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95 Glastonbury Boulevard
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Glastonbury, CT 06033
T: 860.286.8900
F: 860.633.5699
www.gza.com

January 31, 2025
GZA File No. 03.0043654.90

Mr. Joseph Martella
Rhode Island Department of Environmental Management
Office of Land Revitalization and Sustainable Materials
235 Promenade Street, 3rd Floor
Providence, Rhode Island 02908

Re: Remedial Action Work Plan Addendum #4
Site Remediation File No. SR-26-0934A/Formerly RIDEM Case No. 95-022
Former Tidewater Facility
200 Taft Street
Pawtucket, Rhode Island

Dear Mr. Martella:

GZA GeoEnvironmental, Inc. (GZA), on behalf of The Narragansett Electric Company (TNEC), has prepared this fourth addendum to the June 2018 *Remedial Action Work Plan* (RAWP) for the Former Tidewater Facility located in Pawtucket, Rhode Island (herein referred to as the Site). This addendum outlines certain proposed modifications to the remedy included in the June 2018 RAWP and the subsequent addendums which were previously approved by the Rhode Island Department of Environmental Management (RIDEM). These proposed modifications affect the remedy in the southwestern portion of the Site on property owned by TNEC.

BACKGROUND

The approved remedy for the Site includes installation of engineered caps/controls across the majority of the Site to mitigate direct contact with impacted Site materials and, in certain portions of the Site, also to mitigate infiltration of precipitation through the impacted soils with the goal of preventing further groundwater degradation. In the western portions of the Site where steep, wooded slopes are present, the approved remedy included the use of new and existing fencing to prevent access to these slopes and potential direct contact with impacted soil. The use of fencing was the preferred method to prevent removal of the established trees/vegetation and potential destabilization of the steep banks.

In the southwestern portion of the Site, the existing fencing is not co-located with the limits of the TNEC property due to the presence of a utility easement for a combined sewer outfall (CSO) owned and maintained by the Narragansett Bay Commission (NBC). As a result, a portion of the TNEC property in this area is not capped or access restricted with perimeter fencing. The area is currently overgrown with vegetation and some trees with diameters greater than 24-inches which limits access to the area. The attached Figure 1 is a plan depicting the southern portion of the Site and the attached Figure 2 is a blow-up of the southwestern portion of the Site which is the subject of this addendum.

SOIL SAMPLING PROGRAM

A shallow soil sampling program was performed on June 17, 2024 to evaluate soil quality in this area to facilitate development of a remedy to address any impacts in this area and continue to allow access to the utility easement for NBC. Prior to collection of the samples, TNEC notified the owners of the properties directly abutting the Site of the pending sampling program via

letters. No comments or questions were received in response to the letters. Copies of the public notifications are attached.

Nineteen shallow explorations (GZ-SS-1 through GZ-SS-19) were performed in a grid-like pattern in the southwestern portion of the Site using a combination of stainless steel hand augers and shovels extending to a depth of approximately 2 feet below ground surface (bgs). At each location, soil samples were collected from 0 to 1 foot bgs and 1 to 2 feet bgs and analyzed for polyaromatic hydrocarbons (PAHs), total petroleum hydrocarbons (TPH), arsenic, lead, and physiologically available cyanide (PAC). Sampling locations are depicted on Figure 2 and the analytical results are summarized in Table 1. The laboratory data report is also attached.

Subsurface materials encountered during the sampling generally consisted of sandy fill materials with varying amounts of silt. Asphalt fragments were also consistently observed within the fill materials along with occasional pieces of brick, cinders and ash. As summarized in Tables 1A and 1B, PAHs were detected above the method detection limit in each sample. However, excluding benzo(a) pyrene, PAHs were detected at concentrations above the Industrial/Commercial Direct Exposure Criteria (I/C-DEC) in 2 of the 19 samples collected from the top 1 foot of soil and in 7 of 19 samples collected from 1 to 2 feet bgs Benzo(a)pyrene was detected above the I/C-DEC in 12 of 19 samples collected from the top 1 foot of soils and in 15 of 19 samples collected from 1 to 2 feet bgs. TPH were also detected in each sample analyzed but were only detected at concentrations exceeding the I/C-DEC in 1 of 19 samples collected from the top 1 foot of soil and in 2 of 19 samples collected from 1 to 2 bgs. Arsenic and lead were also detected in each sample analyzed. However, the detected lead concentrations did not exceed the I/C-DEC in any of the 38 samples. The detected arsenic concentrations exceeded the I/C-DEC in 7 of the 19 samples collected from the top 1 foot of soils and in 11 of 19 samples collected from 1 to 2 feet bgs. PAC was detected in 33 of the 38 samples but none of the detected PAC concentrations exceeded the I/C-DEC. Only the 3 TPH concentrations that exceed the I/C-DEC also exceed the GB Leachability Criteria. None of the detected concentrations exceeded the Upper Concentration Limits.

PROPOSED REMEDY MODIFICATIONS

Given the impacts detected in shallow soils in the southwestern portion of the Site, the following outlines the proposed modifications to the remedy for this area for the Department's approval.

- A new chain-link fence will be installed extending from Bowles Court southward towards Max Reed Field. Proximate to Max Reed Field, the new fencing will extend east and connect into the existing fence at the base of the steep slope in this portion of the Site. The new fence will be off-set approximately 10-feet east of the western property line for the Site and the Max Reed Field fencing to meet TNEC's security protocol requirements. A 12-foot wide gate will also be installed on the north side of the new fencing near Bowles Court to provide access to the easement area for NBC to perform CSO maintenance (as necessary).

- The existing vegetation within 10-feet of the new fencing (on both sides) will be cut/trimmed/removed as necessary to meet TNEC's security protocol requirements. Any organic waste during this clearing/trimming will be disposed off-Site or chipped on-Site and used as fill on the surface of the steep slopes in the western portion of the Site.

- Within the area between the new fencing and the property line and the previously capped Max Reed Field a 1-foot thick cap will be installed. The cap will be installed by excavating the existing material and installing a high-visibility, non-woven geotextile over the exposed materials to act as a warning barrier. The area will then be restored with 8-inches of granular fill and either 4-inches of topsoil or 4-inches of crushed stone to match the existing surrounding grades.

- The excavated material generated during the installation of the engineered caps (approximately 280 cubic yards) will be relocated and placed as fill east of the new fencing or and in the steep slopes in the western portion of the Site to facilitate creation of an access path to facilitate the performance of maintenance on the overhead electric lines in this area. After placement, the excavated material will either be covered with 3-inches of topsoil or 6-inches of dense grade.

The layout of the proposed fencing and caps and cap profiles are shown on Figure 3.

SCHEDULE

As you are aware, implementation of the RIDEM approved remedy is being performed in 5 phases. Phases 1 through 4 have been completed (with the exception of the potential replacement of distressed plants/vegetation in the buffer zone along the river) and the last phase (Phase 5) is scheduled to be completed in the spring/summer of 2025. Once approved, the installation of the engineered cap and fencing in the southwestern portion of the Site as proposed herein will be performed concurrent with the Phase 5 work.

We trust the information herein is sufficient to allow you to approve these proposed modifications. We look forward to continuing to work cooperatively with RIDEM to advance this Site to compliance with the applicable regulations. Should you have any questions or comments regarding the information presented herein, please do not hesitate to contact the undersigned or Kenneth Lento at 617-791-2627.

Very truly yours,

GZA GEOENVIRONMENTAL, INC.

David Rusczyk, LEP
Associate Principal
860-858-3110 - david.rusczyk@gza.com

cc: Mr. Kenneth Lento, The Narragansett Electric Company

Attachments:
Table 1A: Summary of Shallow Soil Sampling Program (0 to 1 feet below grade)
Table 1B: Summary of Shallow Soil Sampling Program (1 - 2 feet below grade)
Figure 1: Site Plan
Figure 2: Southwestern Portion of Site
Figure 3: Southwestern Capping Plan
Public Notifications
Laboratory Data Report

Table 1A
Summary of Shallow Soil Sampling Program (0 to 1 feet below grade)
Southwestern Portion of Site
Former Tidewater Facility
Pawtucket, RI

Compounds	Units	GB Leachability Criteria	I/C-DEC	Upper Concentration Limit	Sample Designation, Sample Depth (feet), and Sample Date							
					GZ-SS-1 0-1		GZ-SS-2 0-1		GZ-SS-3 0-1		GZ-SS-4 0-1	
					06/17/2024		06/17/2024		06/17/2024		06/17/2024	
PAHs												
2-Methylnaphthalene	mg/kg	NE	10,000	10,000	0.107	U	0.104	U	0.218	U, D	0.217	U, D
Acenaphthene	mg/kg	NE	10,000	10,000	0.107	U	0.104	U	0.218	U, D	0.217	U, D
Acenaphthylene	mg/kg	NE	10,000	10,000	0.311	-	0.62	-	0.218	U, D	0.807	D
Anthracene	mg/kg	NE	10,000	10,000	0.107	U	0.19	-	0.218	U, D	0.264	D
Benzo(a)anthracene	mg/kg	NE	7.8	10,000	0.441	-	0.792	-	0.294	D	1.03	D
Benzo(a)pyrene	mg/kg	NE	0.8	10,000	0.47	-	**0.929**	-	0.332	D	**1.28**	D
Benzo(b)fluoranthene	mg/kg	NE	7.8	10,000	0.606	-	1.43	-	0.396	D	1.92	D
Benzo(g,h,i)perylene	mg/kg	NE	10,000	10,000	0.51	-	1.09	-	0.303	D	1.34	D
Benzo(k)fluoranthene	mg/kg	NE	78	10,000	0.564	-	1.33	-	0.356	D	1.81	D
Chrysene	mg/kg	NE	780	10,000	0.463	-	0.91	-	0.369	D	1.25	D
Dibenzo(a,h)Anthracene	mg/kg	NE	0.8	10,000	0.116	-	0.248	-	0.218	U, D	0.316	D
Fluoranthene	mg/kg	NE	10,000	10,000	0.547	-	0.83	-	0.505	D	1.23	D
Fluorene	mg/kg	NE	10,000	10,000	0.107	U	0.104	U	0.218	U, D	0.217	U, D
Indeno(1,2,3-cd)Pyrene	mg/kg	NE	7.8	10,000	0.533	-	1.2	-	0.328	D	1.44	D
Naphthalene	mg/kg	NE	10,000	10,000	0.107	U	0.125	-	0.218	U, D	0.217	U, D
Phenanthrene	mg/kg	NE	10,000	10,000	0.195	-	0.263	-	0.218	U, D	0.429	D
Pyrene	mg/kg	NE	10,000	10,000	0.674	-	1.28	-	0.683	D	1.69	D
TPH - ETPH												
Total Petroleum Hydrocarbons (C9-C36)	mg/kg	2,500	2,500	30,000	163	-	262	-	200	U, D	625	D
Total Metals												
Arsenic	mg/kg	NE	7	10,000	6.22	-	5.84	-	2.45	-	3.59	-
Lead	mg/kg	NE	500	10,000	51.5	-	48.8	-	53.4	-	47.3	-
Classical Chemistry												
Cyanide (PAC)	mg/kg	NE	10,000	10,000	1.08	U	14.9	-	0.98	U	15.5	-

Notes
Samples were collected by GZA personnel on the dates indicated.
I/C=DEC = Industrial/Commercial Direct Exposure Criteria
NE = Criteria Not Established
U = Not detected above the laboratory reporting limit
D = Detected and reported at an estimated concentration
Exceeds I/C-DEC
Exceeds GB Leachability Criteria

Table 1A
Summary of Shallow Soil Sampling Program (0 to 1 feet below grade)
Southwestern Portion of Site
Former Tidewater Facility
Pawtucket, RI

Compounds	Units	GB Leachability Criteria	I/C-DEC	Upper Concentration Limit	Sample Designation, Sample Depth (feet), and Sample Date							
					GZ-SS-5 0-1		GZ-SS-6 0-1		GZ-SS-7 0-1		GZ-SS-8 0-1	
					06/17/2024		06/17/2024		06/17/2024		06/17/2024	
PAHs												
2-Methylnaphthalene	mg/kg	NE	10,000	10,000	0.221	U, D	0.219	U, D	0.21	U, D	0.296	D
Acenaphthene	mg/kg	NE	10,000	10,000	0.221	U, D	0.219	U, D	0.21	U, D	0.259	D
Acenaphthylene	mg/kg	NE	10,000	10,000	0.706	D	1.32	D	0.936	D	9.47	D
Anthracene	mg/kg	NE	10,000	10,000	0.225	D	0.452	D	0.272	D	4.3	D
Benzo(a)anthracene	mg/kg	NE	7.8	10,000	0.961	D	1.67	D	1.31	D	**13.2**	D
Benzo(a)pyrene	mg/kg	NE	0.8	10,000	**1.11**	D	**2.12**	D	**1.45**	D	**13.7**	D
Benzo(b)fluoranthene	mg/kg	NE	7.8	10,000	1.75	D	3.01	D	2.01	D	**15.3**	D
Benzo(g,h,i)perylene	mg/kg	NE	10,000	10,000	1.12	D	1.92	D	1.34	D	10.2	D
Benzo(k)fluoranthene	mg/kg	NE	78	10,000	1.3	D	2.42	D	1.87	D	12	D
Chrysene	mg/kg	NE	780	10,000	1.04	D	1.72	D	1.4	D	10.9	D
Dibenzo(a,h)Anthracene	mg/kg	NE	0.8	10,000	0.289	D	0.435	D	0.318	D	**2.09**	D
Fluoranthene	mg/kg	NE	10,000	10,000	1.22	D	1.6	D	1.51	D	18.6	D
Fluorene	mg/kg	NE	10,000	10,000	0.221	U, D	0.219	U, D	0.21	U, D	0.326	D
Indeno(1,2,3-cd)Pyrene	mg/kg	NE	7.8	10,000	1.24	D	2.14	D	1.52	D	**10.7**	D
Naphthalene	mg/kg	NE	10,000	10,000	0.221	U, D	0.412	D	0.21	U, D	0.677	D
Phenanthrene	mg/kg	NE	10,000	10,000	0.46	D	0.66	D	0.405	D	5.83	D
Pyrene	mg/kg	NE	10,000	10,000	1.62	D	2.38	D	2.05	D	19.9	D
TPH - ETPH												
Total Petroleum Hydrocarbons (C9-C36)	mg/kg	2,500	2,500	30,000	405	D	459	D	514	D	690	D
Total Metals												
Arsenic	mg/kg	NE	7	10,000	**9.01**	-	**8.89**	-	**11.6**	-	**10.4**	-
Lead	mg/kg	NE	500	10,000	153	-	46.4	-	88.9	-	111	-
Classical Chemistry												
Cyanide (PAC)	mg/kg	NE	10,000	10,000	10.5	-	1.05	U	14.2	-	30.6	D

Notes
Samples were collected by GZA personnel on the dates indicated.
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Table 1A
Summary of Shallow Soil Sampling Program (0 to 1 feet below grade)
Southwestern Portion of Site
Former Tidewater Facility
Pawtucket, RI

Compounds	Units	GB Leachability Criteria	I/C-DEC	Upper Concentration Limit	Sample Designation, Sample Depth (feet), and Sample Date							
					GZ-SS-9 0-1		GZ-SS-10 0-1		GZ-SS-11 0-1		GZ-SS-12 0-1	
					06/17/2024		06/17/2024		06/17/2024		06/17/2024	
PAHs												
2-Methylnaphthalene	mg/kg	NE	10,000	10,000	0.107	U	0.217	U, D	0.214	U, D	0.22	U, D
Acenaphthene	mg/kg	NE	10,000	10,000	0.107	U	0.217	U, D	0.214	U, D	0.22	U, D
Acenaphthylene	mg/kg	NE	10,000	10,000	1.58	-	2.68	D	1.27	D	1.07	D
Anthracene	mg/kg	NE	10,000	10,000	0.516	-	0.663	D	0.419	D	0.48	D
Benzo(a)anthracene	mg/kg	NE	7.8	10,000	1.24	-	1.03	D	0.603	D	0.903	D
Benzo(a)pyrene	mg/kg	NE	0.8	10,000	**1.29**	-	**1**	D	**1.04**	D	**0.937**	D
Benzo(b)fluoranthene	mg/kg	NE	7.8	10,000	1.94	-	2.46	D	1.68	D	1.43	D
Benzo(g,h,i)perylene	mg/kg	NE	10,000	10,000	1.34	-	1.62	D	2.61	D	1.28	D
Benzo(k)fluoranthene	mg/kg	NE	78	10,000	1.44	-	1.66	D	0.976	D	1.08	D
Chrysene	mg/kg	NE	780	10,000	1.32	-	1.58	D	1.01	D	1.08	D
Dibenzo(a,h)Anthracene	mg/kg	NE	0.8	10,000	0.32	-	0.405	D	0.419	D	0.286	D
Fluoranthene	mg/kg	NE	10,000	10,000	1.88	-	1.56	D	0.857	D	1.76	D
Fluorene	mg/kg	NE	10,000	10,000	0.107	U	0.217	U, D	0.214	U, D	0.22	U, D
Indeno(1,2,3-cd)Pyrene	mg/kg	NE	7.8	10,000	1.42	-	1.71	D	1.81	D	1.19	D
Naphthalene	mg/kg	NE	10,000	10,000	0.207	-	0.443	D	0.223	D	0.22	U, D
Phenanthrene	mg/kg	NE	10,000	10,000	0.559	-	0.445	D	0.272	D	0.556	D
Pyrene	mg/kg	NE	10,000	10,000	1.83	-	1.56	D	1.07	D	1.52	D
TPH - ETPH												
Total Petroleum Hydrocarbons (C9-C36)	mg/kg	2,500	2,500	30,000	469	D	713	D	1050	D	517	D
Total Metals												
Arsenic	mg/kg	NE	7	10,000	6.42	-	**11.1**	-	5.51	-	3.23	-
Lead	mg/kg	NE	500	10,000	57.1	-	91.3	-	53.7	-	35.6	-
Classical Chemistry												
Cyanide (PAC)	mg/kg	NE	10,000	10,000	16.9	-	29.2	D	40.3	D	18.1	-

Notes
Samples were collected by GZA personnel on the dates indicated.
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Exceeds I/C-DEC
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Table 1A
Summary of Shallow Soil Sampling Program (0 to 1 feet below grade)
Southwestern Portion of Site
Former Tidewater Facility
Pawtucket, RI

Compounds	Units	GB Leachability Criteria	I/C-DEC	Upper Concentration Limit	Sample Designation, Sample Depth (feet), and Sample Date							
					GZ-SS-13 0-1		GZ-SS-14 0-1		GZ-SS-15 0-1		GZ-SS-16 0-1	
					06/17/2024		06/17/2024		06/17/2024		06/17/2024	
PAHs												
2-Methylnaphthalene	mg/kg	NE	10,000	10,000	0.108	U	0.214	U, D	0.106	U	0.205	U, D
Acenaphthene	mg/kg	NE	10,000	10,000	0.108	U	0.214	U, D	0.106	U	0.205	U, D
Acenaphthylene	mg/kg	NE	10,000	10,000	1.26	-	0.829	D	0.196	-	0.3	D
Anthracene	mg/kg	NE	10,000	10,000	0.423	-	0.335	D	0.106	U	0.205	U, D
Benzo(a)anthracene	mg/kg	NE	7.8	10,000	1.01	-	0.306	D	0.268	-	0.504	D
Benzo(a)pyrene	mg/kg	NE	0.8	10,000	**1.23**	-	0.398	D	0.332	-	0.735	D
Benzo(b)fluoranthene	mg/kg	NE	7.8	10,000	1.95	-	1.34	D	0.507	-	1.32	D
Benzo(g,h,i)perylene	mg/kg	NE	10,000	10,000	1.57	-	1.75	D	0.348	-	1.25	D
Benzo(k)fluoranthene	mg/kg	NE	78	10,000	1.28	-	0.606	D	0.408	-	0.848	D
Chrysene	mg/kg	NE	780	10,000	1.19	-	0.559	D	0.278	-	0.651	D
Dibenzo(a,h)Anthracene	mg/kg	NE	0.8	10,000	0.346	-	0.326	D	0.106	U	0.283	D
Fluoranthene	mg/kg	NE	10,000	10,000	1.18	-	0.38	D	0.374	-	0.541	D
Fluorene	mg/kg	NE	10,000	10,000	0.108	U	0.214	U, D	0.106	U	0.205	U, D
Indeno(1,2,3-cd)Pyrene	mg/kg	NE	7.8	10,000	1.5	-	1.23	D	0.364	-	1.02	D
Naphthalene	mg/kg	NE	10,000	10,000	0.12	-	0.214	U, D	0.106	U	0.205	U, D
Phenanthrene	mg/kg	NE	10,000	10,000	0.326	-	0.214	U, D	0.106	U	0.205	U, D
Pyrene	mg/kg	NE	10,000	10,000	1.28	-	0.455	D	0.413	-	0.754	D
TPH - ETPH												
Total Petroleum Hydrocarbons (C9-C36)	mg/kg	2,500	2,500	30,000	243	-	706	D	79.9	-	443	D
Total Metals												
Arsenic	mg/kg	NE	7	10,000	**10.3**	-	6.62	-	5.15	-	4.05	-
Lead	mg/kg	NE	500	10,000	71.8	-	42.9	-	21.6	-	33.1	-
Classical Chemistry												
Cyanide (PAC)	mg/kg	NE	10,000	10,000	9.75	-	42.7	D	7.83	-	18.9	-

Notes
Samples were collected by GZA personnel on the dates indicated.
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NE = Criteria Not Established
U = Not detected above the laboratory reporting limit
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Exceeds I/C-DEC
Exceeds GB Leachability Criteria

Table 1A
Summary of Shallow Soil Sampling Program (0 to 1 feet below grade)
Southwestern Portion of Site
Former Tidewater Facility
Pawtucket, RI

Compounds	Units	GB Leachability Criteria	I/C-DEC	Upper Concentration Limit	Sample Designation, Sample Depth (feet), and Sample Date					
					GZ-SS-17 0-1		GZ-SS-18 0-1		GZ-SS-19 0-1	
					06/17/2024		06/17/2024		06/17/2024	
PAHs										
2-Methylnaphthalene	mg/kg	NE	10,000	10,000	0.106	U	1.05	D	0.206	U, D
Acenaphthene	mg/kg	NE	10,000	10,000	0.106	U	0.303	D	0.206	U, D
Acenaphthylene	mg/kg	NE	10,000	10,000	0.149	-	10.2	D	0.206	U, D
Anthracene	mg/kg	NE	10,000	10,000	0.106	U	6.24	D	0.206	U, D
Benzo(a)anthracene	mg/kg	NE	7.8	10,000	0.568	-	**29.1**	D	0.257	D
Benzo(a)pyrene	mg/kg	NE	0.8	10,000	0.65	-	**26.1**	D	0.213	D
Benzo(b)fluoranthene	mg/kg	NE	7.8	10,000	0.8	-	**37.6**	D	0.206	U, D
Benzo(g,h,i)perylene	mg/kg	NE	10,000	10,000	0.522	-	19.2	D	0.206	U, D
Benzo(k)fluoranthene	mg/kg	NE	78	10,000	0.637	-	26.1	D	0.21	D
Chrysene	mg/kg	NE	780	10,000	0.666	-	30.2	D	0.305	D
Dibenzo(a,h)Anthracene	mg/kg	NE	0.8	10,000	0.12	-	**5.83**	D	0.206	U, D
Fluoranthene	mg/kg	NE	10,000	10,000	0.999	-	44.8	D	0.342	D
Fluorene	mg/kg	NE	10,000	10,000	0.106	U	1.14	D	0.206	U, D
Indeno(1,2,3-cd)Pyrene	mg/kg	NE	7.8	10,000	0.555	-	**23.6**	D	0.206	U, D
Naphthalene	mg/kg	NE	10,000	10,000	0.106	U	1.73	D	0.206	U, D
Phenanthrene	mg/kg	NE	10,000	10,000	0.407	-	14.8	D	0.381	D
Pyrene	mg/kg	NE	10,000	10,000	1.32	-	47	D	0.627	D
TPH - ETPH										
Total Petroleum Hydrocarbons (C9-C36)	mg/kg	2,500	2,500	30,000	102	-	**3090**	D	42.3	-
Total Metals										
Arsenic	mg/kg	NE	7	10,000	**7.74**	-	3.82	-	2.74	-
Lead	mg/kg	NE	500	10,000	144	-	221	-	16.2	-
Classical Chemistry										
Cyanide (PAC)	mg/kg	NE	10,000	10,000	2.63	-	185	D	1.02	U

Notes
Samples were collected by GZA personnel on the dates indicated.
I/C=DEC = Industrial/Commercial Direct Exposure Criteria
NE = Criteria Not Established
U = Not detected above the laboratory reporting limit
D = Detected and reported at an estimated concentration
Exceeds I/C-DEC
Exceeds GB Leachability Criteria

Table 1B
Summary of Shallow Soil Sampling Program (1-2 feet below grade)
Southwestern Portion of Site
Former Tidewater Facility
Pawtucket, RI

Compounds	Units	GB Leachability Criteria	I/C-DEC	Upper Concentration Limit	Sample Designation, Sample Depth (feet), and Sample Date							
					GZ-SS-1 1-2		GZ-SS-2 1-2		GZ-SS-3 1-2		GZ-SS-4 1-2	
					06/17/2024		06/17/2024		06/17/2024		06/17/2024	
PAHs												
2-Methylnaphthalene	mg/kg	NE	10,000	10,000	0.11	U	0.166	-	0.346	D	0.115	-
Acenaphthene	mg/kg	NE	10,000	10,000	0.11	U	0.1	U	0.205	U, D	0.11	U
Acenaphthylene	mg/kg	NE	10,000	10,000	0.197	-	0.754	-	5.11	D	0.718	-
Anthracene	mg/kg	NE	10,000	10,000	0.398	-	0.294	-	3.29	D	0.245	-
Benzo(a)anthracene	mg/kg	NE	7.8	10,000	1.1	-	1.17	-	**12.2**	D	1.12	-
Benzo(a)pyrene	mg/kg	NE	0.8	10,000	**0.971**	-	**1.36**	-	**12.2**	D	**1.1**	-
Benzo(b)fluoranthene	mg/kg	NE	7.8	10,000	0.954	-	1.81	-	**15.6**	D	1.47	-
Benzo(g,h,i)perylene	mg/kg	NE	10,000	10,000	0.649	-	1.32	-	9.61	D	0.954	-
Benzo(k)fluoranthene	mg/kg	NE	78	10,000	0.912	-	1.37	-	11.4	D	1.33	-
Chrysene	mg/kg	NE	780	10,000	0.982	-	1.23	-	11.4	D	1.15	-
Dibenzo(a,h)Anthracene	mg/kg	NE	0.8	10,000	0.152	-	0.293	-	**2.13**	D	0.224	-
Fluoranthene	mg/kg	NE	10,000	10,000	1.94	-	1.51	-	17	D	1.48	-
Fluorene	mg/kg	NE	10,000	10,000	0.149	-	0.1	U	0.267	D	0.11	U
Indeno(1,2,3-cd)Pyrene	mg/kg	NE	7.8	10,000	0.73	-	1.44	-	**11**	D	1.08	-
Naphthalene	mg/kg	NE	10,000	10,000	0.136	-	0.309	-	0.802	D	0.284	-
Phenanthrene	mg/kg	NE	10,000	10,000	1.32	-	0.579	-	7.25	D	0.485	-
Pyrene	mg/kg	NE	10,000	10,000	2.28	-	1.82	-	22.3	D	1.84	-
TPH - ETPH												
Total Petroleum Hydrocarbons (C9-C36)	mg/kg	2,500	2,500	30,000	159	-	180	-	1540	D	171	-
Total Metals												
Arsenic	mg/kg	NE	7	10,000	6.8	-	4.08	-	**8.89**	-	**7.09**	-
Lead	mg/kg	NE	500	10,000	44.8	-	63.3	-	194	-	32	-
Classical Chemistry												
Cyanide (PAC)	mg/kg	NE	10,000	10,000	1.08	U	20	-	77.1	D	9.4	-

Notes

Samples were collected by GZA personnel on the dates indicated.

I/C=DEC = Industrial/Commercial Direct Exposure Criteria

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D = Detected and reported at an estimated concentration

Exceeds I/C-DEC

Exceeds GB Leachability Criteria

Table 1B
Summary of Shallow Soil Sampling Program (1-2 feet below grade)
Southwestern Portion of Site
Former Tidewater Facility
Pawtucket, RI

Compounds	Units	GB Leachability Criteria	I/C-DEC	Upper Concentration Limit	Sample Designation, Sample Depth (feet), and Sample Date							
					GZ-SS-5 1-2		GZ-SS-6 1-2		GZ-SS-7 1-2		GZ-SS-8 1-2	
					06/17/2024		06/17/2024		06/17/2024		06/17/2024	
PAHs												
2-Methylnaphthalene	mg/kg	NE	10,000	10,000	0.204	U, D	0.434	D	1.11	-	0.902	-
Acenaphthene	mg/kg	NE	10,000	10,000	0.204	U, D	0.206	U, D	0.509	-	0.114	-
Acenaphthylene	mg/kg	NE	10,000	10,000	3.09	D	1.92	D	5.9	-	3.74	-
Anthracene	mg/kg	NE	10,000	10,000	1.42	D	0.765	D	5.81	-	1.45	-
Benzo(a)anthracene	mg/kg	NE	7.8	10,000	**8.87**	D	3.14	D	**8.4**	-	2.61	-
Benzo(a)pyrene	mg/kg	NE	0.8	10,000	**8.39**	D	**3.16**	D	**7.02**	-	**2.56**	-
Benzo(b)fluoranthene	mg/kg	NE	7.8	10,000	**10.2**	D	4.04	D	**9.04**	-	4.2	-
Benzo(g,h,i)perylene	mg/kg	NE	10,000	10,000	5.83	D	2.82	D	5.73	-	3.1	-
Benzo(k)fluoranthene	mg/kg	NE	78	10,000	8.42	D	3.98	D	6.48	-	3.51	-
Chrysene	mg/kg	NE	780	10,000	7.87	D	3.12	D	7.88	-	2.99	-
Dibenzo(a,h)Anthracene	mg/kg	NE	0.8	10,000	**1.3**	D	0.654	D	**1.04**	-	0.732	-
Fluoranthene	mg/kg	NE	10,000	10,000	11.2	D	3.37	D	20.8	D	4.27	-
Fluorene	mg/kg	NE	10,000	10,000	0.204	U, D	0.206	U, D	1.15	-	0.15	-
Indeno(1,2,3-cd)Pyrene	mg/kg	NE	7.8	10,000	6.83	D	3.23	D	6.14	-	3.36	-
Naphthalene	mg/kg	NE	10,000	10,000	0.306	D	0.925	D	1.17	-	2.08	-
Phenanthrene	mg/kg	NE	10,000	10,000	2.2	D	1.1	D	15.5	D	1.97	-
Pyrene	mg/kg	NE	10,000	10,000	14.5	D	5.38	D	16	D	4.08	-
TPH - ETPH												
Total Petroleum Hydrocarbons (C9-C36)	mg/kg	2,500	2,500	30,000	544	-	827	D	1370	D	970	D
Total Metals												
Arsenic	mg/kg	NE	7	10,000	**12.3**	-	5.44	-	**17.4**	-	**9.39**	-
Lead	mg/kg	NE	500	10,000	114	-	62.2	-	117	-	76.9	-
Classical Chemistry												
Cyanide (PAC)	mg/kg	NE	10,000	10,000	37.8	D	8.32	-	24.6	-	33	D

Notes

Samples were collected by GZA personnel on the dates indicated.

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Exceeds I/C-DEC

Exceeds GB Leachability Criteria

Table 1B
Summary of Shallow Soil Sampling Program (1-2 feet below grade)
Southwestern Portion of Site
Former Tidewater Facility
Pawtucket, RI

Compounds	Units	GB Leachability Criteria	I/C-DEC	Upper Concentration Limit	Sample Designation, Sample Depth (feet), and Sample Date							
					GZ-SS-9 1-2		GZ-SS-10 1-2		GZ-SS-11 1-2		GZ-SS-12 1-2	
					06/17/2024		06/17/2024		06/17/2024		06/17/2024	
PAHs												
2-Methylnaphthalene	mg/kg	NE	10,000	10,000	0.166	-	0.293	-	0.214	U, D	0.212	U, D
Acenaphthene	mg/kg	NE	10,000	10,000	0.147	-	0.108	U	0.214	U, D	0.273	D
Acenaphthylene	mg/kg	NE	10,000	10,000	1.9	-	2.75	-	1.57	D	9.22	D
Anthracene	mg/kg	NE	10,000	10,000	0.861	-	0.747	-	0.411	D	6.73	D
Benzo(a)anthracene	mg/kg	NE	7.8	10,000	1.9	-	1.16	-	0.92	D	**19.5**	D
Benzo(a)pyrene	mg/kg	NE	0.8	10,000	**1.73**	-	**1.06**	-	**1.12**	D	**15.2**	D
Benzo(b)fluoranthene	mg/kg	NE	7.8	10,000	2.62	-	2.22	-	1.99	D	**16.6**	D
Benzo(g,h,i)perylene	mg/kg	NE	10,000	10,000	1.61	-	1.59	-	2.73	D	8.47	D
Benzo(k)fluoranthene	mg/kg	NE	78	10,000	1.81	-	1.89	-	0.807	D	12.2	D
Chrysene	mg/kg	NE	780	10,000	1.89	-	1.71	-	1.44	D	16.1	D
Dibenzo(a,h)Anthracene	mg/kg	NE	0.8	10,000	0.415	-	0.437	-	0.517	D	**1.89**	D
Fluoranthene	mg/kg	NE	10,000	10,000	3.16	-	1.54	-	1.07	D	36.5	D
Fluorene	mg/kg	NE	10,000	10,000	0.146	-	0.108	U	0.214	U, D	0.259	D
Indeno(1,2,3-cd)Pyrene	mg/kg	NE	7.8	10,000	1.8	-	1.71	-	1.34	D	**9.97**	D
Naphthalene	mg/kg	NE	10,000	10,000	0.34	-	0.546	-	0.218	D	0.301	D
Phenanthrene	mg/kg	NE	10,000	10,000	1.54	-	0.48	-	0.502	D	7.81	D
Pyrene	mg/kg	NE	10,000	10,000	2.78	-	1.69	-	1.69	D	26.4	D
TPH - ETPH												
Total Petroleum Hydrocarbons (C9-C36)	mg/kg	2,500	2,500	30,000	300	-	746	D	**4320**	D	1050	D
Total Metals												
Arsenic	mg/kg	NE	7	10,000	**10.6**	-	**10.1**	-	4.57	-	4.33	-
Lead	mg/kg	NE	500	10,000	72.2	-	62	-	71.4	-	29.1	-
Classical Chemistry												
Cyanide (PAC)	mg/kg	NE	10,000	10,000	15.5	-	35.2	D	83.8	D	6.26	-

Notes

Samples were collected by GZA personnel on the dates indicated.

I/C=DEC = Industrial/Commercial Direct Exposure Criteria

NE = Criteria Not Established

U = Not detected above the laboratory reporting limit

D = Detected and reported at an estimated concentration

Exceeds I/C-DEC

Exceeds GB Leachability Criteria

Table 1B
Summary of Shallow Soil Sampling Program (1-2 feet below grade)
Southwestern Portion of Site
Former Tidewater Facility
Pawtucket, RI

Compounds	Units	GB Leachability Criteria	I/C-DEC	Upper Concentration Limit	Sample Designation, Sample Depth (feet), and Sample Date							
					GZ-SS-13 1-2		GZ-SS-14 1-2		GZ-SS-15 1-2		GZ-SS-16 1-2	
					06/17/2024		06/17/2024		06/17/2024		06/17/2024	
PAHs												
2-Methylnaphthalene	mg/kg	NE	10,000	10,000	0.316	D	0.215	U, D	0.107	U	0.205	U, D
Acenaphthene	mg/kg	NE	10,000	10,000	0.234	U, D	0.215	U, D	0.107	U	0.205	U, D
Acenaphthylene	mg/kg	NE	10,000	10,000	1.05	D	0.543	D	0.582	-	0.309	D
Anthracene	mg/kg	NE	10,000	10,000	1.78	D	0.215	U, D	0.107	U	0.205	U, D
Benzo(a)anthracene	mg/kg	NE	7.8	10,000	**15.7**	D	0.516	D	0.307	-	0.602	D
Benzo(a)pyrene	mg/kg	NE	0.8	10,000	**19.4**	D	0.549	D	0.315	-	0.796	D
Benzo(b)fluoranthene	mg/kg	NE	7.8	10,000	**29.5**	D	1.29	D	0.475	-	1.57	D
Benzo(g,h,i)perylene	mg/kg	NE	10,000	10,000	28.4	D	1.58	D	0.307	-	1.53	D
Benzo(k)fluoranthene	mg/kg	NE	78	10,000	16.3	D	0.631	D	0.447	-	0.883	D
Chrysene	mg/kg	NE	780	10,000	25.7	D	0.664	D	0.369	-	0.787	D
Dibenzo(a,h)Anthracene	mg/kg	NE	0.8	10,000	**15.1**	D	0.244	D	0.107	U	0.349	D
Fluoranthene	mg/kg	NE	10,000	10,000	4.92	D	0.657	D	0.451	-	0.514	D
Fluorene	mg/kg	NE	10,000	10,000	0.234	U, D	0.215	U, D	0.107	U	0.205	U, D
Indeno(1,2,3-cd)Pyrene	mg/kg	NE	7.8	10,000	**25.1**	D	1.16	D	0.353	-	1.22	D
Naphthalene	mg/kg	NE	10,000	10,000	0.719	D	0.215	U, D	0.107	U	0.205	U, D
Phenanthrene	mg/kg	NE	10,000	10,000	0.717	D	0.419	D	0.196	-	0.205	U, D
Pyrene	mg/kg	NE	10,000	10,000	11.6	D	0.992	D	0.53	-	0.782	D
TPH - ETPH												
Total Petroleum Hydrocarbons (C9-C36)	mg/kg	2,500	2,500	30,000	**3830**	D	1130	D	61.6	-	407	D
Total Metals												
Arsenic	mg/kg	NE	7	10,000	**17.3**	-	**12.7**	-	5.28	-	**7.38**	-
Lead	mg/kg	NE	500	10,000	162	-	58.7	-	30.3	-	45	-
Classical Chemistry												
Cyanide (PAC)	mg/kg	NE	10,000	10,000	350	D	52	D	14.9	-	15.7	-

Notes

Samples were collected by GZA personnel on the dates indicated.

