydrogen Ion (pH) by SM	14500H+B		Bat	chID: R477495	5 Ana	lysis Date:	02/14/2022	Seq No: 11027891
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref	Val %RPD	RPD Limit Qual
pН	10.50	0.0100						10.51	0.048	20
Sample ID: 2202G57-010ADUP	Client ID:	FSP-1			Un	its: pH Unit	s Prep	Date:		Run No: 477495
SampleType: DUP	TestCode:	Hydrogen Ion (pH) by SM	14500H+B		Bat	chID: R47749 5	5 Ana	lysis Date:	02/14/2022	Seq No: 11027931
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref	Val %RPD	RPD Limit Qual
рН	4.769	0.0100						4.795	0.544	- 20

Qualifiers: > Greater than Result value

BRL Below reporting limit

J Estimated value detected below Reporting Limit

Rpt Lim Reporting Limit

< Less than Result value

E Estimated (value above quantitation range)

N Analyte not NELAC certified

S Spike Recovery outside limits due to matrix

B Analyte detected in the associated method blank

H Holding times for preparation or analysis exceeded

R RPD outside limits due to matrix

18-Feb-22

Date:

Client: Terracon Consultants **Project Name:**

Blythewood Ind. Park

Workorder: 2202G57

ANALYTICAL QC SUMMARY REPORT

BatchID: R477806

Date:

18-Feb-22

Sample ID: MB-R477806	Client ID:				Un	its: mg/L	Pre	ep Date:		Run No: 477806
SampleType: MBLK	TestCode:	ION SCAN SW9056A			Bat	tchID: R47780	6 An	alysis Date: 02/16	5/2022	Seq No: 11036673
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPI	O RPD Limit Qua
Fluoride	BRL	0.20								
Sample ID: LCS-R477806	Client ID:				Un	its: mg/L	Pre	p Date:		Run No: 477806
SampleType: LCS	TestCode:	ION SCAN SW9056A			Bat	tchID: R47780	6 An	alysis Date: 02/16	5/2022	Seq No: 11036671
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPI	O RPD Limit Qua
Fluoride	4.942	0.20	5.000		98.8	90	110			
Sample ID: 2202G57-011AMS	Client ID:	FSP-2			Un	its: mg/L	Pre	ep Date:		Run No: 477806
SampleType: MS	TestCode:	ION SCAN SW9056A			Bat	tchID: R47780	6 An	alysis Date: 02/16	5/2022	Seq No: 11036701
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPI	O RPD Limit Qua
Fluoride	5.153	0.20	5.000		103	90	110			
Sample ID: 2202G57-011AMSD	Client ID:	FSP-2			Un	its: mg/L	Pre	ep Date:		Run No: 477806
SampleType: MSD	TestCode:	ION SCAN SW9056A			Bat	tchID: R47780	6 An	alysis Date: 02/16	5/2022	Seq No: 11036708
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPI	O RPD Limit Qua
Fluoride	5.258	0.20	5.000		105	90	110	5.153	2.02	20

Qualifiers: Greater than Result value

> BRL Below reporting limit

Estimated value detected below Reporting Limit

Rpt Lim Reporting Limit

Less than Result value

E Estimated (value above quantitation range)

N Analyte not NELAC certified

S Spike Recovery outside limits due to matrix

B Analyte detected in the associated method blank

Holding times for preparation or analysis exceeded

End of Report



ANALYTICAL REPORT

CLIENT:

Terracon 521 Clemson Road Columbia, SC 29229

PROJECT:

Blythewood Industries

REPORT DATE:

02.17.22

REPORT APPROVED BY:

Bryant W. Boyd Laboratory Manager

bryant@axs-inc.com

Any questions related to this report should be directed to Access Analytical, Inc. via phone at 803.781.4243 or via email at the address listed above.