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D = Detected and reported at an estimated concentration

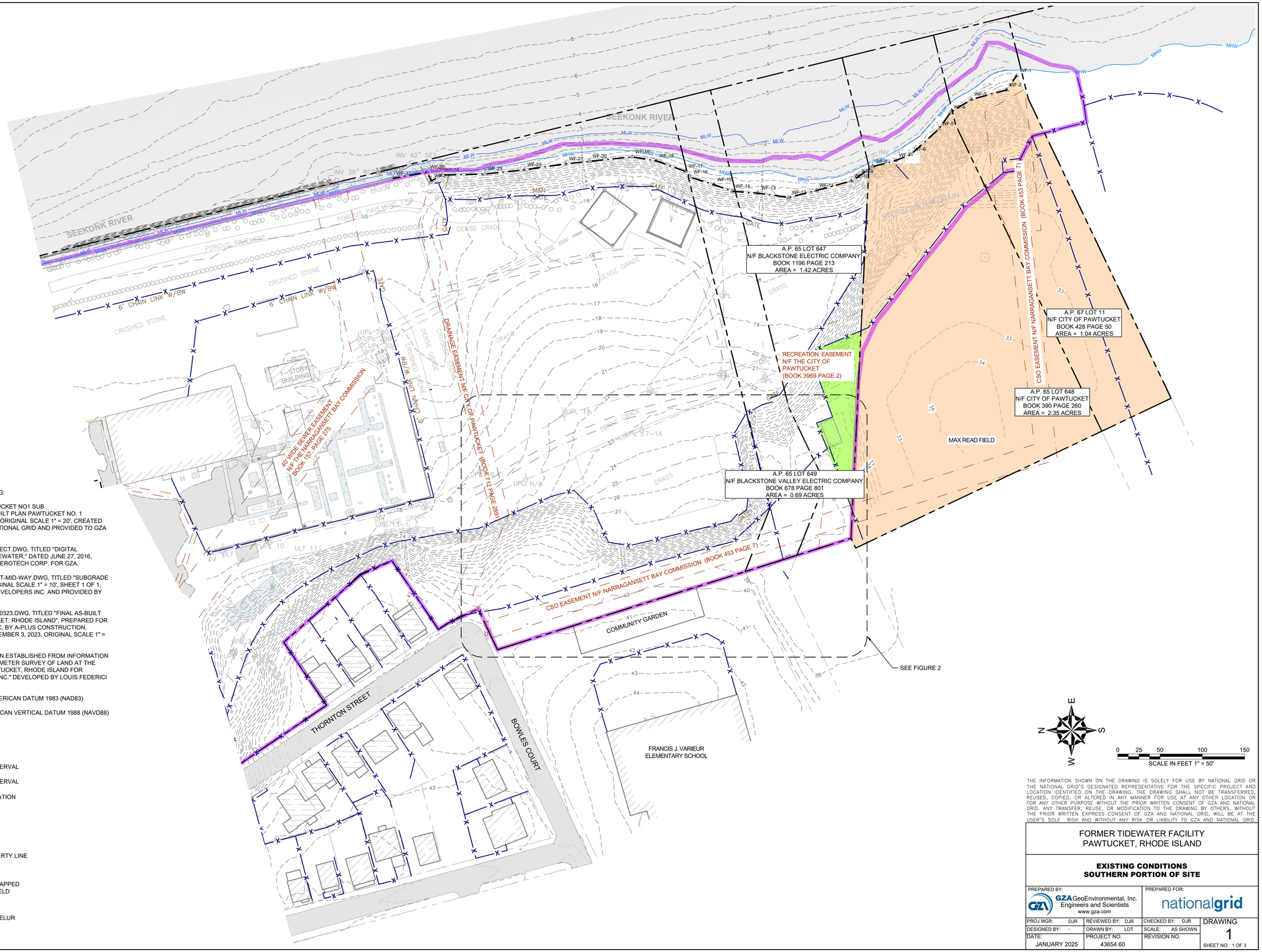
Exceeds I/C-DEC

Exceeds GB Leachability Criteria

Table 1B
Summary of Shallow Soil Sampling Program (1-2 feet below grade)
Southwestern Portion of Site
Former Tidewater Facility
Pawtucket, RI

Compounds	Units	GB Leachability Criteria	I/C-DEC	Upper Concentration Limit	Sample Designation, Sample Depth (feet), and Sample Date					
					GZ-SS-17 1-2		GZ-SS-18 1-2		GZ-SS-19 1-2	
					06/17/2024		06/17/2024		06/17/2024	
PAHs										
2-Methylnaphthalene	mg/kg	NE	10,000	10,000	0.107	U	1.1	D	2.75	D
Acenaphthene	mg/kg	NE	10,000	10,000	0.107	U	0.234	D	0.239	D
Acenaphthylene	mg/kg	NE	10,000	10,000	0.266	-	5.82	D	4.78	D
Anthracene	mg/kg	NE	10,000	10,000	0.113	-	3.58	D	3.87	D
Benzo(a)anthracene	mg/kg	NE	7.8	10,000	0.634	-	**12.5**	D	**11.3**	D
Benzo(a)pyrene	mg/kg	NE	0.8	10,000	0.683	-	**10.8**	D	**9.59**	D
Benzo(b)fluoranthene	mg/kg	NE	7.8	10,000	0.828	-	**18.6**	D	**9.5**	D
Benzo(g,h,i)perylene	mg/kg	NE	10,000	10,000	0.491	-	8.21	D	7.57	D
Benzo(k)fluoranthene	mg/kg	NE	78	10,000	0.666	-	13.2	D	7.44	D
Chrysene	mg/kg	NE	780	10,000	0.635	-	14	D	12.1	D
Dibenzo(a,h)Anthracene	mg/kg	NE	0.8	10,000	0.11	-	**2.13**	D	**1.68**	D
Fluoranthene	mg/kg	NE	10,000	10,000	0.968	-	16.7	D	19.7	D
Fluorene	mg/kg	NE	10,000	10,000	0.107	U	0.484	D	1.05	D
Indeno(1,2,3-cd)Pyrene	mg/kg	NE	7.8	10,000	0.559	-	**10**	D	7.62	D
Naphthalene	mg/kg	NE	10,000	10,000	0.107	U	2.26	D	4.89	D
Phenanthrene	mg/kg	NE	10,000	10,000	0.306	-	7.15	D	13.7	D
Pyrene	mg/kg	NE	10,000	10,000	1.21	-	22.7	D	19	D
TPH - ETPH										
Total Petroleum Hydrocarbons (C9-C36)	mg/kg	2,500	2,500	30,000	87.1	-	1680	D	834	D
Total Metals										
Arsenic	mg/kg	NE	7	10,000	**8.53**	-	5.64	-	6.62	-
Lead	mg/kg	NE	500	10,000	138	-	338	-	76.1	-
Classical Chemistry										
Cyanide (PAC)	mg/kg	NE	10,000	10,000	4.01	-	241	D	8.33	-

Notes
Samples were collected by GZA personnel on the dates indicated.
I/C=DEC = Industrial/Commercial Direct Exposure Criteria
NE = Criteria Not Established
U = Not detected above the laboratory reporting limit
D = Detected and reported at an estimated concentration
Exceeds I/C-DEC
Exceeds GB Leachability Criteria



GENERAL NOTES:

1) BASE MAP DEVELOPED FROM THE FOLLOWING:

- ELECTRONIC CAD FILE 17-NG-52_PAWTUCKET NO1 SUB TIDEWATER-JEG-07.DWG, TITLED "AS BUILT PLAN PAWTUCKET NO. 1 SUBSTATION," DATED AUGUST 22, 2017, ORIGINAL SCALE 1" = 20', CREATED BY TAUPER LAND SURVEY, INC. FOR NATIONAL GRID AND PROVIDED TO GZA ON SEPTEMBER 12, 2017.
- ELECTRONIC CAD FILE AERO1408_PROJECT.DWG, TITLED "DIGITAL PHOTOGRAMMETRIC MAPPING FOR TIDEWATER," DATED JUNE 27, 2016, ORIGINAL SCALE 1" = 40', CREATED BY AEROTECH CORP. FOR GZA.
- ELECTRONIC CAD FILE 2016-161-AS BUILT-MID-WAY.DWG, TITLED "SUBGRADE AS-BUILT PLAN," DATED JULY 2016, ORIGINAL SCALE 1" = 10', SHEET 1 OF 1, CREATED BY NATIONAL SURVEYORS-DEVELOPERS INC. AND PROVIDED BY NRC.
- ELECTRONIC CAD FILE 4177 AB FINAL 120323.DWG, TITLED "FINAL AS-BUILT PLAN PHASE 1-5, TIDEWATER, PAWTUCKET, RHODE ISLAND", PREPARED FOR CHARTER CONTRACTING COMPANY, LLC, BY A-PLUS CONSTRUCTION, FIGURE 4 OF 4, REVISION 1, DATED DECEMBER 3, 2023, ORIGINAL SCALE 1" = 30'
- PROPERTY LINES AND LOT INFORMATION ESTABLISHED FROM INFORMATION PROVIDED ON A DRAWING TITLED "PERIMETER SURVEY OF LAND AT THE TIDEWATER FORMER MGP SITE IN PAWTUCKET, RHODE ISLAND FOR ATLANTIC ENVIRONMENTAL SERVICES INC." DEVELOPED BY LOUIS FEDERICI AND ASSOCIATES.

2) HORIZONTAL DATUM IS BASED ON NORTH AMERICAN DATUM 1983 (NAD83)

3) VERTICAL DATUM IS BASED ON NORTH AMERICAN VERTICAL DATUM 1988 (NAVD88)

4) SITE BOUNDARIES ARE APPROXIMATE.

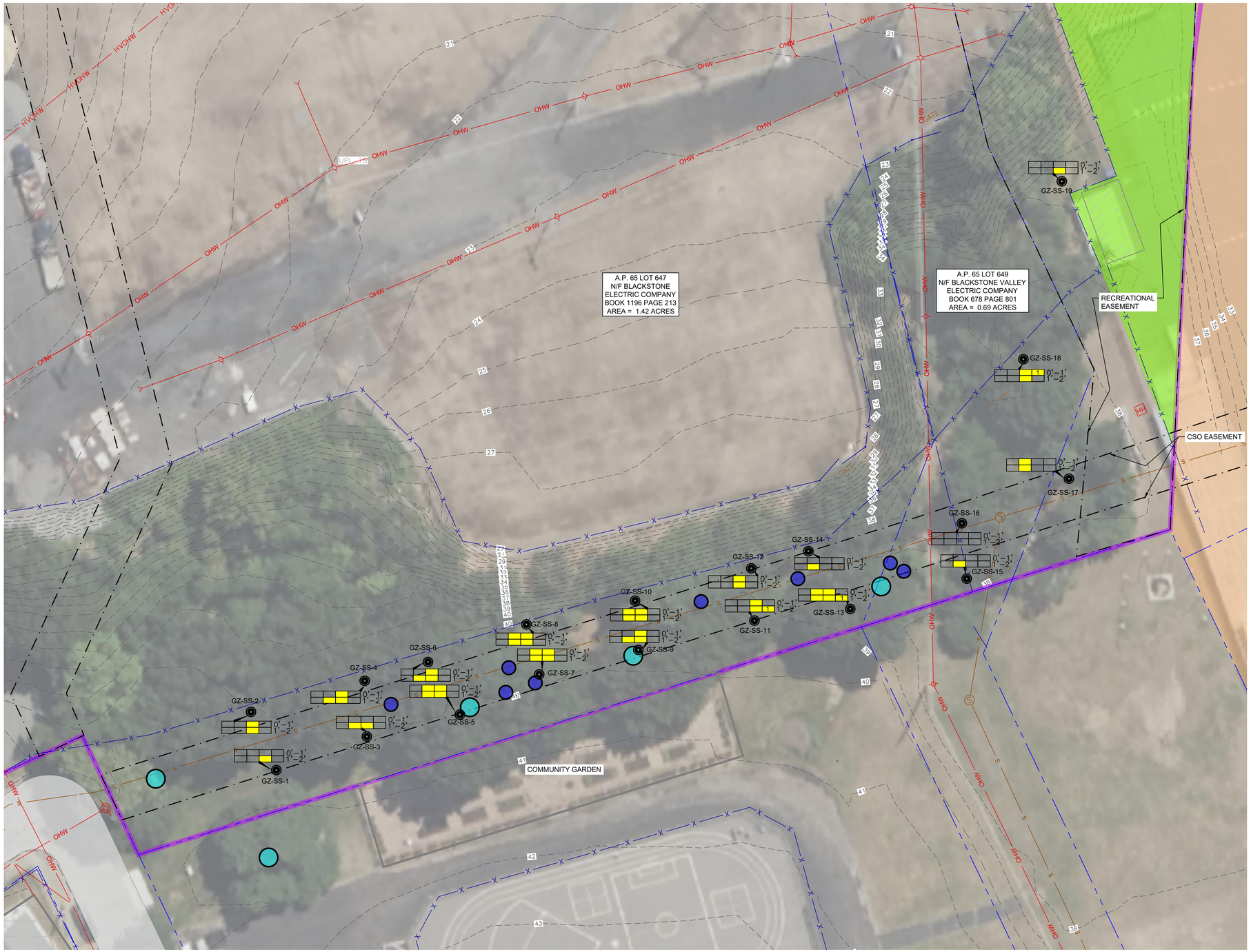
LEGEND:

- CONTOUR 5 FOOT INTERVAL
- CONTOUR 1 FOOT INTERVAL
- WF-1 WETLAND FLAG LOCATION
- WETLAND LINE
- EXISTING FENCE LINE
- SITE BOUNDARY
- APPROXIMATE PROPERTY LINE
- EASEMENT
- AREA REPORTEDLY CAPPED DURING MAX READ FIELD CONSTRUCTION
- CITY OF PAWTUCKET ELUR

FORMER TIDEWATER FACILITY
PAWTUCKET, RHODE ISLAND

EXISTING CONDITIONS
SOUTHERN PORTION OF SITE

PREPARED BY: GZA GeoEnvironmental, Inc. Engineers and Scientists www.gza.com		PREPARED FOR: nationalgrid	
PROJ MGR: DJR	REVIEWED BY: DJR	CHECKED BY: DJR	DRAWING 1
DESIGNED BY: -	DRAWN BY: LDT	SCALE: AS SHOWN	
DATE: JANUARY 2025	PROJECT NO. 43654.60	REVISION NO.	SHEET NO. 1 OF 3



GENERAL NOTES:

1) BASE MAP DEVELOPED FROM THE FOLLOWING:
   - ELECTRONIC CAD FILE 17-NG-52_PAWTUCKET NO1 SUB TIDEWATER-JEG-07.DWG, TITLED "AS BUILT PLAN PAWTUCKET NO. 1 SUBSTATION," DATED AUGUST 22, 2017, ORIGINAL SCALE 1" = 20', CREATED BY TAUPER LAND SURVEY, INC. FOR NATIONAL GRID AND PROVIDED TO GZA ON SEPTEMBER 12, 2017.
   - ELECTRONIC CAD FILE AERO1408_PROJECT.DWG, TITLED "DIGITAL PHOTOGRAMMETRIC MAPPING FOR TIDEWATER," DATED JUNE 27, 2016, ORIGINAL SCALE 1" = 40', CREATED BY AEROTECH CORP. FOR GZA.
   - ELECTRONIC CAD FILE 2016-161-AS BUILT-MID-WAY.DWG, TITLED "SUBGRADE AS-BUILT PLAN," DATED JULY 2016, ORIGINAL SCALE 1" = 10', SHEET 1 OF 1, CREATED BY NATIONAL SURVEYORS-DEVELOPERS INC. AND PROVIDED BY NRC.
   - ELECTRONIC CAD FILE 4177 AB FINAL 120323.DWG, TITLED "FINAL AS-BUILT PLAN PHASE 1-5, TIDEWATER, PAWTUCKET, RHODE ISLAND", PREPARED FOR CHARTER CONTRACTING COMPANY, LLC, BY A-PLUS CONSTRUCTION, FIGURE 4 OF 4, REVISION 1, DATED DECEMBER 3, 2023, ORIGINAL SCALE 1" = 30'
   - PROPERTY LINES AND LOT INFORMATION ESTABLISHED FROM INFORMATION PROVIDED ON A DRAWING TITLED "PERIMETER SURVEY OF LAND AT THE TIDEWATER FORMER MGP SITE IN PAWTUCKET, RHODE ISLAND FOR ATLANTIC ENVIRONMENTAL SERVICES INC." DEVELOPED BY LOUIS FEDERICI AND ASSOCIATES.
   - AERIAL IMAGE ACQUIRED FROM 2024 MICROSOFT 2024 MAXAR/CNES(2024) DISTRIBUTION AIRBUS DS.
2) HORIZONTAL DATUM IS BASED ON NORTH AMERICAN DATUM 1983 (NAD83)
3) VERTICAL DATUM IS BASED ON NORTH AMERICAN VERTICAL DATUM 1988 (NAVD88)
4) SITE BOUNDARIES ARE APPROXIMATE.

LEGEND:

- CONTOUR 5 FOOT INTERVAL
- CONTOUR 1 FOOT INTERVAL
- EXISTING FENCE LINE
- SITE BOUNDARY
- APPROXIMATE PROPERTY LINE
- EASEMENT
- AREA REPORTEDLY CAPPED DURING MAX READ FIELD CONSTRUCTION
- CITY OF PAWTUCKET ELUR
- TREE WITH APPROX. TRUNK GREATER THAN 24 "Ø
- TREE WITH APPROX. TRUNK LESS THAN 24"Ø

SAMPLE LEGEND

- GZ-SS GZA SAMPLE LOCATION (2024)

IMPACTS LEGEND:

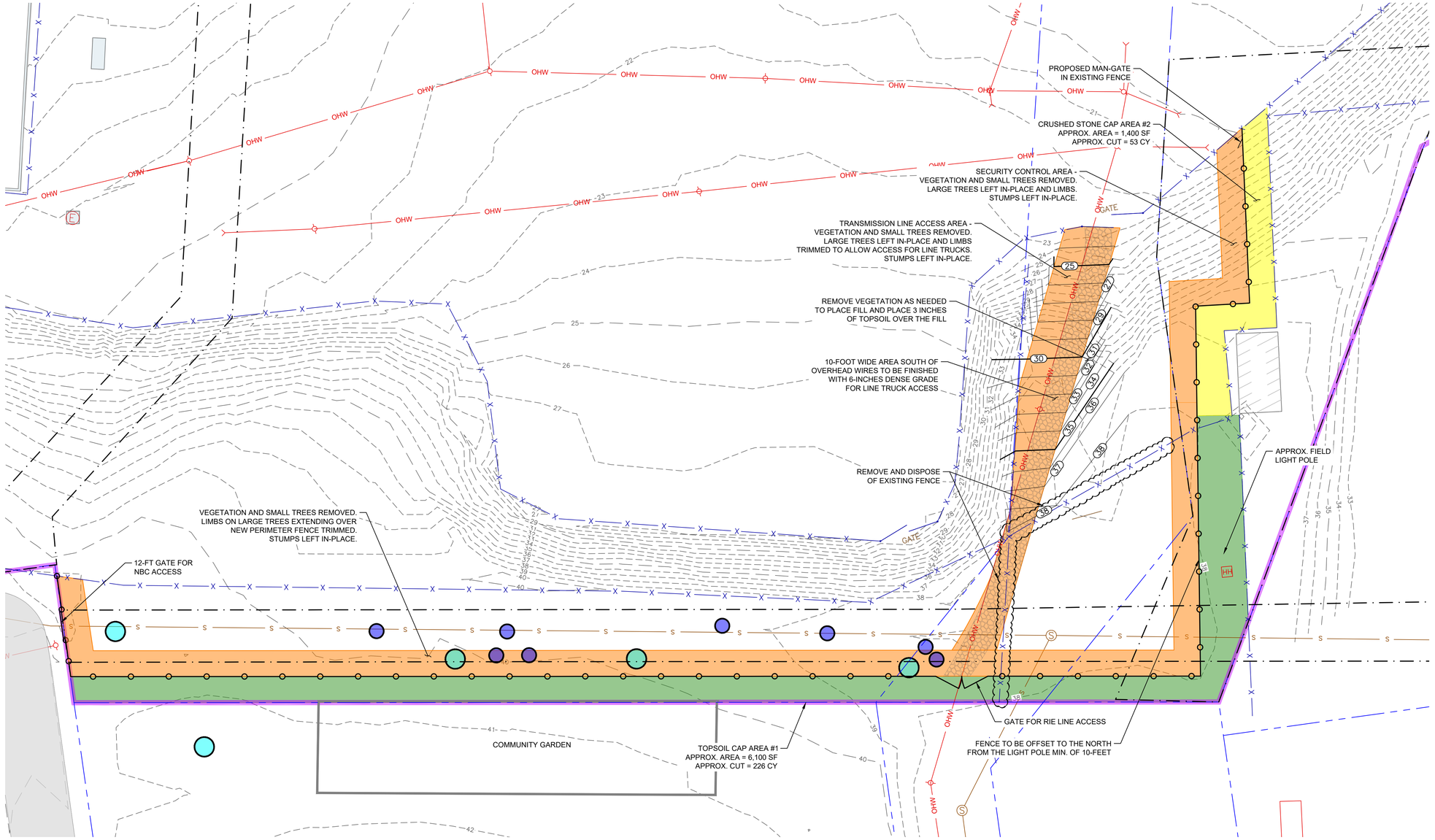
2 | 1 | 0'–2'
- DEPTH OF SAMPLE
- TPH
- PAHs
- METALS
- CYANIDE

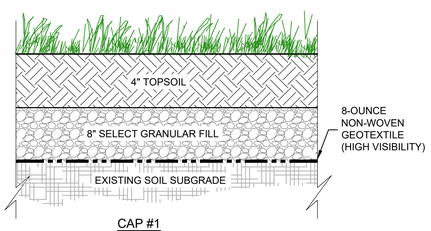
- 1 SAMPLE RESULT EXCEEDS GB LEACHABILITY CRITERIA
- 2 SAMPLE RESULT EXCEEDS UPPER CONCENTRATION LIMIT
- NO EXCEEDANCES OF INDUSTRIAL/COMMERCIAL DIRECT EXPOSURE CRITERIA AT THIS DEPTH
- SAMPLE RESULT EXCEEDS INDUSTRIAL/COMMERCIAL DIRECT EXPOSURE CRITERIA AT THIS DEPTH

FORMER TIDEWATER FACILITY
PAWTUCKET, RHODE ISLAND

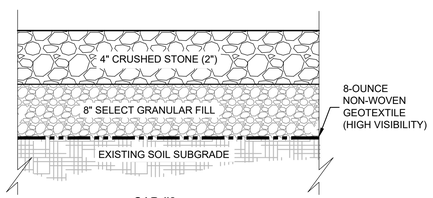
SOUTHWESTERN PORTION OF THE SITE

PREPARED BY:		PREPARED FOR:	
GZA GeoEnvironmental, Inc. Engineers and Scientists www.gza.com		nationalgrid	
PROJ MGR: DJR	REVIEWED BY: DJR	CHECKED BY: DJR	DRAWING 2
DESIGNED BY: -	DRAWN BY: LDT	SCALE: AS SHOWN	
DATE: JANUARY 2025	PROJECT NO. 43654.60	REVISION NO.	SHEET NO. 2 OF 3





CAP #1
NOT TO SCALE



CAP #2
NOT TO SCALE

LEGEND:

- EXISTING CONTOUR (EVERY 5 FEET)
- EXISTING CONTOUR (EVERY 1 FOOT)
- EASEMENT
- SEWER MANHOLE
- UTILITY POLE
- EXISTING ELECTRIC HANDHOLE
- EXISTING OVERHEAD WIRE
- EXISTING SEWER LINE
- EXISTING FENCE LINE
- SITE BOUNDARY
- APPROXIMATE PROPERTY LINE
- TREE WITH APPROX. TRUNK GREATER THAN 24"Ø
- TREE WITH APPROX. TRUNK LESS THAN 24"Ø
- PROPOSED TOPSOIL CAP (SEE DETAIL THIS SHEET)
- PROPOSED CRUSHED STONE CAP (SEE DETAIL THIS SHEET)
- TRANSMISSION LINE ACCESS AND SECURITY CONTROL AREAS
- 10-FOOT WIDE LINE TRUCK ACCESS ROAD FINISHED WITH 6 INCHES DENSE GRADE
- PROPOSED FENCE
- PROPOSED CONTOUR (EVERY 5 FEET)
- PROPOSED CONTOUR (EVERY 1 FOOT)

GENERAL NOTES:

1) BASE MAP DEVELOPED FROM THE FOLLOWING:
   - ELECTRONIC CAD FILE 17-NG-52_PAWTUCKET NO1 SUB TIDEWATER-JEG-07.DWG, TITLED "AS BUILT PLAN PAWTUCKET NO. 1 SUBSTATION," DATED AUGUST 22, 2017, ORIGINAL SCALE 1" = 20', CREATED BY TAUPER LAND SURVEY, INC. FOR NATIONAL GRID AND PROVIDED TO GZA ON SEPTEMBER 12, 2017.
   - ELECTRONIC CAD FILE AERO1408_PROJECT.DWG, TITLED "DIGITAL PHOTOGRAMMETRIC MAPPING FOR TIDEWATER," DATED JUNE 27, 2016, ORIGINAL SCALE 1" = 40', CREATED BY AEROTECH CORP. FOR GZA.
   - ELECTRONIC CAD FILE 2016-161-AS BUILT-MID-WAY.DWG, TITLED "SUBGRADE AS-BUILT PLAN," DATED JULY 2016, ORIGINAL SCALE 1" = 10', SHEET 1 OF 1, CREATED BY NATIONAL SURVEYORS-DEVELOPERS INC. AND PROVIDED BY NRC.
   - ELECTRONIC CAD FILE 4177 AB FINAL 120323.DWG, TITLED "FINAL AS-BUILT PLAN PHASE 1-5, TIDEWATER, PAWTUCKET, RHODE ISLAND", PREPARED FOR CHARTER CONTRACTING COMPANY, LLC, BY A-PLUS CONSTRUCTION, FIGURE 4 OF 4, REVISION 1, DATED DECEMBER 3, 2023, ORIGINAL SCALE 1" = 30'
   - PROPERTY LINES AND LOT INFORMATION ESTABLISHED FROM INFORMATION PROVIDED ON A DRAWING TITLED "PERIMETER SURVEY OF LAND AT THE TIDEWATER FORMER MGP SITE IN PAWTUCKET, RHODE ISLAND FOR ATLANTIC ENVIRONMENTAL SERVICES INC." DEVELOPED BY LOUIS FEDERICI AND ASSOCIATES.
   - GIS DATA WAS PROVIDED BY THE CITY OF PAWTUCKET IN OCTOBER 2016 FOR REFERENCE PURPOSES ONLY AND SHOULD NOT BE CONSIDERED A LEGALLY AUTHORITATIVE SOURCE AS TO LOCATION OF ANY LINE OR FEATURE. THESE DATA ARE FOR PLANNING PURPOSES ONLY AND DO NOT REPRESENT A LEGALLY RECORDED PLAN, DEED, SURVEY OR ENGINEERING SCHEMATIC AND ARE NOT INTENDED TO BE USED AS SUCH.
   - AERIAL IMAGE ACQUIRED FROM 2024 MICROSOFT 2024 MAXAR/CNES(2024) DISTRIBUTION AIRBUS DS.
2) HORIZONTAL DATUM IS BASED ON NORTH AMERICAN DATUM 1983 (NAD83)
3) VERTICAL DATUM IS BASED ON NORTH AMERICAN VERTICAL DATUM 1988 (NAVD88)

0 10' 20' 40' 60'
SCALE IN FEET 1" = 20'

FORMER TIDEWATER FACILITY
PAWTUCKET, RHODE ISLAND

SOUTHWESTERN CAPPING PLAN

PREPARED BY: GZA GeoEnvironmental, Inc. Engineers and Scientists www.gza.com		PREPARED FOR: nationalgrid	
PROJ MGR: JK	REVIEWED BY: DJR	CHECKED BY: DJR	DRAWING 3
DESIGNED BY: JK	DRAWN BY: LDT	SCALE: AS SHOWN	
DATE: JANUARY 2025	PROJECT NO. 43654.60	REVISION NO.	SHEET NO. 3 OF 3

2025- GZA GeoEnvironmental, Inc. G:\ENV\43654.60\DAY\CURRENT\PLANS\2024-2-1_SOUTHERN PORTION OF SITE\43654.60_PERIMETER CAPPING.DWG 20-SCALE JANUARY 30, 2025 7:39 AM LISA THERRAULT

GZA
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ECOLOGICAL
WATER
CONSTRUCTION MANAGEMENT

530 Broadway
Providence, RI 02909
T: 401.421.4140
F: 401.751.8613
www.gza.com

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ĐÂY LÀ MỘT BẢN THÔNG CÁO QUAN TRỌNG
XIN VUI LÒNG CHO DỊCH LẠI THÔNG CÁO NÀY

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Это очень важное сообщение.
Пожалуйста, попросите чтобы
вам его перевели.

May 20, 2024
File No. 03.0043654.80

Re: Notice to Abutters
Shallow Soil Investigation Program
Former Tidewater Facility
Pawtucket, Rhode Island
Site Remediation File No. SR-26-0934A/Formerly RIDEM Case No. 95-022

Dear Abutters:

The purpose of this letter is to notify you that The Narragansett Electric Company d/b/a Rhode Island Energy (Rhode Island Energy) will be conducting a supplemental environmental soil testing program associated with the former Tidewater Manufactured Gas Plant (MGP) and the former Pawtucket No. 1 Power Station Site (the Site) located at the ends of Tidewater and Merry Streets in Pawtucket, Rhode Island. This notice is being provided to abutting property owners in accordance with the requirements established in the Rhode Island Department of Environmental Management's (RIDEM) *Rules and Regulation for the Investigation and Remediation of Hazardous Materials* (Remediation Regulations). Should you be an owner of property that is leased, we request that you provide a copy of this letter to your tenants. **Note this notice is the same as the notice you recently received except, we have also provided translated versions in Spanish and Portuguese.**

Rhode Island Energy plans to collect shallow surface soil samples from the southwestern portion of the Site in a limited area adjacent to the Francis J. Varieur Elementary School and Max Read Field using manual sampling techniques. These proposed explorations are designed to supplement the existing data and facilitate completion of the Site remedy. Real time air quality monitoring will be performed during the work using hand-held instruments for dust and total volatile organic compounds (VOCs).

We currently anticipate this work will begin in late May 2024 and will take approximately 1 to 2 days to complete. The results of these investigations will be described in a letter report which will be submitted to RIDEM and posted to the Tidewater and RIDEM websites (www.tidewatersite.com and http://www.dem.ri.gov/programs/wastemanagement/site-remediation/tidewater.php). All air monitoring data will be posted to the bulletin boards at the end Tidewater Street and Bowles Court and the Tidewater website by the Monday following the work.

For more information regarding this shallow soil testing program or if you have any questions, please contact Kenneth Lento of Rhode Island Energy at (401)-784-4250.

Very truly yours,

GZA GEOENVIRONMENTAL, INC.

David Rusczyk, P.E.
Associate Principal

cc: Joe Martella, RIDEM
Kenneth Lento, Rhode Island Energy

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20 de mayo de 2024
Archivo n.º 03.0043654.80

Asunto:
Aviso a vecinos de propiedades colindantes
Programa de investigación de suelos poco profundos
Antigua instalación de Tidewater
Pawtucket, Rhode Island
N.º de archivo de saneamiento del sitio SR-26-0934A/Anteriormente caso del RIDEM n.º 95-022

Estimados vecinos de propiedades colindantes:

Les enviamos esta carta con el propósito de notificarles que The Narragansett Electric Company que opera bajo el nombre comercial de Rhode Island Energy (Rhode Island Energy) llevará a cabo un programa complementario de pruebas del suelo en relación con la antigua planta de producción de gas de Tidewater (MGP) y la antigua central eléctrica de Pawtucket n.º 1 (el Sitio), situadas al final de las calles Tidewater y Merry de Pawtucket, Rhode Island. Enviamos este aviso a todos los vecinos de propiedades colindantes de acuerdo con los requerimientos que se establecen en las *Normas y Regulaciones para la Investigación y el Saneamiento de Emisiones de Materiales Peligrosos* (Normas de Saneamiento) del Departamento de Gestión Ambiental de Rhode Island (RIDEM). Si son dueños de una propiedad que está alquilada, les solicitamos que faciliten una copia de esta carta a sus inquilinos. **Tengan en cuenta que este es el mismo aviso que recibieron recientemente, pero hemos agregado la traducción al español y portugués.**

Rhode Island Energy tiene previsto tomar muestras superficiales (poca profundidad) del suelo en la parte suroeste del Sitio, en un área limitada adyacente a la escuela primaria Francis J. Varieur y al campo Max Read utilizando técnicas de muestreo manual. Estas exploraciones se proponen con el objetivo de sumar información a los datos actuales y facilitar la realización del saneamiento del Sitio. Durante el transcurso de este proyecto, se llevará a cabo un control en tiempo real de la calidad del aire mediante instrumentos portátiles para medir el polvo y los compuestos orgánicos volátiles totales.

Prevemos que el trabajo comenzará a fines de mayo de 2024 y que se completará en aproximadamente 1 o 2 días. Describiremos los resultados de estas investigaciones en un informe, el cual se enviará al RIDEM y se publicará en los sitios web de Tidewater y RIDEM (www.tidewatersite.com y http://www.dem.ri.gov/programs/wastemanagement/site-remediation/tidewater.php). Publicaremos todos los datos de control de la calidad del aire en los tablones de anuncios al final de Tidewater Street y Bowles Court, y en el sitio web de Tidewater el lunes posterior a los trabajos.

Si tiene alguna duda o desea solicitar más información acerca de este programa de pruebas superficiales de suelo, llame a Kenneth Lento de Rhode Island Energy al (401)-784-4250.

Cordialmente,

GZA GEOENVIRONMENTAL, INC.

David Rusczyk, P.E.
Director adjunto

Cc: Joe Martella, RIDEM
Kenneth Lento, Rhode Island Energy

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20 de maio de 2024
Arquivo nº 03.0043654.80

Ref: Notificação aos donos de propriedades adjacentes
Programa de investigação de solos rasos
Previamente Tidewater Facility
Pawtucket, Rhode Island
Arquivo nº SR-26-0934A de remediação do local/Previamente Caso nº 95-022 do RIDEM

Prezados donos de propriedades adjacentes,

O objetivo dessa carta é notificá-los de que a Companhia Elétrica Narragansett, sob o nome comercial Rhode Island Energy (Rhode Island Energy) estará conduzindo um programa complementar de testes ambientais de solo associado à antiga Fábrica de Gás Manufaturado Tidewater (sigla em inglês, MGP) e ao antigo local da Central Elétrica Pawtucket nº 1 (o Local), localizados no final das ruas Tidewater e Merry, em Pawtucket, Rhode Island. Essa notificação está sendo fornecida aos donos das propriedades adjacentes, de acordo com os requisitos estabelecidos nas *Regras e regulamentação para a investigação e remediação de materiais perigosos* (Regulamentações de Remediação) do Departamento de Gestão Ambiental de Rhode Island (sigla em inglês, RIDEM). Caso seja dono de uma propriedade que esteja alugada, solicitamos que forneça uma cópia dessa carta aos seus inquilinos. **Observe que essa notificação é igual à notificação que você recebeu recentemente, exceto que também fornecemos versões traduzidas em espanhol e português.**

A Rhode Island Energy planeja coletar amostras superficiais rasas de solo da porção sudoeste do Local em uma área limitada, adjacente à Francis J. Varieur Elementary School e ao Max Read Field, usando técnicas de amostragem manual. Essas explorações propostas foram projetadas para complementar os dados existentes e facilitar a conclusão da remediação do local. O monitoramento da qualidade do ar em tempo real será realizado durante a obra, usando instrumentos portáteis para pó e compostos orgânicos voláteis (VOCs) totais.

Prevemos, atualmente, que essa obra comece no final de maio de 2024 e que leve aproximadamente de 1 a 2 dias para a conclusão. Os resultados dessas investigações serão descritos em uma carta relatório, que será enviada ao RIDEM e publicada nos sites da Tidewater e do RIDEM (www.tidewatersite.com e http://www.dem.ri.gov/programs/wastemanagement/site-remediation/tidewater.php). Todos os dados do monitoramento do ar serão publicados nos painéis informativos no final da Tidewater Street e Bowles Court; e no site da Tidewater na segunda-feira após a obra.

Para maiores informações sobre esse programa de testes de solos rasos, ou caso tenham alguma dúvida, entrem em contato com Kenneth Lento, da Rhode Island Energy, pelo telefone (401)-784-4250.

Sinceramente,

GZA GEOENVIRONMENTAL, INC.

David Rusczyk, P.E.
Diretor Associado

cc: Joe Martella, RIDEM
Kenneth Lento, Rhode Island Energy

ESS Laboratory
DIVISION OF THE RISE GROUP
BAL Laboratory Analytical Balance

CERTIFICATE OF ANALYSIS

David Rusczyk
GZA GeoEnvironmental, Inc.
95 Glastonbury Boulevard, 3rd Floor
Glastonbury, CT 06033

RE: Tidewater (05.0043654.80)
ESS Laboratory Work Order Number: 24F0696

This signed Certificate of Analysis is our approved release of your analytical results. These results are only representative of sample aliquots received at the laboratory. ESS Laboratory expects its clients to follow all regulatory sampling guidelines. Beginning with this page, the entire report has been paginated. This report should not be copied except in full without the approval of the laboratory. Samples will be disposed of thirty days after the final report has been delivered. If you have any questions or concerns, please feel free to call our Customer Service Department.

Laurel Stoddard
Laboratory Director

REVIEWED
By ESS Laboratory at 7:39 pm, Jun 24, 2024

Analytical Summary
The project as described above has been analyzed in accordance with the ESS Quality Assurance Plan. This plan utilizes the following methodologies: US EPA SW-846, US EPA Methods for Chemical Analysis of Water and Wastes per 40 CFR Part 136, APHA Standard Methods for the Examination of Water and Wastewater, American Society for Testing and Materials (ASTM), and other recognized methodologies. The analyses with these noted observations are in conformance to the Quality Assurance Plan. In chromatographic analysis, manual integration is frequently used instead of automated integration because it produces more accurate results.

The test results present in this report are in compliance with TNI and relative state standards, and/or client Quality Assurance Project Plans (QAPP). The laboratory has reviewed the following: Sample Preservations, Hold Times, Initial Calibrations, Continuing Calibrations, Method Blanks, Blank Spikes, Blank Spike Duplicates, Duplicates, Matrix Spikes, Matrix Spike Duplicates, Surrogates and Internal Standards. Any results which were found to be outside of the recommended ranges stated in our SOPs will be noted in the Project Narrative.

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Tidewater

ESS Laboratory Work Order: 24F0696

SAMPLE RECEIPT

The following samples were received on June 17, 2024 for the analyses specified on the enclosed Chain of Custody Record.

Lab Number	Sample Name	Matrix	Analysis
24F0696-01	GZ-SS-1 0-1	Soil	6010D, 8100M, 8270E PAH, MA PAC
24F0696-02	GZ-SS-1 1-2	Soil	6010D, 8100M, 8270E PAH, MA PAC
24F0696-03	GZ-SS-2 0-1	Soil	6010D, 8100M, 8270E PAH, MA PAC
24F0696-04	GZ-SS-2 1-2	Soil	6010D, 8100M, 8270E PAH, MA PAC
24F0696-05	GZ-SS-3 0-1	Soil	6010D, 8100M, 8270E PAH, MA PAC
24F0696-06	GZ-SS-3 1-2	Soil	6010D, 8100M, 8270E PAH, MA PAC
24F0696-07	GZ-SS-4 0-1	Soil	6010D, 8100M, 8270E PAH, MA PAC
24F0696-08	GZ-SS-4 1-2	Soil	6010D, 8100M, 8270E PAH, MA PAC
24F0696-09	GZ-SS-5 0-1	Soil	6010D, 8100M, 8270E PAH, MA PAC
24F0696-10	GZ-SS-5 1-2	Soil	6010D, 8100M, 8270E PAH, MA PAC
24F0696-11	GZ-SS-6 0-1	Soil	6010D, 8100M, 8270E PAH, MA PAC
24F0696-12	GZ-SS-6 1-2	Soil	6010D, 8100M, 8270E PAH, MA PAC
24F0696-13	GZ-SS-7 0-1	Soil	6010D, 8100M, 8270E PAH, MA PAC
24F0696-14	GZ-SS-7 1-2	Soil	6010D, 8100M, 8270E PAH, MA PAC
24F0696-15	GZ-SS-8 0-1	Soil	6010D, 8100M, 8270E PAH, MA PAC
24F0696-16	GZ-SS-8 1-2	Soil	6010D, 8100M, 8270E PAH, MA PAC
24F0696-17	GZ-SS-9 0-1	Soil	6010D, 8100M, 8270E PAH, MA PAC
24F0696-18	GZ-SS-9 1-2	Soil	6010D, 8100M, 8270E PAH, MA PAC
24F0696-19	GZ-SS-10 0-1	Soil	6010D, 8100M, 8270E PAH, MA PAC
24F0696-20	GZ-SS-10 1-2	Soil	6010D, 8100M, 8270E PAH, MA PAC

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Tidewater ESS Laboratory Work Order: 24F0696

PROJECT NARRATIVE

Semi-Volatile Organic Compounds

24F0696-03	**Surrogate recovery(ies) above upper control limit (S+).**
	p-Terphenyl-d14 (134% @ 30-130%)
24F0696-05	**Elevated Method Reporting Limits due to sample matrix (EL).**
24F0696-06	**Elevated Method Reporting Limits due to sample matrix (EL).**
24F0696-07	**Elevated Method Reporting Limits due to sample matrix (EL).**
24F0696-08	**Surrogate recovery(ies) above upper control limit (S+).**
	p-Terphenyl-d14 (135% @ 30-130%)
24F0696-09	**Elevated Method Reporting Limits due to sample matrix (EL).**
24F0696-10	**Elevated Method Reporting Limits due to sample matrix (EL).**
24F0696-11	**Elevated Method Reporting Limits due to sample matrix (EL).**
24F0696-12	**Elevated Method Reporting Limits due to sample matrix (EL).**
24F0696-13	**Elevated Method Reporting Limits due to sample matrix (EL).**
24F0696-15	**Elevated Method Reporting Limits due to sample matrix (EL).**
24F0696-19	**Elevated Method Reporting Limits due to sample matrix (EL).**

No other observations noted.

End of Project Narrative.

DATA USABILITY LINKS

To ensure you are viewing the most current version of the documents below, please clear your internet cookies for www.ESSLaboratory.com. Consult your IT Support personnel for information on how to clear your internet cookies.

Definitions of Quality Control Parameters

Semivolatile Organics Internal Standard Information

Semivolatile Organics Surrogate Information

Volatile Organics Internal Standard Information

Volatile Organics Surrogate Information

EPH and VPH Alkane Lists

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Tidewater ESS Laboratory Work Order: 24F0696

CURRENT SW-846 METHODOLOGY VERSIONS

Analytical Methods

1010A - Flashpoint
6010D - ICP
6020B - ICP MS
7010 - Graphite Furnace
7196A - Hexavalent Chromium
7470A - Aqueous Mercury
7471B - Solid Mercury
8011 - EDB/DBCP/TCP
8015C - GRO/DRO
8081B - Pesticides
8082A - PCB
8100M - TPH
8151A - Herbicides
8260D - VOA
8270E - SVOA
8270E SIM - SVOA Low Level
9014 - Cyanide
9038 - Sulfate
9040C - Aqueous pH
9045D - Solid pH (Corrosivity)
9050A - Specific Conductance
9056A - Anions (IC)
9060A - TOC
9095B - Paint Filter
MADEP 19-2.1 - EPH
MADEP 18-2.1 - VPH

Prep Methods

3005A - Aqueous ICP Digestion
3020A - Aqueous Graphite Furnace / ICP MS Digestion
3050B - Solid ICP / Graphite Furnace / ICP MS Digestion
3060A - Solid Hexavalent Chromium Digestion
3510C - Separatory Funnel Extraction
3520C - Liquid / Liquid Extraction
3540C - Manual Soxhlet Extraction
3546 - Microwave Extraction
3580A - Waste Dilution
5030B - Aqueous Purge and Trap
5030C - Aqueous Purge and Trap
5035A - Solid Purge and Trap

SW846 Reactivity Methods 7.3.3.2 (Reactive Cyanide) and 7.3.4.1 (Reactive Sulfide) have been withdrawn by EPA. These methods are reported per client request and are not NELAP accredited.

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Tidewater
Client Sample ID: GZ-SS-1 0-1
Date Sampled: 06/17/24 08:45
Percent Solids: 93

ESS Laboratory Work Order: 24F0696
ESS Laboratory Sample ID: 24F0696-01
Sample Matrix: Soil
Units: mg/kg dry

Extraction Method: 3050B

Total Metals

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	IV / FV	Batch
Arsenic	**6.22** (1.99)	---	6010D	---	1	KJB	06/21/24 16:05	2.7 100	DF41915
Lead	**51.5** (3.99)	---	6010D	---	1	KJB	06/21/24 16:05	2.7 100	DF41915

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Tidewater
Client Sample ID: GZ-SS-1 0-1
Date Sampled: 06/17/24 08:45
Percent Solids: 93
Initial Volume: 20.2g
Final Volume: 1ml
Extraction Method: 3546

ESS Laboratory Work Order: 24F0696
ESS Laboratory Sample ID: 24F0696-01
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TJ
Prepared: 6/18/24 8:55

Semi-Volatile Organic Compounds

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	Sequence	Batch
2-Methylnaphthalene	ND (0.107)	---	8270E PAH	---	1	TJ	06/19/24 21:59	D4F0390	DF41759
Acenaphthene	ND (0.107)	---	8270E PAH	---	1	TJ	06/19/24 21:59	D4F0390	DF41759
Acenaphthylene	**0.311** (0.107)	---	8270E PAH	---	1	TJ	06/19/24 21:59	D4F0390	DF41759
Anthracene	ND (0.107)	---	8270E PAH	---	1	TJ	06/19/24 21:59	D4F0390	DF41759
Benzo(a)anthracene	**0.441** (0.107)	---	8270E PAH	---	1	TJ	06/19/24 21:59	D4F0390	DF41759
Benzo(a)pyrene	**0.470** (0.107)	---	8270E PAH	---	1	TJ	06/19/24 21:59	D4F0390	DF41759
Benzo(b)fluoranthene	**0.606** (0.107)	---	8270E PAH	---	1	TJ	06/19/24 21:59	D4F0390	DF41759
Benzo(g,h,i)perylene	**0.510** (0.107)	---	8270E PAH	---	1	TJ	06/19/24 21:59	D4F0390	DF41759
Benzo(k)fluoranthene	**0.564** (0.107)	---	8270E PAH	---	1	TJ	06/19/24 21:59	D4F0390	DF41759
Chrysene	**0.463** (0.107)	---	8270E PAH	---	1	TJ	06/19/24 21:59	D4F0390	DF41759
Dibenzo(a,h)Anthracene	**0.116** (0.107)	---	8270E PAH	---	1	TJ	06/19/24 21:59	D4F0390	DF41759
Fluoranthene	**0.547** (0.107)	---	8270E PAH	---	1	TJ	06/19/24 21:59	D4F0390	DF41759
Fluorene	ND (0.107)	---	8270E PAH	---	1	TJ	06/19/24 21:59	D4F0390	DF41759
Indeno(1,2,3-cd)Pyrene	**0.533** (0.107)	---	8270E PAH	---	1	TJ	06/19/24 21:59	D4F0390	DF41759
Naphthalene	ND (0.107)	---	8270E PAH	---	1	TJ	06/19/24 21:59	D4F0390	DF41759
Phenanthrene	**0.195** (0.107)	---	8270E PAH	---	1	TJ	06/19/24 21:59	D4F0390	DF41759
Pyrene	**0.674** (0.107)	---	8270E PAH	---	1	TJ	06/19/24 21:59	D4F0390	DF41759

	%Recovery	*Qualifier*	*Limits*
Surrogate: 1,2-Dichlorobenzene-d4	*85 %*		*30-130*
Surrogate: 2-Fluorobiphenyl	*96 %*		*30-130*
Surrogate: Nitrobenzene-d5	*97 %*		*30-130*
Surrogate: p-Terphenyl-d14	*123 %*		*30-130*

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Tidewater
Client Sample ID: GZ-SS-1 0-1
Date Sampled: 06/17/24 08:45
Percent Solids: 93
Initial Volume: 20.1g
Final Volume: 1ml
Extraction Method: 3546

ESS Laboratory Work Order: 24F0696
ESS Laboratory Sample ID: 24F0696-01
Sample Matrix: Soil
Units: mg/kg dry
Analyst: JDN
Prepared: 6/18/24 8:45

8100M Total Petroleum Hydrocarbons

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Total Petroleum Hydrocarbons (C9-C36)	**163** (40.2)	---	8100M	---	1	06/20/24 17:06	---	DF41761

	%Recovery	Qualifier	Limits
Surrogate: O-Terphenyl	*77 %*		*40-140*

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Tidewater
Client Sample ID: GZ-SS-1 0-1
Date Sampled: 06/17/24 08:45
Percent Solids: 93

ESS Laboratory Work Order: 24F0696
ESS Laboratory Sample ID: 24F0696-01
Sample Matrix: Soil

Classical Chemistry

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	Units	Batch
Cyanide (PAC)	ND (1.08)	---	MA PAC	---	1	EEM	06/19/24 12:05	mg/kg dry	DF41928

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Tidewater
Client Sample ID: GZ-SS-1 1-2
Date Sampled: 06/17/24 09:10
Percent Solids: 93

ESS Laboratory Work Order: 24F0696
ESS Laboratory Sample ID: 24F0696-02
Sample Matrix: Soil
Units: mg/kg dry

Extraction Method: 3050B

Total Metals

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	IV / FV	Batch
Arsenic	**6.80** (1.87)	---	6010D	---	1	KJB	06/21/24 16:07	2.87 100	DF41915
Lead	**44.8** (3.75)	---	6010D	---	1	KJB	06/21/24 16:07	2.87 100	DF41915

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Tidewater
Client Sample ID: GZ-SS-1 1-2
Date Sampled: 06/17/24 09:10
Percent Solids: 93
Initial Volume: 19.5g
Final Volume: 1ml
Extraction Method: 3546

ESS Laboratory Work Order: 24F0696
ESS Laboratory Sample ID: 24F0696-02
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TJ
Prepared: 6/18/24 8:55

Semi-Volatile Organic Compounds

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	Sequence	Batch
2-Methylnaphthalene	ND (0.110)	---	8270E PAH	---	1	TJ	06/19/24 22:29	D4F0390	DF41759
Acenaphthene	ND (0.110)	---	8270E PAH	---	1	TJ	06/19/24 22:29	D4F0390	DF41759
Acenaphthylene	**0.197** (0.110)	---	8270E PAH	---	1	TJ	06/19/24 22:29	D4F0390	DF41759
Anthracene	**0.398** (0.110)	---	8270E PAH	---	1	TJ	06/19/24 22:29	D4F0390	DF41759
Benzo(a)anthracene	**1.10** (0.110)	---	8270E PAH	---	1	TJ	06/19/24 22:29	D4F0390	DF41759
Benzo(a)pyrene	**0.971** (0.110)	---	8270E PAH	---	1	TJ	06/19/24 22:29	D4F0390	DF41759
Benzo(b)fluoranthene	**0.954** (0.110)	---	8270E PAH	---	1	TJ	06/19/24 22:29	D4F0390	DF41759
Benzo(g,h,i)perylene	**0.649** (0.110)	---	8270E PAH	---	1	TJ	06/19/24 22:29	D4F0390	DF41759
Benzo(k)fluoranthene	**0.912** (0.110)	---	8270E PAH	---	1	TJ	06/19/24 22:29	D4F0390	DF41759
Chrysene	**0.982** (0.110)	---	8270E PAH	---	1	TJ	06/19/24 22:29	D4F0390	DF41759
Dibenzo(a,h)Anthracene	**0.152** (0.110)	---	8270E PAH	---	1	TJ	06/19/24 22:29	D4F0390	DF41759
Fluoranthene	**1.94** (0.110)	---	8270E PAH	---	1	TJ	06/19/24 22:29	D4F0390	DF41759
Fluorene	**0.149** (0.110)	---	8270E PAH	---	1	TJ	06/19/24 22:29	D4F0390	DF41759
Indeno(1,2,3-cd)Pyrene	**0.730** (0.110)	---	8270E PAH	---	1	TJ	06/19/24 22:29	D4F0390	DF41759
Naphthalene	**0.136** (0.110)	---	8270E PAH	---	1	TJ	06/19/24 22:29	D4F0390	DF41759
Phenanthrene	**1.32** (0.110)	---	8270E PAH	---	1	TJ	06/19/24 22:29	D4F0390	DF41759
Pyrene	**2.28** (0.110)	---	8270E PAH	---	1	TJ	06/19/24 22:29	D4F0390	DF41759

	%Recovery	*Qualifier*	*Limits*
Surrogate: 1,2-Dichlorobenzene-d4	*83 %*		*30-130*
Surrogate: 2-Fluorobiphenyl	*96 %*		*30-130*
Surrogate: Nitrobenzene-d5	*92 %*		*30-130*
Surrogate: p-Terphenyl-d14	*127 %*		*30-130*

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Tidewater
Client Sample ID: GZ-SS-1 1-2
Date Sampled: 06/17/24 09:10
Percent Solids: 93
Initial Volume: 20.2g
Final Volume: 1ml
Extraction Method: 3546

ESS Laboratory Work Order: 24F0696
ESS Laboratory Sample ID: 24F0696-02
Sample Matrix: Soil
Units: mg/kg dry
Analyst: JDN
Prepared: 6/18/24 8:45

8100M Total Petroleum Hydrocarbons

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Total Petroleum Hydrocarbons (C9-C36)	**159** (40.0)	---	8100M	---	1	06/20/24 17:39	---	DF41761

	%Recovery	Qualifier	Limits
Surrogate: O-Terphenyl	*76 %*		*40-140*

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Tidewater
Client Sample ID: GZ-SS-1 1-2
Date Sampled: 06/17/24 09:10
Percent Solids: 93

ESS Laboratory Work Order: 24F0696
ESS Laboratory Sample ID: 24F0696-02
Sample Matrix: Soil

Classical Chemistry

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	Units	Batch
Cyanide (PAC)	ND (1.08)	---	MA PAC	---	1	EEM	06/19/24 12:05	mg/kg dry	DF41928

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Tidewater
Client Sample ID: GZ-SS-2 0-1
Date Sampled: 06/17/24 08:50
Percent Solids: 97

ESS Laboratory Work Order: 24F0696
ESS Laboratory Sample ID: 24F0696-03
Sample Matrix: Soil
Units: mg/kg dry

Extraction Method: 3050B

Total Metals

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	IV / FV	Batch
Arsenic	**5.84** (1.87)	---	6010D	---	1	KJB	06/21/24 16:10	2.76 100	DF41915
Lead	**48.8** (3.74)	---	6010D	---	1	KJB	06/21/24 16:10	2.76 100	DF41915

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Tidewater
Client Sample ID: GZ-SS-2 0-1
Date Sampled: 06/17/24 08:50
Percent Solids: 97
Initial Volume: 19.9g
Final Volume: 1ml
Extraction Method: 3546

ESS Laboratory Work Order: 24F0696
ESS Laboratory Sample ID: 24F0696-03
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TJ
Prepared: 6/18/24 8:55

Semi-Volatile Organic Compounds

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	Sequence	Batch
2-Methylnaphthalene	ND (0.104)	---	8270E PAH	---	1	TJ	06/19/24 23:00	D4F0390	DF41759
Acenaphthene	ND (0.104)	---	8270E PAH	---	1	TJ	06/19/24 23:00	D4F0390	DF41759
Acenaphthylene	**0.620** (0.104)	---	8270E PAH	---	1	TJ	06/19/24 23:00	D4F0390	DF41759
Anthracene	**0.190** (0.104)	---	8270E PAH	---	1	TJ	06/19/24 23:00	D4F0390	DF41759
Benzo(a)anthracene	**0.792** (0.104)	---	8270E PAH	---	1	TJ	06/19/24 23:00	D4F0390	DF41759
Benzo(a)pyrene	**0.929** (0.104)	---	8270E PAH	---	1	TJ	06/19/24 23:00	D4F0390	DF41759
Benzo(b)fluoranthene	**1.43** (0.104)	---	8270E PAH	---	1	TJ	06/19/24 23:00	D4F0390	DF41759
Benzo(g,h,i)perylene	**1.09** (0.104)	---	8270E PAH	---	1	TJ	06/19/24 23:00	D4F0390	DF41759
Benzo(k)fluoranthene	**1.33** (0.104)	---	8270E PAH	---	1	TJ	06/19/24 23:00	D4F0390	DF41759
Chrysene	**0.910** (0.104)	---	8270E PAH	---	1	TJ	06/19/24 23:00	D4F0390	DF41759
Dibenzo(a,h)Anthracene	**0.248** (0.104)	---	8270E PAH	---	1	TJ	06/19/24 23:00	D4F0390	DF41759
Fluoranthene	**0.830** (0.104)	---	8270E PAH	---	1	TJ	06/19/24 23:00	D4F0390	DF41759
Fluorene	ND (0.104)	---	8270E PAH	---	1	TJ	06/19/24 23:00	D4F0390	DF41759
Indeno(1,2,3-cd)Pyrene	**1.20** (0.104)	---	8270E PAH	---	1	TJ	06/19/24 23:00	D4F0390	DF41759
Naphthalene	**0.125** (0.104)	---	8270E PAH	---	1	TJ	06/19/24 23:00	D4F0390	DF41759
Phenanthrene	**0.263** (0.104)	---	8270E PAH	---	1	TJ	06/19/24 23:00	D4F0390	DF41759
Pyrene	**1.28** (0.104)	---	8270E PAH	---	1	TJ	06/19/24 23:00	D4F0390	DF41759

	%Recovery	Qualifier	Limits
Surrogate: 1,2-Dichlorobenzene-d4	*87 %*		*30-130*
Surrogate: 2-Fluorobiphenyl	*96 %*		*30-130*
Surrogate: Nitrobenzene-d5	*98 %*		*30-130*
Surrogate: p-Terphenyl-d14	*134 %*	*S+*	*30-130*

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Tidewater
Client Sample ID: GZ-SS-2 0-1
Date Sampled: 06/17/24 08:50
Percent Solids: 97
Initial Volume: 19.9g
Final Volume: 1ml
Extraction Method: 3546

ESS Laboratory Work Order: 24F0696
ESS Laboratory Sample ID: 24F0696-03
Sample Matrix: Soil
Units: mg/kg dry
Analyst: JDN
Prepared: 6/18/24 8:45

8100M Total Petroleum Hydrocarbons

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Total Petroleum Hydrocarbons (C9-C36)	**262** (38.9)	---	8100M	---	1	06/20/24 18:11	---	DF41761

	%Recovery	Qualifier	Limits
Surrogate: O-Terphenyl	*72 %*		*40-140*

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Tidewater
Client Sample ID: GZ-SS-2 0-1
Date Sampled: 06/17/24 08:50
Percent Solids: 97

ESS Laboratory Work Order: 24F0696
ESS Laboratory Sample ID: 24F0696-03
Sample Matrix: Soil

Classical Chemistry

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	Units	Batch
Cyanide (PAC)	**14.9** (0.94)	---	MA PAC	---	1	EEM	06/19/24 12:05	mg/kg dry	DF41928

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Tidewater
Client Sample ID: GZ-SS-2 1-2
Date Sampled: 06/17/24 08:55
Percent Solids: 96

ESS Laboratory Work Order: 24F0696
ESS Laboratory Sample ID: 24F0696-04
Sample Matrix: Soil
Units: mg/kg dry

Extraction Method: 3050B

Total Metals

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	IV / FV	Batch
Arsenic	**4.08** (1.81)	---	6010D	---	1	KJB	06/21/24 16:12	2.88 100	DF41915
Lead	**63.3** (3.62)	---	6010D	---	1	KJB	06/21/24 16:12	2.88 100	DF41915

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Tidewater
Client Sample ID: GZ-SS-2 1-2
Date Sampled: 06/17/24 08:55
Percent Solids: 96
Initial Volume: 20.9g
Final Volume: 1ml
Extraction Method: 3546

ESS Laboratory Work Order: 24F0696
ESS Laboratory Sample ID: 24F0696-04
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TJ
Prepared: 6/18/24 8:55

Semi-Volatile Organic Compounds

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	Sequence	Batch
2-Methylnaphthalene	**0.166** (0.100)	---	8270E PAH	---	1	TJ	06/19/24 23:30	D4F0390	DF41759
Acenaphthene	ND (0.100)	---	8270E PAH	---	1	TJ	06/19/24 23:30	D4F0390	DF41759
Acenaphthylene	**0.754** (0.100)	---	8270E PAH	---	1	TJ	06/19/24 23:30	D4F0390	DF41759
Anthracene	**0.294** (0.100)	---	8270E PAH	---	1	TJ	06/19/24 23:30	D4F0390	DF41759
Benzo(a)anthracene	**1.17** (0.100)	---	8270E PAH	---	1	TJ	06/19/24 23:30	D4F0390	DF41759
Benzo(a)pyrene	**1.36** (0.100)	---	8270E PAH	---	1	TJ	06/19/24 23:30	D4F0390	DF41759
Benzo(b)fluoranthene	**1.81** (0.100)	---	8270E PAH	---	1	TJ	06/19/24 23:30	D4F0390	DF41759
Benzo(g,h,i)perylene	**1.32** (0.100)	---	8270E PAH	---	1	TJ	06/19/24 23:30	D4F0390	DF41759
Benzo(k)fluoranthene	**1.37** (0.100)	---	8270E PAH	---	1	TJ	06/19/24 23:30	D4F0390	DF41759
Chrysene	**1.23** (0.100)	---	8270E PAH	---	1	TJ	06/19/24 23:30	D4F0390	DF41759
Dibenzo(a,h)Anthracene	**0.293** (0.100)	---	8270E PAH	---	1	TJ	06/19/24 23:30	D4F0390	DF41759
Fluoranthene	**1.51** (0.100)	---	8270E PAH	---	1	TJ	06/19/24 23:30	D4F0390	DF41759
Fluorene	ND (0.100)	---	8270E PAH	---	1	TJ	06/19/24 23:30	D4F0390	DF41759
Indeno(1,2,3-cd)Pyrene	**1.44** (0.100)	---	8270E PAH	---	1	TJ	06/19/24 23:30	D4F0390	DF41759
Naphthalene	**0.309** (0.100)	---	8270E PAH	---	1	TJ	06/19/24 23:30	D4F0390	DF41759
Phenanthrene	**0.579** (0.100)	---	8270E PAH	---	1	TJ	06/19/24 23:30	D4F0390	DF41759
Pyrene	**1.82** (0.100)	---	8270E PAH	---	1	TJ	06/19/24 23:30	D4F0390	DF41759

	%Recovery	*Qualifier*	*Limits*
Surrogate: 1,2-Dichlorobenzene-d4	*79 %*		*30-130*
Surrogate: 2-Fluorobiphenyl	*90 %*		*30-130*
Surrogate: Nitrobenzene-d5	*89 %*		*30-130*
Surrogate: p-Terphenyl-d14	*108 %*		*30-130*

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Tidewater
Client Sample ID: GZ-SS-2 1-2
Date Sampled: 06/17/24 08:55
Percent Solids: 96
Initial Volume: 19.1g
Final Volume: 1ml
Extraction Method: 3546

ESS Laboratory Work Order: 24F0696
ESS Laboratory Sample ID: 24F0696-04
Sample Matrix: Soil
Units: mg/kg dry
Analyst: JDN
Prepared: 6/18/24 8:45

8100M Total Petroleum Hydrocarbons

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Total Petroleum Hydrocarbons (C9-C36)	**180** (40.9)	---	8100M	---	1	06/20/24 14:57	---	DF41761

	%Recovery	Qualifier	Limits
Surrogate: O-Terphenyl	*77 %*		*40-140*

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Tidewater
Client Sample ID: GZ-SS-2 1-2
Date Sampled: 06/17/24 08:55
Percent Solids: 96

ESS Laboratory Work Order: 24F0696
ESS Laboratory Sample ID: 24F0696-04
Sample Matrix: Soil

Classical Chemistry

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	Units	Batch
Cyanide (PAC)	**20.0** (0.95)	---	MA PAC	---	1	EEM	06/19/24 12:05	mg/kg dry	DF41928

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Tidewater
Client Sample ID: GZ-SS-3 0-1
Date Sampled: 06/17/24 09:00
Percent Solids: 93

ESS Laboratory Work Order: 24F0696
ESS Laboratory Sample ID: 24F0696-05
Sample Matrix: Soil
Units: mg/kg dry

Extraction Method: 3050B

Total Metals

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	IV / FV	Batch
Arsenic	**2.45** (1.85)	---	6010D	---	1	KJB	06/21/24 16:14	2.9 100	DF41915
Lead	**53.4** (3.71)	---	6010D	---	1	KJB	06/21/24 16:14	2.9 100	DF41915

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Tidewater
Client Sample ID: GZ-SS-3 0-1
Date Sampled: 06/17/24 09:00
Percent Solids: 93
Initial Volume: 19.7g
Final Volume: 1ml
Extraction Method: 3546

ESS Laboratory Work Order: 24F0696
ESS Laboratory Sample ID: 24F0696-05
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TJ
Prepared: 6/18/24 8:55

Semi-Volatile Organic Compounds

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	Sequence	Batch
2-Methylnaphthalene	ND (0.218)	---	8270E PAH	---	2	TJ	06/20/24 0:00	D4F0390	DF41759
Acenaphthene	ND (0.218)	---	8270E PAH	---	2	TJ	06/20/24 0:00	D4F0390	DF41759
Acenaphthylene	ND (0.218)	---	8270E PAH	---	2	TJ	06/20/24 0:00	D4F0390	DF41759
Anthracene	ND (0.218)	---	8270E PAH	---	2	TJ	06/20/24 0:00	D4F0390	DF41759
Benzo(a)anthracene	**0.294** (0.218)	---	8270E PAH	---	2	TJ	06/20/24 0:00	D4F0390	DF41759
Benzo(a)pyrene	**0.332** (0.218)	---	8270E PAH	---	2	TJ	06/20/24 0:00	D4F0390	DF41759
Benzo(b)fluoranthene	**0.396** (0.218)	---	8270E PAH	---	2	TJ	06/20/24 0:00	D4F0390	DF41759
Benzo(g,h,i)perylene	**0.303** (0.218)	---	8270E PAH	---	2	TJ	06/20/24 0:00	D4F0390	DF41759
Benzo(k)fluoranthene	**0.356** (0.218)	---	8270E PAH	---	2	TJ	06/20/24 0:00	D4F0390	DF41759
Chrysene	**0.369** (0.218)	---	8270E PAH	---	2	TJ	06/20/24 0:00	D4F0390	DF41759
Dibenzo(a,h)Anthracene	ND (0.218)	---	8270E PAH	---	2	TJ	06/20/24 0:00	D4F0390	DF41759
Fluoranthene	**0.505** (0.218)	---	8270E PAH	---	2	TJ	06/20/24 0:00	D4F0390	DF41759
Fluorene	ND (0.218)	---	8270E PAH	---	2	TJ	06/20/24 0:00	D4F0390	DF41759
Indeno(1,2,3-cd)Pyrene	**0.328** (0.218)	---	8270E PAH	---	2	TJ	06/20/24 0:00	D4F0390	DF41759
Naphthalene	ND (0.218)	---	8270E PAH	---	2	TJ	06/20/24 0:00	D4F0390	DF41759
Phenanthrene	ND (0.218)	---	8270E PAH	---	2	TJ	06/20/24 0:00	D4F0390	DF41759
Pyrene	**0.683** (0.218)	---	8270E PAH	---	2	TJ	06/20/24 0:00	D4F0390	DF41759

	%Recovery	Qualifier	Limits
Surrogate: 1,2-Dichlorobenzene-d4	*67 %*		*30-130*
Surrogate: 2-Fluorobiphenyl	*76 %*		*30-130*
Surrogate: Nitrobenzene-d5	*72 %*		*30-130*
Surrogate: p-Terphenyl-d14	*101 %*		*30-130*

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Tidewater
Client Sample ID: GZ-SS-3 0-1
Date Sampled: 06/17/24 09:00
Percent Solids: 93
Initial Volume: 20.1g
Final Volume: 1ml
Extraction Method: 3546

ESS Laboratory Work Order: 24F0696
ESS Laboratory Sample ID: 24F0696-05
Sample Matrix: Soil
Units: mg/kg dry
Analyst: JDN
Prepared: 6/18/24 8:45

8100M Total Petroleum Hydrocarbons

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Total Petroleum Hydrocarbons (C9-C36)	ND (200)	---	8100M	---	5	06/20/24 20:20	---	DF41761

	%Recovery	Qualifier	Limits
Surrogate: O-Terphenyl	*72 %*		*40-140*

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Tidewater
Client Sample ID: GZ-SS-3 0-1
Date Sampled: 06/17/24 09:00
Percent Solids: 93

ESS Laboratory Work Order: 24F0696
ESS Laboratory Sample ID: 24F0696-05
Sample Matrix: Soil

Classical Chemistry

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	Units	Batch
Cyanide (PAC)	ND (0.98)	---	MA PAC	---	1	EEM	06/19/24 12:05	mg/kg dry	DF41928

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Tidewater
Client Sample ID: GZ-SS-3 1-2
Date Sampled: 06/17/24 09:10
Percent Solids: 94

ESS Laboratory Work Order: 24F0696
ESS Laboratory Sample ID: 24F0696-06
Sample Matrix: Soil
Units: mg/kg dry

Extraction Method: 3050B

Total Metals

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	IV / FV	Batch
Arsenic	**8.89** (1.96)	---	6010D	---	1	KJB	06/21/24 16:16	2.71 100	DF41915
Lead	**194** (3.92)	---	6010D	---	1	KJB	06/21/24 16:16	2.71 100	DF41915

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Tidewater
Client Sample ID: GZ-SS-3 1-2
Date Sampled: 06/17/24 09:10
Percent Solids: 94
Initial Volume: 20.8g
Final Volume: 1ml
Extraction Method: 3546

ESS Laboratory Work Order: 24F0696
ESS Laboratory Sample ID: 24F0696-06
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TJ
Prepared: 6/18/24 8:55

Semi-Volatile Organic Compounds

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	Sequence	Batch
2-Methylnaphthalene	**0.346** (0.205)	---	8270E PAH	---	2	TJ	06/20/24 0:30	D4F0390	DF41759
Acenaphthene	ND (0.205)	---	8270E PAH	---	2	TJ	06/20/24 0:30	D4F0390	DF41759
Acenaphthylene	**5.11** (0.205)	---	8270E PAH	---	2	TJ	06/20/24 0:30	D4F0390	DF41759
Anthracene	**3.29** (0.205)	---	8270E PAH	---	2	TJ	06/20/24 0:30	D4F0390	DF41759
Benzo(a)anthracene	**12.2** (0.205)	---	8270E PAH	---	2	TJ	06/20/24 0:30	D4F0390	DF41759
Benzo(a)pyrene	**12.2** (0.205)	---	8270E PAH	---	2	TJ	06/20/24 0:30	D4F0390	DF41759
Benzo(b)fluoranthene	**15.6** (0.205)	---	8270E PAH	---	2	TJ	06/20/24 0:30	D4F0390	DF41759
Benzo(g,h,i)perylene	**9.61** (0.205)	---	8270E PAH	---	2	TJ	06/20/24 0:30	D4F0390	DF41759
Benzo(k)fluoranthene	**11.4** (0.205)	---	8270E PAH	---	2	TJ	06/20/24 0:30	D4F0390	DF41759
Chrysene	**11.4** (0.205)	---	8270E PAH	---	2	TJ	06/20/24 0:30	D4F0390	DF41759
Dibenzo(a,h)Anthracene	**2.13** (0.205)	---	8270E PAH	---	2	TJ	06/20/24 0:30	D4F0390	DF41759
Fluoranthene	**17.0** (0.205)	---	8270E PAH	---	2	TJ	06/20/24 0:30	D4F0390	DF41759
Fluorene	**0.267** (0.205)	---	8270E PAH	---	2	TJ	06/20/24 0:30	D4F0390	DF41759
Indeno(1,2,3-cd)Pyrene	**11.0** (0.205)	---	8270E PAH	---	2	TJ	06/20/24 0:30	D4F0390	DF41759
Naphthalene	**0.802** (0.205)	---	8270E PAH	---	2	TJ	06/20/24 0:30	D4F0390	DF41759
Phenanthrene	**7.25** (0.205)	---	8270E PAH	---	2	TJ	06/20/24 0:30	D4F0390	DF41759
Pyrene	**22.3** (0.205)	---	8270E PAH	---	2	TJ	06/20/24 0:30	D4F0390	DF41759

	%Recovery	*Qualifier*	*Limits*
Surrogate: 1,2-Dichlorobenzene-d4	*85 %*		*30-130*
Surrogate: 2-Fluorobiphenyl	*91 %*		*30-130*
Surrogate: Nitrobenzene-d5	*95 %*		*30-130*
Surrogate: p-Terphenyl-d14	*122 %*		*30-130*

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Tidewater
Client Sample ID: GZ-SS-3 1-2
Date Sampled: 06/17/24 09:10
Percent Solids: 94
Initial Volume: 19.7g
Final Volume: 1ml
Extraction Method: 3546

ESS Laboratory Work Order: 24F0696
ESS Laboratory Sample ID: 24F0696-06
Sample Matrix: Soil
Units: mg/kg dry
Analyst: JDN
Prepared: 6/18/24 8:45

8100M Total Petroleum Hydrocarbons

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Total Petroleum Hydrocarbons (C9-C36)	**1540** (202)	---	8100M	---	5	06/20/24 20:52	---	DF41761

	%Recovery	Qualifier	Limits
Surrogate: O-Terphenyl	*81 %*		*40-140*

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Tidewater
Client Sample ID: GZ-SS-3 1-2
Date Sampled: 06/17/24 09:10
Percent Solids: 94

ESS Laboratory Work Order: 24F0696
ESS Laboratory Sample ID: 24F0696-06
Sample Matrix: Soil

Classical Chemistry

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	Units	Batch
Cyanide (PAC)	**77.1** (5.32)	---	MA PAC	---	5	EEM	06/19/24 12:05	mg/kg dry	DF41928

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Tidewater
Client Sample ID: GZ-SS-4 0-1
Date Sampled: 06/17/24 09:15
Percent Solids: 92

ESS Laboratory Work Order: 24F0696
ESS Laboratory Sample ID: 24F0696-07
Sample Matrix: Soil
Units: mg/kg dry

Extraction Method: 3050B

Total Metals

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	IV / FV	Batch
Arsenic	**3.59** (2.16)	---	6010D	---	1	KJB	06/21/24 16:18	2.51 100	DF41915
Lead	**47.3** (4.33)	---	6010D	---	1	KJB	06/21/24 16:18	2.51 100	DF41915

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Tidewater
Client Sample ID: GZ-SS-4 0-1
Date Sampled: 06/17/24 09:15
Percent Solids: 92
Initial Volume: 20g
Final Volume: 1ml
Extraction Method: 3546

ESS Laboratory Work Order: 24F0696
ESS Laboratory Sample ID: 24F0696-07
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TJ
Prepared: 6/18/24 8:55

Semi-Volatile Organic Compounds

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	Sequence	Batch
2-Methylnaphthalene	ND (0.217)	---	8270E PAH	---	2	TJ	06/20/24 1:01	D4F0390	DF41759
Acenaphthene	ND (0.217)	---	8270E PAH	---	2	TJ	06/20/24 1:01	D4F0390	DF41759
Acenaphthylene	**0.807** (0.217)	---	8270E PAH	---	2	TJ	06/20/24 1:01	D4F0390	DF41759
Anthracene	**0.264** (0.217)	---	8270E PAH	---	2	TJ	06/20/24 1:01	D4F0390	DF41759
Benzo(a)anthracene	**1.03** (0.217)	---	8270E PAH	---	2	TJ	06/20/24 1:01	D4F0390	DF41759
Benzo(a)pyrene	**1.28** (0.217)	---	8270E PAH	---	2	TJ	06/20/24 1:01	D4F0390	DF41759
Benzo(b)fluoranthene	**1.92** (0.217)	---	8270E PAH	---	2	TJ	06/20/24 1:01	D4F0390	DF41759
Benzo(g,h,i)perylene	**1.34** (0.217)	---	8270E PAH	---	2	TJ	06/20/24 1:01	D4F0390	DF41759
Benzo(k)fluoranthene	**1.81** (0.217)	---	8270E PAH	---	2	TJ	06/20/24 1:01	D4F0390	DF41759
Chrysene	**1.25** (0.217)	---	8270E PAH	---	2	TJ	06/20/24 1:01	D4F0390	DF41759
Dibenzo(a,h)Anthracene	**0.316** (0.217)	---	8270E PAH	---	2	TJ	06/20/24 1:01	D4F0390	DF41759
Fluoranthene	**1.23** (0.217)	---	8270E PAH	---	2	TJ	06/20/24 1:01	D4F0390	DF41759
Fluorene	ND (0.217)	---	8270E PAH	---	2	TJ	06/20/24 1:01	D4F0390	DF41759
Indeno(1,2,3-cd)Pyrene	**1.44** (0.217)	---	8270E PAH	---	2	TJ	06/20/24 1:01	D4F0390	DF41759
Naphthalene	ND (0.217)	---	8270E PAH	---	2	TJ	06/20/24 1:01	D4F0390	DF41759
Phenanthrene	**0.429** (0.217)	---	8270E PAH	---	2	TJ	06/20/24 1:01	D4F0390	DF41759
Pyrene	**1.69** (0.217)	---	8270E PAH	---	2	TJ	06/20/24 1:01	D4F0390	DF41759

	%Recovery	Qualifier	Limits
Surrogate: 1,2-Dichlorobenzene-d4	*76 %*		*30-130*
Surrogate: 2-Fluorobiphenyl	*82 %*		*30-130*
Surrogate: Nitrobenzene-d5	*83 %*		*30-130*
Surrogate: p-Terphenyl-d14	*110 %*		*30-130*

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Tidewater
Client Sample ID: GZ-SS-4 0-1
Date Sampled: 06/17/24 09:15
Percent Solids: 92
Initial Volume: 20.4g
Final Volume: 1ml
Extraction Method: 3546

ESS Laboratory Work Order: 24F0696
ESS Laboratory Sample ID: 24F0696-07
Sample Matrix: Soil
Units: mg/kg dry
Analyst: JDN
Prepared: 6/18/24 8:45

8100M Total Petroleum Hydrocarbons

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Total Petroleum Hydrocarbons (C9-C36)	**625** (200)	---	8100M	---	5	06/20/24 19:48	---	DF41761

	%Recovery	Qualifier	Limits
Surrogate: O-Terphenyl	*66 %*		*40-140*

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Tidewater
Client Sample ID: GZ-SS-4 0-1
Date Sampled: 06/17/24 09:15
Percent Solids: 92

ESS Laboratory Work Order: 24F0696
ESS Laboratory Sample ID: 24F0696-07
Sample Matrix: Soil

Classical Chemistry

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	Units	Batch
Cyanide (PAC)	**15.5** (0.99)	---	MA PAC	---	1	EEM	06/19/24 12:05	mg/kg dry	DF41928

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Tidewater
Client Sample ID: GZ-SS-4 1-2
Date Sampled: 06/17/24 09:20
Percent Solids: 96

ESS Laboratory Work Order: 24F0696
ESS Laboratory Sample ID: 24F0696-08
Sample Matrix: Soil
Units: mg/kg dry

Extraction Method: 3050B

Total Metals

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	IV / FV	Batch
Arsenic	**7.09** (2.01)	---	6010D	---	1	KJB	06/21/24 16:20	2.6 100	DF41915
Lead	**32.0** (4.02)	---	6010D	---	1	KJB	06/21/24 16:20	2.6 100	DF41915

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Tidewater
Client Sample ID: GZ-SS-4 1-2
Date Sampled: 06/17/24 09:20
Percent Solids: 96
Initial Volume: 19g
Final Volume: 1ml
Extraction Method: 3546

ESS Laboratory Work Order: 24F0696
ESS Laboratory Sample ID: 24F0696-08
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TJ
Prepared: 6/18/24 8:55

Semi-Volatile Organic Compounds

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	Sequence	Batch
2-Methylnaphthalene	**0.115** (0.110)	---	8270E PAH	---	1	TJ	06/20/24 1:31	D4F0390	DF41759
Acenaphthene	ND (0.110)	---	8270E PAH	---	1	TJ	06/20/24 1:31	D4F0390	DF41759
Acenaphthylene	**0.718** (0.110)	---	8270E PAH	---	1	TJ	06/20/24 1:31	D4F0390	DF41759
Anthracene	**0.245** (0.110)	---	8270E PAH	---	1	TJ	06/20/24 1:31	D4F0390	DF41759
Benzo(a)anthracene	**1.12** (0.110)	---	8270E PAH	---	1	TJ	06/20/24 1:31	D4F0390	DF41759
Benzo(a)pyrene	**1.10** (0.110)	---	8270E PAH	---	1	TJ	06/20/24 1:31	D4F0390	DF41759
Benzo(b)fluoranthene	**1.47** (0.110)	---	8270E PAH	---	1	TJ	06/20/24 1:31	D4F0390	DF41759
Benzo(g,h,i)perylene	**0.954** (0.110)	---	8270E PAH	---	1	TJ	06/20/24 1:31	D4F0390	DF41759
Benzo(k)fluoranthene	**1.33** (0.110)	---	8270E PAH	---	1	TJ	06/20/24 1:31	D4F0390	DF41759
Chrysene	**1.15** (0.110)	---	8270E PAH	---	1	TJ	06/20/24 1:31	D4F0390	DF41759
Dibenzo(a,h)Anthracene	**0.224** (0.110)	---	8270E PAH	---	1	TJ	06/20/24 1:31	D4F0390	DF41759
Fluoranthene	**1.48** (0.110)	---	8270E PAH	---	1	TJ	06/20/24 1:31	D4F0390	DF41759
Fluorene	ND (0.110)	---	8270E PAH	---	1	TJ	06/20/24 1:31	D4F0390	DF41759
Indeno(1,2,3-cd)Pyrene	**1.08** (0.110)	---	8270E PAH	---	1	TJ	06/20/24 1:31	D4F0390	DF41759
Naphthalene	**0.284** (0.110)	---	8270E PAH	---	1	TJ	06/20/24 1:31	D4F0390	DF41759
Phenanthrene	**0.485** (0.110)	---	8270E PAH	---	1	TJ	06/20/24 1:31	D4F0390	DF41759
Pyrene	**1.84** (0.110)	---	8270E PAH	---	1	TJ	06/20/24 1:31	D4F0390	DF41759

	%Recovery	*Qualifier*	*Limits*
Surrogate: 1,2-Dichlorobenzene-d4	*88 %*		*30-130*
Surrogate: 2-Fluorobiphenyl	*92 %*		*30-130*
Surrogate: Nitrobenzene-d5	*98 %*		*30-130*
Surrogate: p-Terphenyl-d14	*135 %*	*S+*	*30-130*

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Tidewater
Client Sample ID: GZ-SS-4 1-2
Date Sampled: 06/17/24 09:20
Percent Solids: 96
Initial Volume: 20.6g
Final Volume: 1ml
Extraction Method: 3546

ESS Laboratory Work Order: 24F0696
ESS Laboratory Sample ID: 24F0696-08
Sample Matrix: Soil
Units: mg/kg dry
Analyst: JDN
Prepared: 6/18/24 8:45

8100M Total Petroleum Hydrocarbons

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Total Petroleum Hydrocarbons (C9-C36)	**171** (38.1)	---	8100M	---	1	06/20/24 16:02	---	DF41761

	%Recovery	Qualifier	Limits
Surrogate: O-Terphenyl	*71 %*		*40-140*

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Tidewater
Client Sample ID: GZ-SS-4 1-2
Date Sampled: 06/17/24 09:20
Percent Solids: 96

ESS Laboratory Work Order: 24F0696
ESS Laboratory Sample ID: 24F0696-08
Sample Matrix: Soil

Classical Chemistry

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	Units	Batch
Cyanide (PAC)	**9.40** (1.05)	---	MA PAC	---	1	EEM	06/19/24 12:05	mg/kg dry	DF41928

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Tidewater
Client Sample ID: GZ-SS-5 0-1
Date Sampled: 06/17/24 09:50
Percent Solids: 93

ESS Laboratory Work Order: 24F0696
ESS Laboratory Sample ID: 24F0696-09
Sample Matrix: Soil
Units: mg/kg dry

Extraction Method: 3050B

Total Metals

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	IV / FV	Batch
Arsenic	**9.01** (1.96)	---	6010D	---	1	KJB	06/21/24 16:22	2.76 100	DF41915
Lead	**153** (3.91)	---	6010D	---	1	KJB	06/21/24 16:22	2.76 100	DF41915

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Tidewater
Client Sample ID: GZ-SS-5 0-1
Date Sampled: 06/17/24 09:50
Percent Solids: 93
Initial Volume: 19.5g
Final Volume: 1ml
Extraction Method: 3546

ESS Laboratory Work Order: 24F0696
ESS Laboratory Sample ID: 24F0696-09
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TJ
Prepared: 6/18/24 8:55

Semi-Volatile Organic Compounds

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	Sequence	Batch
2-Methylnaphthalene	ND (0.221)	---	8270E PAH	---	2	TJ	06/20/24 2:01	D4F0390	DF41759
Acenaphthene	ND (0.221)	---	8270E PAH	---	2	TJ	06/20/24 2:01	D4F0390	DF41759
Acenaphthylene	**0.706** (0.221)	---	8270E PAH	---	2	TJ	06/20/24 2:01	D4F0390	DF41759
Anthracene	**0.225** (0.221)	---	8270E PAH	---	2	TJ	06/20/24 2:01	D4F0390	DF41759
Benzo(a)anthracene	**0.961** (0.221)	---	8270E PAH	---	2	TJ	06/20/24 2:01	D4F0390	DF41759
Benzo(a)pyrene	**1.11** (0.221)	---	8270E PAH	---	2	TJ	06/20/24 2:01	D4F0390	DF41759
Benzo(b)fluoranthene	**1.75** (0.221)	---	8270E PAH	---	2	TJ	06/20/24 2:01	D4F0390	DF41759
Benzo(g,h,i)perylene	**1.12** (0.221)	---	8270E PAH	---	2	TJ	06/20/24 2:01	D4F0390	DF41759
Benzo(k)fluoranthene	**1.30** (0.221)	---	8270E PAH	---	2	TJ	06/20/24 2:01	D4F0390	DF41759
Chrysene	**1.04** (0.221)	---	8270E PAH	---	2	TJ	06/20/24 2:01	D4F0390	DF41759
Dibenzo(a,h)Anthracene	**0.289** (0.221)	---	8270E PAH	---	2	TJ	06/20/24 2:01	D4F0390	DF41759
Fluoranthene	**1.22** (0.221)	---	8270E PAH	---	2	TJ	06/20/24 2:01	D4F0390	DF41759
Fluorene	ND (0.221)	---	8270E PAH	---	2	TJ	06/20/24 2:01	D4F0390	DF41759
Indeno(1,2,3-cd)Pyrene	**1.24** (0.221)	---	8270E PAH	---	2	TJ	06/20/24 2:01	D4F0390	DF41759
Naphthalene	ND (0.221)	---	8270E PAH	---	2	TJ	06/20/24 2:01	D4F0390	DF41759
Phenanthrene	**0.460** (0.221)	---	8270E PAH	---	2	TJ	06/20/24 2:01	D4F0390	DF41759
Pyrene	**1.62** (0.221)	---	8270E PAH	---	2	TJ	06/20/24 2:01	D4F0390	DF41759

	%Recovery	*Qualifier*	*Limits*
Surrogate: 1,2-Dichlorobenzene-d4	*87 %*		*30-130*
Surrogate: 2-Fluorobiphenyl	*92 %*		*30-130*
Surrogate: Nitrobenzene-d5	*93 %*		*30-130*
Surrogate: p-Terphenyl-d14	*124 %*		*30-130*

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Tidewater
Client Sample ID: GZ-SS-5 0-1
Date Sampled: 06/17/24 09:50
Percent Solids: 93
Initial Volume: 19.7g
Final Volume: 1ml
Extraction Method: 3546

ESS Laboratory Work Order: 24F0696
ESS Laboratory Sample ID: 24F0696-09
Sample Matrix: Soil
Units: mg/kg dry
Analyst: JDN
Prepared: 6/18/24 8:45

8100M Total Petroleum Hydrocarbons

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Total Petroleum Hydrocarbons (C9-C36)	**405** (82.2)	---	8100M	---	2	06/21/24 13:38	---	DF41761