South Carolina DHEC state lab certification #: 32571001
 Florida – DOH national NELAP lab accreditation #: E871145



Access Analytical, Inc. 15 Thames Valley Rd. ~ Irmo, SC 29063

PHONE: 803.781.4243 ~ FAX: 803.781.4303 ~ WEB: www.axs-inc.com



Lab ID #: 41544-001 Matrix: Waste Water

 Project:
 Blythewood Industries
 Collected:
 2/10/2022 @ 10:30

 Sample Name:
 SW-1
 Date Received:
 2/10/2022 @ 14:20

Client ID #:

Parameter	Result	MRL*	Units	Method Reference	Data Flag *	Date/Time of Analysis	Analyst
% Solids	<1	None	%	SM 2540 G		2/11/2022 11:29	JRS
Ammonia-N	<0.015	0.1	mg/L	SM 4500-NH3 D-2011	J	2/15/2022 9:59	AMM
COD	36.0	20	mg/L	HACH 8000 (1979)		2/16/2022 14:01	AMM
рН	4.44	None	SU	SM 4500 HB-2011	Н	2/16/2022 13:34	MML

Laboratory Report #: 41544 Page 2 of 17



Lab ID #: 41544-002 Matrix: Waste Water

 Project:
 Blythewood Industries
 Collected:
 2/10/2022 @ 10:35

 Sample Name:
 SW-2
 Date Received:
 2/10/2022 @ 14:20

Client ID #:

Parameter	Result	MRL*	Units	Method Reference	Data Flag *	Date/Time of Analysis	Analyst
% Solids	<1	None	%	SM 2540 G		2/11/2022 11:29	JRS
Ammonia-N	<0.015	0.1	mg/L	SM 4500-NH3 D-2011	J	2/15/2022 9:59	AMM
COD	19	20	mg/L	HACH 8000 (1979)	J	2/16/2022 14:01	AMM
рН	5.12	None	SU	SM 4500 HB-2011	Н	2/16/2022 13:37	MML

Laboratory Report #: 41544 Page 3 of 17



Lab ID #: 41544-003 Matrix: Waste Water

 Project:
 Blythewood Industries
 Collected:
 2/10/2022 @ 11:20

 Sample Name:
 SW-4
 Date Received:
 2/10/2022 @ 14:20

Client ID #:

Parameter	Result	MRL *	Units	Method Reference	Data Flag *	Date/Time of Analysis	Analyst
% Solids	<1	None	%	SM 2540 G		2/11/2022 11:29	JRS
Ammonia-N	<0.015	0.1	mg/L	SM 4500-NH3 D-2011	J	2/15/2022 9:59	AMM
COD	17	20	mg/L	HACH 8000 (1979)	J	2/16/2022 14:01	AMM
рН	3.93	None	SU	SM 4500 HB-2011	Н	2/16/2022 13:45	MML

Laboratory Report #: 41544 Page 4 of 17



Lab ID #: 41544-004 Matrix: Waste Water

 Project:
 Blythewood Industries
 Collected:
 2/10/2022 @ 12:00

 Sample Name:
 SW-5
 Date Received:
 2/10/2022 @ 14:20

Client ID #:

Parameter	Result	MRL*	Units	Method Reference	Data Flag *	Date/Time of Analysis	Analyst
% Solids	<1	None	%	SM 2540 G		2/11/2022 11:29	JRS
Ammonia-N	<0.015	0.1	mg/L	SM 4500-NH3 D-2011	J	2/15/2022 9:59	AMM
COD	31.0	20	mg/L	HACH 8000 (1979)		2/16/2022 14:01	AMM
рН	3.98	None	SU	SM 4500 HB-2011	Н	2/16/2022 13:52	MML

Laboratory Report #: 41544 Page 5 of 17



Lab ID #: 41544-005 Matrix: Waste Water

 Project:
 Blythewood Industries
 Collected:
 2/10/2022 @ 12:00

 Sample Name:
 SW-6
 Date Received:
 2/10/2022 @ 14:20

Client ID #:

Parameter	Result	MRL*	Units	Method Reference	Data Flag *	Date/Time of Analysis	Analyst
% Solids	<1	None	%	SM 2540 G		2/11/2022 11:29	JRS
Ammonia-N	<0.015	0.1	mg/L	SM 4500-NH3 D-2011	J	2/15/2022 9:59	AMM
COD	17	20	mg/L	HACH 8000 (1979)	J	2/16/2022 14:01	AMM
рН	4.69	None	SU	SM 4500 HB-2011	Н	2/16/2022 13:55	MML

Laboratory Report #: 41544 Page 6 of 17



Lab ID #: 41544-006 Matrix: Waste Water

 Project:
 Blythewood Industries
 Collected:
 2/10/2022 @ 12:15

 Sample Name:
 SW-7
 Date Received:
 2/10/2022 @ 14:20

Client ID #:

Parameter	Result	MRL*	Units	Method Reference	Data Flag *	Date/Time of Analysis	Analyst
% Solids	<1	None	%	SM 2540 G		2/11/2022 11:29	JRS
Ammonia-N	<0.015	0.1	mg/L	SM 4500-NH3 D-2011	J	2/15/2022 9:59	AMM
COD	19	20	mg/L	HACH 8000 (1979)	J	2/16/2022 14:01	AMM
рН	4.01	None	SU	SM 4500 HB-2011	Н	2/16/2022 14:00	MML

Laboratory Report #: 41544 Page 7 of 17



Lab ID #: 41544-007 Matrix: Waste Water

 Project:
 Blythewood Industries
 Collected:
 2/10/2022 @ 12:05

 Sample Name:
 SW-8
 Date Received:
 2/10/2022 @ 14:20

Client ID #:

Parameter	Result	MRL *	Units	Method Reference	Data Flag *	Date/Time of Analysis	Analyst
% Solids	<1	None	%	SM 2540 G		2/11/2022 11:29	JRS
Ammonia-N	0.0175	0.1	mg/L	SM 4500-NH3 D-2011	J	2/15/2022 9:59	AMM
COD	26.0	20	mg/L	HACH 8000 (1979)		2/16/2022 14:01	AMM
рН	4.99	None	SU	SM 4500 HB-2011	Н	2/16/2022 14:05	MML

Laboratory Report #: 41544 Page 8 of 17



Lab ID #: 41544-008 Matrix: Waste Water

 Project:
 Blythewood Industries
 Collected:
 2/10/2022 @ 12:20

 Sample Name:
 SW-9
 Date Received:
 2/10/2022 @ 14:20

Client ID #:

Parameter	Result	MRL*	Units	Method Reference	Data Flag *	Date/Time of Analysis	Analyst
% Solids	<1	None	%	SM 2540 G		2/11/2022 11:29	JRS
Ammonia-N	<0.015	0.1	mg/L	SM 4500-NH3 D-2011	J	2/15/2022 9:59	AMM
COD	19	20	mg/L	HACH 8000 (1979)	J	2/16/2022 14:01	AMM
рН	4.26	None	SU	SM 4500 HB-2011	Н	2/16/2022 14:30	MML

Laboratory Report #: 41544 Page 9 of 17



Lab ID #: 41544-009 Matrix: Waste Water

 Project:
 Blythewood Industries
 Collected:
 2/10/2022 @ 12:35

 Sample Name:
 SW-10
 Date Received:
 2/10/2022 @ 14:20

Client ID #:

Parameter	Result	MRL*	Units	Method Reference	Data Flag *	Date/Time of Analysis	Analyst
% Solids	<1	None	%	SM 2540 G		2/11/2022 11:29	JRS
Ammonia-N	<0.015	0.1	mg/L	SM 4500-NH3 D-2011	J	2/15/2022 9:59	AMM
COD	33.0	20	mg/L	HACH 8000 (1979)		2/16/2022 14:01	AMM
рН	4.11	None	SU	SM 4500 HB-2011	Н	2/16/2022 14:35	MML

Laboratory Report #: 41544 Page 10 of 17



Lab ID #: 41544-010 Matrix: Waste Water

 Project:
 Blythewood Industries
 Collected:
 2/10/2022 @ 12:40

 Sample Name:
 SW-11
 Date Received:
 2/10/2022 @ 14:20

Client ID #:

Parameter	Result	MRL *	Units	Method Reference	Data Flag *	Date/Time of Analysis	Analyst
% Solids	<1	None	%	SM 2540 G		2/11/2022 11:29	JRS
Ammonia-N	0.0871	0.1	mg/L	SM 4500-NH3 D-2011	J	2/15/2022 9:59	AMM
COD	26.0	20	mg/L	HACH 8000 (1979)		2/16/2022 14:01	AMM
рН	5.36	None	SU	SM 4500 HB-2011	Н	2/16/2022 14:40	MML

Laboratory Report #: 41544 Page 11 of 17



Lab ID #: 41544-011 Matrix: Waste Water

 Project:
 Blythewood Industries
 Collected:
 2/10/2022 @ 12:45

 Sample Name:
 SW-12
 Date Received:
 2/10/2022 @ 14:20

Client ID #:

Parameter	Result	MRL*	Units	Method Reference	Data Flag *	Date/Time of Analysis	Analyst
% Solids	<1	None	%	SM 2540 G		2/11/2022 11:29	JRS
Ammonia-N	<0.015	0.1	mg/L	SM 4500-NH3 D-2011	J	2/15/2022 9:59	AMM
COD	19	20	mg/L	HACH 8000 (1979)	J	2/16/2022 14:01	AMM
рН	3.95	None	SU	SM 4500 HB-2011	Н	2/16/2022 13:30	MML

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2/10/2022 @ 14:20

Lab ID #: 41544-012 Matrix: Waste Water

Project: Blythewood Industries Collected: 2/10/2022 @ 11:45 Sample Name: SW-3 Date Received:

Client ID #:

Parameter	Result	MRL*	Units	Method Reference	Data Flag *	Date/Time of Analysis	Analyst
% Solids	<1	None	%	SM 2540 G		2/11/2022 11:29	JRS
Ammonia-N	<0.015	0.1	mg/L	SM 4500-NH3 D-2011	J	2/15/2022 9:59	AMM
COD	24.0	20	mg/L	HACH 8000 (1979)		2/16/2022 14:01	AMM
pH	4.38	None	SU	SM 4500 HB-2011	Н	2/16/2022 14:45	MML

Laboratory Report #: 41544 Page 13 of 17



Laboratory Endorsement / Definitions

Sample analysis was performed in accordance with approved methodologies provided by the Environmental Protection Agency, Standard Methods or other recognized agencies.

* Common abbreviations that may be utilized in this report:

ND Indicates the result was Not Detected at the specified reporting limit

"<" Indicated the result as less than the indicated amount
 MI Indicates the result was subject to Matrix Interference
 TNTC Indicates the result was Too Numerous to Count
 SUB Indicates the analysis was Sub-Contracted
 FLD Indicates the analysis was performed in the Field

DL Detection Limit
DF Dilution Factor

MRL The minimum reporting limit (MRL) is defined as the minimum quantifiable concentration of a given analyte in a sample.

MDL Calculated minimum detection limit

PQL Practical Quantitation Limit

RE Re-analysis

* Reporting flags that may be utilized in this report:

J Indicates the result is between the MDL and MRL and considered to be an estimated result

MB Indicates the analyte was detected in the associated Method Blank

H Indicates the recommended holding time was exceeded

Indicates a non-compliant or not applicable QC recovery or RPD

A BOD or CBOD GGA check value for this sample did not meet acceptance criteria.

B BOD or CBOD blank depletion did not meet acceptance criteria.

C Indicates the spike % recovery was not acceptable.

D Indicates the duplicate % difference was not acceptable.

E Toxicity is apparent in the sample.

Sample receipt at Access Analytical is documented through the attached chain of custody. In accordance with laboratory protocol, this report shall be reproduced only in full and with the written permission of Access Analytical, Inc.. The results contained within this report relate only to the samples reported. The documented results are presented within this report.

This report pertains only to the samples listed in the attached report and should be retained as a permanent record thereof. The results contained within this report are intended for the use of the client. Any unauthorized use of the information contained in this report is prohibited.

Laboratory Report #: 41544 Page 14 of 17



Sample Receipt

Were samples received on ice?	YES
Were samples received within required temperature limits?	YES
Are the number of samples the same as stated on the chain of custody?	YES
Are samples submitted with a correct and complete chain of custody?	YES
Are bottle caps tight and securely in place, coolers and samples intact?	YES
Are the correct sample containers provided?	YES
Were samples within the holding time for requested test(s)?	YES
Is the volume of sample submitted sufficient for the requested test(s)?	YES
Is there sufficient air space in bottle for bacteriological analysis?	n/a
Were samples received with applicable preservative?	YES

Login Comments

Sample 41544-001:

pH received out of 15 minute hold time. Proceed with analysis.