	%Recovery	Qualifier	Limits
Surrogate: O-Terphenyl	*80 %*		*40-140*

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Tidewater
Client Sample ID: GZ-SS-5 0-1
Date Sampled: 06/17/24 09:50
Percent Solids: 93

ESS Laboratory Work Order: 24F0696
ESS Laboratory Sample ID: 24F0696-09
Sample Matrix: Soil

Classical Chemistry

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	Units	Batch
Cyanide (PAC)	**10.5** (0.98)	---	MA PAC	---	1	EEM	06/19/24 12:05	mg/kg dry	DF41928

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Tidewater
Client Sample ID: GZ-SS-5 1-2
Date Sampled: 06/17/24 09:20
Percent Solids: 95

ESS Laboratory Work Order: 24F0696
ESS Laboratory Sample ID: 24F0696-10
Sample Matrix: Soil
Units: mg/kg dry

Extraction Method: 3050B

Total Metals

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	IV / FV	Batch
Arsenic	**12.3** (2.02)	---	6010D	---	1	KJB	06/21/24 16:29	2.6 100	DF41915
Lead	**114** (4.04)	---	6010D	---	1	KJB	06/21/24 16:29	2.6 100	DF41915

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Tidewater
Client Sample ID: GZ-SS-5 1-2
Date Sampled: 06/17/24 09:20
Percent Solids: 95
Initial Volume: 20.6g
Final Volume: 1ml
Extraction Method: 3546

ESS Laboratory Work Order: 24F0696
ESS Laboratory Sample ID: 24F0696-10
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TJ
Prepared: 6/18/24 16:08

Semi-Volatile Organic Compounds

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	Sequence	Batch
2-Methylnaphthalene	ND (0.204)	---	8270E PAH	---	2	TJ	06/20/24 2:31	D4F0390	DF41830
Acenaphthene	ND (0.204)	---	8270E PAH	---	2	TJ	06/20/24 2:31	D4F0390	DF41830
Acenaphthylene	**3.09** (0.204)	---	8270E PAH	---	2	TJ	06/20/24 2:31	D4F0390	DF41830
Anthracene	**1.42** (0.204)	---	8270E PAH	---	2	TJ	06/20/24 2:31	D4F0390	DF41830
Benzo(a)anthracene	**8.87** (0.204)	---	8270E PAH	---	2	TJ	06/20/24 2:31	D4F0390	DF41830
Benzo(a)pyrene	**8.39** (0.204)	---	8270E PAH	---	2	TJ	06/20/24 2:31	D4F0390	DF41830
Benzo(b)fluoranthene	**10.2** (0.204)	---	8270E PAH	---	2	TJ	06/20/24 2:31	D4F0390	DF41830
Benzo(g,h,i)perylene	**5.83** (0.204)	---	8270E PAH	---	2	TJ	06/20/24 2:31	D4F0390	DF41830
Benzo(k)fluoranthene	**8.42** (0.204)	---	8270E PAH	---	2	TJ	06/20/24 2:31	D4F0390	DF41830
Chrysene	**7.87** (0.204)	---	8270E PAH	---	2	TJ	06/20/24 2:31	D4F0390	DF41830
Dibenzo(a,h)Anthracene	**1.30** (0.204)	---	8270E PAH	---	2	TJ	06/20/24 2:31	D4F0390	DF41830
Fluoranthene	**11.2** (0.204)	---	8270E PAH	---	2	TJ	06/20/24 2:31	D4F0390	DF41830
Fluorene	ND (0.204)	---	8270E PAH	---	2	TJ	06/20/24 2:31	D4F0390	DF41830
Indeno(1,2,3-cd)Pyrene	**6.83** (0.204)	---	8270E PAH	---	2	TJ	06/20/24 2:31	D4F0390	DF41830
Naphthalene	**0.306** (0.204)	---	8270E PAH	---	2	TJ	06/20/24 2:31	D4F0390	DF41830
Phenanthrene	**2.20** (0.204)	---	8270E PAH	---	2	TJ	06/20/24 2:31	D4F0390	DF41830
Pyrene	**14.5** (0.204)	---	8270E PAH	---	2	TJ	06/20/24 2:31	D4F0390	DF41830

	%Recovery	*Qualifier*	*Limits*
Surrogate: 1,2-Dichlorobenzene-d4	*79 %*		*30-130*
Surrogate: 2-Fluorobiphenyl	*84 %*		*30-130*
Surrogate: Nitrobenzene-d5	*83 %*		*30-130*
Surrogate: p-Terphenyl-d14	*116 %*		*30-130*

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Tidewater
Client Sample ID: GZ-SS-5 1-2
Date Sampled: 06/17/24 09:20
Percent Solids: 95
Initial Volume: 20g
Final Volume: 1ml
Extraction Method: 3546

ESS Laboratory Work Order: 24F0696
ESS Laboratory Sample ID: 24F0696-10
Sample Matrix: Soil
Units: mg/kg dry
Analyst: JDN
Prepared: 6/18/24 8:45

8100M Total Petroleum Hydrocarbons

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Total Petroleum Hydrocarbons (C9-C36)	**544** (39.4)	---	8100M	---	1	06/21/24 14:11	---	DF41761

	%Recovery	Qualifier	Limits
Surrogate: O-Terphenyl	*85 %*		*40-140*

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Tidewater
Client Sample ID: GZ-SS-5 1-2
Date Sampled: 06/17/24 09:20
Percent Solids: 95

ESS Laboratory Work Order: 24F0696
ESS Laboratory Sample ID: 24F0696-10
Sample Matrix: Soil

Classical Chemistry

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	Units	Batch
Cyanide (PAC)	**37.8** (5.26)	---	MA PAC	---	5	EEM	06/19/24 12:05	mg/kg dry	DF41928

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Tidewater
Client Sample ID: GZ-SS-6 0-1
Date Sampled: 06/17/24 09:20
Percent Solids: 96

ESS Laboratory Work Order: 24F0696
ESS Laboratory Sample ID: 24F0696-11
Sample Matrix: Soil
Units: mg/kg dry

Extraction Method: 3050B

Total Metals

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	IV / FV	Batch
Arsenic	**8.89** (1.89)	---	6010D	---	1	KJB	06/21/24 16:41	2.77 100	DF41915
Lead	**46.4** (3.78)	---	6010D	---	1	KJB	06/21/24 16:41	2.77 100	DF41915

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Tidewater
Client Sample ID: GZ-SS-6 0-1
Date Sampled: 06/17/24 09:20
Percent Solids: 96
Initial Volume: 19.1g
Final Volume: 1ml
Extraction Method: 3546

ESS Laboratory Work Order: 24F0696
ESS Laboratory Sample ID: 24F0696-11
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TJ
Prepared: 6/18/24 16:08

Semi-Volatile Organic Compounds

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	Sequence	Batch
2-Methylnaphthalene	ND (0.219)	---	8270E PAH	---	2	TJ	06/20/24 3:02	D4F0390	DF41830
Acenaphthene	ND (0.219)	---	8270E PAH	---	2	TJ	06/20/24 3:02	D4F0390	DF41830
Acenaphthylene	**1.32** (0.219)	---	8270E PAH	---	2	TJ	06/20/24 3:02	D4F0390	DF41830
Anthracene	**0.452** (0.219)	---	8270E PAH	---	2	TJ	06/20/24 3:02	D4F0390	DF41830
Benzo(a)anthracene	**1.67** (0.219)	---	8270E PAH	---	2	TJ	06/20/24 3:02	D4F0390	DF41830
Benzo(a)pyrene	**2.12** (0.219)	---	8270E PAH	---	2	TJ	06/20/24 3:02	D4F0390	DF41830
Benzo(b)fluoranthene	**3.01** (0.219)	---	8270E PAH	---	2	TJ	06/20/24 3:02	D4F0390	DF41830
Benzo(g,h,i)perylene	**1.92** (0.219)	---	8270E PAH	---	2	TJ	06/20/24 3:02	D4F0390	DF41830
Benzo(k)fluoranthene	**2.42** (0.219)	---	8270E PAH	---	2	TJ	06/20/24 3:02	D4F0390	DF41830
Chrysene	**1.72** (0.219)	---	8270E PAH	---	2	TJ	06/20/24 3:02	D4F0390	DF41830
Dibenzo(a,h)Anthracene	**0.435** (0.219)	---	8270E PAH	---	2	TJ	06/20/24 3:02	D4F0390	DF41830
Fluoranthene	**1.60** (0.219)	---	8270E PAH	---	2	TJ	06/20/24 3:02	D4F0390	DF41830
Fluorene	ND (0.219)	---	8270E PAH	---	2	TJ	06/20/24 3:02	D4F0390	DF41830
Indeno(1,2,3-cd)Pyrene	**2.14** (0.219)	---	8270E PAH	---	2	TJ	06/20/24 3:02	D4F0390	DF41830
Naphthalene	**0.412** (0.219)	---	8270E PAH	---	2	TJ	06/20/24 3:02	D4F0390	DF41830
Phenanthrene	**0.660** (0.219)	---	8270E PAH	---	2	TJ	06/20/24 3:02	D4F0390	DF41830
Pyrene	**2.38** (0.219)	---	8270E PAH	---	2	TJ	06/20/24 3:02	D4F0390	DF41830

	%Recovery	*Qualifier*	*Limits*
Surrogate: 1,2-Dichlorobenzene-d4	*85 %*		*30-130*
Surrogate: 2-Fluorobiphenyl	*88 %*		*30-130*
Surrogate: Nitrobenzene-d5	*89 %*		*30-130*
Surrogate: p-Terphenyl-d14	*124 %*		*30-130*

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Tidewater
Client Sample ID: GZ-SS-6 0-1
Date Sampled: 06/17/24 09:20
Percent Solids: 96
Initial Volume: 19.5g
Final Volume: 1ml
Extraction Method: 3546

ESS Laboratory Work Order: 24F0696
ESS Laboratory Sample ID: 24F0696-11
Sample Matrix: Soil
Units: mg/kg dry
Analyst: JDN
Prepared: 6/18/24 8:45

8100M Total Petroleum Hydrocarbons

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Total Petroleum Hydrocarbons (C9-C36)	**459** (80.5)	---	8100M	---	2	06/21/24 14:43	---	DF41761

	%Recovery	Qualifier	Limits
Surrogate: O-Terphenyl	*77 %*		*40-140*

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Tidewater
Client Sample ID: GZ-SS-6 0-1
Date Sampled: 06/17/24 09:20
Percent Solids: 96

ESS Laboratory Work Order: 24F0696
ESS Laboratory Sample ID: 24F0696-11
Sample Matrix: Soil

Classical Chemistry

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	Units	Batch
Cyanide (PAC)	ND (1.05)	---	MA PAC	---	1	EEM	06/19/24 12:05	mg/kg dry	DF41928

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Tidewater
Client Sample ID: GZ-SS-6 1-2
Date Sampled: 06/17/24 09:30
Percent Solids: 95

ESS Laboratory Work Order: 24F0696
ESS Laboratory Sample ID: 24F0696-12
Sample Matrix: Soil
Units: mg/kg dry

Extraction Method: 3050B

Total Metals

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	IV / FV	Batch
Arsenic	**5.44** (1.99)	---	6010D	---	1	KJB	06/21/24 16:43	2.65 100	DF41915
Lead	**62.2** (3.99)	---	6010D	---	1	KJB	06/21/24 16:43	2.65 100	DF41915

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Tidewater
Client Sample ID: GZ-SS-6 1-2
Date Sampled: 06/17/24 09:30
Percent Solids: 95
Initial Volume: 20.5g
Final Volume: 1ml
Extraction Method: 3546

ESS Laboratory Work Order: 24F0696
ESS Laboratory Sample ID: 24F0696-12
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TJ
Prepared: 6/18/24 16:08

Semi-Volatile Organic Compounds

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	Sequence	Batch
2-Methylnaphthalene	**0.434** (0.206)	---	8270E PAH	---	2	TJ	06/20/24 3:32	D4F0390	DF41830
Acenaphthene	ND (0.206)	---	8270E PAH	---	2	TJ	06/20/24 3:32	D4F0390	DF41830
Acenaphthylene	**1.92** (0.206)	---	8270E PAH	---	2	TJ	06/20/24 3:32	D4F0390	DF41830
Anthracene	**0.765** (0.206)	---	8270E PAH	---	2	TJ	06/20/24 3:32	D4F0390	DF41830
Benzo(a)anthracene	**3.14** (0.206)	---	8270E PAH	---	2	TJ	06/20/24 3:32	D4F0390	DF41830
Benzo(a)pyrene	**3.16** (0.206)	---	8270E PAH	---	2	TJ	06/20/24 3:32	D4F0390	DF41830
Benzo(b)fluoranthene	**4.04** (0.206)	---	8270E PAH	---	2	TJ	06/20/24 3:32	D4F0390	DF41830
Benzo(g,h,i)perylene	**2.82** (0.206)	---	8270E PAH	---	2	TJ	06/20/24 3:32	D4F0390	DF41830
Benzo(k)fluoranthene	**3.98** (0.206)	---	8270E PAH	---	2	TJ	06/20/24 3:32	D4F0390	DF41830
Chrysene	**3.12** (0.206)	---	8270E PAH	---	2	TJ	06/20/24 3:32	D4F0390	DF41830
Dibenzo(a,h)Anthracene	**0.654** (0.206)	---	8270E PAH	---	2	TJ	06/20/24 3:32	D4F0390	DF41830
Fluoranthene	**3.37** (0.206)	---	8270E PAH	---	2	TJ	06/20/24 3:32	D4F0390	DF41830
Fluorene	ND (0.206)	---	8270E PAH	---	2	TJ	06/20/24 3:32	D4F0390	DF41830
Indeno(1,2,3-cd)Pyrene	**3.23** (0.206)	---	8270E PAH	---	2	TJ	06/20/24 3:32	D4F0390	DF41830
Naphthalene	**0.925** (0.206)	---	8270E PAH	---	2	TJ	06/20/24 3:32	D4F0390	DF41830
Phenanthrene	**1.10** (0.206)	---	8270E PAH	---	2	TJ	06/20/24 3:32	D4F0390	DF41830
Pyrene	**5.38** (0.206)	---	8270E PAH	---	2	TJ	06/20/24 3:32	D4F0390	DF41830

	%Recovery	*Qualifier*	*Limits*
Surrogate: 1,2-Dichlorobenzene-d4	*85 %*		*30-130*
Surrogate: 2-Fluorobiphenyl	*91 %*		*30-130*
Surrogate: Nitrobenzene-d5	*94 %*		*30-130*
Surrogate: p-Terphenyl-d14	*124 %*		*30-130*

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Tidewater
Client Sample ID: GZ-SS-6 1-2
Date Sampled: 06/17/24 09:30
Percent Solids: 95
Initial Volume: 19.3g
Final Volume: 1ml
Extraction Method: 3546

ESS Laboratory Work Order: 24F0696
ESS Laboratory Sample ID: 24F0696-12
Sample Matrix: Soil
Units: mg/kg dry
Analyst: JDN
Prepared: 6/18/24 17:03

8100M Total Petroleum Hydrocarbons

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Total Petroleum Hydrocarbons (C9-C36)	**827** (82.1)	---	8100M	---	2	06/21/24 15:15	---	DF41829

	%Recovery	Qualifier	Limits
Surrogate: O-Terphenyl	*84 %*		*40-140*

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Tidewater
Client Sample ID: GZ-SS-6 1-2
Date Sampled: 06/17/24 09:30
Percent Solids: 95

ESS Laboratory Work Order: 24F0696
ESS Laboratory Sample ID: 24F0696-12
Sample Matrix: Soil

Classical Chemistry

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	Units	Batch
Cyanide (PAC)	**8.32** (1.06)	---	MA PAC	---	1	EEM	06/19/24 12:05	mg/kg dry	DF41928

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Tidewater
Client Sample ID: GZ-SS-7 0-1
Date Sampled: 06/17/24 10:00
Percent Solids: 97

ESS Laboratory Work Order: 24F0696
ESS Laboratory Sample ID: 24F0696-13
Sample Matrix: Soil
Units: mg/kg dry

Extraction Method: 3050B

Total Metals

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	IV / FV	Batch
Arsenic	**11.6** (1.98)	---	6010D	---	1	KJB	06/21/24 16:45	2.6 100	DF41915
Lead	**88.9** (3.95)	---	6010D	---	1	KJB	06/21/24 16:45	2.6 100	DF41915

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Tidewater
Client Sample ID: GZ-SS-7 0-1
Date Sampled: 06/17/24 10:00
Percent Solids: 97
Initial Volume: 19.6g
Final Volume: 1ml
Extraction Method: 3546

ESS Laboratory Work Order: 24F0696
ESS Laboratory Sample ID: 24F0696-13
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TJ
Prepared: 6/18/24 16:08

Semi-Volatile Organic Compounds

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	Sequence	Batch
2-Methylnaphthalene	ND (0.210)	---	8270E PAH	---	2	TJ	06/20/24 4:02	D4F0390	DF41830
Acenaphthene	ND (0.210)	---	8270E PAH	---	2	TJ	06/20/24 4:02	D4F0390	DF41830
Acenaphthylene	**0.936** (0.210)	---	8270E PAH	---	2	TJ	06/20/24 4:02	D4F0390	DF41830
Anthracene	**0.272** (0.210)	---	8270E PAH	---	2	TJ	06/20/24 4:02	D4F0390	DF41830
Benzo(a)anthracene	**1.31** (0.210)	---	8270E PAH	---	2	TJ	06/20/24 4:02	D4F0390	DF41830
Benzo(a)pyrene	**1.45** (0.210)	---	8270E PAH	---	2	TJ	06/20/24 4:02	D4F0390	DF41830
Benzo(b)fluoranthene	**2.01** (0.210)	---	8270E PAH	---	2	TJ	06/20/24 4:02	D4F0390	DF41830
Benzo(g,h,i)perylene	**1.34** (0.210)	---	8270E PAH	---	2	TJ	06/20/24 4:02	D4F0390	DF41830
Benzo(k)fluoranthene	**1.87** (0.210)	---	8270E PAH	---	2	TJ	06/20/24 4:02	D4F0390	DF41830
Chrysene	**1.40** (0.210)	---	8270E PAH	---	2	TJ	06/20/24 4:02	D4F0390	DF41830
Dibenzo(a,h)Anthracene	**0.318** (0.210)	---	8270E PAH	---	2	TJ	06/20/24 4:02	D4F0390	DF41830
Fluoranthene	**1.51** (0.210)	---	8270E PAH	---	2	TJ	06/20/24 4:02	D4F0390	DF41830
Fluorene	ND (0.210)	---	8270E PAH	---	2	TJ	06/20/24 4:02	D4F0390	DF41830
Indeno(1,2,3-cd)Pyrene	**1.52** (0.210)	---	8270E PAH	---	2	TJ	06/20/24 4:02	D4F0390	DF41830
Naphthalene	ND (0.210)	---	8270E PAH	---	2	TJ	06/20/24 4:02	D4F0390	DF41830
Phenanthrene	**0.405** (0.210)	---	8270E PAH	---	2	TJ	06/20/24 4:02	D4F0390	DF41830
Pyrene	**2.05** (0.210)	---	8270E PAH	---	2	TJ	06/20/24 4:02	D4F0390	DF41830

	%Recovery	*Qualifier*	*Limits*
Surrogate: 1,2-Dichlorobenzene-d4	*78 %*		*30-130*
Surrogate: 2-Fluorobiphenyl	*85 %*		*30-130*
Surrogate: Nitrobenzene-d5	*87 %*		*30-130*
Surrogate: p-Terphenyl-d14	*121 %*		*30-130*

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Tidewater
Client Sample ID: GZ-SS-7 0-1
Date Sampled: 06/17/24 10:00
Percent Solids: 97
Initial Volume: 19.6g
Final Volume: 1ml
Extraction Method: 3546

ESS Laboratory Work Order: 24F0696
ESS Laboratory Sample ID: 24F0696-13
Sample Matrix: Soil
Units: mg/kg dry
Analyst: JDN
Prepared: 6/18/24 17:03

8100M Total Petroleum Hydrocarbons

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Total Petroleum Hydrocarbons (C9-C36)	**514** (78.6)	---	8100M	---	2	06/21/24 15:48	---	DF41829

	%Recovery	Qualifier	Limits
Surrogate: O-Terphenyl	*93 %*		*40-140*

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Tidewater
Client Sample ID: GZ-SS-7 0-1
Date Sampled: 06/17/24 10:00
Percent Solids: 97

ESS Laboratory Work Order: 24F0696
ESS Laboratory Sample ID: 24F0696-13
Sample Matrix: Soil

Classical Chemistry

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	Units	Batch
Cyanide (PAC)	**14.2** (1.03)	---	MA PAC	---	1	EEM	06/19/24 12:05	mg/kg dry	DF41928

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Tidewater
Client Sample ID: GZ-SS-7 1-2
Date Sampled: 06/17/24 10:15
Percent Solids: 95

ESS Laboratory Work Order: 24F0696
ESS Laboratory Sample ID: 24F0696-14
Sample Matrix: Soil
Units: mg/kg dry

Extraction Method: 3050B

Total Metals

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	IV / FV	Batch
Arsenic	**17.4** (1.93)	---	6010D	---	1	KJB	06/21/24 16:47	2.71 100	DF41915
Lead	**117** (3.87)	---	6010D	---	1	KJB	06/21/24 16:47	2.71 100	DF41915

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Tidewater
Client Sample ID: GZ-SS-7 1-2
Date Sampled: 06/17/24 10:15
Percent Solids: 95
Initial Volume: 19.5g
Final Volume: 1ml
Extraction Method: 3546

ESS Laboratory Work Order: 24F0696
ESS Laboratory Sample ID: 24F0696-14
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TJ
Prepared: 6/18/24 16:08

Semi-Volatile Organic Compounds

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	Sequence	Batch
2-Methylnaphthalene	**1.11** (0.108)	---	8270E PAH	---	1	TJ	06/19/24 21:31	D4F0391	DF41830
Acenaphthene	**0.509** (0.108)	---	8270E PAH	---	1	TJ	06/19/24 21:31	D4F0391	DF41830
Acenaphthylene	**5.90** (0.108)	---	8270E PAH	---	1	TJ	06/19/24 21:31	D4F0391	DF41830
Anthracene	**5.81** (0.108)	---	8270E PAH	---	1	TJ	06/19/24 21:31	D4F0391	DF41830
Benzo(a)anthracene	**8.40** (0.108)	---	8270E PAH	---	1	TJ	06/19/24 21:31	D4F0391	DF41830
Benzo(a)pyrene	**7.02** (0.108)	---	8270E PAH	---	1	TJ	06/19/24 21:31	D4F0391	DF41830
Benzo(b)fluoranthene	**9.04** (0.108)	---	8270E PAH	---	1	TJ	06/19/24 21:31	D4F0391	DF41830
Benzo(g,h,i)perylene	**5.73** (0.108)	---	8270E PAH	---	1	TJ	06/19/24 21:31	D4F0391	DF41830
Benzo(k)fluoranthene	**6.48** (0.108)	---	8270E PAH	---	1	TJ	06/19/24 21:31	D4F0391	DF41830
Chrysene	**7.88** (0.108)	---	8270E PAH	---	1	TJ	06/19/24 21:31	D4F0391	DF41830
Dibenzo(a,h)Anthracene	**1.04** (0.108)	---	8270E PAH	---	1	TJ	06/19/24 21:31	D4F0391	DF41830
Fluoranthene	**20.8** (1.08)	---	8270E PAH	---	10	TJ	06/20/24 19:57	D4F0391	DF41830
Fluorene	**1.15** (0.108)	---	8270E PAH	---	1	TJ	06/19/24 21:31	D4F0391	DF41830
Indeno(1,2,3-cd)Pyrene	**6.14** (0.108)	---	8270E PAH	---	1	TJ	06/19/24 21:31	D4F0391	DF41830
Naphthalene	**1.17** (0.108)	---	8270E PAH	---	1	TJ	06/19/24 21:31	D4F0391	DF41830
Phenanthrene	**15.5** (1.08)	---	8270E PAH	---	10	TJ	06/20/24 19:57	D4F0391	DF41830
Pyrene	**16.0** (1.08)	---	8270E PAH	---	10	TJ	06/20/24 19:57	D4F0391	DF41830

	%Recovery	Qualifier	Limits
Surrogate: 1,2-Dichlorobenzene-d4	*78 %*		*30-130*
Surrogate: 2-Fluorobiphenyl	*61 %*		*30-130*
Surrogate: Nitrobenzene-d5	*76 %*		*30-130*
Surrogate: p-Terphenyl-d14	*82 %*		*30-130*

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Tidewater
Client Sample ID: GZ-SS-7 1-2
Date Sampled: 06/17/24 10:15
Percent Solids: 95
Initial Volume: 19.2g
Final Volume: 1ml
Extraction Method: 3546

ESS Laboratory Work Order: 24F0696
ESS Laboratory Sample ID: 24F0696-14
Sample Matrix: Soil
Units: mg/kg dry
Analyst: JDN
Prepared: 6/18/24 17:03

8100M Total Petroleum Hydrocarbons

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Total Petroleum Hydrocarbons (C9-C36)	**1370** (81.9)	---	8100M	---	2	06/21/24 16:20	---	DF41829

	%Recovery	Qualifier	Limits
Surrogate: O-Terphenyl	*100 %*		*40-140*

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Tidewater
Client Sample ID: GZ-SS-7 1-2
Date Sampled: 06/17/24 10:15
Percent Solids: 95

ESS Laboratory Work Order: 24F0696
ESS Laboratory Sample ID: 24F0696-14
Sample Matrix: Soil

Classical Chemistry

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	Units	Batch
Cyanide (PAC)	**24.6** (1.05)	---	MA PAC	---	1	EEM	06/19/24 12:05	mg/kg dry	DF41928

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Tidewater
Client Sample ID: GZ-SS-8 0-1
Date Sampled: 06/17/24 10:10
Percent Solids: 96

ESS Laboratory Work Order: 24F0696
ESS Laboratory Sample ID: 24F0696-15
Sample Matrix: Soil
Units: mg/kg dry

Extraction Method: 3050B

Total Metals

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	IV / FV	Batch
Arsenic	**10.4** (1.95)	---	6010D	---	1	KJB	06/21/24 16:49	2.67 100	DF41915
Lead	**111** (3.89)	---	6010D	---	1	KJB	06/21/24 16:49	2.67 100	DF41915

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Tidewater
Client Sample ID: GZ-SS-8 0-1
Date Sampled: 06/17/24 10:10
Percent Solids: 96
Initial Volume: 19.5g
Final Volume: 1ml
Extraction Method: 3546

ESS Laboratory Work Order: 24F0696
ESS Laboratory Sample ID: 24F0696-15
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TJ
Prepared: 6/18/24 16:08

Semi-Volatile Organic Compounds

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	Sequence	Batch
2-Methylnaphthalene	**0.296** (0.213)	---	8270E PAH	---	2	TJ	06/19/24 22:01	D4F0391	DF41830
Acenaphthene	**0.259** (0.213)	---	8270E PAH	---	2	TJ	06/19/24 22:01	D4F0391	DF41830
Acenaphthylene	**9.47** (0.213)	---	8270E PAH	---	2	TJ	06/19/24 22:01	D4F0391	DF41830
Anthracene	**4.30** (0.213)	---	8270E PAH	---	2	TJ	06/19/24 22:01	D4F0391	DF41830
Benzo(a)anthracene	**13.2** (0.213)	---	8270E PAH	---	2	TJ	06/19/24 22:01	D4F0391	DF41830
Benzo(a)pyrene	**13.7** (0.213)	---	8270E PAH	---	2	TJ	06/19/24 22:01	D4F0391	DF41830
Benzo(b)fluoranthene	**15.3** (0.213)	---	8270E PAH	---	2	TJ	06/19/24 22:01	D4F0391	DF41830
Benzo(g,h,i)perylene	**10.2** (0.213)	---	8270E PAH	---	2	TJ	06/19/24 22:01	D4F0391	DF41830
Benzo(k)fluoranthene	**12.0** (0.213)	---	8270E PAH	---	2	TJ	06/19/24 22:01	D4F0391	DF41830
Chrysene	**10.9** (0.213)	---	8270E PAH	---	2	TJ	06/19/24 22:01	D4F0391	DF41830
Dibenzo(a,h)Anthracene	**2.09** (0.213)	---	8270E PAH	---	2	TJ	06/19/24 22:01	D4F0391	DF41830
Fluoranthene	**18.6** (0.213)	---	8270E PAH	---	2	TJ	06/19/24 22:01	D4F0391	DF41830
Fluorene	**0.326** (0.213)	---	8270E PAH	---	2	TJ	06/19/24 22:01	D4F0391	DF41830
Indeno(1,2,3-cd)Pyrene	**10.7** (0.213)	---	8270E PAH	---	2	TJ	06/19/24 22:01	D4F0391	DF41830
Naphthalene	**0.677** (0.213)	---	8270E PAH	---	2	TJ	06/19/24 22:01	D4F0391	DF41830
Phenanthrene	**5.83** (0.213)	---	8270E PAH	---	2	TJ	06/19/24 22:01	D4F0391	DF41830
Pyrene	**19.9** (0.213)	---	8270E PAH	---	2	TJ	06/19/24 22:01	D4F0391	DF41830

	%Recovery	*Qualifier*	*Limits*
Surrogate: 1,2-Dichlorobenzene-d4	*83 %*		*30-130*
Surrogate: 2-Fluorobiphenyl	*75 %*		*30-130*
Surrogate: Nitrobenzene-d5	*83 %*		*30-130*
Surrogate: p-Terphenyl-d14	*89 %*		*30-130*

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Tidewater
Client Sample ID: GZ-SS-8 0-1
Date Sampled: 06/17/24 10:10
Percent Solids: 96
Initial Volume: 19.4g
Final Volume: 1ml
Extraction Method: 3546

ESS Laboratory Work Order: 24F0696
ESS Laboratory Sample ID: 24F0696-15
Sample Matrix: Soil
Units: mg/kg dry
Analyst: JDN
Prepared: 6/18/24 17:03

8100M Total Petroleum Hydrocarbons

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Total Petroleum Hydrocarbons (C9-C36)	**690** (80.4)	---	8100M	---	2	06/21/24 16:52	---	DF41829

	%Recovery	Qualifier	Limits
Surrogate: O-Terphenyl	*77 %*		*40-140*

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Tidewater
Client Sample ID: GZ-SS-8 0-1
Date Sampled: 06/17/24 10:10
Percent Solids: 96

ESS Laboratory Work Order: 24F0696
ESS Laboratory Sample ID: 24F0696-15
Sample Matrix: Soil

Classical Chemistry

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	Units	Batch
Cyanide (PAC)	**30.6** (2.08)	---	MA PAC	---	2	EEM	06/19/24 12:05	mg/kg dry	DF41928

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Tidewater
Client Sample ID: GZ-SS-8 1-2
Date Sampled: 06/17/24 10:15
Percent Solids: 96

ESS Laboratory Work Order: 24F0696
ESS Laboratory Sample ID: 24F0696-16
Sample Matrix: Soil
Units: mg/kg dry

Extraction Method: 3050B

Total Metals

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	IV / FV	Batch
Arsenic	**9.39** (1.74)	---	6010D	---	1	KJB	06/21/24 16:56	2.98 100	DF41915
Lead	**76.9** (3.48)	---	6010D	---	1	KJB	06/21/24 16:56	2.98 100	DF41915

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Tidewater
Client Sample ID: GZ-SS-8 1-2
Date Sampled: 06/17/24 10:15
Percent Solids: 96
Initial Volume: 19.1g
Final Volume: 1ml
Extraction Method: 3546

ESS Laboratory Work Order: 24F0696
ESS Laboratory Sample ID: 24F0696-16
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TJ
Prepared: 6/18/24 16:08

Semi-Volatile Organic Compounds

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	Sequence	Batch
2-Methylnaphthalene	**0.902** (0.109)	---	8270E PAH	---	1	TJ	06/19/24 22:32	D4F0391	DF41830
Acenaphthene	**0.114** (0.109)	---	8270E PAH	---	1	TJ	06/19/24 22:32	D4F0391	DF41830
Acenaphthylene	**3.74** (0.109)	---	8270E PAH	---	1	TJ	06/19/24 22:32	D4F0391	DF41830
Anthracene	**1.45** (0.109)	---	8270E PAH	---	1	TJ	06/19/24 22:32	D4F0391	DF41830
Benzo(a)anthracene	**2.61** (0.109)	---	8270E PAH	---	1	TJ	06/19/24 22:32	D4F0391	DF41830
Benzo(a)pyrene	**2.56** (0.109)	---	8270E PAH	---	1	TJ	06/19/24 22:32	D4F0391	DF41830
Benzo(b)fluoranthene	**4.20** (0.109)	---	8270E PAH	---	1	TJ	06/19/24 22:32	D4F0391	DF41830
Benzo(g,h,i)perylene	**3.10** (0.109)	---	8270E PAH	---	1	TJ	06/19/24 22:32	D4F0391	DF41830
Benzo(k)fluoranthene	**3.51** (0.109)	---	8270E PAH	---	1	TJ	06/19/24 22:32	D4F0391	DF41830
Chrysene	**2.99** (0.109)	---	8270E PAH	---	1	TJ	06/19/24 22:32	D4F0391	DF41830
Dibenzo(a,h)Anthracene	**0.732** (0.109)	---	8270E PAH	---	1	TJ	06/19/24 22:32	D4F0391	DF41830
Fluoranthene	**4.27** (0.109)	---	8270E PAH	---	1	TJ	06/19/24 22:32	D4F0391	DF41830
Fluorene	**0.150** (0.109)	---	8270E PAH	---	1	TJ	06/19/24 22:32	D4F0391	DF41830
Indeno(1,2,3-cd)Pyrene	**3.36** (0.109)	---	8270E PAH	---	1	TJ	06/19/24 22:32	D4F0391	DF41830
Naphthalene	**2.08** (0.109)	---	8270E PAH	---	1	TJ	06/19/24 22:32	D4F0391	DF41830
Phenanthrene	**1.97** (0.109)	---	8270E PAH	---	1	TJ	06/19/24 22:32	D4F0391	DF41830
Pyrene	**4.08** (0.109)	---	8270E PAH	---	1	TJ	06/19/24 22:32	D4F0391	DF41830

	%Recovery	Qualifier	Limits
Surrogate: 1,2-Dichlorobenzene-d4	*83 %*		*30-130*
Surrogate: 2-Fluorobiphenyl	*71 %*		*30-130*
Surrogate: Nitrobenzene-d5	*82 %*		*30-130*
Surrogate: p-Terphenyl-d14	*89 %*		*30-130*

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Tidewater
Client Sample ID: GZ-SS-8 1-2
Date Sampled: 06/17/24 10:15
Percent Solids: 96
Initial Volume: 19.6g
Final Volume: 1ml
Extraction Method: 3546

ESS Laboratory Work Order: 24F0696
ESS Laboratory Sample ID: 24F0696-16
Sample Matrix: Soil
Units: mg/kg dry
Analyst: JDN
Prepared: 6/18/24 17:03

8100M Total Petroleum Hydrocarbons

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Total Petroleum Hydrocarbons (C9-C36)	**970** (79.5)	---	8100M	---	2	06/21/24 17:25	---	DF41829

	%Recovery	Qualifier	Limits
Surrogate: O-Terphenyl	*85 %*		*40-140*

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Tidewater
Client Sample ID: GZ-SS-8 1-2
Date Sampled: 06/17/24 10:15
Percent Solids: 96

ESS Laboratory Work Order: 24F0696
ESS Laboratory Sample ID: 24F0696-16
Sample Matrix: Soil

Classical Chemistry

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	Units	Batch
Cyanide (PAC)	**33.0** (2.08)	---	MA PAC	---	2	EEM	06/19/24 12:05	mg/kg dry	DF41928

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Tidewater
Client Sample ID: GZ-SS-9 0-1
Date Sampled: 06/17/24 09:55
Percent Solids: 97

ESS Laboratory Work Order: 24F0696
ESS Laboratory Sample ID: 24F0696-17
Sample Matrix: Soil
Units: mg/kg dry

Extraction Method: 3050B

Total Metals

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	IV / FV	Batch
Arsenic	**6.42** (1.79)	---	6010D	---	1	KJB	06/21/24 16:58	2.87 100	DF41915
Lead	**57.1** (3.59)	---	6010D	---	1	KJB	06/21/24 16:58	2.87 100	DF41915

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Tidewater
Client Sample ID: GZ-SS-9 0-1
Date Sampled: 06/17/24 09:55
Percent Solids: 97
Initial Volume: 19.2g
Final Volume: 1ml
Extraction Method: 3546

ESS Laboratory Work Order: 24F0696
ESS Laboratory Sample ID: 24F0696-17
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TJ
Prepared: 6/18/24 16:08

Semi-Volatile Organic Compounds

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	Sequence	Batch
2-Methylnaphthalene	ND (0.107)	---	8270E PAH	---	1	TJ	06/19/24 23:02	D4F0391	DF41830
Acenaphthene	ND (0.107)	---	8270E PAH	---	1	TJ	06/19/24 23:02	D4F0391	DF41830
Acenaphthylene	**1.58** (0.107)	---	8270E PAH	---	1	TJ	06/19/24 23:02	D4F0391	DF41830
Anthracene	**0.516** (0.107)	---	8270E PAH	---	1	TJ	06/19/24 23:02	D4F0391	DF41830
Benzo(a)anthracene	**1.24** (0.107)	---	8270E PAH	---	1	TJ	06/19/24 23:02	D4F0391	DF41830
Benzo(a)pyrene	**1.29** (0.107)	---	8270E PAH	---	1	TJ	06/19/24 23:02	D4F0391	DF41830
Benzo(b)fluoranthene	**1.94** (0.107)	---	8270E PAH	---	1	TJ	06/19/24 23:02	D4F0391	DF41830
Benzo(g,h,i)perylene	**1.34** (0.107)	---	8270E PAH	---	1	TJ	06/19/24 23:02	D4F0391	DF41830
Benzo(k)fluoranthene	**1.44** (0.107)	---	8270E PAH	---	1	TJ	06/19/24 23:02	D4F0391	DF41830
Chrysene	**1.32** (0.107)	---	8270E PAH	---	1	TJ	06/19/24 23:02	D4F0391	DF41830
Dibenzo(a,h)Anthracene	**0.320** (0.107)	---	8270E PAH	---	1	TJ	06/19/24 23:02	D4F0391	DF41830
Fluoranthene	**1.88** (0.107)	---	8270E PAH	---	1	TJ	06/19/24 23:02	D4F0391	DF41830
Fluorene	ND (0.107)	---	8270E PAH	---	1	TJ	06/19/24 23:02	D4F0391	DF41830
Indeno(1,2,3-cd)Pyrene	**1.42** (0.107)	---	8270E PAH	---	1	TJ	06/19/24 23:02	D4F0391	DF41830
Naphthalene	**0.207** (0.107)	---	8270E PAH	---	1	TJ	06/19/24 23:02	D4F0391	DF41830
Phenanthrene	**0.559** (0.107)	---	8270E PAH	---	1	TJ	06/19/24 23:02	D4F0391	DF41830
Pyrene	**1.83** (0.107)	---	8270E PAH	---	1	TJ	06/19/24 23:02	D4F0391	DF41830

	%Recovery	Qualifier	Limits
Surrogate: 1,2-Dichlorobenzene-d4	*79 %*		*30-130*
Surrogate: 2-Fluorobiphenyl	*70 %*		*30-130*
Surrogate: Nitrobenzene-d5	*80 %*		*30-130*
Surrogate: p-Terphenyl-d14	*86 %*		*30-130*

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Tidewater
Client Sample ID: GZ-SS-9 0-1
Date Sampled: 06/17/24 09:55
Percent Solids: 97
Initial Volume: 20.1g
Final Volume: 1ml
Extraction Method: 3546

ESS Laboratory Work Order: 24F0696
ESS Laboratory Sample ID: 24F0696-17
Sample Matrix: Soil
Units: mg/kg dry
Analyst: JDN
Prepared: 6/18/24 17:03

8100M Total Petroleum Hydrocarbons

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Total Petroleum Hydrocarbons (C9-C36)	**469** (76.8)	---	8100M	---	2	06/21/24 17:57	---	DF41829

	%Recovery	Qualifier	Limits
Surrogate: O-Terphenyl	*83 %*		*40-140*

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Tidewater
Client Sample ID: GZ-SS-9 0-1
Date Sampled: 06/17/24 09:55
Percent Solids: 97

ESS Laboratory Work Order: 24F0696
ESS Laboratory Sample ID: 24F0696-17
Sample Matrix: Soil

Classical Chemistry

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	Units	Batch
Cyanide (PAC)	**16.9** (1.03)	---	MA PAC	---	1	EEM	06/19/24 12:05	mg/kg dry	DF41928

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Tidewater
Client Sample ID: GZ-SS-9 1-2
Date Sampled: 06/17/24 10:05
Percent Solids: 98

ESS Laboratory Work Order: 24F0696
ESS Laboratory Sample ID: 24F0696-18
Sample Matrix: Soil
Units: mg/kg dry

Extraction Method: 3050B

Total Metals

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	IV / FV	Batch
Arsenic	**10.6** (1.99)	---	6010D	---	1	KJB	06/21/24 17:01	2.56 100	DF41915
Lead	**72.2** (3.98)	---	6010D	---	1	KJB	06/21/24 17:01	2.56 100	DF41915

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Tidewater
Client Sample ID: GZ-SS-9 1-2
Date Sampled: 06/17/24 10:05
Percent Solids: 98
Initial Volume: 19.3g
Final Volume: 1ml
Extraction Method: 3546

ESS Laboratory Work Order: 24F0696
ESS Laboratory Sample ID: 24F0696-18
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TJ
Prepared: 6/18/24 16:08

Semi-Volatile Organic Compounds

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	Sequence	Batch
2-Methylnaphthalene	**0.166** (0.106)	---	8270E PAH	---	1	TJ	06/19/24 23:32	D4F0391	DF41830
Acenaphthene	**0.147** (0.106)	---	8270E PAH	---	1	TJ	06/19/24 23:32	D4F0391	DF41830
Acenaphthylene	**1.90** (0.106)	---	8270E PAH	---	1	TJ	06/19/24 23:32	D4F0391	DF41830
Anthracene	**0.861** (0.106)	---	8270E PAH	---	1	TJ	06/19/24 23:32	D4F0391	DF41830
Benzo(a)anthracene	**1.90** (0.106)	---	8270E PAH	---	1	TJ	06/19/24 23:32	D4F0391	DF41830
Benzo(a)pyrene	**1.73** (0.106)	---	8270E PAH	---	1	TJ	06/19/24 23:32	D4F0391	DF41830
Benzo(b)fluoranthene	**2.62** (0.106)	---	8270E PAH	---	1	TJ	06/19/24 23:32	D4F0391	DF41830
Benzo(g,h,i)perylene	**1.61** (0.106)	---	8270E PAH	---	1	TJ	06/19/24 23:32	D4F0391	DF41830
Benzo(k)fluoranthene	**1.81** (0.106)	---	8270E PAH	---	1	TJ	06/19/24 23:32	D4F0391	DF41830
Chrysene	**1.89** (0.106)	---	8270E PAH	---	1	TJ	06/19/24 23:32	D4F0391	DF41830
Dibenzo(a,h)Anthracene	**0.415** (0.106)	---	8270E PAH	---	1	TJ	06/19/24 23:32	D4F0391	DF41830
Fluoranthene	**3.16** (0.106)	---	8270E PAH	---	1	TJ	06/19/24 23:32	D4F0391	DF41830
Fluorene	**0.146** (0.106)	---	8270E PAH	---	1	TJ	06/19/24 23:32	D4F0391	DF41830
Indeno(1,2,3-cd)Pyrene	**1.80** (0.106)	---	8270E PAH	---	1	TJ	06/19/24 23:32	D4F0391	DF41830
Naphthalene	**0.340** (0.106)	---	8270E PAH	---	1	TJ	06/19/24 23:32	D4F0391	DF41830
Phenanthrene	**1.54** (0.106)	---	8270E PAH	---	1	TJ	06/19/24 23:32	D4F0391	DF41830
Pyrene	**2.78** (0.106)	---	8270E PAH	---	1	TJ	06/19/24 23:32	D4F0391	DF41830

	%Recovery	*Qualifier*	*Limits*
Surrogate: 1,2-Dichlorobenzene-d4	*88 %*		*30-130*
Surrogate: 2-Fluorobiphenyl	*80 %*		*30-130*
Surrogate: Nitrobenzene-d5	*89 %*		*30-130*
Surrogate: p-Terphenyl-d14	*97 %*		*30-130*

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Tidewater
Client Sample ID: GZ-SS-9 1-2
Date Sampled: 06/17/24 10:05
Percent Solids: 98
Initial Volume: 20g
Final Volume: 1ml
Extraction Method: 3546

ESS Laboratory Work Order: 24F0696
ESS Laboratory Sample ID: 24F0696-18
Sample Matrix: Soil
Units: mg/kg dry
Analyst: JDN
Prepared: 6/18/24 17:03

8100M Total Petroleum Hydrocarbons

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Total Petroleum Hydrocarbons (C9-C36)	**300** (38.2)	---	8100M	---	1	06/21/24 18:29	---	DF41829

	%Recovery	Qualifier	Limits
Surrogate: O-Terphenyl	*97 %*		*40-140*

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Tidewater
Client Sample ID: GZ-SS-9 1-2
Date Sampled: 06/17/24 10:05
Percent Solids: 98

ESS Laboratory Work Order: 24F0696
ESS Laboratory Sample ID: 24F0696-18
Sample Matrix: Soil

Classical Chemistry

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	Units	Batch
Cyanide (PAC)	**15.5** (1.02)	---	MA PAC	---	1	EEM	06/19/24 12:05	mg/kg dry	DF41928

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Tidewater
Client Sample ID: GZ-SS-10 0-1
Date Sampled: 06/17/24 10:20
Percent Solids: 95

ESS Laboratory Work Order: 24F0696
ESS Laboratory Sample ID: 24F0696-19
Sample Matrix: Soil
Units: mg/kg dry

Extraction Method: 3050B

Total Metals

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	IV / FV	Batch
Arsenic	**11.1** (1.98)	---	6010D	---	1	KJB	06/21/24 17:03	2.65 100	DF41915
Lead	**91.3** (3.96)	---	6010D	---	1	KJB	06/21/24 17:03	2.65 100	DF41915

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Tidewater
Client Sample ID: GZ-SS-10 0-1
Date Sampled: 06/17/24 10:20
Percent Solids: 95
Initial Volume: 19.3g
Final Volume: 1ml
Extraction Method: 3546

ESS Laboratory Work Order: 24F0696
ESS Laboratory Sample ID: 24F0696-19
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TJ
Prepared: 6/18/24 16:08

Semi-Volatile Organic Compounds

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	Sequence	Batch
2-Methylnaphthalene	ND (0.217)	---	8270E PAH	---	2	TJ	06/20/24 0:03	D4F0391	DF41830
Acenaphthene	ND (0.217)	---	8270E PAH	---	2	TJ	06/20/24 0:03	D4F0391	DF41830
Acenaphthylene	**2.68** (0.217)	---	8270E PAH	---	2	TJ	06/20/24 0:03	D4F0391	DF41830
Anthracene	**0.663** (0.217)	---	8270E PAH	---	2	TJ	06/20/24 0:03	D4F0391	DF41830
Benzo(a)anthracene	**1.03** (0.217)	---	8270E PAH	---	2	TJ	06/20/24 0:03	D4F0391	DF41830
Benzo(a)pyrene	**1.00** (0.217)	---	8270E PAH	---	2	TJ	06/20/24 0:03	D4F0391	DF41830
Benzo(b)fluoranthene	**2.46** (0.217)	---	8270E PAH	---	2	TJ	06/20/24 0:03	D4F0391	DF41830
Benzo(g,h,i)perylene	**1.62** (0.217)	---	8270E PAH	---	2	TJ	06/20/24 0:03	D4F0391	DF41830
Benzo(k)fluoranthene	**1.66** (0.217)	---	8270E PAH	---	2	TJ	06/20/24 0:03	D4F0391	DF41830
Chrysene	**1.58** (0.217)	---	8270E PAH	---	2	TJ	06/20/24 0:03	D4F0391	DF41830
Dibenzo(a,h)Anthracene	**0.405** (0.217)	---	8270E PAH	---	2	TJ	06/20/24 0:03	D4F0391	DF41830
Fluoranthene	**1.56** (0.217)	---	8270E PAH	---	2	TJ	06/20/24 0:03	D4F0391	DF41830
Fluorene	ND (0.217)	---	8270E PAH	---	2	TJ	06/20/24 0:03	D4F0391	DF41830
Indeno(1,2,3-cd)Pyrene	**1.71** (0.217)	---	8270E PAH	---	2	TJ	06/20/24 0:03	D4F0391	DF41830
Naphthalene	**0.443** (0.217)	---	8270E PAH	---	2	TJ	06/20/24 0:03	D4F0391	DF41830
Phenanthrene	**0.445** (0.217)	---	8270E PAH	---	2	TJ	06/20/24 0:03	D4F0391	DF41830
Pyrene	**1.56** (0.217)	---	8270E PAH	---	2	TJ	06/20/24 0:03	D4F0391	DF41830

	%Recovery	*Qualifier*	*Limits*
Surrogate: 1,2-Dichlorobenzene-d4	*79 %*		*30-130*
Surrogate: 2-Fluorobiphenyl	*70 %*		*30-130*
Surrogate: Nitrobenzene-d5	*79 %*		*30-130*
Surrogate: p-Terphenyl-d14	*83 %*		*30-130*

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Tidewater
Client Sample ID: GZ-SS-10 0-1
Date Sampled: 06/17/24 10:20
Percent Solids: 95
Initial Volume: 19.8g
Final Volume: 1ml
Extraction Method: 3546

ESS Laboratory Work Order: 24F0696
ESS Laboratory Sample ID: 24F0696-19
Sample Matrix: Soil
Units: mg/kg dry
Analyst: JDN
Prepared: 6/18/24 17:03

8100M Total Petroleum Hydrocarbons

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Total Petroleum Hydrocarbons (C9-C36)	**713** (79.4)	---	8100M	---	2	06/21/24 19:01	---	DF41829

	%Recovery	Qualifier	Limits
Surrogate: O-Terphenyl	*81 %*		*40-140*

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Tidewater
Client Sample ID: GZ-SS-10 0-1
Date Sampled: 06/17/24 10:20
Percent Solids: 95

ESS Laboratory Work Order: 24F0696
ESS Laboratory Sample ID: 24F0696-19
Sample Matrix: Soil

Classical Chemistry

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	Units	Batch
Cyanide (PAC)	**29.2** (2.10)	---	MA PAC	---	2	EEM	06/19/24 12:05	mg/kg dry	DF41928

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Tidewater
Client Sample ID: GZ-SS-10 1-2
Date Sampled: 06/17/24 10:35
Percent Solids: 97

ESS Laboratory Work Order: 24F0696
ESS Laboratory Sample ID: 24F0696-20
Sample Matrix: Soil
Units: mg/kg dry

Extraction Method: 3050B

Total Metals

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	IV / FV	Batch
Arsenic	**10.1** (1.87)	---	6010D	---	1	KJB	06/21/24 17:05	2.76 100	DF41915
Lead	**62.0** (3.73)	---	6010D	---	1	KJB	06/21/24 17:05	2.76 100	DF41915

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Tidewater
Client Sample ID: GZ-SS-10 1-2
Date Sampled: 06/17/24 10:35
Percent Solids: 97
Initial Volume: 19.1g
Final Volume: 1ml
Extraction Method: 3546

ESS Laboratory Work Order: 24F0696
ESS Laboratory Sample ID: 24F0696-20
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TJ
Prepared: 6/18/24 16:08

Semi-Volatile Organic Compounds

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	Sequence	Batch
2-Methylnaphthalene	**0.293** (0.108)	---	8270E PAH	---	1	TJ	06/20/24 0:33	D4F0391	DF41830
Acenaphthene	ND (0.108)	---	8270E PAH	---	1	TJ	06/20/24 0:33	D4F0391	DF41830
Acenaphthylene	**2.75** (0.108)	---	8270E PAH	---	1	TJ	06/20/24 0:33	D4F0391	DF41830
Anthracene	**0.747** (0.108)	---	8270E PAH	---	1	TJ	06/20/24 0:33	D4F0391	DF41830
Benzo(a)anthracene	**1.16** (0.108)	---	8270E PAH	---	1	TJ	06/20/24 0:33	D4F0391	DF41830
Benzo(a)pyrene	**1.06** (0.108)	---	8270E PAH	---	1	TJ	06/20/24 0:33	D4F0391	DF41830
Benzo(b)fluoranthene	**2.22** (0.108)	---	8270E PAH	---	1	TJ	06/20/24 0:33	D4F0391	DF41830
Benzo(g,h,i)perylene	**1.59** (0.108)	---	8270E PAH	---	1	TJ	06/20/24 0:33	D4F0391	DF41830
Benzo(k)fluoranthene	**1.89** (0.108)	---	8270E PAH	---	1	TJ	06/20/24 0:33	D4F0391	DF41830
Chrysene	**1.71** (0.108)	---	8270E PAH	---	1	TJ	06/20/24 0:33	D4F0391	DF41830
Dibenzo(a,h)Anthracene	**0.437** (0.108)	---	8270E PAH	---	1	TJ	06/20/24 0:33	D4F0391	DF41830
Fluoranthene	**1.54** (0.108)	---	8270E PAH	---	1	TJ	06/20/24 0:33	D4F0391	DF41830
Fluorene	ND (0.108)	---	8270E PAH	---	1	TJ	06/20/24 0:33	D4F0391	DF41830
Indeno(1,2,3-cd)Pyrene	**1.71** (0.108)	---	8270E PAH	---	1	TJ	06/20/24 0:33	D4F0391	DF41830
Naphthalene	**0.546** (0.108)	---	8270E PAH	---	1	TJ	06/20/24 0:33	D4F0391	DF41830
Phenanthrene	**0.480** (0.108)	---	8270E PAH	---	1	TJ	06/20/24 0:33	D4F0391	DF41830
Pyrene	**1.69** (0.108)	---	8270E PAH	---	1	TJ	06/20/24 0:33	D4F0391	DF41830

	%Recovery	*Qualifier*	*Limits*
Surrogate: 1,2-Dichlorobenzene-d4	*79 %*		*30-130*
Surrogate: 2-Fluorobiphenyl	*65 %*		*30-130*
Surrogate: Nitrobenzene-d5	*78 %*		*30-130*
Surrogate: p-Terphenyl-d14	*85 %*		*30-130*

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Tidewater
Client Sample ID: GZ-SS-10 1-2
Date Sampled: 06/17/24 10:35
Percent Solids: 97
Initial Volume: 20.4g
Final Volume: 1ml
Extraction Method: 3546

ESS Laboratory Work Order: 24F0696
ESS Laboratory Sample ID: 24F0696-20
Sample Matrix: Soil
Units: mg/kg dry
Analyst: JDN
Prepared: 6/18/24 17:03

8100M Total Petroleum Hydrocarbons

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Total Petroleum Hydrocarbons (C9-C36)	**746** (75.8)	---	8100M	---	2	06/21/24 19:34	---	DF41829

	%Recovery	Qualifier	Limits
Surrogate: O-Terphenyl	*82 %*		*40-140*

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Tidewater
Client Sample ID: GZ-SS-10 1-2
Date Sampled: 06/17/24 10:35
Percent Solids: 97

ESS Laboratory Work Order: 24F0696
ESS Laboratory Sample ID: 24F0696-20
Sample Matrix: Soil

Classical Chemistry

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	Units	Batch
Cyanide (PAC)	**35.2** (4.68)	---	MA PAC	---	5	EEM	06/19/24 12:05	mg/kg dry	DF41928

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Tidewater ESS Laboratory Work Order: 24F0696

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
Total Metals										
Batch DF41915 - 3050B										
Blank										
Arsenic	ND	2.48	mg/kg wet							
Lead	ND	4.95	mg/kg wet							
LCS										
Arsenic	325	7.81	mg/kg wet	360.0		90	80-120			
Lead	98.9	15.6	mg/kg wet	100.0		99	80-120			
LCS Dup										
Arsenic	317	8.20	mg/kg wet	360.0		88	80-120	3	30	
Lead	96.3	16.4	mg/kg wet	100.0		96	80-120	3	30	
Semi-Volatile Organic Compounds										
Batch DF41759 - 3546										
Blank										
2-Methylnaphthalene	ND	0.100	mg/kg wet							
Acenaphthene	ND	0.100	mg/kg wet							
Acenaphthylene	ND	0.100	mg/kg wet							
Anthracene	ND	0.100	mg/kg wet							
Benzo(a)anthracene	ND	0.100	mg/kg wet							
Benzo(a)pyrene	ND	0.100	mg/kg wet							
Benzo(b)fluoranthene	ND	0.100	mg/kg wet							
Benzo(g,h,i)perylene	ND	0.100	mg/kg wet							
Benzo(k)fluoranthene	ND	0.100	mg/kg wet							
Chrysene	ND	0.100	mg/kg wet							
Dibenzo(a,h)Anthracene	ND	0.100	mg/kg wet							
Fluoranthene	ND	0.100	mg/kg wet							
Fluorene	ND	0.100	mg/kg wet							
Indeno(1,2,3-cd)Pyrene	ND	0.100	mg/kg wet							
Naphthalene	ND	0.100	mg/kg wet							
Phenanthrene	ND	0.100	mg/kg wet							
Pyrene	ND	0.100	mg/kg wet							
Surrogate: 1,2-Dichlorobenzene-d4	*2.52*		mg/kg wet	*2.500*		*101*	*30-130*			
Surrogate: 2-Fluorobiphenyl	*2.35*		mg/kg wet	*2.500*		*94*	*30-130*			
Surrogate: Nitrobenzene-d5	*2.45*		mg/kg wet	*2.500*		*98*	*30-130*			
Surrogate: p-Terphenyl-d14	*2.61*		mg/kg wet	*2.500*		*105*	*30-130*			
LCS										
2-Methylnaphthalene	2.32	0.100	mg/kg wet	2.500		93	40-140			
Acenaphthene	2.39	0.100	mg/kg wet	2.500		95	40-140			
Acenaphthylene	2.27	0.100	mg/kg wet	2.500		91	40-140			
Anthracene	2.43	0.100	mg/kg wet	2.500		97	40-140			
Benzo(a)anthracene	2.39	0.100	mg/kg wet	2.500		96	40-140			
Benzo(a)pyrene	2.40	0.100	mg/kg wet	2.500		96	40-140			
Benzo(b)fluoranthene	2.35	0.100	mg/kg wet	2.500		94	40-140			

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Tidewater ESS Laboratory Work Order: 24F0696

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
Semi-Volatile Organic Compounds										
Batch DF41759 - 3546										
Benzo(g,h,i)perylene	2.45	0.100	mg/kg wet	2.500		98	40-140			
Benzo(k)fluoranthene	2.37	0.100	mg/kg wet	2.500		95	40-140			
Chrysene	2.44	0.100	mg/kg wet	2.500		98	40-140			
Dibenzo(a,h)Anthracene	2.33	0.100	mg/kg wet	2.500		93	40-140			
Fluoranthene	2.48	0.100	mg/kg wet	2.500		99	40-140			
Fluorene	2.45	0.100	mg/kg wet	2.500		98	40-140			
Indeno(1,2,3-cd)Pyrene	2.33	0.100	mg/kg wet	2.500		93	40-140			
Naphthalene	2.26	0.100	mg/kg wet	2.500		91	40-140			
Phenanthrene	2.37	0.100	mg/kg wet	2.500		95	40-140			
Pyrene	2.51	0.100	mg/kg wet	2.500		100	40-140			
Surrogate: 1,2-Dichlorobenzene-d4	*2.38*		mg/kg wet	*2.500*		*95*	*30-130*			
Surrogate: 2-Fluorobiphenyl	*2.28*		mg/kg wet	*2.500*		*91*	*30-130*			
Surrogate: Nitrobenzene-d5	*2.31*		mg/kg wet	*2.500*		*92*	*30-130*			
Surrogate: p-Terphenyl-d14	*2.33*		mg/kg wet	*2.500*		*93*	*30-130*			
LCS Dup										
2-Methylnaphthalene	2.17	0.100	mg/kg wet	2.500		87	40-140	7	30	
Acenaphthene	2.19	0.100	mg/kg wet	2.500		88	40-140	9	30	
Acenaphthylene	2.09	0.100	mg/kg wet	2.500		83	40-140	9	30	
Anthracene	2.22	0.100	mg/kg wet	2.500		89	40-140	9	30	
Benzo(a)anthracene	2.20	0.100	mg/kg wet	2.500		88	40-140	8	30	
Benzo(a)pyrene	2.22	0.100	mg/kg wet	2.500		89	40-140	8	30	
Benzo(b)fluoranthene	2.20	0.100	mg/kg wet	2.500		88	40-140	7	30	
Benzo(g,h,i)perylene	2.24	0.100	mg/kg wet	2.500		90	40-140	9	30	
Benzo(k)fluoranthene	2.30	0.100	mg/kg wet	2.500		92	40-140	3	30	
Chrysene	2.28	0.100	mg/kg wet	2.500		91	40-140	7	30	
Dibenzo(a,h)Anthracene	2.13	0.100	mg/kg wet	2.500		85	40-140	9	30	
Fluoranthene	2.30	0.100	mg/kg wet	2.500		92	40-140	7	30	
Fluorene	2.23	0.100	mg/kg wet	2.500		89	40-140	9	30	
Indeno(1,2,3-cd)Pyrene	2.14	0.100	mg/kg wet	2.500		86	40-140	8	30	
Naphthalene	2.07	0.100	mg/kg wet	2.500		83	40-140	9	30	
Phenanthrene	2.21	0.100	mg/kg wet	2.500		88	40-140	7	30	
Pyrene	2.33	0.100	mg/kg wet	2.500		93	40-140	7	30	
Surrogate: 1,2-Dichlorobenzene-d4	*2.09*		mg/kg wet	*2.500*		*84*	*30-130*			
Surrogate: 2-Fluorobiphenyl	*2.02*		mg/kg wet	*2.500*		*81*	*30-130*			
Surrogate: Nitrobenzene-d5	*2.07*		mg/kg wet	*2.500*		*83*	*30-130*			
Surrogate: p-Terphenyl-d14	*2.06*		mg/kg wet	*2.500*		*83*	*30-130*			
Batch DF41830 - 3546										
Blank										
2-Methylnaphthalene	ND	0.100	mg/kg wet							
Acenaphthene	ND	0.100	mg/kg wet							
Acenaphthylene	ND	0.100	mg/kg wet							
Anthracene	ND	0.100	mg/kg wet							

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Tidewater ESS Laboratory Work Order: 24F0696

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
Semi-Volatile Organic Compounds										
Batch DF41830 - 3546										
Benzo(a)anthracene	ND	0.100	mg/kg wet							
Benzo(a)pyrene	ND	0.100	mg/kg wet							
Benzo(b)fluoranthene	ND	0.100	mg/kg wet							
Benzo(g,h,i)perylene	ND	0.100	mg/kg wet							
Benzo(k)fluoranthene	ND	0.100	mg/kg wet							
Chrysene	ND	0.100	mg/kg wet							
Dibenzo(a,h)Anthracene	ND	0.100	mg/kg wet							
Fluoranthene	ND	0.100	mg/kg wet							
Fluorene	ND	0.100	mg/kg wet							
Indeno(1,2,3-cd)Pyrene	ND	0.100	mg/kg wet							
Naphthalene	ND	0.100	mg/kg wet							
Phenanthrene	ND	0.100	mg/kg wet							
Pyrene	ND	0.100	mg/kg wet							
Surrogate: 1,2-Dichlorobenzene-d4	*2.42*		mg/kg wet	*2.500*		*97*	*30-130*			
Surrogate: 2-Fluorobiphenyl	*2.57*		mg/kg wet	*2.500*		*103*	*30-130*			
Surrogate: Nitrobenzene-d5	*2.64*		mg/kg wet	*2.500*		*106*	*30-130*			
Surrogate: p-Terphenyl-d14	*3.06*		mg/kg wet	*2.500*		*122*	*30-130*			
LCS										
2-Methylnaphthalene	2.14	0.100	mg/kg wet	2.500		85	40-140			
Acenaphthene	2.55	0.100	mg/kg wet	2.500		102	40-140			
Acenaphthylene	2.67	0.100	mg/kg wet	2.500		107	40-140			
Anthracene	2.66	0.100	mg/kg wet	2.500		106	40-140			
Benzo(a)anthracene	2.74	0.100	mg/kg wet	2.500		110	40-140			
Benzo(a)pyrene	2.76	0.100	mg/kg wet	2.500		110	40-140			
Benzo(b)fluoranthene	2.69	0.100	mg/kg wet	2.500		107	40-140			
Benzo(g,h,i)perylene	2.52	0.100	mg/kg wet	2.500		101	40-140			
Benzo(k)fluoranthene	2.77	0.100	mg/kg wet	2.500		111	40-140			
Chrysene	2.66	0.100	mg/kg wet	2.500		106	40-140			
Dibenzo(a,h)Anthracene	2.51	0.100	mg/kg wet	2.500		100	40-140			
Fluoranthene	2.61	0.100	mg/kg wet	2.500		104	40-140			
Fluorene	2.61	0.100	mg/kg wet	2.500		105	40-140			
Indeno(1,2,3-cd)Pyrene	2.39	0.100	mg/kg wet	2.500		96	40-140			
Naphthalene	2.12	0.100	mg/kg wet	2.500		85	40-140			
Phenanthrene	2.56	0.100	mg/kg wet	2.500		102	40-140			
Pyrene	3.01	0.100	mg/kg wet	2.500		121	40-140			
Surrogate: 1,2-Dichlorobenzene-d4	*2.49*		mg/kg wet	*2.500*		*99*	*30-130*			
Surrogate: 2-Fluorobiphenyl	*2.69*		mg/kg wet	*2.500*		*108*	*30-130*			
Surrogate: Nitrobenzene-d5	*2.43*		mg/kg wet	*2.500*		*97*	*30-130*			
Surrogate: p-Terphenyl-d14	*3.16*		mg/kg wet	*2.500*		*126*	*30-130*			
LCS Dup										
2-Methylnaphthalene	2.16	0.100	mg/kg wet	2.500		86	40-140	1	30	
Acenaphthene	2.54	0.100	mg/kg wet	2.500		102	40-140	0.2	30	

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Tidewater ESS Laboratory Work Order: 24F0696

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
Semi-Volatile Organic Compounds										
Batch DF41830 - 3546										
Acenaphthylene	2.66	0.100	mg/kg wet	2.500		107	40-140	0.1	30	
Anthracene	2.72	0.100	mg/kg wet	2.500		109	40-140	2	30	
Benzo(a)anthracene	2.78	0.100	mg/kg wet	2.500		111	40-140	2	30	
Benzo(a)pyrene	2.75	0.100	mg/kg wet	2.500		110	40-140	0.2	30	
Benzo(b)fluoranthene	2.68	0.100	mg/kg wet	2.500		107	40-140	0.1	30	
Benzo(g,h,i)perylene	2.53	0.100	mg/kg wet	2.500		101	40-140	0.3	30	
Benzo(k)fluoranthene	2.78	0.100	mg/kg wet	2.500		111	40-140	0.3	30	
Chrysene	2.67	0.100	mg/kg wet	2.500		107	40-140	0.5	30	
Dibenzo(a,h)Anthracene	2.56	0.100	mg/kg wet	2.500		102	40-140	2	30	
Fluoranthene	2.67	0.100	mg/kg wet	2.500		107	40-140	2	30	
Fluorene	2.63	0.100	mg/kg wet	2.500		105	40-140	0.5	30	
Indeno(1,2,3-cd)Pyrene	2.45	0.100	mg/kg wet	2.500		98	40-140	3	30	
Naphthalene	2.13	0.100	mg/kg wet	2.500		85	40-140	0.3	30	
Phenanthrene	2.58	0.100	mg/kg wet	2.500		103	40-140	0.9	30	
Pyrene	3.01	0.100	mg/kg wet	2.500		121	40-140	0.03	30	
Surrogate: 1,2-Dichlorobenzene-d4	*2.41*		mg/kg wet	*2.500*		*97*	*30-130*			
Surrogate: 2-Fluorobiphenyl	*2.62*		mg/kg wet	*2.500*		*105*	*30-130*			
Surrogate: Nitrobenzene-d5	*2.37*		mg/kg wet	*2.500*		*95*	*30-130*			
Surrogate: p-Terphenyl-d14	*3.02*		mg/kg wet	*2.500*		*121*	*30-130*			
8100M Total Petroleum Hydrocarbons										
Batch DF41761 - 3546										
Blank										
Decane (C10)	ND	0.2	mg/kg wet							
Docosane (C22)	ND	0.2	mg/kg wet							
Dodecane (C12)	ND	0.2	mg/kg wet							
Eicosane (C20)	ND	0.2	mg/kg wet							
Hexacosane (C26)	ND	0.2	mg/kg wet							
Hexadecane (C16)	ND	0.2	mg/kg wet							
Nonadecane (C19)	ND	0.2	mg/kg wet							
Nonane (C9)	ND	0.2	mg/kg wet							
Octacosane (C28)	ND	0.2	mg/kg wet							
Octadecane (C18)	ND	0.2	mg/kg wet							
Tetracosane (C24)	ND	0.2	mg/kg wet							
Tetradecane (C14)	ND	0.2	mg/kg wet							
Total Petroleum Hydrocarbons (C9-C36)	ND	37.5	mg/kg wet							
Triacontane (C30)	ND	0.2	mg/kg wet							
Surrogate: O-Terphenyl	*3.57*		mg/kg wet	*5.000*		*71*	*40-140*			
LCS										
Decane (C10)	1.6	0.2	mg/kg wet	2.500		63	40-140			
Docosane (C22)	1.8	0.2	mg/kg wet	2.500		70	40-140			
Dodecane (C12)	1.7	0.2	mg/kg wet	2.500		67	40-140			

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Tidewater ESS Laboratory Work Order: 24F0696

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8100M Total Petroleum Hydrocarbons										
Batch DF41761 - 3546										
Eicosane (C20)	1.7	0.2	mg/kg wet	2.500		68	40-140			
Hexacosane (C26)	1.9	0.2	mg/kg wet	2.500		78	40-140			
Hexadecane (C16)	1.7	0.2	mg/kg wet	2.500		68	40-140			
Nonadecane (C19)	1.7	0.2	mg/kg wet	2.500		69	40-140			
Nonane (C9)	1.4	0.2	mg/kg wet	2.500		56	30-140			
Octacosane (C28)	2.0	0.2	mg/kg wet	2.500		80	40-140			
Octadecane (C18)	1.7	0.2	mg/kg wet	2.500		66	40-140			
Tetracosane (C24)	1.7	0.2	mg/kg wet	2.500		69	40-140			
Tetradecane (C14)	1.7	0.2	mg/kg wet	2.500		68	40-140			
Total Petroleum Hydrocarbons (C9-C36)	24.8	37.5	mg/kg wet	35.00		71	40-140			
Triacontane (C30)	2.1	0.2	mg/kg wet	2.500		83	40-140			
Surrogate: O-Terphenyl	*3.46*		mg/kg wet	*5.000*		*69*	*40-140*			
LCS Dup										
Decane (C10)	1.6	0.2	mg/kg wet	2.500		65	40-140	2	25	
Docosane (C22)	1.8	0.2	mg/kg wet	2.500		73	40-140	3	25	
Dodecane (C12)	1.7	0.2	mg/kg wet	2.500		68	40-140	3	25	
Eicosane (C20)	1.8	0.2	mg/kg wet	2.500		71	40-140	4	25	
Hexacosane (C26)	2.0	0.2	mg/kg wet	2.500		80	40-140	2	25	
Hexadecane (C16)	1.8	0.2	mg/kg wet	2.500		71	40-140	4	25	
Nonadecane (C19)	1.8	0.2	mg/kg wet	2.500		72	40-140	3	25	
Nonane (C9)	1.4	0.2	mg/kg wet	2.500		57	30-140	2	25	
Octacosane (C28)	2.0	0.2	mg/kg wet	2.500		82	40-140	2	25	
Octadecane (C18)	1.7	0.2	mg/kg wet	2.500		69	40-140	5	25	
Tetracosane (C24)	1.8	0.2	mg/kg wet	2.500		71	40-140	3	25	
Tetradecane (C14)	1.8	0.2	mg/kg wet	2.500		70	40-140	3	25	
Total Petroleum Hydrocarbons (C9-C36)	25.4	37.5	mg/kg wet	35.00		73	40-140	3	25	
Triacontane (C30)	2.1	0.2	mg/kg wet	2.500		85	40-140	2	25	
Surrogate: O-Terphenyl	*3.47*		mg/kg wet	*5.000*		*69*	*40-140*			
Batch DF41829 - 3546										
Blank										
Decane (C10)	ND	0.2	mg/kg wet							
Docosane (C22)	ND	0.2	mg/kg wet							
Dodecane (C12)	ND	0.2	mg/kg wet							
Eicosane (C20)	ND	0.2	mg/kg wet							
Hexacosane (C26)	ND	0.2	mg/kg wet							
Hexadecane (C16)	ND	0.2	mg/kg wet							
Nonadecane (C19)	ND	0.2	mg/kg wet							
Nonane (C9)	ND	0.2	mg/kg wet							
Octacosane (C28)	ND	0.2	mg/kg wet							
Octadecane (C18)	ND	0.2	mg/kg wet							
Tetracosane (C24)	ND	0.2	mg/kg wet							
Tetradecane (C14)	ND	0.2	mg/kg wet							

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Tidewater

ESS Laboratory Work Order: 24F0696

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8100M Total Petroleum Hydrocarbons										
Batch DF41829 - 3546										
Total Petroleum Hydrocarbons (C9-C36)	ND	37.5	mg/kg wet							
Triacontane (C30)	ND	0.2	mg/kg wet							
Surrogate: O-Terphenyl	*3.84*		mg/kg wet	*5.000*		*77*	*40-140*			
LCS										
Decane (C10)	1.5	0.2	mg/kg wet	2.500		62	40-140			
Docosane (C22)	1.8	0.2	mg/kg wet	2.500		72	40-140			
Dodecane (C12)	1.7	0.2	mg/kg wet	2.500		66	40-140			
Eicosane (C20)	1.8	0.2	mg/kg wet	2.500		70	40-140			
Hexacosane (C26)	1.9	0.2	mg/kg wet	2.500		76	40-140			
Hexadecane (C16)	1.7	0.2	mg/kg wet	2.500		69	40-140			
Nonadecane (C19)	1.8	0.2	mg/kg wet	2.500		70	40-140			
Nonane (C9)	1.4	0.2	mg/kg wet	2.500		54	30-140			
Octacosane (C28)	1.9	0.2	mg/kg wet	2.500		76	40-140			
Octadecane (C18)	1.7	0.2	mg/kg wet	2.500		68	40-140			
Tetracosane (C24)	1.7	0.2	mg/kg wet	2.500		69	40-140			
Tetradecane (C14)	1.7	0.2	mg/kg wet	2.500		68	40-140			
Total Petroleum Hydrocarbons (C9-C36)	24.5	37.5	mg/kg wet	35.00		70	40-140			
Triacontane (C30)	1.9	0.2	mg/kg wet	2.500		77	40-140			
Surrogate: O-Terphenyl	*3.59*		mg/kg wet	*5.000*		*72*	*40-140*			
LCS Dup										
Decane (C10)	1.4	0.2	mg/kg wet	2.500		58	40-140	7	25	
Docosane (C22)	1.6	0.2	mg/kg wet	2.500		65	40-140	10	25	
Dodecane (C12)	1.5	0.2	mg/kg wet	2.500		61	40-140	8	25	
Eicosane (C20)	1.6	0.2	mg/kg wet	2.500		63	40-140	10	25	
Hexacosane (C26)	1.7	0.2	mg/kg wet	2.500		69	40-140	9	25	
Hexadecane (C16)	1.6	0.2	mg/kg wet	2.500		63	40-140	9	25	
Nonadecane (C19)	1.6	0.2	mg/kg wet	2.500		63	40-140	10	25	
Nonane (C9)	1.3	0.2	mg/kg wet	2.500		51	30-140	6	25	
Octacosane (C28)	1.7	0.2	mg/kg wet	2.500		69	40-140	9	25	
Octadecane (C18)	1.5	0.2	mg/kg wet	2.500		62	40-140	10	25	
Tetracosane (C24)	1.6	0.2	mg/kg wet	2.500		63	40-140	10	25	
Tetradecane (C14)	1.6	0.2	mg/kg wet	2.500		62	40-140	9	25	
Total Petroleum Hydrocarbons (C9-C36)	22.2	37.5	mg/kg wet	35.00		63	40-140	10	25	
Triacontane (C30)	1.7	0.2	mg/kg wet	2.500		70	40-140	9	25	
Surrogate: O-Terphenyl	*3.20*		mg/kg wet	*5.000*		*64*	*40-140*			
Classical Chemistry										
Batch DF41928 - TCN Prep										
Blank										
Cyanide (PAC)	ND	1.00	mg/kg wet							

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Tidewater ESS Laboratory Work Order: 24F0696

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
Classical Chemistry										
Batch DF41928 - TCN Prep										
LCS										
Cyanide (PAC)	5.05	1.00	mg/kg wet	5.015		101	80-120			
LCS										
Cyanide (PAC)	20.3	1.00	mg/kg wet	20.06		101	80-120			
LCS Dup										
Cyanide (PAC)	20.1	1.00	mg/kg wet	20.06		100	80-120	0.9	20	
Reference										
Cyanide (PAC)	2.70	1.00	mg/kg wet	76.30		4	0-10			

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Tidewater ESS Laboratory Work Order: 24F0696

Notes and Definitions

U	Analyte included in the analysis, but not detected
S+	Surrogate recovery(ies) above upper control limit (S+).
EL	Elevated Method Reporting Limits due to sample matrix (EL).
D	Diluted.
ND	Analyte NOT DETECTED at or above the MRL (LOQ), LOD for DoD Reports, MDL for J-Flagged Analytes
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
MDL	Method Detection Limit
MRL	Method Reporting Limit
LOD	Limit of Detection
LOQ	Limit of Quantitation
DL	Detection Limit
I/V	Initial Volume
F/V	Final Volume
§	Subcontracted analysis; see attached report
1	Range result excludes concentrations of surrogates and/or internal standards eluting in that range.
2	Range result excludes concentrations of target analytes eluting in that range.
3	Range result excludes the concentration of the C9-C10 aromatic range.
Avg	Results reported as a mathematical average.
NR	No Recovery
[CALC]	Calculated Analyte
SUB	Subcontracted analysis; see attached report
RL	Reporting Limit
EDL	Estimated Detection Limit
MF	Membrane Filtration
MPN	Most Probable Number
TNTC	Too numerous to Count
CFU	Colony Forming Units

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Tidewater ESS Laboratory Work Order: 24F0696

ESS LABORATORY CERTIFICATIONS AND ACCREDITATIONS

ENVIRONMENTAL

Rhode Island Potable and Non Potable Water: LAI00179
http://www.health.ri.gov/find/labs/analytical/ESS.pdf

Connecticut Potable and Non Potable Water, Solid and Hazardous Waste: PH-0750
http://www.ct.gov/dph/lib/dph/environmental_health/environmental_laboratories/pdf/OutofStateCommercialLaboratories.pdf

Maine Potable and Non Potable Water, and Solid and Hazardous Waste: RI00002
http://www.maine.gov/dhhs/mecdc/environmental-health/dwp/partners/labCert.shtml

Massachusetts Potable and Non Potable Water: M-RI002
http://public.dep.state.ma.us/Labcert/Labcert.aspx

New Hampshire (NELAP accredited) Potable and Non Potable Water, Solid and Hazardous Waste: 2424
http://des.nh.gov/organization/divisions/water/dwgb/nhelap/index.htm

New York (NELAP accredited) Non Potable Water, Solid and Hazardous Waste: 11313
http://www.wadsworth.org/labcert/elap/comm.html

New Jersey (NELAP accredited) Non Potable Water, Solid and Hazardous Waste: RI006
http://datamine2.state.nj.us/DEP_OPRA/OpraMain/pi_main?mode=pi_by_site&sort_order=PI_NAMEA&Select+a+Site:=58715

Pennsylvania: 68-01752
http://www.dep.pa.gov/Business/OtherPrograms/Labs/Pages/Laboratory-Accreditation-Program.aspx

ESS Laboratory Sample and Cooler Receipt Checklist

Client: GZA - Glastonbury CT - GZA/ML

Shipped/Delivered Via: Client

ESS Project ID: 24F0696
Date Received: 6/17/2024
Project Due Date: 6/24/2024
Days for Project: 5 Day

1. Air bill manifest present? No
   Air No.: NA
2. Were custody seals present? No
3. Is radiation count <100 CPM? Yes
4. Is a Cooler Present? Yes
   Temp: 5.6 Iced with: Ice
5. Was COC signed and dated by client? Yes
6. Does COC match bottles? Yes
7. Is COC complete and correct? No
8. Were samples received intact? Yes
9. **Were labs informed about short holds & rushes?** Yes / No / (NA)
10. Were any analyses received outside of hold time? Yes / (No)

11. Any Subcontracting needed? Yes / (No)
    ESS Sample IDs:
    Analysis:
    TAT:
12. Were VOAs received? (Yes) / No
    a. Air bubbles in aqueous VOAs? Yes / No
    b. Does methanol cover soil completely? Yes / No / NA
13. Are the samples properly preserved? (Yes) / No
    a. If metals preserved upon receipt: Date: Time: By/Acid Lot#:
    b. If dissolved metals are requested, are they: Yes / No Field Filtered — Yes / No To Be Lab Filtered
    c. Low Level VOA vials frozen: Date: Time: By:

Sample Receiving Notes:

Page one doesn't have any analyses checked off.

14. Was there a need to contact Project Manager? (Yes) / No
    a. Was there a need to contact the client? Yes / No
    Who was contacted: Date: Time: By:

Resolution:

Sample Number	Container ID	Proper Container	Air Bubbles Present	Sufficient Volume	Container Type	Preservative	Record pH (Cyanide and 608 Pesticides)
1	562464	Yes	N/A	Yes	8 oz jar	NP	
2	562465	Yes	N/A	Yes	8 oz jar	NP	
3	562466	Yes	N/A	Yes	8 oz jar	NP	
4	562467	Yes	N/A	Yes	8 oz jar	NP	
5	562468	Yes	N/A	Yes	8 oz jar	NP	
6	562469	Yes	N/A	Yes	8 oz jar	NP	
7	562470	Yes	N/A	Yes	8 oz jar	NP	
8	562471	Yes	N/A	Yes	8 oz jar	NP	
9	562472	Yes	N/A	Yes	8 oz jar	NP	
10	562473	Yes	N/A	Yes	8 oz jar	NP	
11	562474	Yes	N/A	Yes	8 oz jar	NP	
12	562475	Yes	N/A	Yes	8 oz jar	NP	
13	562476	Yes	N/A	Yes	8 oz jar	NP	
14	562477	Yes	N/A	Yes	8 oz jar	NP	
15	562478	Yes	N/A	Yes	8 oz jar	NP	
16	562479	Yes	N/A	Yes	8 oz jar	NP	
17	562480	Yes	N/A	Yes	8 oz jar	NP	
18	562481	Yes	N/A	Yes	8 oz jar	NP	
19	562482	Yes	N/A	Yes	8 oz jar	NP	
20	562483	Yes	N/A	Yes	8 oz jar	NP	

ESS Laboratory Sample and Cooler Receipt Checklist

Client: GZA - Glastonbury CT - GZA/ML

ESS Project ID: 24F0696
Date Received: 6/17/2024

2nd Review

Were all containers scanned into storage/lab? Initials TD

Are barcode labels on correct containers?	Yes / No
Are all Flashpoint stickers attached/container ID # circled?	Yes / No / NA
Are all Hex Chrome stickers attached?	Yes / No / NA
Are all QC stickers attached?	Yes / No / NA
Are VOA stickers attached if bubbles noted?	Yes / No / NA

Completed By: [signature] Date & Time: 6/17/24 1605

Reviewed By: [signature] Date & Time: 6/17/24 1608

CHAIN OF CUSTODY

ESS Lab # 24IF010910 | Page 1 of 4

ESS LABORATORY
185 Frances Avenue
Cranston, RI 02921
Phone: 401-461-7181
[redacted]
www.esslaboratory.com

Turn Time: ☐ >5 ☒ 5 ☐ 4 ☐ 3 ☐ 2 ☐ 1 ☐ Same Day
Regulatory State: RI Criteria:
Is this project for any of the following?: ☐ CT RCP ☐ MA MCP ☐ RGP ☐ Permit ☐ 401 WQ

ELECTRONIC DELIVERABLES (Final Reports are PDF)
☒ Limit Checker ☐ State Forms ☐ EQuIS
☒ Excel ☐ Hard Copy ☐ Enviro Data
☐ CLP-Like Package ☒ Other (Specify) → PDF

CLIENT INFORMATION

Client: GZA
Address: 95 Glastenbury blvd.
Glastenbury CT
Phone: [redacted] 860-250-6556
Email Distribution List:
dave.ruscz4@gza.com
benjamin.ramos@gza.com

PROJECT INFORMATION

Project Name: Tidewater
Project Location: Pawtucket, RI
Project Number: 43654.80
Project Manager: Dave Ruscz4
Bill to: GZA
PO#: —
Quote#: —

Client acknowledges that sampling is compliant with all EPA / State regulatory programs

REQUESTED ANALYSES

ESS Lab ID	Collection Date	Collection Time	Sample Type	Sample Matrix	Sample ID	PAHs	Lead	Arsenic	TPHs	PAC *	Total Number of Bottles
1	6/17/24	845	Composite	Soil	GZ-SS-1, 0-1	X	X	X	X	X	JA 6/18/24
2		910			GZ-SS-1, 1-2						
3		850			GZ-SS-2, 0-1						
4		855			GZ-SS-2, 1-2						
5		900			GZ-SS-3, 0-1						
6		910			GZ-SS-3, 1-2						
7		915			GZ-SS-4, 0-1						
8		920			GZ-SS-4, 1-2						
9		950			GZ-SS-5, 0-1						
10		920			GZ-SS-5, 1-2						

Container Type: AC-Air Cassette AG-Amber Glass B-BOD Bottle C-Cubitainer J-Jar O-Other P-Poly S-Sterile V-Vial — 46 — 10
Container Volume: 1-100 mL 2-2.5 gal 3-250 mL 4-300 mL 5-500 mL 6-1L 7-VOA 8-2 oz 9-4 oz 10-8 oz 11-Other* — 10
Preservation Code: 1-Non Preserved 2-HCl 3-H2SO4 4-HNO3 5-NaOH 6-Methanol 7-Na2S2O3 8-ZnAce, NaOH 9-NH4Cl 10-DI H2O 11-Other* — 1

Sampled by: BVR, DR, BG, KL

Chain needs to be filled out neatly and completely for on time delivery.