Laboratory Report #: 41544 Page 15 of 17



Access Lab Report #: Sub Lab (if applicable): Client Purchase Order #: Access Estimate #:	나 숙낙 나 	1:	7.	ACCESS ANALYTICAL, INC.	2 00 1 1 1 2 2 1	Access Analytical, Inc. 15 Thames Valley Rd.* " in Phone: 803-781-4243 / I SCDHEC Lab Certification NELAC Lab ID # E871145	, Inc. , Rd. ~ Ir 4243 / I ification 871145	Access Analytical, Inc. 15 Thames Volley Rd. ~ Irmo, SC 29063 Phone: 803-781-4243 / Fax: 803-781-4303 / www.axs-inc.com SCDHC Lab Certification # 32571 NELAC Lab ID # E871145	xs-inc.com	Chain of	Chain of Custody Record
Client Tryong en	Consultants,	Inc.		Preservativ	Preservatives (see codes):	٥	5			Preservation	Preservation Codes / Bottle Types:
Attn: Walker	-			Bottle Type	Bottle Types (see codes):	<u>Q</u> _	4		*Preservative Co	des: 1. 2 - HNO3, 3 - H.50s, 4 = P	18 OH, 5 - Nas5, 3,, 6 - Method 5035 set w/ NaHSO, 8
Address: 5721 Cl-						4			CHOH, 7 = NaOF 12 = Assorbit Aci	/ZnOAC, 8 = H.PO., 9 = coals d / HCL, 13 = EDA	ChOH, 7 = NaDHZnOKC, 8 = H#Ou, 9 = cooled to SGC, 10 = cooled to SIDC. 11 = Amm.Ch. 12 = Accordic Acid f HCL, 13 = EDA.
City: Columbia	,	State:	2	Zip Code: 29,22	5				"Matrix Codes: GW = ground wa SL = sludge, A = 7	ter, WW = waste water, DW iir, IW = industrial waste, C =	"Natris Codes: Vantris Codes: Exercity Was waste wate; DW = drinking water, SW = surface/storm water, .5 = soil, SL = sludge, A = nit, LW = industrial waste, D = other (specify in comments section)
Phone: 863-729-7573	75.73 Fax:				IANA:				*Program Area C	odes: ter Act (for wastewaters), S	Program Area Codes. CVM = Clean Woter Act (for wastewaters). SDWA = Se'e Diniting Water Act (for drinking water).
Email:	Walker, hinson	Ptimeen, com	Cen, Con	r	841 O		~		SHW = Solid and "Container Type	SHW = Solid and Hazardous Wastes (for soils, Container Type: G = Glass, P = Plastic	ground waters and waste samples)
Project Name:	Blythewood Ind	Industrial			JESTE	27,	1 10				
Sampled By (Signature):	March C				REQU	; ++		40		Notes	Notes / Comments
Lab iD: Sample Name:	Date Collected: Time Collected:	Time Collected:	CaComp Matrix G=Grab (see codes)	Program Area (see codes)	Total # Containers	0		12		CONCOL .	
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White Copy: Lab original / Canary Copy: Client Copy	Canary Copy: Clent Copy	N	OTE: Relinqui	shing samples vi	a this Chain o	f Custod	/ docum	NOTE: Relinquishing samples via this Chain of Custody document constitutes client acceptance of Access Analytical terms and conditions.	ance of Access	Analytical terms an	d conditions.