Laboratory Use Only
Cooler Temperature (°C): 5.0 ice

Comments: * Please specify "Other" preservative and containers types in this space
*Physrologically Available Cyanide
① Compare to RI Residential Direct Exposure Criteria

All samples submitted are subject to ESS Laboratory's payment terms and conditions.

Dissolved Filtration
☐ Lab Filter

Relinquished by (Signature)	Date	Time	Received by (Signature)	Relinquished by (Signature)	Date	Time	Received by (Signature)
[signature]	6/17/24	1533	[signature]				
Relinquished by (Signature)	Date	Time	Received by (Signature)	Relinquished by (Signature)	Date	Time	Received by (Signature)

ESS LABORATORY
185 Frances Avenue
Cranston, RI 02921
Phone: 401-461-7181
[redacted]
www.esslaboratory.com

CHAIN OF CUSTODY

ESS Lab # 24FD0910 | Page 2 of 4

Turn Time: ☐ >5 ☒ 5 ☐ 4 ☐ 3 ☐ 2 ☐ 1 ☐ Same Day
Regulatory State: RI Criteria:
Is this project for any of the following?: ☐ CT RCP ☐ MA MCP ☐ RGP ☐ Permit ☐ 401 WQ

ELECTRONIC DELIVERABLES (Final Reports are PDF)
☒ Limit Checker ☐ State Forms ☐ EQuIS
☒ Excel ☐ Hard Copy ☐ Enviro Data
☐ CLP-Like Package ☒ Other (Specify) → PDF

CLIENT INFORMATION

Client: GZA
Address: 95 Glastonbury blvd.
Glastonbury CT
Phone: 860-250-8556
Email Distribution List:
dave.rusczyk@gza.com
benjamin.ramos@gza.com

PROJECT INFORMATION

Project Name: Tidewater
Project Location: Pawtucket, RI
Project Number: 483654.80
Project Manager: Dave Ruscsyk
Bill to: GZA
PO#: -
Quote#: -

Client acknowledges that sampling is compliant with all EPA / State regulatory programs

REQUESTED ANALYSES

ESS Lab ID	Collection Date	Collection Time	Sample Type	Sample Matrix	Sample ID	PAHs	Lead	Arsenic	TPHs	BAC *	Total Number of Bottles
11	6/17/24	920	Comp	Soil	GZ-SS-6,0-1	X	X	X	X	X	1
12		930			GZ-SS-6,1-2	X	X	X	X	X	
13		1000			GZ-SS-7,0-1	X	X	X	X	X	
14		1015			GZ-SS-7,1-2	X	X	X	X	X	
15		1010			GZ-SS-8,0-1	X	X	X	X	X	
16		1015			GZ-SS-8,1-2	X	X	X	X	X	
17		955			GZ-SS-9,0-1	X	X	X	X	X	
18		1005			GZ-SS-9,1-2	X	X	X	X	X	
19		1020			GZ-SS-10,0-1	X	X	X	X	X	
20		1035			GZ-SS-10,1-2	X	X	X	X	X	

Container Type: AC-Air Cassette AG-Amber Glass B-BOD Bottle C-Cubitainer J-Jar O-Other P-Poly S-Sterile V-Vial — AG →
Container Volume: 1-100 mL 2-2.5 gal 3-250 mL 4-300 mL 5-500 mL 6-1L 7-VOA 8-2 oz 9-4 oz 10-8 oz 11-Other* — 10 →
Preservation Code: 1-Non Preserved 2-HCl 3-H2SO4 4-HNO3 5-NaOH 6-Methanol 7-Na2S2O3 8-ZnAce, NaOH 9-NH4Cl 10-DI H2O 11-Other* — 1 →

Total Number of Bottles: 10

Sampled by: BUR, DB, BG, KL

Chain needs to be filled out neatly and completely for on time delivery.

Laboratory Use Only
Cooler Temperature (°C): 2.1 2.0

Comments: * Please specify "Other" preservative and containers types in this space
* Physiologically Available Cyanide
① Compare to RI Residential Direct Exposure Criteria

All samples submitted are subject to ESS Laboratory's payment terms and conditions.

Dissolved Filtration
☐ Lab Filter

Relinquished by (Signature)	Date	Time	Received by (Signature)	Relinquished by (Signature)	Date	Time	Received by (Signature)
[signature]	6/17/24	1533	[signature]				
Relinquished by (Signature)	Date	Time	Received by (Signature)	Relinquished by (Signature)	Date	Time	Received by (Signature)

ESS Laboratory
DIVISION OF THE RISE GROUP
BAL Laboratory Analytical Balance

CERTIFICATE OF ANALYSIS

David Rusczyk
GZA GeoEnvironmental, Inc.
95 Glastonbury Boulevard, 3rd Floor
Glastonbury, CT 06033

RE: Tidewater (05.0043654.80)
ESS Laboratory Work Order Number: 24F0697

This signed Certificate of Analysis is our approved release of your analytical results. These results are only representative of sample aliquots received at the laboratory. ESS Laboratory expects its clients to follow all regulatory sampling guidelines. Beginning with this page, the entire report has been paginated. This report should not be copied except in full without the approval of the laboratory. Samples will be disposed of thirty days after the final report has been delivered. If you have any questions or concerns, please feel free to call our Customer Service Department.

Laurel Stoddard
Laboratory Director

REVIEWED
By ESS Laboratory at 7:49 pm, Jun 24, 2024

Analytical Summary
The project as described above has been analyzed in accordance with the ESS Quality Assurance Plan. This plan utilizes the following methodologies: US EPA SW-846, US EPA Methods for Chemical Analysis of Water and Wastes per 40 CFR Part 136, APHA Standard Methods for the Examination of Water and Wastewater, American Society for Testing and Materials (ASTM), and other recognized methodologies. The analyses with these noted observations are in conformance to the Quality Assurance Plan. In chromatographic analysis, manual integration is frequently used instead of automated integration because it produces more accurate results.

The test results present in this report are in compliance with TNI and relative state standards, and/or client Quality Assurance Project Plans (QAPP). The laboratory has reviewed the following: Sample Preservations, Hold Times, Initial Calibrations, Continuing Calibrations, Method Blanks, Blank Spikes, Blank Spike Duplicates, Duplicates, Matrix Spikes, Matrix Spike Duplicates, Surrogates and Internal Standards. Any results which were found to be outside of the recommended ranges stated in our SOPs will be noted in the Project Narrative.

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Tidewater ESS Laboratory Work Order: 24F0697

SAMPLE RECEIPT

The following samples were received on June 17, 2024 for the analyses specified on the enclosed Chain of Custody Record.

Lab Number	Sample Name	Matrix	Analysis
24F0697-01	GZ-SS-11 0-1'	Soil	6010D, 8100M, 8270E PAH, MA PAC
24F0697-02	GZ-SS-11 1-2	Soil	6010D, 8100M, 8270E PAH, MA PAC
24F0697-03	GZ-SS-12 0-1	Soil	6010D, 8100M, 8270E PAH, MA PAC
24F0697-04	GZ-SS-12 1-2	Soil	6010D, 8100M, 8270E PAH, MA PAC
24F0697-05	GZ-SS-13 0-1	Soil	6010D, 8100M, 8270E PAH, MA PAC
24F0697-06	GZ-SS-13 1-2	Soil	6010D, 8100M, 8270E PAH, MA PAC
24F0697-07	GZ-SS-14 0-1	Soil	6010D, 8100M, 8270E PAH, MA PAC
24F0697-08	GZ-SS-14 1-2	Soil	6010D, 8100M, 8270E PAH, MA PAC
24F0697-09	GZ-SS-15 0-1	Soil	6010D, 8100M, 8270E PAH, MA PAC
24F0697-10	GZ-SS-15 1-2	Soil	6010D, 8100M, 8270E PAH, MA PAC
24F0697-11	GZ-SS-16 0-1	Soil	6010D, 8100M, 8270E PAH, MA PAC
24F0697-12	GZ-SS-16 1-2	Soil	6010D, 8100M, 8270E PAH, MA PAC
24F0697-13	GZ-SS-17 0-1	Soil	6010D, 8100M, 8270E PAH, MA PAC
24F0697-14	GZ-SS-17 1-2	Soil	6010D, 8100M, 8270E PAH, MA PAC
24F0697-15	GZ-SS-18 0-1	Soil	6010D, 8100M, 8270E PAH, MA PAC
24F0697-16	GZ-SS-18 1-2	Soil	6010D, 8100M, 8270E PAH, MA PAC
24F0697-17	GZ-SS-19 0-1	Soil	6010D, 8100M, 8270E PAH, MA PAC
24F0697-18	GZ-SS-19 1-2	Soil	6010D, 8100M, 8270E PAH, MA PAC

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Tidewater ESS Laboratory Work Order: 24F0697

PROJECT NARRATIVE

Semi-Volatile Organic Compounds

24F0697-01	**Elevated Method Reporting Limits due to sample matrix (EL).**
24F0697-02	**Elevated Method Reporting Limits due to sample matrix (EL).**
24F0697-03	**Elevated Method Reporting Limits due to sample matrix (EL).**
24F0697-04	**Elevated Method Reporting Limits due to sample matrix (EL).**
24F0697-06	**Elevated Method Reporting Limits due to sample matrix (EL).**
24F0697-07	**Elevated Method Reporting Limits due to sample matrix (EL).**
24F0697-08	**Elevated Method Reporting Limits due to sample matrix (EL).**
24F0697-11	**Elevated Method Reporting Limits due to sample matrix (EL).**
24F0697-12	**Elevated Method Reporting Limits due to sample matrix (EL).**
24F0697-14	**Surrogate recovery(ies) above upper control limit (S+).** p-Terphenyl-d14 (133% @ 30-130%)
24F0697-15	**Elevated Method Reporting Limits due to sample matrix (EL).**
24F0697-16	**Elevated Method Reporting Limits due to sample matrix (EL).**
24F0697-17	**Elevated Method Reporting Limits due to sample matrix (EL).**
24F0697-18	**Elevated Method Reporting Limits due to sample matrix (EL).**
D4F0422-CCV1	**Continuing Calibration %Diff/Drift is above control limit (CD+).** Nitrobenzene-d5 (23% @ 20%)

No other observations noted.

End of Project Narrative.

DATA USABILITY LINKS

To ensure you are viewing the most current version of the documents below, please clear your internet cookies for www.ESSLaboratory.com. Consult your IT Support personnel for information on how to clear your internet cookies.

Definitions of Quality Control Parameters

Semivolatile Organics Internal Standard Information

Semivolatile Organics Surrogate Information

Volatile Organics Internal Standard Information

Volatile Organics Surrogate Information

EPH and VPH Alkane Lists

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Tidewater ESS Laboratory Work Order: 24F0697

CURRENT SW-846 METHODOLOGY VERSIONS

Analytical Methods

1010A - Flashpoint
6010D - ICP
6020B - ICP MS
7010 - Graphite Furnace
7196A - Hexavalent Chromium
7470A - Aqueous Mercury
7471B - Solid Mercury
8011 - EDB/DBCP/TCP
8015C - GRO/DRO
8081B - Pesticides
8082A - PCB
8100M - TPH
8151A - Herbicides
8260D - VOA
8270E - SVOA
8270E SIM - SVOA Low Level
9014 - Cyanide
9038 - Sulfate
9040C - Aqueous pH
9045D - Solid pH (Corrosivity)
9050A - Specific Conductance
9056A - Anions (IC)
9060A - TOC
9095B - Paint Filter
MADEP 19-2.1 - EPH
MADEP 18-2.1 - VPH

Prep Methods

3005A - Aqueous ICP Digestion
3020A - Aqueous Graphite Furnace / ICP MS Digestion
3050B - Solid ICP / Graphite Furnace / ICP MS Digestion
3060A - Solid Hexavalent Chromium Digestion
3510C - Separatory Funnel Extraction
3520C - Liquid / Liquid Extraction
3540C - Manual Soxhlet Extraction
3546 - Microwave Extraction
3580A - Waste Dilution
5030B - Aqueous Purge and Trap
5030C - Aqueous Purge and Trap
5035A - Solid Purge and Trap

SW846 Reactivity Methods 7.3.3.2 (Reactive Cyanide) and 7.3.4.1 (Reactive Sulfide) have been withdrawn by EPA. These methods are reported per client request and are not NELAP accredited.

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Tidewater
Client Sample ID: GZ-SS-11 0-1'
Date Sampled: 06/17/24 10:40
Percent Solids: 96

ESS Laboratory Work Order: 24F0697
ESS Laboratory Sample ID: 24F0697-01
Sample Matrix: Soil
Units: mg/kg dry

Extraction Method: 3050B

Total Metals

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	IV / FV	Batch
Arsenic	**5.51** (1.88)	---	6010D	---	1	KJB	06/21/24 17:36	2.76 100	DF41916
Lead	**53.7** (3.77)	---	6010D	---	1	KJB	06/21/24 17:36	2.76 100	DF41916

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Tidewater
Client Sample ID: GZ-SS-11 0-1'
Date Sampled: 06/17/24 10:40
Percent Solids: 96
Initial Volume: 19.4g
Final Volume: 1ml
Extraction Method: 3546

ESS Laboratory Work Order: 24F0697
ESS Laboratory Sample ID: 24F0697-01
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TJ
Prepared: 6/18/24 16:08

Semi-Volatile Organic Compounds

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	Sequence	Batch
2-Methylnaphthalene	ND (0.214)	---	8270E PAH	---	2	TJ	06/20/24 1:03	D4F0391	DF41830
Acenaphthene	ND (0.214)	---	8270E PAH	---	2	TJ	06/20/24 1:03	D4F0391	DF41830
Acenaphthylene	**1.27** (0.214)	---	8270E PAH	---	2	TJ	06/20/24 1:03	D4F0391	DF41830
Anthracene	**0.419** (0.214)	---	8270E PAH	---	2	TJ	06/20/24 1:03	D4F0391	DF41830
Benzo(a)anthracene	**0.603** (0.214)	---	8270E PAH	---	2	TJ	06/20/24 1:03	D4F0391	DF41830
Benzo(a)pyrene	**1.04** (0.214)	---	8270E PAH	---	2	TJ	06/20/24 1:03	D4F0391	DF41830
Benzo(b)fluoranthene	**1.68** (0.214)	---	8270E PAH	---	2	TJ	06/20/24 1:03	D4F0391	DF41830
Benzo(g,h,i)perylene	**2.61** (0.214)	---	8270E PAH	---	2	TJ	06/20/24 1:03	D4F0391	DF41830
Benzo(k)fluoranthene	**0.976** (0.214)	---	8270E PAH	---	2	TJ	06/20/24 1:03	D4F0391	DF41830
Chrysene	**1.01** (0.214)	---	8270E PAH	---	2	TJ	06/20/24 1:03	D4F0391	DF41830
Dibenzo(a,h)Anthracene	**0.419** (0.214)	---	8270E PAH	---	2	TJ	06/20/24 1:03	D4F0391	DF41830
Fluoranthene	**0.857** (0.214)	---	8270E PAH	---	2	TJ	06/20/24 1:03	D4F0391	DF41830
Fluorene	ND (0.214)	---	8270E PAH	---	2	TJ	06/20/24 1:03	D4F0391	DF41830
Indeno(1,2,3-cd)Pyrene	**1.81** (0.214)	---	8270E PAH	---	2	TJ	06/20/24 1:03	D4F0391	DF41830
Naphthalene	**0.223** (0.214)	---	8270E PAH	---	2	TJ	06/20/24 1:03	D4F0391	DF41830
Phenanthrene	**0.272** (0.214)	---	8270E PAH	---	2	TJ	06/20/24 1:03	D4F0391	DF41830
Pyrene	**1.07** (0.214)	---	8270E PAH	---	2	TJ	06/20/24 1:03	D4F0391	DF41830

	%Recovery	*Qualifier*	*Limits*
Surrogate: 1,2-Dichlorobenzene-d4	*73 %*		*30-130*
Surrogate: 2-Fluorobiphenyl	*67 %*		*30-130*
Surrogate: Nitrobenzene-d5	*69 %*		*30-130*
Surrogate: p-Terphenyl-d14	*78 %*		*30-130*

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Tidewater
Client Sample ID: GZ-SS-11 0-1'
Date Sampled: 06/17/24 10:40
Percent Solids: 96
Initial Volume: 19.2g
Final Volume: 1ml
Extraction Method: 3546

ESS Laboratory Work Order: 24F0697
ESS Laboratory Sample ID: 24F0697-01
Sample Matrix: Soil
Units: mg/kg dry
Analyst: JDN
Prepared: 6/18/24 17:03

8100M Total Petroleum Hydrocarbons

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Total Petroleum Hydrocarbons (C9-C36)	**1050** (203)	---	8100M	---	5	06/21/24 13:38	---	DF41829

	%Recovery	Qualifier	Limits
Surrogate: O-Terphenyl	*73 %*		*40-140*

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Tidewater
Client Sample ID: GZ-SS-11 0-1'
Date Sampled: 06/17/24 10:40
Percent Solids: 96

ESS Laboratory Work Order: 24F0697
ESS Laboratory Sample ID: 24F0697-01
Sample Matrix: Soil

Classical Chemistry

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	Units	Batch
Cyanide (PAC)	**40.3** (2.08)	---	MA PAC	---	2	EEM	06/20/24 12:10	mg/kg dry	DF42021

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Tidewater
Client Sample ID: GZ-SS-11 1-2
Date Sampled: 06/17/24 10:45
Percent Solids: 96

ESS Laboratory Work Order: 24F0697
ESS Laboratory Sample ID: 24F0697-02
Sample Matrix: Soil
Units: mg/kg dry

Extraction Method: 3050B

Total Metals

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	IV / FV	Batch
Arsenic	**4.57** (1.73)	---	6010D	---	1	KJB	06/21/24 17:38	2.99 100	DF41916
Lead	**71.4** (3.47)	---	6010D	---	1	KJB	06/21/24 17:38	2.99 100	DF41916

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Tidewater
Client Sample ID: GZ-SS-11 1-2
Date Sampled: 06/17/24 10:45
Percent Solids: 96
Initial Volume: 19.4g
Final Volume: 1ml
Extraction Method: 3546

ESS Laboratory Work Order: 24F0697
ESS Laboratory Sample ID: 24F0697-02
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TJ
Prepared: 6/18/24 16:08

Semi-Volatile Organic Compounds

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	Sequence	Batch
2-Methylnaphthalene	ND (0.214)	---	8270E PAH	---	2	TJ	06/20/24 1:34	D4F0391	DF41830
Acenaphthene	ND (0.214)	---	8270E PAH	---	2	TJ	06/20/24 1:34	D4F0391	DF41830
Acenaphthylene	**1.57** (0.214)	---	8270E PAH	---	2	TJ	06/20/24 1:34	D4F0391	DF41830
Anthracene	**0.411** (0.214)	---	8270E PAH	---	2	TJ	06/20/24 1:34	D4F0391	DF41830
Benzo(a)anthracene	**0.920** (0.214)	---	8270E PAH	---	2	TJ	06/20/24 1:34	D4F0391	DF41830
Benzo(a)pyrene	**1.12** (0.214)	---	8270E PAH	---	2	TJ	06/20/24 1:34	D4F0391	DF41830
Benzo(b)fluoranthene	**1.99** (0.214)	---	8270E PAH	---	2	TJ	06/20/24 1:34	D4F0391	DF41830
Benzo(g,h,i)perylene	**2.73** (0.214)	---	8270E PAH	---	2	TJ	06/20/24 1:34	D4F0391	DF41830
Benzo(k)fluoranthene	**0.807** (0.214)	---	8270E PAH	---	2	TJ	06/20/24 1:34	D4F0391	DF41830
Chrysene	**1.44** (0.214)	---	8270E PAH	---	2	TJ	06/20/24 1:34	D4F0391	DF41830
Dibenzo(a,h)Anthracene	**0.517** (0.214)	---	8270E PAH	---	2	TJ	06/20/24 1:34	D4F0391	DF41830
Fluoranthene	**1.07** (0.214)	---	8270E PAH	---	2	TJ	06/20/24 1:34	D4F0391	DF41830
Fluorene	ND (0.214)	---	8270E PAH	---	2	TJ	06/20/24 1:34	D4F0391	DF41830
Indeno(1,2,3-cd)Pyrene	**1.34** (0.214)	---	8270E PAH	---	2	TJ	06/20/24 1:34	D4F0391	DF41830
Naphthalene	**0.218** (0.214)	---	8270E PAH	---	2	TJ	06/20/24 1:34	D4F0391	DF41830
Phenanthrene	**0.502** (0.214)	---	8270E PAH	---	2	TJ	06/20/24 1:34	D4F0391	DF41830
Pyrene	**1.69** (0.214)	---	8270E PAH	---	2	TJ	06/20/24 1:34	D4F0391	DF41830

	%Recovery	*Qualifier*	*Limits*
Surrogate: 1,2-Dichlorobenzene-d4	*56 %*		*30-130*
Surrogate: 2-Fluorobiphenyl	*52 %*		*30-130*
Surrogate: Nitrobenzene-d5	*56 %*		*30-130*
Surrogate: p-Terphenyl-d14	*62 %*		*30-130*

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Tidewater
Client Sample ID: GZ-SS-11 1-2
Date Sampled: 06/17/24 10:45
Percent Solids: 96
Initial Volume: 19.8g
Final Volume: 1ml
Extraction Method: 3546

ESS Laboratory Work Order: 24F0697
ESS Laboratory Sample ID: 24F0697-02
Sample Matrix: Soil
Units: mg/kg dry
Analyst: JDN
Prepared: 6/18/24 17:03

8100M Total Petroleum Hydrocarbons

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Total Petroleum Hydrocarbons (C9-C36)	**4320** (785)	---	8100M	---	20	06/21/24 14:11	---	DF41829

	%Recovery	Qualifier	Limits
Surrogate: O-Terphenyl	*65 %*		*40-140*

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Tidewater
Client Sample ID: GZ-SS-11 1-2
Date Sampled: 06/17/24 10:45
Percent Solids: 96

ESS Laboratory Work Order: 24F0697
ESS Laboratory Sample ID: 24F0697-02
Sample Matrix: Soil

Classical Chemistry

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	Units	Batch
Cyanide (PAC)	**83.8** (10.4)	---	MA PAC	---	10	EEM	06/20/24 12:10	mg/kg dry	DF42021

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Tidewater
Client Sample ID: GZ-SS-12 0-1
Date Sampled: 06/17/24 10:50
Percent Solids: 94

ESS Laboratory Work Order: 24F0697
ESS Laboratory Sample ID: 24F0697-03
Sample Matrix: Soil
Units: mg/kg dry

Extraction Method: 3050B

Total Metals

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	IV / FV	Batch
Arsenic	**3.23** (1.92)	---	6010D	---	1	KJB	06/21/24 17:40	2.77 100	DF41916
Lead	**35.6** (3.83)	---	6010D	---	1	KJB	06/21/24 17:40	2.77 100	DF41916

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Tidewater
Client Sample ID: GZ-SS-12 0-1
Date Sampled: 06/17/24 10:50
Percent Solids: 94
Initial Volume: 19.3g
Final Volume: 1ml
Extraction Method: 3546

ESS Laboratory Work Order: 24F0697
ESS Laboratory Sample ID: 24F0697-03
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TJ
Prepared: 6/18/24 16:08

Semi-Volatile Organic Compounds

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	Sequence	Batch
2-Methylnaphthalene	ND (0.220)	---	8270E PAH	---	2	TJ	06/20/24 2:04	D4F0391	DF41830
Acenaphthene	ND (0.220)	---	8270E PAH	---	2	TJ	06/20/24 2:04	D4F0391	DF41830
Acenaphthylene	**1.07** (0.220)	---	8270E PAH	---	2	TJ	06/20/24 2:04	D4F0391	DF41830
Anthracene	**0.480** (0.220)	---	8270E PAH	---	2	TJ	06/20/24 2:04	D4F0391	DF41830
Benzo(a)anthracene	**0.903** (0.220)	---	8270E PAH	---	2	TJ	06/20/24 2:04	D4F0391	DF41830
Benzo(a)pyrene	**0.937** (0.220)	---	8270E PAH	---	2	TJ	06/20/24 2:04	D4F0391	DF41830
Benzo(b)fluoranthene	**1.43** (0.220)	---	8270E PAH	---	2	TJ	06/20/24 2:04	D4F0391	DF41830
Benzo(g,h,i)perylene	**1.28** (0.220)	---	8270E PAH	---	2	TJ	06/20/24 2:04	D4F0391	DF41830
Benzo(k)fluoranthene	**1.08** (0.220)	---	8270E PAH	---	2	TJ	06/20/24 2:04	D4F0391	DF41830
Chrysene	**1.08** (0.220)	---	8270E PAH	---	2	TJ	06/20/24 2:04	D4F0391	DF41830
Dibenzo(a,h)Anthracene	**0.286** (0.220)	---	8270E PAH	---	2	TJ	06/20/24 2:04	D4F0391	DF41830
Fluoranthene	**1.76** (0.220)	---	8270E PAH	---	2	TJ	06/20/24 2:04	D4F0391	DF41830
Fluorene	ND (0.220)	---	8270E PAH	---	2	TJ	06/20/24 2:04	D4F0391	DF41830
Indeno(1,2,3-cd)Pyrene	**1.19** (0.220)	---	8270E PAH	---	2	TJ	06/20/24 2:04	D4F0391	DF41830
Naphthalene	ND (0.220)	---	8270E PAH	---	2	TJ	06/20/24 2:04	D4F0391	DF41830
Phenanthrene	**0.556** (0.220)	---	8270E PAH	---	2	TJ	06/20/24 2:04	D4F0391	DF41830
Pyrene	**1.52** (0.220)	---	8270E PAH	---	2	TJ	06/20/24 2:04	D4F0391	DF41830

	%Recovery	*Qualifier*	*Limits*
Surrogate: 1,2-Dichlorobenzene-d4	*65 %*		*30-130*
Surrogate: 2-Fluorobiphenyl	*63 %*		*30-130*
Surrogate: Nitrobenzene-d5	*66 %*		*30-130*
Surrogate: p-Terphenyl-d14	*74 %*		*30-130*

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Tidewater
Client Sample ID: GZ-SS-12 0-1
Date Sampled: 06/17/24 10:50
Percent Solids: 94
Initial Volume: 19.1g
Final Volume: 1ml
Extraction Method: 3546

ESS Laboratory Work Order: 24F0697
ESS Laboratory Sample ID: 24F0697-03
Sample Matrix: Soil
Units: mg/kg dry
Analyst: JDN
Prepared: 6/18/24 17:03

8100M Total Petroleum Hydrocarbons

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Total Petroleum Hydrocarbons (C9-C36)	**517** (208)	---	8100M	---	5	06/21/24 14:43	---	DF41829

	%Recovery	Qualifier	Limits
Surrogate: O-Terphenyl	*73 %*		*40-140*

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Tidewater
Client Sample ID: GZ-SS-12 0-1
Date Sampled: 06/17/24 10:50
Percent Solids: 94

ESS Laboratory Work Order: 24F0697
ESS Laboratory Sample ID: 24F0697-03
Sample Matrix: Soil

Classical Chemistry

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	Units	Batch
Cyanide (PAC)	**18.1** (1.06)	---	MA PAC	---	1	EEM	06/20/24 12:10	mg/kg dry	DF42021

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Tidewater
Client Sample ID: GZ-SS-12 1-2
Date Sampled: 06/17/24 11:02
Percent Solids: 97

ESS Laboratory Work Order: 24F0697
ESS Laboratory Sample ID: 24F0697-04
Sample Matrix: Soil
Units: mg/kg dry

Extraction Method: 3050B

Total Metals

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	IV / FV	Batch
Arsenic	**4.33** (1.87)	---	6010D	---	1	KJB	06/21/24 17:42	2.76 100	DF41916
Lead	**29.1** (3.73)	---	6010D	---	1	KJB	06/21/24 17:42	2.76 100	DF41916

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Tidewater
Client Sample ID: GZ-SS-12 1-2
Date Sampled: 06/17/24 11:02
Percent Solids: 97
Initial Volume: 19.4g
Final Volume: 1ml
Extraction Method: 3546

ESS Laboratory Work Order: 24F0697
ESS Laboratory Sample ID: 24F0697-04
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TJ
Prepared: 6/18/24 16:08

Semi-Volatile Organic Compounds

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	Sequence	Batch
2-Methylnaphthalene	ND (0.212)	---	8270E PAH	---	2	TJ	06/20/24 2:34	D4F0391	DF41830
Acenaphthene	**0.273** (0.212)	---	8270E PAH	---	2	TJ	06/20/24 2:34	D4F0391	DF41830
Acenaphthylene	**9.22** (0.212)	---	8270E PAH	---	2	TJ	06/20/24 2:34	D4F0391	DF41830
Anthracene	**6.73** (0.212)	---	8270E PAH	---	2	TJ	06/20/24 2:34	D4F0391	DF41830
Benzo(a)anthracene	**19.5** (0.212)	---	8270E PAH	---	2	TJ	06/20/24 2:34	D4F0391	DF41830
Benzo(a)pyrene	**15.2** (0.212)	---	8270E PAH	---	2	TJ	06/20/24 2:34	D4F0391	DF41830
Benzo(b)fluoranthene	**16.6** (0.212)	---	8270E PAH	---	2	TJ	06/20/24 2:34	D4F0391	DF41830
Benzo(g,h,i)perylene	**8.47** (0.212)	---	8270E PAH	---	2	TJ	06/20/24 2:34	D4F0391	DF41830
Benzo(k)fluoranthene	**12.2** (0.212)	---	8270E PAH	---	2	TJ	06/20/24 2:34	D4F0391	DF41830
Chrysene	**16.1** (0.212)	---	8270E PAH	---	2	TJ	06/20/24 2:34	D4F0391	DF41830
Dibenzo(a,h)Anthracene	**1.89** (0.212)	---	8270E PAH	---	2	TJ	06/20/24 2:34	D4F0391	DF41830
Fluoranthene	**36.5** (2.12)	---	8270E PAH	---	20	TJ	06/20/24 20:28	D4F0391	DF41830
Fluorene	**0.259** (0.212)	---	8270E PAH	---	2	TJ	06/20/24 2:34	D4F0391	DF41830
Indeno(1,2,3-cd)Pyrene	**9.97** (0.212)	---	8270E PAH	---	2	TJ	06/20/24 2:34	D4F0391	DF41830
Naphthalene	**0.301** (0.212)	---	8270E PAH	---	2	TJ	06/20/24 2:34	D4F0391	DF41830
Phenanthrene	**7.81** (0.212)	---	8270E PAH	---	2	TJ	06/20/24 2:34	D4F0391	DF41830
Pyrene	**26.4** (2.12)	---	8270E PAH	---	20	TJ	06/20/24 20:28	D4F0391	DF41830

	%Recovery	*Qualifier*	*Limits*
Surrogate: 1,2-Dichlorobenzene-d4	*75 %*		*30-130*
Surrogate: 2-Fluorobiphenyl	*71 %*		*30-130*
Surrogate: Nitrobenzene-d5	*72 %*		*30-130*
Surrogate: p-Terphenyl-d14	*84 %*		*30-130*

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Tidewater
Client Sample ID: GZ-SS-12 1-2
Date Sampled: 06/17/24 11:02
Percent Solids: 97
Initial Volume: 19.3g
Final Volume: 1ml
Extraction Method: 3546

ESS Laboratory Work Order: 24F0697
ESS Laboratory Sample ID: 24F0697-04
Sample Matrix: Soil
Units: mg/kg dry
Analyst: JDN
Prepared: 6/18/24 17:03

8100M Total Petroleum Hydrocarbons

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Total Petroleum Hydrocarbons (C9-C36)	**1050** (80.1)	---	8100M	---	2	06/21/24 15:15	---	DF41829

	%Recovery	Qualifier	Limits
Surrogate: O-Terphenyl	*90 %*		*40-140*

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Tidewater
Client Sample ID: GZ-SS-12 1-2
Date Sampled: 06/17/24 11:02
Percent Solids: 97

ESS Laboratory Work Order: 24F0697
ESS Laboratory Sample ID: 24F0697-04
Sample Matrix: Soil

Classical Chemistry

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	Units	Batch
Cyanide (PAC)	**6.26** (1.03)	---	MA PAC	---	1	EEM	06/20/24 12:10	mg/kg dry	DF42021

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Tidewater
Client Sample ID: GZ-SS-13 0-1
Date Sampled: 06/17/24 11:21
Percent Solids: 97

ESS Laboratory Work Order: 24F0697
ESS Laboratory Sample ID: 24F0697-05
Sample Matrix: Soil
Units: mg/kg dry

Extraction Method: 3050B

Total Metals

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	IV / FV	Batch
Arsenic	**10.3** (1.85)	---	6010D	---	1	KJB	06/21/24 17:49	2.78 100	DF41916
Lead	**71.8** (3.70)	---	6010D	---	1	KJB	06/21/24 17:49	2.78 100	DF41916

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Tidewater
Client Sample ID: GZ-SS-13 0-1
Date Sampled: 06/17/24 11:21
Percent Solids: 97
Initial Volume: 19g
Final Volume: 1ml
Extraction Method: 3546

ESS Laboratory Work Order: 24F0697
ESS Laboratory Sample ID: 24F0697-05
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TJ
Prepared: 6/18/24 16:08

Semi-Volatile Organic Compounds

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	Sequence	Batch
2-Methylnaphthalene	ND (0.108)	---	8270E PAH	---	1	TJ	06/20/24 3:05	D4F0391	DF41830
Acenaphthene	ND (0.108)	---	8270E PAH	---	1	TJ	06/20/24 3:05	D4F0391	DF41830
Acenaphthylene	**1.26** (0.108)	---	8270E PAH	---	1	TJ	06/20/24 3:05	D4F0391	DF41830
Anthracene	**0.423** (0.108)	---	8270E PAH	---	1	TJ	06/20/24 3:05	D4F0391	DF41830
Benzo(a)anthracene	**1.01** (0.108)	---	8270E PAH	---	1	TJ	06/20/24 3:05	D4F0391	DF41830
Benzo(a)pyrene	**1.23** (0.108)	---	8270E PAH	---	1	TJ	06/20/24 3:05	D4F0391	DF41830
Benzo(b)fluoranthene	**1.95** (0.108)	---	8270E PAH	---	1	TJ	06/20/24 3:05	D4F0391	DF41830
Benzo(g,h,i)perylene	**1.57** (0.108)	---	8270E PAH	---	1	TJ	06/20/24 3:05	D4F0391	DF41830
Benzo(k)fluoranthene	**1.28** (0.108)	---	8270E PAH	---	1	TJ	06/20/24 3:05	D4F0391	DF41830
Chrysene	**1.19** (0.108)	---	8270E PAH	---	1	TJ	06/20/24 3:05	D4F0391	DF41830
Dibenzo(a,h)Anthracene	**0.346** (0.108)	---	8270E PAH	---	1	TJ	06/20/24 3:05	D4F0391	DF41830
Fluoranthene	**1.18** (0.108)	---	8270E PAH	---	1	TJ	06/20/24 3:05	D4F0391	DF41830
Fluorene	ND (0.108)	---	8270E PAH	---	1	TJ	06/20/24 3:05	D4F0391	DF41830
Indeno(1,2,3-cd)Pyrene	**1.50** (0.108)	---	8270E PAH	---	1	TJ	06/20/24 3:05	D4F0391	DF41830
Naphthalene	**0.120** (0.108)	---	8270E PAH	---	1	TJ	06/20/24 3:05	D4F0391	DF41830
Phenanthrene	**0.326** (0.108)	---	8270E PAH	---	1	TJ	06/20/24 3:05	D4F0391	DF41830
Pyrene	**1.28** (0.108)	---	8270E PAH	---	1	TJ	06/20/24 3:05	D4F0391	DF41830

	%Recovery	*Qualifier*	*Limits*
Surrogate: 1,2-Dichlorobenzene-d4	*77 %*		*30-130*
Surrogate: 2-Fluorobiphenyl	*69 %*		*30-130*
Surrogate: Nitrobenzene-d5	*74 %*		*30-130*
Surrogate: p-Terphenyl-d14	*85 %*		*30-130*

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Tidewater
Client Sample ID: GZ-SS-13 0-1
Date Sampled: 06/17/24 11:21
Percent Solids: 97
Initial Volume: 19.7g
Final Volume: 1ml
Extraction Method: 3546

ESS Laboratory Work Order: 24F0697
ESS Laboratory Sample ID: 24F0697-05
Sample Matrix: Soil
Units: mg/kg dry
Analyst: JDN
Prepared: 6/18/24 17:03

8100M Total Petroleum Hydrocarbons

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Total Petroleum Hydrocarbons (C9-C36)	**243** (39.1)	---	8100M	---	1	06/21/24 15:48	---	DF41829

	%Recovery	Qualifier	Limits
Surrogate: O-Terphenyl	*75 %*		*40-140*

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Tidewater
Client Sample ID: GZ-SS-13 0-1
Date Sampled: 06/17/24 11:21
Percent Solids: 97

ESS Laboratory Work Order: 24F0697
ESS Laboratory Sample ID: 24F0697-05
Sample Matrix: Soil

Classical Chemistry

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	Units	Batch
Cyanide (PAC)	**9.75** (0.93)	---	MA PAC	---	1	EEM	06/20/24 12:10	mg/kg dry	DF42021

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Tidewater
Client Sample ID: GZ-SS-13 1-2
Date Sampled: 06/17/24 12:00
Percent Solids: 90

ESS Laboratory Work Order: 24F0697
ESS Laboratory Sample ID: 24F0697-06
Sample Matrix: Soil
Units: mg/kg dry

Extraction Method: 3050B

Total Metals

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	IV / FV	Batch
Arsenic	**17.3** (1.93)	---	6010D	---	1	KJB	06/21/24 17:51	2.89 100	DF41916
Lead	**162** (3.86)	---	6010D	---	1	KJB	06/21/24 17:51	2.89 100	DF41916

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Tidewater
Client Sample ID: GZ-SS-13 1-2
Date Sampled: 06/17/24 12:00
Percent Solids: 90
Initial Volume: 19.1g
Final Volume: 1ml
Extraction Method: 3546

ESS Laboratory Work Order: 24F0697
ESS Laboratory Sample ID: 24F0697-06
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TJ
Prepared: 6/18/24 16:08

Semi-Volatile Organic Compounds

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	Sequence	Batch
2-Methylnaphthalene	**0.316** (0.234)	---	8270E PAH	---	2	TJ	06/20/24 3:35	D4F0391	DF41830
Acenaphthene	ND (0.234)	---	8270E PAH	---	2	TJ	06/20/24 3:35	D4F0391	DF41830
Acenaphthylene	**1.05** (0.234)	---	8270E PAH	---	2	TJ	06/20/24 3:35	D4F0391	DF41830
Anthracene	**1.78** (0.234)	---	8270E PAH	---	2	TJ	06/20/24 3:35	D4F0391	DF41830
Benzo(a)anthracene	**15.7** (0.234)	---	8270E PAH	---	2	TJ	06/20/24 3:35	D4F0391	DF41830
Benzo(a)pyrene	**19.4** (0.234)	---	8270E PAH	---	2	TJ	06/20/24 3:35	D4F0391	DF41830
Benzo(b)fluoranthene	**29.5** (2.34)	---	8270E PAH	---	20	TJ	06/20/24 20:58	D4F0391	DF41830
Benzo(g,h,i)perylene	**28.4** (2.34)	---	8270E PAH	---	20	TJ	06/20/24 20:58	D4F0391	DF41830
Benzo(k)fluoranthene	**16.3** (0.234)	---	8270E PAH	---	2	TJ	06/20/24 3:35	D4F0391	DF41830
Chrysene	**25.7** (0.234)	---	8270E PAH	---	2	TJ	06/20/24 3:35	D4F0391	DF41830
Dibenzo(a,h)Anthracene	**15.1** (0.234)	---	8270E PAH	---	2	TJ	06/20/24 3:35	D4F0391	DF41830
Fluoranthene	**4.92** (0.234)	---	8270E PAH	---	2	TJ	06/20/24 3:35	D4F0391	DF41830
Fluorene	ND (0.234)	---	8270E PAH	---	2	TJ	06/20/24 3:35	D4F0391	DF41830
Indeno(1,2,3-cd)Pyrene	**25.1** (0.234)	---	8270E PAH	---	2	TJ	06/20/24 3:35	D4F0391	DF41830
Naphthalene	**0.719** (0.234)	---	8270E PAH	---	2	TJ	06/20/24 3:35	D4F0391	DF41830
Phenanthrene	**0.717** (0.234)	---	8270E PAH	---	2	TJ	06/20/24 3:35	D4F0391	DF41830
Pyrene	**11.6** (0.234)	---	8270E PAH	---	2	TJ	06/20/24 3:35	D4F0391	DF41830

	%Recovery	*Qualifier*	*Limits*
Surrogate: 1,2-Dichlorobenzene-d4	*73 %*		*30-130*
Surrogate: 2-Fluorobiphenyl	*66 %*		*30-130*
Surrogate: Nitrobenzene-d5	*78 %*		*30-130*
Surrogate: p-Terphenyl-d14	*82 %*		*30-130*

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Tidewater
Client Sample ID: GZ-SS-13 1-2
Date Sampled: 06/17/24 12:00
Percent Solids: 90
Initial Volume: 19.7g
Final Volume: 1ml
Extraction Method: 3546

ESS Laboratory Work Order: 24F0697
ESS Laboratory Sample ID: 24F0697-06
Sample Matrix: Soil
Units: mg/kg dry
Analyst: JDN
Prepared: 6/18/24 17:03

8100M Total Petroleum Hydrocarbons

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Total Petroleum Hydrocarbons (C9-C36)	**3830** (849)	---	8100M	---	20	06/21/24 16:20	---	DF41829

	%Recovery	Qualifier	Limits
Surrogate: O-Terphenyl	67 %		40-140

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Tidewater
Client Sample ID: GZ-SS-13 1-2
Date Sampled: 06/17/24 12:00
Percent Solids: 90

ESS Laboratory Work Order: 24F0697
ESS Laboratory Sample ID: 24F0697-06
Sample Matrix: Soil

Classical Chemistry

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	Units	Batch
Cyanide (PAC)	**350** (27.9)	---	MA PAC	---	25	EEM	06/20/24 12:10	mg/kg dry	DF42021

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Tidewater
Client Sample ID: GZ-SS-14 0-1
Date Sampled: 06/17/24 11:25
Percent Solids: 95

ESS Laboratory Work Order: 24F0697
ESS Laboratory Sample ID: 24F0697-07
Sample Matrix: Soil
Units: mg/kg dry

Extraction Method: 3050B

Total Metals

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	IV / FV	Batch
Arsenic	**6.62** (1.98)	---	6010D	---	1	KJB	06/21/24 17:53	2.66 100	DF41916
Lead	**42.9** (3.96)	---	6010D	---	1	KJB	06/21/24 17:53	2.66 100	DF41916

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Tidewater
Client Sample ID: GZ-SS-14 0-1
Date Sampled: 06/17/24 11:25
Percent Solids: 95
Initial Volume: 19.7g
Final Volume: 1ml
Extraction Method: 3546

ESS Laboratory Work Order: 24F0697
ESS Laboratory Sample ID: 24F0697-07
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TJ
Prepared: 6/18/24 16:08

Semi-Volatile Organic Compounds

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	Sequence	Batch
2-Methylnaphthalene	ND (0.214)	---	8270E PAH	---	2	TJ	06/20/24 4:05	D4F0391	DF41830
Acenaphthene	ND (0.214)	---	8270E PAH	---	2	TJ	06/20/24 4:05	D4F0391	DF41830
Acenaphthylene	**0.829** (0.214)	---	8270E PAH	---	2	TJ	06/20/24 4:05	D4F0391	DF41830
Anthracene	**0.335** (0.214)	---	8270E PAH	---	2	TJ	06/20/24 4:05	D4F0391	DF41830
Benzo(a)anthracene	**0.306** (0.214)	---	8270E PAH	---	2	TJ	06/20/24 4:05	D4F0391	DF41830
Benzo(a)pyrene	**0.398** (0.214)	---	8270E PAH	---	2	TJ	06/20/24 4:05	D4F0391	DF41830
Benzo(b)fluoranthene	**1.34** (0.214)	---	8270E PAH	---	2	TJ	06/20/24 4:05	D4F0391	DF41830
Benzo(g,h,i)perylene	**1.75** (0.214)	---	8270E PAH	---	2	TJ	06/20/24 4:05	D4F0391	DF41830
Benzo(k)fluoranthene	**0.606** (0.214)	---	8270E PAH	---	2	TJ	06/20/24 4:05	D4F0391	DF41830
Chrysene	**0.559** (0.214)	---	8270E PAH	---	2	TJ	06/20/24 4:05	D4F0391	DF41830
Dibenzo(a,h)Anthracene	**0.326** (0.214)	---	8270E PAH	---	2	TJ	06/20/24 4:05	D4F0391	DF41830
Fluoranthene	**0.380** (0.214)	---	8270E PAH	---	2	TJ	06/20/24 4:05	D4F0391	DF41830
Fluorene	ND (0.214)	---	8270E PAH	---	2	TJ	06/20/24 4:05	D4F0391	DF41830
Indeno(1,2,3-cd)Pyrene	**1.23** (0.214)	---	8270E PAH	---	2	TJ	06/20/24 4:05	D4F0391	DF41830
Naphthalene	ND (0.214)	---	8270E PAH	---	2	TJ	06/20/24 4:05	D4F0391	DF41830
Phenanthrene	ND (0.214)	---	8270E PAH	---	2	TJ	06/20/24 4:05	D4F0391	DF41830
Pyrene	**0.455** (0.214)	---	8270E PAH	---	2	TJ	06/20/24 4:05	D4F0391	DF41830

	%Recovery	Qualifier	Limits
Surrogate: 1,2-Dichlorobenzene-d4	*82 %*		*30-130*
Surrogate: 2-Fluorobiphenyl	*73 %*		*30-130*
Surrogate: Nitrobenzene-d5	*77 %*		*30-130*
Surrogate: p-Terphenyl-d14	*87 %*		*30-130*

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Tidewater
Client Sample ID: GZ-SS-14 0-1
Date Sampled: 06/17/24 11:25
Percent Solids: 95
Initial Volume: 19.1g
Final Volume: 1ml
Extraction Method: 3546

ESS Laboratory Work Order: 24F0697
ESS Laboratory Sample ID: 24F0697-07
Sample Matrix: Soil
Units: mg/kg dry
Analyst: JDN
Prepared: 6/18/24 17:03

8100M Total Petroleum Hydrocarbons

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Total Petroleum Hydrocarbons (C9-C36)	**706** (207)	---	8100M	---	5	06/21/24 16:52	---	DF41829

	%Recovery	Qualifier	Limits
Surrogate: O-Terphenyl	*80 %*		*40-140*

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Tidewater
Client Sample ID: GZ-SS-14 0-1
Date Sampled: 06/17/24 11:25
Percent Solids: 95

ESS Laboratory Work Order: 24F0697
ESS Laboratory Sample ID: 24F0697-07
Sample Matrix: Soil

Classical Chemistry

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	Units	Batch
Cyanide (PAC)	**42.7** (4.79)	---	MA PAC	---	5	EEM	06/20/24 12:10	mg/kg dry	DF42021

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Tidewater
Client Sample ID: GZ-SS-14 1-2
Date Sampled: 06/17/24 11:35
Percent Solids: 97

ESS Laboratory Work Order: 24F0697
ESS Laboratory Sample ID: 24F0697-08
Sample Matrix: Soil
Units: mg/kg dry

Extraction Method: 3050B

Total Metals

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	IV / FV	Batch
Arsenic	**12.7** (1.99)	---	6010D	---	1	KJB	06/21/24 17:55	2.59 100	DF41916
Lead	**58.7** (3.99)	---	6010D	---	1	KJB	06/21/24 17:55	2.59 100	DF41916

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Tidewater
Client Sample ID: GZ-SS-14 1-2
Date Sampled: 06/17/24 11:35
Percent Solids: 97
Initial Volume: 19.2g
Final Volume: 1ml
Extraction Method: 3546

ESS Laboratory Work Order: 24F0697
ESS Laboratory Sample ID: 24F0697-08
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TJ
Prepared: 6/18/24 16:08

Semi-Volatile Organic Compounds

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	Sequence	Batch
2-Methylnaphthalene	ND (0.215)	---	8270E PAH	---	2	TJ	06/20/24 21:28	D4F0422	DF41830
Acenaphthene	ND (0.215)	---	8270E PAH	---	2	TJ	06/20/24 21:28	D4F0422	DF41830
Acenaphthylene	**0.543** (0.215)	---	8270E PAH	---	2	TJ	06/20/24 21:28	D4F0422	DF41830
Anthracene	ND (0.215)	---	8270E PAH	---	2	TJ	06/20/24 21:28	D4F0422	DF41830
Benzo(a)anthracene	**0.516** (0.215)	---	8270E PAH	---	2	TJ	06/20/24 21:28	D4F0422	DF41830
Benzo(a)pyrene	**0.549** (0.215)	---	8270E PAH	---	2	TJ	06/20/24 21:28	D4F0422	DF41830
Benzo(b)fluoranthene	**1.29** (0.215)	---	8270E PAH	---	2	TJ	06/20/24 21:28	D4F0422	DF41830
Benzo(g,h,i)perylene	**1.58** (0.215)	---	8270E PAH	---	2	TJ	06/20/24 21:28	D4F0422	DF41830
Benzo(k)fluoranthene	**0.631** (0.215)	---	8270E PAH	---	2	TJ	06/20/24 21:28	D4F0422	DF41830
Chrysene	**0.664** (0.215)	---	8270E PAH	---	2	TJ	06/20/24 21:28	D4F0422	DF41830
Dibenzo(a,h)Anthracene	**0.244** (0.215)	---	8270E PAH	---	2	TJ	06/20/24 21:28	D4F0422	DF41830
Fluoranthene	**0.657** (0.215)	---	8270E PAH	---	2	TJ	06/20/24 21:28	D4F0422	DF41830
Fluorene	ND (0.215)	---	8270E PAH	---	2	TJ	06/20/24 21:28	D4F0422	DF41830
Indeno(1,2,3-cd)Pyrene	**1.16** (0.215)	---	8270E PAH	---	2	TJ	06/20/24 21:28	D4F0422	DF41830
Naphthalene	ND (0.215)	---	8270E PAH	---	2	TJ	06/20/24 21:28	D4F0422	DF41830
Phenanthrene	**0.419** (0.215)	---	8270E PAH	---	2	TJ	06/20/24 21:28	D4F0422	DF41830
Pyrene	**0.992** (0.215)	---	8270E PAH	---	2	TJ	06/20/24 21:28	D4F0422	DF41830

	%Recovery	*Qualifier*	*Limits*
Surrogate: 1,2-Dichlorobenzene-d4	*82 %*		*30-130*
Surrogate: 2-Fluorobiphenyl	*83 %*		*30-130*
Surrogate: Nitrobenzene-d5	*89 %*		*30-130*
Surrogate: p-Terphenyl-d14	*119 %*		*30-130*

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Tidewater
Client Sample ID: GZ-SS-14 1-2
Date Sampled: 06/17/24 11:35
Percent Solids: 97
Initial Volume: 20.1g
Final Volume: 1ml
Extraction Method: 3546

ESS Laboratory Work Order: 24F0697
ESS Laboratory Sample ID: 24F0697-08
Sample Matrix: Soil
Units: mg/kg dry
Analyst: JDN
Prepared: 6/18/24 17:03

8100M Total Petroleum Hydrocarbons

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Total Petroleum Hydrocarbons (C9-C36)	**1130** (193)	---	8100M	---	5	06/21/24 17:25	---	DF41829

	%Recovery	Qualifier	Limits
Surrogate: O-Terphenyl	*74 %*		*40-140*

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Tidewater
Client Sample ID: GZ-SS-14 1-2
Date Sampled: 06/17/24 11:35
Percent Solids: 97

ESS Laboratory Work Order: 24F0697
ESS Laboratory Sample ID: 24F0697-08
Sample Matrix: Soil

Classical Chemistry

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	Units	Batch
Cyanide (PAC)	**52.0** (5.16)	---	MA PAC	---	5	EEM	06/20/24 12:10	mg/kg dry	DF42021

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Tidewater
Client Sample ID: GZ-SS-15 0-1
Date Sampled: 06/17/24 11:48
Percent Solids: 96

ESS Laboratory Work Order: 24F0697
ESS Laboratory Sample ID: 24F0697-09
Sample Matrix: Soil
Units: mg/kg dry

Extraction Method: 3050B

Total Metals

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	IV / FV	Batch
Arsenic	**5.15** (1.73)	---	6010D	---	1	KJB	06/21/24 17:57	2.99 100	DF41916
Lead	**21.6** (3.47)	---	6010D	---	1	KJB	06/21/24 17:57	2.99 100	DF41916

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Tidewater
Client Sample ID: GZ-SS-15 0-1
Date Sampled: 06/17/24 11:48
Percent Solids: 96
Initial Volume: 19.5g
Final Volume: 1ml
Extraction Method: 3546

ESS Laboratory Work Order: 24F0697
ESS Laboratory Sample ID: 24F0697-09
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TJ
Prepared: 6/18/24 16:08

Semi-Volatile Organic Compounds

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	Sequence	Batch
2-Methylnaphthalene	ND (0.106)	---	8270E PAH	---	1	TJ	06/20/24 21:58	D4F0422	DF41830
Acenaphthene	ND (0.106)	---	8270E PAH	---	1	TJ	06/20/24 21:58	D4F0422	DF41830
Acenaphthylene	**0.196** (0.106)	---	8270E PAH	---	1	TJ	06/20/24 21:58	D4F0422	DF41830
Anthracene	ND (0.106)	---	8270E PAH	---	1	TJ	06/20/24 21:58	D4F0422	DF41830
Benzo(a)anthracene	**0.268** (0.106)	---	8270E PAH	---	1	TJ	06/20/24 21:58	D4F0422	DF41830
Benzo(a)pyrene	**0.332** (0.106)	---	8270E PAH	---	1	TJ	06/20/24 21:58	D4F0422	DF41830
Benzo(b)fluoranthene	**0.507** (0.106)	---	8270E PAH	---	1	TJ	06/20/24 21:58	D4F0422	DF41830
Benzo(g,h,i)perylene	**0.348** (0.106)	---	8270E PAH	---	1	TJ	06/20/24 21:58	D4F0422	DF41830
Benzo(k)fluoranthene	**0.408** (0.106)	---	8270E PAH	---	1	TJ	06/20/24 21:58	D4F0422	DF41830
Chrysene	**0.278** (0.106)	---	8270E PAH	---	1	TJ	06/20/24 21:58	D4F0422	DF41830
Dibenzo(a,h)Anthracene	ND (0.106)	---	8270E PAH	---	1	TJ	06/20/24 21:58	D4F0422	DF41830
Fluoranthene	**0.374** (0.106)	---	8270E PAH	---	1	TJ	06/20/24 21:58	D4F0422	DF41830
Fluorene	ND (0.106)	---	8270E PAH	---	1	TJ	06/20/24 21:58	D4F0422	DF41830
Indeno(1,2,3-cd)Pyrene	**0.364** (0.106)	---	8270E PAH	---	1	TJ	06/20/24 21:58	D4F0422	DF41830
Naphthalene	ND (0.106)	---	8270E PAH	---	1	TJ	06/20/24 21:58	D4F0422	DF41830
Phenanthrene	ND (0.106)	---	8270E PAH	---	1	TJ	06/20/24 21:58	D4F0422	DF41830
Pyrene	**0.413** (0.106)	---	8270E PAH	---	1	TJ	06/20/24 21:58	D4F0422	DF41830

	%Recovery	*Qualifier*	*Limits*
Surrogate: 1,2-Dichlorobenzene-d4	*89 %*		*30-130*
Surrogate: 2-Fluorobiphenyl	*88 %*		*30-130*
Surrogate: Nitrobenzene-d5	*98 %*		*30-130*
Surrogate: p-Terphenyl-d14	*117 %*		*30-130*

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Tidewater
Client Sample ID: GZ-SS-15 0-1
Date Sampled: 06/17/24 11:48
Percent Solids: 96
Initial Volume: 19.6g
Final Volume: 1ml
Extraction Method: 3546

ESS Laboratory Work Order: 24F0697
ESS Laboratory Sample ID: 24F0697-09
Sample Matrix: Soil
Units: mg/kg dry
Analyst: JDN
Prepared: 6/18/24 17:03

8100M Total Petroleum Hydrocarbons

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Total Petroleum Hydrocarbons (C9-C36)	**79.9** (39.7)	---	8100M	---	1	06/21/24 0:03	---	DF41829

	%Recovery	Qualifier	Limits
Surrogate: O-Terphenyl	*78 %*		*40-140*

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Tidewater
Client Sample ID: GZ-SS-15 0-1
Date Sampled: 06/17/24 11:48
Percent Solids: 96

ESS Laboratory Work Order: 24F0697
ESS Laboratory Sample ID: 24F0697-09
Sample Matrix: Soil

Classical Chemistry

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	Units	Batch
Cyanide (PAC)	**7.83** (1.04)	---	MA PAC	---	1	EEM	06/20/24 12:10	mg/kg dry	DF42021

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Tidewater
Client Sample ID: GZ-SS-15 1-2
Date Sampled: 06/17/24 11:52
Percent Solids: 95

ESS Laboratory Work Order: 24F0697
ESS Laboratory Sample ID: 24F0697-10
Sample Matrix: Soil
Units: mg/kg dry

Extraction Method: 3050B

Total Metals

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	IV / FV	Batch
Arsenic	**5.28** (2.01)	---	6010D	---	1	KJB	06/21/24 18:08	2.6 100	DF41916
Lead	**30.3** (4.03)	---	6010D	---	1	KJB	06/21/24 18:08	2.6 100	DF41916

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Tidewater
Client Sample ID: GZ-SS-15 1-2
Date Sampled: 06/17/24 11:52
Percent Solids: 95
Initial Volume: 19.6g
Final Volume: 1ml
Extraction Method: 3546

ESS Laboratory Work Order: 24F0697
ESS Laboratory Sample ID: 24F0697-10
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TJ
Prepared: 6/18/24 18:50

Semi-Volatile Organic Compounds

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	Sequence	Batch
2-Methylnaphthalene	ND (0.107)	---	8270E PAH	---	1	TJ	06/20/24 22:29	D4F0422	DF41840
Acenaphthene	ND (0.107)	---	8270E PAH	---	1	TJ	06/20/24 22:29	D4F0422	DF41840
Acenaphthylene	**0.582** (0.107)	---	8270E PAH	---	1	TJ	06/20/24 22:29	D4F0422	DF41840
Anthracene	ND (0.107)	---	8270E PAH	---	1	TJ	06/20/24 22:29	D4F0422	DF41840
Benzo(a)anthracene	**0.307** (0.107)	---	8270E PAH	---	1	TJ	06/20/24 22:29	D4F0422	DF41840
Benzo(a)pyrene	**0.315** (0.107)	---	8270E PAH	---	1	TJ	06/20/24 22:29	D4F0422	DF41840
Benzo(b)fluoranthene	**0.475** (0.107)	---	8270E PAH	---	1	TJ	06/20/24 22:29	D4F0422	DF41840
Benzo(g,h,i)perylene	**0.307** (0.107)	---	8270E PAH	---	1	TJ	06/20/24 22:29	D4F0422	DF41840
Benzo(k)fluoranthene	**0.447** (0.107)	---	8270E PAH	---	1	TJ	06/20/24 22:29	D4F0422	DF41840
Chrysene	**0.369** (0.107)	---	8270E PAH	---	1	TJ	06/20/24 22:29	D4F0422	DF41840
Dibenzo(a,h)Anthracene	ND (0.107)	---	8270E PAH	---	1	TJ	06/20/24 22:29	D4F0422	DF41840
Fluoranthene	**0.451** (0.107)	---	8270E PAH	---	1	TJ	06/20/24 22:29	D4F0422	DF41840
Fluorene	ND (0.107)	---	8270E PAH	---	1	TJ	06/20/24 22:29	D4F0422	DF41840
Indeno(1,2,3-cd)Pyrene	**0.353** (0.107)	---	8270E PAH	---	1	TJ	06/20/24 22:29	D4F0422	DF41840
Naphthalene	ND (0.107)	---	8270E PAH	---	1	TJ	06/20/24 22:29	D4F0422	DF41840
Phenanthrene	**0.196** (0.107)	---	8270E PAH	---	1	TJ	06/20/24 22:29	D4F0422	DF41840
Pyrene	**0.530** (0.107)	---	8270E PAH	---	1	TJ	06/20/24 22:29	D4F0422	DF41840

	%Recovery	Qualifier	Limits
Surrogate: 1,2-Dichlorobenzene-d4	*93 %*		*30-130*
Surrogate: 2-Fluorobiphenyl	*95 %*		*30-130*
Surrogate: Nitrobenzene-d5	*100 %*		*30-130*
Surrogate: p-Terphenyl-d14	*124 %*		*30-130*

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Tidewater
Client Sample ID: GZ-SS-15 1-2
Date Sampled: 06/17/24 11:52
Percent Solids: 95
Initial Volume: 20.6g
Final Volume: 1ml
Extraction Method: 3546

ESS Laboratory Work Order: 24F0697
ESS Laboratory Sample ID: 24F0697-10
Sample Matrix: Soil
Units: mg/kg dry
Analyst: JDN
Prepared: 6/18/24 17:03

8100M Total Petroleum Hydrocarbons

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Total Petroleum Hydrocarbons (C9-C36)	**61.6** (38.1)	---	8100M	---	1	06/21/24 0:50	---	DF41829

	%Recovery	Qualifier	Limits
Surrogate: O-Terphenyl	*70 %*		*40-140*

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Tidewater
Client Sample ID: GZ-SS-15 1-2
Date Sampled: 06/17/24 11:52
Percent Solids: 95

ESS Laboratory Work Order: 24F0697
ESS Laboratory Sample ID: 24F0697-10
Sample Matrix: Soil

Classical Chemistry

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	Units	Batch
Cyanide (PAC)	**14.9** (0.95)	---	MA PAC	---	1	EEM	06/20/24 12:10	mg/kg dry	DF42021

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Tidewater
Client Sample ID: GZ-SS-16 0-1
Date Sampled: 06/17/24 11:55
Percent Solids: 94

ESS Laboratory Work Order: 24F0697
ESS Laboratory Sample ID: 24F0697-11
Sample Matrix: Soil
Units: mg/kg dry

Extraction Method: 3050B

Total Metals

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	IV / FV	Batch
Arsenic	**4.05** (2.02)	---	6010D	---	1	KJB	06/21/24 18:15	2.63 100	DF41916
Lead	**33.1** (4.04)	---	6010D	---	1	KJB	06/21/24 18:15	2.63 100	DF41916

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Tidewater
Client Sample ID: GZ-SS-16 0-1
Date Sampled: 06/17/24 11:55
Percent Solids: 94
Initial Volume: 20.7g
Final Volume: 1ml
Extraction Method: 3546

ESS Laboratory Work Order: 24F0697
ESS Laboratory Sample ID: 24F0697-11
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TJ
Prepared: 6/18/24 18:50

Semi-Volatile Organic Compounds

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	Sequence	Batch
2-Methylnaphthalene	ND (0.205)	---	8270E PAH	---	2	TJ	06/20/24 22:59	D4F0422	DF41840
Acenaphthene	ND (0.205)	---	8270E PAH	---	2	TJ	06/20/24 22:59	D4F0422	DF41840
Acenaphthylene	**0.300** (0.205)	---	8270E PAH	---	2	TJ	06/20/24 22:59	D4F0422	DF41840
Anthracene	ND (0.205)	---	8270E PAH	---	2	TJ	06/20/24 22:59	D4F0422	DF41840
Benzo(a)anthracene	**0.504** (0.205)	---	8270E PAH	---	2	TJ	06/20/24 22:59	D4F0422	DF41840
Benzo(a)pyrene	**0.735** (0.205)	---	8270E PAH	---	2	TJ	06/20/24 22:59	D4F0422	DF41840
Benzo(b)fluoranthene	**1.32** (0.205)	---	8270E PAH	---	2	TJ	06/20/24 22:59	D4F0422	DF41840
Benzo(g,h,i)perylene	**1.25** (0.205)	---	8270E PAH	---	2	TJ	06/20/24 22:59	D4F0422	DF41840
Benzo(k)fluoranthene	**0.848** (0.205)	---	8270E PAH	---	2	TJ	06/20/24 22:59	D4F0422	DF41840
Chrysene	**0.651** (0.205)	---	8270E PAH	---	2	TJ	06/20/24 22:59	D4F0422	DF41840
Dibenzo(a,h)Anthracene	**0.283** (0.205)	---	8270E PAH	---	2	TJ	06/20/24 22:59	D4F0422	DF41840
Fluoranthene	**0.541** (0.205)	---	8270E PAH	---	2	TJ	06/20/24 22:59	D4F0422	DF41840
Fluorene	ND (0.205)	---	8270E PAH	---	2	TJ	06/20/24 22:59	D4F0422	DF41840
Indeno(1,2,3-cd)Pyrene	**1.02** (0.205)	---	8270E PAH	---	2	TJ	06/20/24 22:59	D4F0422	DF41840
Naphthalene	ND (0.205)	---	8270E PAH	---	2	TJ	06/20/24 22:59	D4F0422	DF41840
Phenanthrene	ND (0.205)	---	8270E PAH	---	2	TJ	06/20/24 22:59	D4F0422	DF41840
Pyrene	**0.754** (0.205)	---	8270E PAH	---	2	TJ	06/20/24 22:59	D4F0422	DF41840

	%Recovery	*Qualifier*	*Limits*
Surrogate: 1,2-Dichlorobenzene-d4	*83 %*		*30-130*
Surrogate: 2-Fluorobiphenyl	*85 %*		*30-130*
Surrogate: Nitrobenzene-d5	*92 %*		*30-130*
Surrogate: p-Terphenyl-d14	*124 %*		*30-130*

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Tidewater
Client Sample ID: GZ-SS-16 0-1
Date Sampled: 06/17/24 11:55
Percent Solids: 94
Initial Volume: 19.6g
Final Volume: 1ml
Extraction Method: 3546

ESS Laboratory Work Order: 24F0697
ESS Laboratory Sample ID: 24F0697-11
Sample Matrix: Soil
Units: mg/kg dry
Analyst: JDN
Prepared: 6/18/24 17:03

8100M Total Petroleum Hydrocarbons

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Total Petroleum Hydrocarbons (C9-C36)	**443** (203)	---	8100M	---	5	06/21/24 17:57	---	DF41829

	%Recovery	Qualifier	Limits
Surrogate: O-Terphenyl	*80 %*		*40-140*

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Tidewater
Client Sample ID: GZ-SS-16 0-1
Date Sampled: 06/17/24 11:55
Percent Solids: 94

ESS Laboratory Work Order: 24F0697
ESS Laboratory Sample ID: 24F0697-11
Sample Matrix: Soil

Classical Chemistry

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	Units	Batch
Cyanide (PAC)	**18.9** (1.06)	---	MA PAC	---	1	EEM	06/20/24 12:10	mg/kg dry	DF42021

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Tidewater
Client Sample ID: GZ-SS-16 1-2
Date Sampled: 06/17/24 12:10
Percent Solids: 96

ESS Laboratory Work Order: 24F0697
ESS Laboratory Sample ID: 24F0697-12
Sample Matrix: Soil
Units: mg/kg dry

Extraction Method: 3050B

Total Metals

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	IV / FV	Batch
Arsenic	**7.38** (1.85)	---	6010D	---	1	KJB	06/21/24 18:17	2.8 100	DF41916
Lead	**45.0** (3.71)	---	6010D	---	1	KJB	06/21/24 18:17	2.8 100	DF41916

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Tidewater
Client Sample ID: GZ-SS-16 1-2
Date Sampled: 06/17/24 12:10
Percent Solids: 96
Initial Volume: 20.3g
Final Volume: 1ml
Extraction Method: 3546

ESS Laboratory Work Order: 24F0697
ESS Laboratory Sample ID: 24F0697-12
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TJ
Prepared: 6/18/24 18:50

Semi-Volatile Organic Compounds

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	Sequence	Batch
2-Methylnaphthalene	ND (0.205)	---	8270E PAH	---	2	TJ	06/20/24 23:29	D4F0422	DF41840
Acenaphthene	ND (0.205)	---	8270E PAH	---	2	TJ	06/20/24 23:29	D4F0422	DF41840
Acenaphthylene	**0.309** (0.205)	---	8270E PAH	---	2	TJ	06/20/24 23:29	D4F0422	DF41840
Anthracene	ND (0.205)	---	8270E PAH	---	2	TJ	06/20/24 23:29	D4F0422	DF41840
Benzo(a)anthracene	**0.602** (0.205)	---	8270E PAH	---	2	TJ	06/20/24 23:29	D4F0422	DF41840
Benzo(a)pyrene	**0.796** (0.205)	---	8270E PAH	---	2	TJ	06/20/24 23:29	D4F0422	DF41840
Benzo(b)fluoranthene	**1.57** (0.205)	---	8270E PAH	---	2	TJ	06/20/24 23:29	D4F0422	DF41840
Benzo(g,h,i)perylene	**1.53** (0.205)	---	8270E PAH	---	2	TJ	06/20/24 23:29	D4F0422	DF41840
Benzo(k)fluoranthene	**0.883** (0.205)	---	8270E PAH	---	2	TJ	06/20/24 23:29	D4F0422	DF41840
Chrysene	**0.787** (0.205)	---	8270E PAH	---	2	TJ	06/20/24 23:29	D4F0422	DF41840
Dibenzo(a,h)Anthracene	**0.349** (0.205)	---	8270E PAH	---	2	TJ	06/20/24 23:29	D4F0422	DF41840
Fluoranthene	**0.514** (0.205)	---	8270E PAH	---	2	TJ	06/20/24 23:29	D4F0422	DF41840
Fluorene	ND (0.205)	---	8270E PAH	---	2	TJ	06/20/24 23:29	D4F0422	DF41840
Indeno(1,2,3-cd)Pyrene	**1.22** (0.205)	---	8270E PAH	---	2	TJ	06/20/24 23:29	D4F0422	DF41840
Naphthalene	ND (0.205)	---	8270E PAH	---	2	TJ	06/20/24 23:29	D4F0422	DF41840
Phenanthrene	ND (0.205)	---	8270E PAH	---	2	TJ	06/20/24 23:29	D4F0422	DF41840
Pyrene	**0.782** (0.205)	---	8270E PAH	---	2	TJ	06/20/24 23:29	D4F0422	DF41840

	%Recovery	*Qualifier*	*Limits*
Surrogate: 1,2-Dichlorobenzene-d4	*87 %*		*30-130*
Surrogate: 2-Fluorobiphenyl	*90 %*		*30-130*
Surrogate: Nitrobenzene-d5	*94 %*		*30-130*
Surrogate: p-Terphenyl-d14	*134 %*		*30-130*

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Tidewater
Client Sample ID: GZ-SS-16 1-2
Date Sampled: 06/17/24 12:10
Percent Solids: 96
Initial Volume: 19.5g
Final Volume: 1ml
Extraction Method: 3546

ESS Laboratory Work Order: 24F0697
ESS Laboratory Sample ID: 24F0697-12
Sample Matrix: Soil
Units: mg/kg dry
Analyst: JDN
Prepared: 6/18/24 21:45

8100M Total Petroleum Hydrocarbons

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Total Petroleum Hydrocarbons (C9-C36)	**407** (200)	---	8100M	---	5	06/21/24 19:34	---	DF41841

	%Recovery	Qualifier	Limits
Surrogate: O-Terphenyl	*83 %*		*40-140*

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Tidewater
Client Sample ID: GZ-SS-16 1-2
Date Sampled: 06/17/24 12:10
Percent Solids: 96

ESS Laboratory Work Order: 24F0697
ESS Laboratory Sample ID: 24F0697-12
Sample Matrix: Soil

Classical Chemistry

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	Units	Batch
Cyanide (PAC)	**15.7** (0.94)	---	MA PAC	---	1	EEM	06/20/24 12:10	mg/kg dry	DF42021

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Tidewater
Client Sample ID: GZ-SS-17 0-1
Date Sampled: 06/17/24 12:45
Percent Solids: 96

ESS Laboratory Work Order: 24F0697
ESS Laboratory Sample ID: 24F0697-13
Sample Matrix: Soil
Units: mg/kg dry

Extraction Method: 3050B

Total Metals

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	IV / FV	Batch
Arsenic	**7.74** (1.90)	---	6010D	---	1	KJB	06/21/24 18:19	2.73 100	DF41916
Lead	**144** (3.80)	---	6010D	---	1	KJB	06/21/24 18:19	2.73 100	DF41916

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Tidewater
Client Sample ID: GZ-SS-17 0-1
Date Sampled: 06/17/24 12:45
Percent Solids: 96
Initial Volume: 19.6g
Final Volume: 1ml
Extraction Method: 3546

ESS Laboratory Work Order: 24F0697
ESS Laboratory Sample ID: 24F0697-13
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TJ
Prepared: 6/18/24 18:50

Semi-Volatile Organic Compounds

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	Sequence	Batch
2-Methylnaphthalene	ND (0.106)	---	8270E PAH	---	1	TJ	06/20/24 23:59	D4F0422	DF41840
Acenaphthene	ND (0.106)	---	8270E PAH	---	1	TJ	06/20/24 23:59	D4F0422	DF41840
Acenaphthylene	**0.149** (0.106)	---	8270E PAH	---	1	TJ	06/20/24 23:59	D4F0422	DF41840
Anthracene	ND (0.106)	---	8270E PAH	---	1	TJ	06/20/24 23:59	D4F0422	DF41840
Benzo(a)anthracene	**0.568** (0.106)	---	8270E PAH	---	1	TJ	06/20/24 23:59	D4F0422	DF41840
Benzo(a)pyrene	**0.650** (0.106)	---	8270E PAH	---	1	TJ	06/20/24 23:59	D4F0422	DF41840
Benzo(b)fluoranthene	**0.800** (0.106)	---	8270E PAH	---	1	TJ	06/20/24 23:59	D4F0422	DF41840
Benzo(g,h,i)perylene	**0.522** (0.106)	---	8270E PAH	---	1	TJ	06/20/24 23:59	D4F0422	DF41840
Benzo(k)fluoranthene	**0.637** (0.106)	---	8270E PAH	---	1	TJ	06/20/24 23:59	D4F0422	DF41840
Chrysene	**0.666** (0.106)	---	8270E PAH	---	1	TJ	06/20/24 23:59	D4F0422	DF41840
Dibenzo(a,h)Anthracene	**0.120** (0.106)	---	8270E PAH	---	1	TJ	06/20/24 23:59	D4F0422	DF41840
Fluoranthene	**0.999** (0.106)	---	8270E PAH	---	1	TJ	06/20/24 23:59	D4F0422	DF41840
Fluorene	ND (0.106)	---	8270E PAH	---	1	TJ	06/20/24 23:59	D4F0422	DF41840
Indeno(1,2,3-cd)Pyrene	**0.555** (0.106)	---	8270E PAH	---	1	TJ	06/20/24 23:59	D4F0422	DF41840
Naphthalene	ND (0.106)	---	8270E PAH	---	1	TJ	06/20/24 23:59	D4F0422	DF41840
Phenanthrene	**0.407** (0.106)	---	8270E PAH	---	1	TJ	06/20/24 23:59	D4F0422	DF41840
Pyrene	**1.32** (0.106)	---	8270E PAH	---	1	TJ	06/20/24 23:59	D4F0422	DF41840

	%Recovery	*Qualifier*	*Limits*
Surrogate: 1,2-Dichlorobenzene-d4	*78 %*		*30-130*
Surrogate: 2-Fluorobiphenyl	*78 %*		*30-130*
Surrogate: Nitrobenzene-d5	*89 %*		*30-130*
Surrogate: p-Terphenyl-d14	*121 %*		*30-130*

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Tidewater
Client Sample ID: GZ-SS-17 0-1
Date Sampled: 06/17/24 12:45
Percent Solids: 96
Initial Volume: 19.8g
Final Volume: 1ml
Extraction Method: 3546

ESS Laboratory Work Order: 24F0697
ESS Laboratory Sample ID: 24F0697-13
Sample Matrix: Soil
Units: mg/kg dry
Analyst: JDN
Prepared: 6/18/24 21:45

8100M Total Petroleum Hydrocarbons

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Total Petroleum Hydrocarbons (C9-C36)	**102** (39.3)	---	8100M	---	1	06/21/24 20:06	---	DF41841

	%Recovery	Qualifier	Limits
Surrogate: O-Terphenyl	64 %		40-140

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Tidewater
Client Sample ID: GZ-SS-17 0-1
Date Sampled: 06/17/24 12:45
Percent Solids: 96

ESS Laboratory Work Order: 24F0697
ESS Laboratory Sample ID: 24F0697-13
Sample Matrix: Soil

Classical Chemistry

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	Units	Batch
Cyanide (PAC)	**2.63** (1.04)	---	MA PAC	---	1	EEM	06/20/24 12:10	mg/kg dry	DF42021

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Tidewater
Client Sample ID: GZ-SS-17 1-2
Date Sampled: 06/17/24 13:00
Percent Solids: 97

ESS Laboratory Work Order: 24F0697
ESS Laboratory Sample ID: 24F0697-14
Sample Matrix: Soil
Units: mg/kg dry

Extraction Method: 3050B

Total Metals

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	IV / FV	Batch
Arsenic	**8.53** (1.94)	---	6010D	---	1	KJB	06/21/24 18:21	2.66 100	DF41916
Lead	**138** (3.88)	---	6010D	---	1	KJB	06/21/24 18:21	2.66 100	DF41916

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Tidewater
Client Sample ID: GZ-SS-17 1-2
Date Sampled: 06/17/24 13:00
Percent Solids: 97
Initial Volume: 19.3g
Final Volume: 1ml
Extraction Method: 3546

ESS Laboratory Work Order: 24F0697
ESS Laboratory Sample ID: 24F0697-14
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TJ
Prepared: 6/18/24 18:50

Semi-Volatile Organic Compounds

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	Sequence	Batch
2-Methylnaphthalene	ND (0.107)	---	8270E PAH	---	1	TJ	06/21/24 0:29	D4F0422	DF41840
Acenaphthene	ND (0.107)	---	8270E PAH	---	1	TJ	06/21/24 0:29	D4F0422	DF41840
Acenaphthylene	**0.266** (0.107)	---	8270E PAH	---	1	TJ	06/21/24 0:29	D4F0422	DF41840
Anthracene	**0.113** (0.107)	---	8270E PAH	---	1	TJ	06/21/24 0:29	D4F0422	DF41840
Benzo(a)anthracene	**0.634** (0.107)	---	8270E PAH	---	1	TJ	06/21/24 0:29	D4F0422	DF41840
Benzo(a)pyrene	**0.683** (0.107)	---	8270E PAH	---	1	TJ	06/21/24 0:29	D4F0422	DF41840
Benzo(b)fluoranthene	**0.828** (0.107)	---	8270E PAH	---	1	TJ	06/21/24 0:29	D4F0422	DF41840
Benzo(g,h,i)perylene	**0.491** (0.107)	---	8270E PAH	---	1	TJ	06/21/24 0:29	D4F0422	DF41840
Benzo(k)fluoranthene	**0.666** (0.107)	---	8270E PAH	---	1	TJ	06/21/24 0:29	D4F0422	DF41840
Chrysene	**0.635** (0.107)	---	8270E PAH	---	1	TJ	06/21/24 0:29	D4F0422	DF41840
Dibenzo(a,h)Anthracene	**0.110** (0.107)	---	8270E PAH	---	1	TJ	06/21/24 0:29	D4F0422	DF41840
Fluoranthene	**0.968** (0.107)	---	8270E PAH	---	1	TJ	06/21/24 0:29	D4F0422	DF41840
Fluorene	ND (0.107)	---	8270E PAH	---	1	TJ	06/21/24 0:29	D4F0422	DF41840
Indeno(1,2,3-cd)Pyrene	**0.559** (0.107)	---	8270E PAH	---	1	TJ	06/21/24 0:29	D4F0422	DF41840
Naphthalene	ND (0.107)	---	8270E PAH	---	1	TJ	06/21/24 0:29	D4F0422	DF41840
Phenanthrene	**0.306** (0.107)	---	8270E PAH	---	1	TJ	06/21/24 0:29	D4F0422	DF41840
Pyrene	**1.21** (0.107)	---	8270E PAH	---	1	TJ	06/21/24 0:29	D4F0422	DF41840

	%Recovery	Qualifier	Limits
Surrogate: 1,2-Dichlorobenzene-d4	*79 %*		*30-130*
Surrogate: 2-Fluorobiphenyl	*85 %*		*30-130*
Surrogate: Nitrobenzene-d5	*92 %*		*30-130*
Surrogate: p-Terphenyl-d14	*133 %*	*S+*	*30-130*

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Tidewater
Client Sample ID: GZ-SS-17 1-2
Date Sampled: 06/17/24 13:00
Percent Solids: 97
Initial Volume: 19.9g
Final Volume: 1ml
Extraction Method: 3546

ESS Laboratory Work Order: 24F0697
ESS Laboratory Sample ID: 24F0697-14
Sample Matrix: Soil
Units: mg/kg dry
Analyst: JDN
Prepared: 6/18/24 21:45

8100M Total Petroleum Hydrocarbons

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Total Petroleum Hydrocarbons (C9-C36)	**87.1** (38.9)	---	8100M	---	1	06/21/24 20:38	---	DF41841

	%Recovery	Qualifier	Limits
Surrogate: O-Terphenyl	64 %		40-140

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Tidewater
Client Sample ID: GZ-SS-17 1-2
Date Sampled: 06/17/24 13:00
Percent Solids: 97

ESS Laboratory Work Order: 24F0697
ESS Laboratory Sample ID: 24F0697-14
Sample Matrix: Soil

Classical Chemistry

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	Units	Batch
Cyanide (PAC)	**4.01** (0.94)	---	MA PAC	---	1	EEM	06/20/24 12:10	mg/kg dry	DF42021

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Tidewater
Client Sample ID: GZ-SS-18 0-1
Date Sampled: 06/17/24 12:15
Percent Solids: 95

ESS Laboratory Work Order: 24F0697
ESS Laboratory Sample ID: 24F0697-15
Sample Matrix: Soil
Units: mg/kg dry

Extraction Method: 3050B

Total Metals

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	IV / FV	Batch
Arsenic	**3.82** (1.76)	---	6010D	---	1	KJB	06/21/24 18:23	2.98 100	DF41916
Lead	**221** (3.53)	---	6010D	---	1	KJB	06/21/24 18:23	2.98 100	DF41916

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Tidewater
Client Sample ID: GZ-SS-18 0-1
Date Sampled: 06/17/24 12:15
Percent Solids: 95
Initial Volume: 19.2g
Final Volume: 1ml
Extraction Method: 3546