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Sub Lab	Sub Lab (if applicable):	/ Sr	/ Sub Report #:		1	Ac	Access	Pho	ne: 803-	781-4243	/ Fax: 803-78	Phone: 803-781-4243 / Fax: 803-781-4303 / www.axs-inc.com	xs-inc.com	Chain of	Chain of Custody Record	
Client P	Client Purchase Order #:				3	N P	ANALYTICAL, INC.		SCDHEC Lab Certification	ertificati	SCDHEC Lab Certification # 32571					_
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Attn:	Walker A	Fresca					Bottle Types (see codes):	es (see co	des): b	a	C		*Preservative 0 = None, 1 =	Codes: HCL, 2 = HNO3, 3 = HJSO., 4 = N	JaOH, 5 = Naj5,O ₆ , 6 = Method 5035 set w/ NaH5O ₄ .	-2
Address:		9							1				CHsOH, 7 = Na 12 = Ascorbic.	OH/ZnOAC, 8 = H.POs, 9 = coole Actd / HCL, 13 = EDA	CHACH 7 = NaDM/ZnoAC, 8 = N+POL, 9 = cooled to $SB'C$, 10 = cooled to $SB'C$, 11 = Anm.G+, 12 = Acorbic Acid / ACL , 13 = EDA .	
City:				Sta	State:	Zip Code:	ů.		:SISX				*Matrix Codes: GW = ground w SL = slodge, A =	water, WW = waste water, DW = air, IW = industrial waste, D =	"Natrity Codes: CEM = ground water, WW = waste water, DW = drinking water, SW = surface) steem water, S = soil SS = shoilds, A = sir, WW = industrial waste, D = other (specify in comments section)	
Phone:			Fax:						JANA :				*Program Area CWA = Clean 3	a Codes Nater Act (for wastewaters), SI	*Program Area Codes CVA» - Cloan Water Act (for wasteweiers), SDWA - Sale Drinking Water Act (for drinking water), EVMs - Cloan Water Act (for wasteweiers).	
Email:									D LAB	7			*Container Ty	SAW = Solid and Hazardous Wastes (for soils, *Container Type: G = Glass, P = Plastic	ground waters and waste samples)	_
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APPENDIX E – COMMON ACRONYMS and ABBREVIATIONS

ACRONYMS AND ABBREVIATIONS

ACROINTING AND ABBREVIAT	
·	micromhos per centimeter
	All Appropriate Inquiry
	Asbestos-Containing Material
	Asbestos Hazard Emergency Response Act
	American Institute of Certified Planners
AIHA	American Industrial Hygiene Association
ARARs	Applicable or Relevant and Appropriate Requirements
ASAP	As Soon As Possible
AST	Aboveground Storage Tank
bgs	below ground surface
•	Benzene, Toluene, Ethylbenzene, and Xylenes
	Computer-Aided Drafting
	Comprehensive Environmental Response, Compensation,
	and Liability Information System
CER	
	Certified Industrial Hygienist
	•
	Clear Wide Mouth Glass Jar
	Dense Non-Aqueous Phase Liquid
	Environmental Data Resources, Inc.
	Environmental Protection Agency
	Environmental Site Assessment
	Environmental Science Corporation
	electron-volt
	fibers per cubic centimeter of air
	Freedom of Information Act
GC	Gas Chromatograph
GIS	Geographical Information System
GPS	Geographical Positioning System
GRO	Ground water Remediation Objective
HCI	Hydrochloric Acid
HNO ₃	Nitric Acid
HUDUr	nited States Department of Housing and Urban Development
	Investigation Derived Waste
	Impoundment
	liter
	Lead-Based Paint
	Laboratory Control Sample
	Light Non-Aqueous Phase Liquid
	Light Non-Aqueous Fhase Liquid
	Leaking Underground Storage Tank
	milligrams per kilogram
NaOH	Sodium Hydroxide

ACRONYMS AND ABBREVIATIONS

NELAC	National Environmental Laboratory Accreditation Conference
	National Institute of Standards and Technology
	Nephelometric Turbidity Units
	Occupational Health and Safety Administration
	Organic Vapor Meter
	ounce
	Polycyclic Aromatic Hydrocarbon
	Precision, Accuracy, Representativeness,
	Completeness, Comparability, and Sensitivity
PCB	
	Professional Geologist
	Polarized Light Microscopy
	Practical Quantitation Limit
	Polyvinyl Chloride
	Quality Assurance Project Plan
	Quality Control
RA	Remedial Applicant
RCRA	Resource Conservation and Recovery Act
REC	Recognized Environmental Condition
RO	
RPD	Relative Percent Difference
SCDHEC	South Carolina Department of Health and Environmental Control
SIR	Site Investigation Report
SPLP	Synthetic Precipitation Leaching Procedure
SQG	Small Quantity Generator
SRO	Soil Remediation Objective
SRP	
Stat Analysis	Stat Analysis Corporation
SVOC	Semivolatile Organic Compound
TACO	Tiered Approach to Corrective Action Objectives
TCLP	Toxicity Characteristic Leaching Procedure
TSD	Treatment, Storage, and Disposal
TSOP	Terracon Standard Operating Procedure
UAS	
USEPA	United States Environmental Protection Agency
UST	Underground Storage Tank
VOC	Volatile Organic Compound
VSP	Visual Sample Plan
XRF	X-Ray Fluorescence