ESS Laboratory Work Order: 24F0697
ESS Laboratory Sample ID: 24F0697-15
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TJ
Prepared: 6/18/24 18:50

Semi-Volatile Organic Compounds

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	Sequence	Batch
2-Methylnaphthalene	**1.05** (0.219)	---	8270E PAH	---	2	TJ	06/21/24 1:00	D4F0422	DF41840
Acenaphthene	**0.303** (0.219)	---	8270E PAH	---	2	TJ	06/21/24 1:00	D4F0422	DF41840
Acenaphthylene	**10.2** (0.219)	---	8270E PAH	---	2	TJ	06/21/24 1:00	D4F0422	DF41840
Anthracene	**6.24** (0.219)	---	8270E PAH	---	2	TJ	06/21/24 1:00	D4F0422	DF41840
Benzo(a)anthracene	**29.1** (2.19)	---	8270E PAH	---	20	TJ	06/21/24 19:58	D4F0422	DF41840
Benzo(a)pyrene	**26.1** (0.219)	---	8270E PAH	---	2	TJ	06/21/24 1:00	D4F0422	DF41840
Benzo(b)fluoranthene	**37.6** (2.19)	---	8270E PAH	---	20	TJ	06/21/24 19:58	D4F0422	DF41840
Benzo(g,h,i)perylene	**19.2** (0.219)	---	8270E PAH	---	2	TJ	06/21/24 1:00	D4F0422	DF41840
Benzo(k)fluoranthene	**26.1** (0.219)	---	8270E PAH	---	2	TJ	06/21/24 1:00	D4F0422	DF41840
Chrysene	**30.2** (2.19)	---	8270E PAH	---	20	TJ	06/21/24 19:58	D4F0422	DF41840
Dibenzo(a,h)Anthracene	**5.83** (0.219)	---	8270E PAH	---	2	TJ	06/21/24 1:00	D4F0422	DF41840
Fluoranthene	**44.8** (2.19)	---	8270E PAH	---	20	TJ	06/21/24 19:58	D4F0422	DF41840
Fluorene	**1.14** (0.219)	---	8270E PAH	---	2	TJ	06/21/24 1:00	D4F0422	DF41840
Indeno(1,2,3-cd)Pyrene	**23.6** (0.219)	---	8270E PAH	---	2	TJ	06/21/24 1:00	D4F0422	DF41840
Naphthalene	**1.73** (0.219)	---	8270E PAH	---	2	TJ	06/21/24 1:00	D4F0422	DF41840
Phenanthrene	**14.8** (0.219)	---	8270E PAH	---	2	TJ	06/21/24 1:00	D4F0422	DF41840
Pyrene	**47.0** (2.19)	---	8270E PAH	---	20	TJ	06/21/24 19:58	D4F0422	DF41840

	%Recovery	*Qualifier*	*Limits*
Surrogate: 1,2-Dichlorobenzene-d4	*72 %*		*30-130*
Surrogate: 2-Fluorobiphenyl	*75 %*		*30-130*
Surrogate: Nitrobenzene-d5	*78 %*		*30-130*
Surrogate: p-Terphenyl-d14	*114 %*		*30-130*

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Tidewater
Client Sample ID: GZ-SS-18 0-1
Date Sampled: 06/17/24 12:15
Percent Solids: 95
Initial Volume: 19.1g
Final Volume: 1ml
Extraction Method: 3546

ESS Laboratory Work Order: 24F0697
ESS Laboratory Sample ID: 24F0697-15
Sample Matrix: Soil
Units: mg/kg dry
Analyst: JDN
Prepared: 6/18/24 21:45

8100M Total Petroleum Hydrocarbons

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Total Petroleum Hydrocarbons (C9-C36)	**3090** (413)	---	8100M	---	10	06/21/24 21:10	---	DF41841

	%Recovery	Qualifier	Limits
Surrogate: O-Terphenyl	*63 %*		*40-140*

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Tidewater
Client Sample ID: GZ-SS-18 0-1
Date Sampled: 06/17/24 12:15
Percent Solids: 95

ESS Laboratory Work Order: 24F0697
ESS Laboratory Sample ID: 24F0697-15
Sample Matrix: Soil

Classical Chemistry

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	Units	Batch
Cyanide (PAC)	**185** (26.3)	---	MA PAC	---	25	EEM	06/20/24 12:10	mg/kg dry	DF42021

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Tidewater
Client Sample ID: GZ-SS-18 1-2
Date Sampled: 06/17/24 12:30
Percent Solids: 95

ESS Laboratory Work Order: 24F0697
ESS Laboratory Sample ID: 24F0697-16
Sample Matrix: Soil
Units: mg/kg dry

Extraction Method: 3050B

Total Metals

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	IV / FV	Batch
Arsenic	**5.64** (1.91)	---	6010D	---	1	KJB	06/21/24 18:25	2.77 100	DF41916
Lead	**338** (3.81)	---	6010D	---	1	KJB	06/21/24 18:25	2.77 100	DF41916

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Tidewater
Client Sample ID: GZ-SS-18 1-2
Date Sampled: 06/17/24 12:30
Percent Solids: 95
Initial Volume: 19.4g
Final Volume: 1ml
Extraction Method: 3546

ESS Laboratory Work Order: 24F0697
ESS Laboratory Sample ID: 24F0697-16
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TJ
Prepared: 6/18/24 18:50

Semi-Volatile Organic Compounds

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	Sequence	Batch
2-Methylnaphthalene	**1.10** (0.218)	---	8270E PAH	---	2	TJ	06/21/24 1:30	D4F0422	DF41840
Acenaphthene	**0.234** (0.218)	---	8270E PAH	---	2	TJ	06/21/24 1:30	D4F0422	DF41840
Acenaphthylene	**5.82** (0.218)	---	8270E PAH	---	2	TJ	06/21/24 1:30	D4F0422	DF41840
Anthracene	**3.58** (0.218)	---	8270E PAH	---	2	TJ	06/21/24 1:30	D4F0422	DF41840
Benzo(a)anthracene	**12.5** (0.218)	---	8270E PAH	---	2	TJ	06/21/24 1:30	D4F0422	DF41840
Benzo(a)pyrene	**10.8** (0.218)	---	8270E PAH	---	2	TJ	06/21/24 1:30	D4F0422	DF41840
Benzo(b)fluoranthene	**18.6** (0.218)	---	8270E PAH	---	2	TJ	06/21/24 1:30	D4F0422	DF41840
Benzo(g,h,i)perylene	**8.21** (0.218)	---	8270E PAH	---	2	TJ	06/21/24 1:30	D4F0422	DF41840
Benzo(k)fluoranthene	**13.2** (0.218)	---	8270E PAH	---	2	TJ	06/21/24 1:30	D4F0422	DF41840
Chrysene	**14.0** (0.218)	---	8270E PAH	---	2	TJ	06/21/24 1:30	D4F0422	DF41840
Dibenzo(a,h)Anthracene	**2.13** (0.218)	---	8270E PAH	---	2	TJ	06/21/24 1:30	D4F0422	DF41840
Fluoranthene	**16.7** (0.218)	---	8270E PAH	---	2	TJ	06/21/24 1:30	D4F0422	DF41840
Fluorene	**0.484** (0.218)	---	8270E PAH	---	2	TJ	06/21/24 1:30	D4F0422	DF41840
Indeno(1,2,3-cd)Pyrene	**10.0** (0.218)	---	8270E PAH	---	2	TJ	06/21/24 1:30	D4F0422	DF41840
Naphthalene	**2.26** (0.218)	---	8270E PAH	---	2	TJ	06/21/24 1:30	D4F0422	DF41840
Phenanthrene	**7.15** (0.218)	---	8270E PAH	---	2	TJ	06/21/24 1:30	D4F0422	DF41840
Pyrene	**22.7** (0.218)	---	8270E PAH	---	2	TJ	06/21/24 1:30	D4F0422	DF41840

	%Recovery	*Qualifier*	*Limits*
Surrogate: 1,2-Dichlorobenzene-d4	*66 %*		*30-130*
Surrogate: 2-Fluorobiphenyl	*70 %*		*30-130*
Surrogate: Nitrobenzene-d5	*71 %*		*30-130*
Surrogate: p-Terphenyl-d14	*104 %*		*30-130*

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Tidewater
Client Sample ID: GZ-SS-18 1-2
Date Sampled: 06/17/24 12:30
Percent Solids: 95
Initial Volume: 19.6g
Final Volume: 1ml
Extraction Method: 3546

ESS Laboratory Work Order: 24F0697
ESS Laboratory Sample ID: 24F0697-16
Sample Matrix: Soil
Units: mg/kg dry
Analyst: JDN
Prepared: 6/18/24 21:45

8100M Total Petroleum Hydrocarbons

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Total Petroleum Hydrocarbons (C9-C36)	**1680** (202)	---	8100M	---	5	06/21/24 21:43	---	DF41841

	%Recovery	Qualifier	Limits
Surrogate: O-Terphenyl	*65 %*		*40-140*

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Tidewater
Client Sample ID: GZ-SS-18 1-2
Date Sampled: 06/17/24 12:30
Percent Solids: 95

ESS Laboratory Work Order: 24F0697
ESS Laboratory Sample ID: 24F0697-16
Sample Matrix: Soil

Classical Chemistry

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	Units	Batch
Cyanide (PAC)	**241** (26.4)	---	MA PAC	---	25	EEM	06/20/24 12:10	mg/kg dry	DF42021

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Tidewater
Client Sample ID: GZ-SS-19 0-1
Date Sampled: 06/17/24 12:45
Percent Solids: 98

ESS Laboratory Work Order: 24F0697
ESS Laboratory Sample ID: 24F0697-17
Sample Matrix: Soil
Units: mg/kg dry

Extraction Method: 3050B

Total Metals

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	IV / FV	Batch
Arsenic	**2.74** (1.89)	---	6010D	---	1	KJB	06/21/24 18:28	2.71 100	DF41916
Lead	**16.2** (3.77)	---	6010D	---	1	KJB	06/21/24 18:28	2.71 100	DF41916

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Tidewater
Client Sample ID: GZ-SS-19 0-1
Date Sampled: 06/17/24 12:45
Percent Solids: 98
Initial Volume: 19.9g
Final Volume: 1ml
Extraction Method: 3546

ESS Laboratory Work Order: 24F0697
ESS Laboratory Sample ID: 24F0697-17
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TJ
Prepared: 6/18/24 18:50

Semi-Volatile Organic Compounds

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	Sequence	Batch
2-Methylnaphthalene	ND (0.206)	---	8270E PAH	---	2	TJ	06/21/24 2:00	D4F0422	DF41840
Acenaphthene	ND (0.206)	---	8270E PAH	---	2	TJ	06/21/24 2:00	D4F0422	DF41840
Acenaphthylene	ND (0.206)	---	8270E PAH	---	2	TJ	06/21/24 2:00	D4F0422	DF41840
Anthracene	ND (0.206)	---	8270E PAH	---	2	TJ	06/21/24 2:00	D4F0422	DF41840
Benzo(a)anthracene	**0.257** (0.206)	---	8270E PAH	---	2	TJ	06/21/24 2:00	D4F0422	DF41840
Benzo(a)pyrene	**0.213** (0.206)	---	8270E PAH	---	2	TJ	06/21/24 2:00	D4F0422	DF41840
Benzo(b)fluoranthene	ND (0.206)	---	8270E PAH	---	2	TJ	06/21/24 2:00	D4F0422	DF41840
Benzo(g,h,i)perylene	ND (0.206)	---	8270E PAH	---	2	TJ	06/21/24 2:00	D4F0422	DF41840
Benzo(k)fluoranthene	**0.210** (0.206)	---	8270E PAH	---	2	TJ	06/21/24 2:00	D4F0422	DF41840
Chrysene	**0.305** (0.206)	---	8270E PAH	---	2	TJ	06/21/24 2:00	D4F0422	DF41840
Dibenzo(a,h)Anthracene	ND (0.206)	---	8270E PAH	---	2	TJ	06/21/24 2:00	D4F0422	DF41840
Fluoranthene	**0.342** (0.206)	---	8270E PAH	---	2	TJ	06/21/24 2:00	D4F0422	DF41840
Fluorene	ND (0.206)	---	8270E PAH	---	2	TJ	06/21/24 2:00	D4F0422	DF41840
Indeno(1,2,3-cd)Pyrene	ND (0.206)	---	8270E PAH	---	2	TJ	06/21/24 2:00	D4F0422	DF41840
Naphthalene	ND (0.206)	---	8270E PAH	---	2	TJ	06/21/24 2:00	D4F0422	DF41840
Phenanthrene	**0.381** (0.206)	---	8270E PAH	---	2	TJ	06/21/24 2:00	D4F0422	DF41840
Pyrene	**0.627** (0.206)	---	8270E PAH	---	2	TJ	06/21/24 2:00	D4F0422	DF41840

	%Recovery	*Qualifier*	*Limits*
Surrogate: 1,2-Dichlorobenzene-d4	*66 %*		*30-130*
Surrogate: 2-Fluorobiphenyl	*68 %*		*30-130*
Surrogate: Nitrobenzene-d5	*75 %*		*30-130*
Surrogate: p-Terphenyl-d14	*101 %*		*30-130*

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Tidewater
Client Sample ID: GZ-SS-19 0-1
Date Sampled: 06/17/24 12:45
Percent Solids: 98
Initial Volume: 19.3g
Final Volume: 1ml
Extraction Method: 3546

ESS Laboratory Work Order: 24F0697
ESS Laboratory Sample ID: 24F0697-17
Sample Matrix: Soil
Units: mg/kg dry
Analyst: JDN
Prepared: 6/18/24 21:45

8100M Total Petroleum Hydrocarbons

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Total Petroleum Hydrocarbons (C9-C36)	**42.3** (39.8)	---	8100M	---	1	06/20/24 22:27	---	DF41841

	%Recovery	Qualifier	Limits
Surrogate: O-Terphenyl	*75 %*		*40-140*

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Tidewater
Client Sample ID: GZ-SS-19 0-1
Date Sampled: 06/17/24 12:45
Percent Solids: 98

ESS Laboratory Work Order: 24F0697
ESS Laboratory Sample ID: 24F0697-17
Sample Matrix: Soil

Classical Chemistry

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	Units	Batch
Cyanide (PAC)	ND (1.02)	---	MA PAC	---	1	EEM	06/20/24 12:10	mg/kg dry	DF42021

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Tidewater
Client Sample ID: GZ-SS-19 1-2
Date Sampled: 06/17/24 13:00
Percent Solids: 91

ESS Laboratory Work Order: 24F0697
ESS Laboratory Sample ID: 24F0697-18
Sample Matrix: Soil
Units: mg/kg dry

Extraction Method: 3050B

Total Metals

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	IV / FV	Batch
Arsenic	**6.62** (2.23)	---	6010D	---	1	KJB	06/21/24 18:30	2.46 100	DF41916
Lead	**76.1** (4.46)	---	6010D	---	1	KJB	06/21/24 18:30	2.46 100	DF41916

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Tidewater
Client Sample ID: GZ-SS-19 1-2
Date Sampled: 06/17/24 13:00
Percent Solids: 91
Initial Volume: 19.3g
Final Volume: 1ml
Extraction Method: 3546

ESS Laboratory Work Order: 24F0697
ESS Laboratory Sample ID: 24F0697-18
Sample Matrix: Soil
Units: mg/kg dry
Analyst: TJ
Prepared: 6/18/24 18:50

Semi-Volatile Organic Compounds

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	Sequence	Batch
2-Methylnaphthalene	**2.75** (0.228)	---	8270E PAH	---	2	TJ	06/20/24 20:29	D4F0412	DF41840
Acenaphthene	**0.239** (0.228)	---	8270E PAH	---	2	TJ	06/20/24 20:29	D4F0412	DF41840
Acenaphthylene	**4.78** (0.228)	---	8270E PAH	---	2	TJ	06/20/24 20:29	D4F0412	DF41840
Anthracene	**3.87** (0.228)	---	8270E PAH	---	2	TJ	06/20/24 20:29	D4F0412	DF41840
Benzo(a)anthracene	**11.3** (0.228)	---	8270E PAH	---	2	TJ	06/20/24 20:29	D4F0412	DF41840
Benzo(a)pyrene	**9.59** (0.228)	---	8270E PAH	---	2	TJ	06/20/24 20:29	D4F0412	DF41840
Benzo(b)fluoranthene	**9.50** (0.228)	---	8270E PAH	---	2	TJ	06/20/24 20:29	D4F0412	DF41840
Benzo(g,h,i)perylene	**7.57** (0.228)	---	8270E PAH	---	2	TJ	06/20/24 20:29	D4F0412	DF41840
Benzo(k)fluoranthene	**7.44** (0.228)	---	8270E PAH	---	2	TJ	06/20/24 20:29	D4F0412	DF41840
Chrysene	**12.1** (0.228)	---	8270E PAH	---	2	TJ	06/20/24 20:29	D4F0412	DF41840
Dibenzo(a,h)Anthracene	**1.68** (0.228)	---	8270E PAH	---	2	TJ	06/20/24 20:29	D4F0412	DF41840
Fluoranthene	**19.7** (0.228)	---	8270E PAH	---	2	TJ	06/20/24 20:29	D4F0412	DF41840
Fluorene	**1.05** (0.228)	---	8270E PAH	---	2	TJ	06/20/24 20:29	D4F0412	DF41840
Indeno(1,2,3-cd)Pyrene	**7.62** (0.228)	---	8270E PAH	---	2	TJ	06/20/24 20:29	D4F0412	DF41840
Naphthalene	**4.89** (0.228)	---	8270E PAH	---	2	TJ	06/20/24 20:29	D4F0412	DF41840
Phenanthrene	**13.7** (0.228)	---	8270E PAH	---	2	TJ	06/20/24 20:29	D4F0412	DF41840
Pyrene	**19.0** (0.228)	---	8270E PAH	---	2	TJ	06/20/24 20:29	D4F0412	DF41840

	%Recovery	*Qualifier*	*Limits*
Surrogate: 1,2-Dichlorobenzene-d4	*54 %*		*30-130*
Surrogate: 2-Fluorobiphenyl	*54 %*		*30-130*
Surrogate: Nitrobenzene-d5	*51 %*		*30-130*
Surrogate: p-Terphenyl-d14	*56 %*		*30-130*

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Tidewater
Client Sample ID: GZ-SS-19 1-2
Date Sampled: 06/17/24 13:00
Percent Solids: 91
Initial Volume: 20.5g
Final Volume: 1ml
Extraction Method: 3546

ESS Laboratory Work Order: 24F0697
ESS Laboratory Sample ID: 24F0697-18
Sample Matrix: Soil
Units: mg/kg dry
Analyst: JDN
Prepared: 6/18/24 21:45

8100M Total Petroleum Hydrocarbons

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Total Petroleum Hydrocarbons (C9-C36)	**834** (80.4)	---	8100M	---	2	06/21/24 22:15	---	DF41841

	%Recovery	Qualifier	Limits
Surrogate: O-Terphenyl	*51 %*		*40-140*

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Tidewater
Client Sample ID: GZ-SS-19 1-2
Date Sampled: 06/17/24 13:00
Percent Solids: 91

ESS Laboratory Work Order: 24F0697
ESS Laboratory Sample ID: 24F0697-18
Sample Matrix: Soil

Classical Chemistry

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	Units	Batch
Cyanide (PAC)	**8.33** (1.10)	---	MA PAC	---	1	EEM	06/20/24 12:10	mg/kg dry	DF42021

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Tidewater ESS Laboratory Work Order: 24F0697

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
Total Metals										
Batch DF41916 - 3050B										
Blank										
Arsenic	ND	2.36	mg/kg wet							
Lead	ND	4.72	mg/kg wet							
LCS										
Arsenic	311	7.69	mg/kg wet	360.0		86	80-120			
Lead	95.5	15.4	mg/kg wet	100.0		96	80-120			
LCS Dup										
Arsenic	341	8.33	mg/kg wet	360.0		95	80-120	9	30	
Lead	103	16.7	mg/kg wet	100.0		103	80-120	8	30	
Semi-Volatile Organic Compounds										
Batch DF41830 - 3546										
Blank										
2-Methylnaphthalene	ND	0.100	mg/kg wet							
Acenaphthene	ND	0.100	mg/kg wet							
Acenaphthylene	ND	0.100	mg/kg wet							
Anthracene	ND	0.100	mg/kg wet							
Benzo(a)anthracene	ND	0.100	mg/kg wet							
Benzo(a)pyrene	ND	0.100	mg/kg wet							
Benzo(b)fluoranthene	ND	0.100	mg/kg wet							
Benzo(g,h,i)perylene	ND	0.100	mg/kg wet							
Benzo(k)fluoranthene	ND	0.100	mg/kg wet							
Chrysene	ND	0.100	mg/kg wet							
Dibenzo(a,h)Anthracene	ND	0.100	mg/kg wet							
Fluoranthene	ND	0.100	mg/kg wet							
Fluorene	ND	0.100	mg/kg wet							
Indeno(1,2,3-cd)Pyrene	ND	0.100	mg/kg wet							
Naphthalene	ND	0.100	mg/kg wet							
Phenanthrene	ND	0.100	mg/kg wet							
Pyrene	ND	0.100	mg/kg wet							
Surrogate: 1,2-Dichlorobenzene-d4	*2.42*		mg/kg wet	*2.500*		*97*	*30-130*			
Surrogate: 2-Fluorobiphenyl	*2.57*		mg/kg wet	*2.500*		*103*	*30-130*			
Surrogate: Nitrobenzene-d5	*2.64*		mg/kg wet	*2.500*		*106*	*30-130*			
Surrogate: p-Terphenyl-d14	*3.06*		mg/kg wet	*2.500*		*122*	*30-130*			
LCS										
2-Methylnaphthalene	2.14	0.100	mg/kg wet	2.500		85	40-140			
Acenaphthene	2.55	0.100	mg/kg wet	2.500		102	40-140			
Acenaphthylene	2.67	0.100	mg/kg wet	2.500		107	40-140			
Anthracene	2.66	0.100	mg/kg wet	2.500		106	40-140			
Benzo(a)anthracene	2.74	0.100	mg/kg wet	2.500		110	40-140			
Benzo(a)pyrene	2.76	0.100	mg/kg wet	2.500		110	40-140			
Benzo(b)fluoranthene	2.69	0.100	mg/kg wet	2.500		107	40-140			

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Tidewater ESS Laboratory Work Order: 24F0697

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
Semi-Volatile Organic Compounds										
Batch DF41830 - 3546										
Benzo(g,h,i)perylene	2.52	0.100	mg/kg wet	2.500		101	40-140			
Benzo(k)fluoranthene	2.77	0.100	mg/kg wet	2.500		111	40-140			
Chrysene	2.66	0.100	mg/kg wet	2.500		106	40-140			
Dibenzo(a,h)Anthracene	2.51	0.100	mg/kg wet	2.500		100	40-140			
Fluoranthene	2.61	0.100	mg/kg wet	2.500		104	40-140			
Fluorene	2.61	0.100	mg/kg wet	2.500		105	40-140			
Indeno(1,2,3-cd)Pyrene	2.39	0.100	mg/kg wet	2.500		96	40-140			
Naphthalene	2.12	0.100	mg/kg wet	2.500		85	40-140			
Phenanthrene	2.56	0.100	mg/kg wet	2.500		102	40-140			
Pyrene	3.01	0.100	mg/kg wet	2.500		121	40-140			
Surrogate: 1,2-Dichlorobenzene-d4	*2.49*		mg/kg wet	*2.500*		*99*	*30-130*			
Surrogate: 2-Fluorobiphenyl	*2.69*		mg/kg wet	*2.500*		*108*	*30-130*			
Surrogate: Nitrobenzene-d5	*2.43*		mg/kg wet	*2.500*		*97*	*30-130*			
Surrogate: p-Terphenyl-d14	*3.16*		mg/kg wet	*2.500*		*126*	*30-130*			
LCS Dup										
2-Methylnaphthalene	2.16	0.100	mg/kg wet	2.500		86	40-140	1	30	
Acenaphthene	2.54	0.100	mg/kg wet	2.500		102	40-140	0.2	30	
Acenaphthylene	2.66	0.100	mg/kg wet	2.500		107	40-140	0.1	30	
Anthracene	2.72	0.100	mg/kg wet	2.500		109	40-140	2	30	
Benzo(a)anthracene	2.78	0.100	mg/kg wet	2.500		111	40-140	2	30	
Benzo(a)pyrene	2.75	0.100	mg/kg wet	2.500		110	40-140	0.2	30	
Benzo(b)fluoranthene	2.68	0.100	mg/kg wet	2.500		107	40-140	0.1	30	
Benzo(g,h,i)perylene	2.53	0.100	mg/kg wet	2.500		101	40-140	0.3	30	
Benzo(k)fluoranthene	2.78	0.100	mg/kg wet	2.500		111	40-140	0.3	30	
Chrysene	2.67	0.100	mg/kg wet	2.500		107	40-140	0.5	30	
Dibenzo(a,h)Anthracene	2.56	0.100	mg/kg wet	2.500		102	40-140	2	30	
Fluoranthene	2.67	0.100	mg/kg wet	2.500		107	40-140	2	30	
Fluorene	2.63	0.100	mg/kg wet	2.500		105	40-140	0.5	30	
Indeno(1,2,3-cd)Pyrene	2.45	0.100	mg/kg wet	2.500		98	40-140	3	30	
Naphthalene	2.13	0.100	mg/kg wet	2.500		85	40-140	0.3	30	
Phenanthrene	2.58	0.100	mg/kg wet	2.500		103	40-140	0.9	30	
Pyrene	3.01	0.100	mg/kg wet	2.500		121	40-140	0.03	30	
Surrogate: 1,2-Dichlorobenzene-d4	*2.41*		mg/kg wet	*2.500*		*97*	*30-130*			
Surrogate: 2-Fluorobiphenyl	*2.62*		mg/kg wet	*2.500*		*105*	*30-130*			
Surrogate: Nitrobenzene-d5	*2.37*		mg/kg wet	*2.500*		*95*	*30-130*			
Surrogate: p-Terphenyl-d14	*3.02*		mg/kg wet	*2.500*		*121*	*30-130*			
Batch DF41840 - 3546										
Blank										
2-Methylnaphthalene	ND	0.100	mg/kg wet							
Acenaphthene	ND	0.100	mg/kg wet							
Acenaphthylene	ND	0.100	mg/kg wet							
Anthracene	ND	0.100	mg/kg wet							

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Tidewater ESS Laboratory Work Order: 24F0697

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
Semi-Volatile Organic Compounds										
Batch DF41840 - 3546										
Benzo(a)anthracene	ND	0.100	mg/kg wet							
Benzo(a)pyrene	ND	0.100	mg/kg wet							
Benzo(b)fluoranthene	ND	0.100	mg/kg wet							
Benzo(g,h,i)perylene	ND	0.100	mg/kg wet							
Benzo(k)fluoranthene	ND	0.100	mg/kg wet							
Chrysene	ND	0.100	mg/kg wet							
Dibenzo(a,h)Anthracene	ND	0.100	mg/kg wet							
Fluoranthene	ND	0.100	mg/kg wet							
Fluorene	ND	0.100	mg/kg wet							
Indeno(1,2,3-cd)Pyrene	ND	0.100	mg/kg wet							
Naphthalene	ND	0.100	mg/kg wet							
Phenanthrene	ND	0.100	mg/kg wet							
Pyrene	ND	0.100	mg/kg wet							
Surrogate: 1,2-Dichlorobenzene-d4	*2.42*		mg/kg wet	*2.500*		*97*	*30-130*			
Surrogate: 2-Fluorobiphenyl	*2.26*		mg/kg wet	*2.500*		*91*	*30-130*			
Surrogate: Nitrobenzene-d5	*2.44*		mg/kg wet	*2.500*		*98*	*30-130*			
Surrogate: p-Terphenyl-d14	*2.39*		mg/kg wet	*2.500*		*96*	*30-130*			
LCS										
2-Methylnaphthalene	2.03	0.100	mg/kg wet	2.500		81	40-140			
Acenaphthene	2.33	0.100	mg/kg wet	2.500		93	40-140			
Acenaphthylene	2.31	0.100	mg/kg wet	2.500		93	40-140			
Anthracene	2.35	0.100	mg/kg wet	2.500		94	40-140			
Benzo(a)anthracene	2.38	0.100	mg/kg wet	2.500		95	40-140			
Benzo(a)pyrene	2.41	0.100	mg/kg wet	2.500		96	40-140			
Benzo(b)fluoranthene	2.38	0.100	mg/kg wet	2.500		95	40-140			
Benzo(g,h,i)perylene	2.60	0.100	mg/kg wet	2.500		104	40-140			
Benzo(k)fluoranthene	2.10	0.100	mg/kg wet	2.500		84	40-140			
Chrysene	2.40	0.100	mg/kg wet	2.500		96	40-140			
Dibenzo(a,h)Anthracene	2.43	0.100	mg/kg wet	2.500		97	40-140			
Fluoranthene	2.36	0.100	mg/kg wet	2.500		94	40-140			
Fluorene	2.41	0.100	mg/kg wet	2.500		97	40-140			
Indeno(1,2,3-cd)Pyrene	2.44	0.100	mg/kg wet	2.500		98	40-140			
Naphthalene	2.04	0.100	mg/kg wet	2.500		82	40-140			
Phenanthrene	2.29	0.100	mg/kg wet	2.500		92	40-140			
Pyrene	2.52	0.100	mg/kg wet	2.500		101	40-140			
Surrogate: 1,2-Dichlorobenzene-d4	*2.39*		mg/kg wet	*2.500*		*96*	*30-130*			
Surrogate: 2-Fluorobiphenyl	*2.32*		mg/kg wet	*2.500*		*93*	*30-130*			
Surrogate: Nitrobenzene-d5	*2.20*		mg/kg wet	*2.500*		*88*	*30-130*			
Surrogate: p-Terphenyl-d14	*2.43*		mg/kg wet	*2.500*		*97*	*30-130*			
LCS Dup										
2-Methylnaphthalene	1.97	0.100	mg/kg wet	2.500		79	40-140	3	30	
Acenaphthene	2.27	0.100	mg/kg wet	2.500		91	40-140	3	30	

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Tidewater ESS Laboratory Work Order: 24F0697

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
Semi-Volatile Organic Compounds										
Batch DF41840 - 3546										
Acenaphthylene	2.27	0.100	mg/kg wet	2.500		91	40-140	2	30	
Anthracene	2.30	0.100	mg/kg wet	2.500		92	40-140	2	30	
Benzo(a)anthracene	2.30	0.100	mg/kg wet	2.500		92	40-140	3	30	
Benzo(a)pyrene	2.34	0.100	mg/kg wet	2.500		94	40-140	3	30	
Benzo(b)fluoranthene	2.34	0.100	mg/kg wet	2.500		94	40-140	2	30	
Benzo(g,h,i)perylene	2.56	0.100	mg/kg wet	2.500		102	40-140	2	30	
Benzo(k)fluoranthene	2.03	0.100	mg/kg wet	2.500		81	40-140	3	30	
Chrysene	2.33	0.100	mg/kg wet	2.500		93	40-140	3	30	
Dibenzo(a,h)Anthracene	2.41	0.100	mg/kg wet	2.500		96	40-140	1	30	
Fluoranthene	2.29	0.100	mg/kg wet	2.500		92	40-140	3	30	
Fluorene	2.33	0.100	mg/kg wet	2.500		93	40-140	3	30	
Indeno(1,2,3-cd)Pyrene	2.39	0.100	mg/kg wet	2.500		95	40-140	2	30	
Naphthalene	1.99	0.100	mg/kg wet	2.500		80	40-140	3	30	
Phenanthrene	2.25	0.100	mg/kg wet	2.500		90	40-140	2	30	
Pyrene	2.44	0.100	mg/kg wet	2.500		98	40-140	3	30	
Surrogate: 1,2-Dichlorobenzene-d4	*2.28*		mg/kg wet	*2.500*		*91*	*30-130*			
Surrogate: 2-Fluorobiphenyl	*2.19*		mg/kg wet	*2.500*		*88*	*30-130*			
Surrogate: Nitrobenzene-d5	*2.10*		mg/kg wet	*2.500*		*84*	*30-130*			
Surrogate: p-Terphenyl-d14	*2.27*		mg/kg wet	*2.500*		*91*	*30-130*			
8100M Total Petroleum Hydrocarbons										
Batch DF41829 - 3546										
Blank										
Decane (C10)	ND	0.2	mg/kg wet							
Docosane (C22)	ND	0.2	mg/kg wet							
Dodecane (C12)	ND	0.2	mg/kg wet							
Eicosane (C20)	ND	0.2	mg/kg wet							
Hexacosane (C26)	ND	0.2	mg/kg wet							
Hexadecane (C16)	ND	0.2	mg/kg wet							
Nonadecane (C19)	ND	0.2	mg/kg wet							
Nonane (C9)	ND	0.2	mg/kg wet							
Octacosane (C28)	ND	0.2	mg/kg wet							
Octadecane (C18)	ND	0.2	mg/kg wet							
Tetracosane (C24)	ND	0.2	mg/kg wet							
Tetradecane (C14)	ND	0.2	mg/kg wet							
Total Petroleum Hydrocarbons (C9-C36)	ND	37.5	mg/kg wet							
Triacontane (C30)	ND	0.2	mg/kg wet							
Surrogate: O-Terphenyl	*3.84*		mg/kg wet	*5.000*		*77*	*40-140*			
LCS										
Decane (C10)	1.5	0.2	mg/kg wet	2.500		62	40-140			
Docosane (C22)	1.8	0.2	mg/kg wet	2.500		72	40-140			
Dodecane (C12)	1.7	0.2	mg/kg wet	2.500		66	40-140			

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Tidewater ESS Laboratory Work Order: 24F0697

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8100M Total Petroleum Hydrocarbons										
Batch DF41829 - 3546										
Eicosane (C20)	1.8	0.2	mg/kg wet	2.500		70	40-140			
Hexacosane (C26)	1.9	0.2	mg/kg wet	2.500		76	40-140			
Hexadecane (C16)	1.7	0.2	mg/kg wet	2.500		69	40-140			
Nonadecane (C19)	1.8	0.2	mg/kg wet	2.500		70	40-140			
Nonane (C9)	1.4	0.2	mg/kg wet	2.500		54	30-140			
Octacosane (C28)	1.9	0.2	mg/kg wet	2.500		76	40-140			
Octadecane (C18)	1.7	0.2	mg/kg wet	2.500		68	40-140			
Tetracosane (C24)	1.7	0.2	mg/kg wet	2.500		69	40-140			
Tetradecane (C14)	1.7	0.2	mg/kg wet	2.500		68	40-140			
Total Petroleum Hydrocarbons (C9-C36)	24.5	37.5	mg/kg wet	35.00		70	40-140			
Triacontane (C30)	1.9	0.2	mg/kg wet	2.500		77	40-140			
Surrogate: O-Terphenyl	*3.59*		mg/kg wet	*5.000*		*72*	*40-140*			
LCS Dup										
Decane (C10)	1.4	0.2	mg/kg wet	2.500		58	40-140	7	25	
Docosane (C22)	1.6	0.2	mg/kg wet	2.500		65	40-140	10	25	
Dodecane (C12)	1.5	0.2	mg/kg wet	2.500		61	40-140	8	25	
Eicosane (C20)	1.6	0.2	mg/kg wet	2.500		63	40-140	10	25	
Hexacosane (C26)	1.7	0.2	mg/kg wet	2.500		69	40-140	9	25	
Hexadecane (C16)	1.6	0.2	mg/kg wet	2.500		63	40-140	9	25	
Nonadecane (C19)	1.6	0.2	mg/kg wet	2.500		63	40-140	10	25	
Nonane (C9)	1.3	0.2	mg/kg wet	2.500		51	30-140	6	25	
Octacosane (C28)	1.7	0.2	mg/kg wet	2.500		69	40-140	9	25	
Octadecane (C18)	1.5	0.2	mg/kg wet	2.500		62	40-140	10	25	
Tetracosane (C24)	1.6	0.2	mg/kg wet	2.500		63	40-140	10	25	
Tetradecane (C14)	1.6	0.2	mg/kg wet	2.500		62	40-140	9	25	
Total Petroleum Hydrocarbons (C9-C36)	22.2	37.5	mg/kg wet	35.00		63	40-140	10	25	
Triacontane (C30)	1.7	0.2	mg/kg wet	2.500		70	40-140	9	25	
Surrogate: O-Terphenyl	*3.20*		mg/kg wet	*5.000*		*64*	*40-140*			
Batch DF41841 - 3546										
Blank										
Decane (C10)	ND	0.2	mg/kg wet							
Docosane (C22)	ND	0.2	mg/kg wet							
Dodecane (C12)	ND	0.2	mg/kg wet							
Eicosane (C20)	ND	0.2	mg/kg wet							
Hexacosane (C26)	ND	0.2	mg/kg wet							
Hexadecane (C16)	ND	0.2	mg/kg wet							
Nonadecane (C19)	ND	0.2	mg/kg wet							
Nonane (C9)	ND	0.2	mg/kg wet							
Octacosane (C28)	ND	0.2	mg/kg wet							
Octadecane (C18)	ND	0.2	mg/kg wet							
Tetracosane (C24)	ND	0.2	mg/kg wet							
Tetradecane (C14)	ND	0.2	mg/kg wet							

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Tidewater ESS Laboratory Work Order: 24F0697

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8100M Total Petroleum Hydrocarbons										
Batch DF41841 - 3546										
Total Petroleum Hydrocarbons (C9-C36)	ND	37.5	mg/kg wet							
Triacontane (C30)	ND	0.2	mg/kg wet							
Surrogate: O-Terphenyl	*3.51*		mg/kg wet	*5.000*		*70*	*40-140*			
LCS										
Decane (C10)	1.6	0.2	mg/kg wet	2.500		65	40-140			
Docosane (C22)	1.9	0.2	mg/kg wet	2.500		78	40-140			
Dodecane (C12)	1.8	0.2	mg/kg wet	2.500		71	40-140			
Eicosane (C20)	1.9	0.2	mg/kg wet	2.500		76	40-140			
Hexacosane (C26)	2.1	0.2	mg/kg wet	2.500		83	40-140			
Hexadecane (C16)	1.9	0.2	mg/kg wet	2.500		75	40-140			
Nonadecane (C19)	1.9	0.2	mg/kg wet	2.500		76	40-140			
Nonane (C9)	1.4	0.2	mg/kg wet	2.500		56	30-140			
Octacosane (C28)	2.1	0.2	mg/kg wet	2.500		83	40-140			
Octadecane (C18)	1.8	0.2	mg/kg wet	2.500		74	40-140			
Tetracosane (C24)	1.9	0.2	mg/kg wet	2.500		75	40-140			
Tetradecane (C14)	1.8	0.2	mg/kg wet	2.500		74	40-140			
Total Petroleum Hydrocarbons (C9-C36)	26.1	37.5	mg/kg wet	35.00		75	40-140			
Triacontane (C30)	2.1	0.2	mg/kg wet	2.500		83	40-140			
Surrogate: O-Terphenyl	*3.65*		mg/kg wet	*5.000*		*73*	*40-140*			
LCS Dup										
Decane (C10)	1.7	0.2	mg/kg wet	2.500		66	40-140	2	25	
Docosane (C22)	2.0	0.2	mg/kg wet	2.500		79	40-140	1	25	
Dodecane (C12)	1.8	0.2	mg/kg wet	2.500		72	40-140	2	25	
Eicosane (C20)	1.9	0.2	mg/kg wet	2.500		77	40-140	1	25	
Hexacosane (C26)	2.1	0.2	mg/kg wet	2.500		84	40-140	0.9	25	
Hexadecane (C16)	1.9	0.2	mg/kg wet	2.500		76	40-140	1	25	
Nonadecane (C19)	1.9	0.2	mg/kg wet	2.500		77	40-140	2	25	
Nonane (C9)	1.4	0.2	mg/kg wet	2.500		58	30-140	3	25	
Octacosane (C28)	2.1	0.2	mg/kg wet	2.500		83	40-140	0.9	25	
Octadecane (C18)	1.9	0.2	mg/kg wet	2.500		75	40-140	1	25	
Tetracosane (C24)	1.9	0.2	mg/kg wet	2.500		76	40-140	1	25	
Tetradecane (C14)	1.9	0.2	mg/kg wet	2.500		75	40-140	1	25	
Total Petroleum Hydrocarbons (C9-C36)	26.5	37.5	mg/kg wet	35.00		76	40-140	2	25	
Triacontane (C30)	2.1	0.2	mg/kg wet	2.500		84	40-140	1	25	
Surrogate: O-Terphenyl	*3.60*		mg/kg wet	*5.000*		*72*	*40-140*			
Classical Chemistry										
Batch DF42021 - TCN Prep										
Blank										
Cyanide (PAC)	ND	1.00	mg/kg wet							

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Tidewater ESS Laboratory Work Order: 24F0697

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
Classical Chemistry										
Batch DF42021 - TCN Prep										
LCS										
Cyanide (PAC)	5.06	1.00	mg/kg wet	5.015		101	80-120			
LCS										
Cyanide (PAC)	20.4	1.00	mg/kg wet	20.06		102	80-120			
LCS Dup										
Cyanide (PAC)	20.3	1.00	mg/kg wet	200.6		10	80-120	0.5	20	
Reference										
Cyanide (PAC)	2.83	1.00	mg/kg wet	76.30		4	0-10			

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Tidewater ESS Laboratory Work Order: 24F0697

Notes and Definitions

U	Analyte included in the analysis, but not detected
S+	Surrogate recovery(ies) above upper control limit (S+).
EL	Elevated Method Reporting Limits due to sample matrix (EL).
D	Diluted.
CD+	Continuing Calibration %Diff/Drift is above control limit (CD+).
ND	Analyte NOT DETECTED at or above the MRL (LOQ), LOD for DoD Reports, MDL for J-Flagged Analytes
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
MDL	Method Detection Limit
MRL	Method Reporting Limit
LOD	Limit of Detection
LOQ	Limit of Quantitation
DL	Detection Limit
I/V	Initial Volume
F/V	Final Volume
§	Subcontracted analysis; see attached report
1	Range result excludes concentrations of surrogates and/or internal standards eluting in that range.
2	Range result excludes concentrations of target analytes eluting in that range.
3	Range result excludes the concentration of the C9-C10 aromatic range.
Avg	Results reported as a mathematical average.
NR	No Recovery
[CALC]	Calculated Analyte
SUB	Subcontracted analysis; see attached report
RL	Reporting Limit
EDL	Estimated Detection Limit
MF	Membrane Filtration
MPN	Most Probable Number
TNTC	Too numerous to Count
CFU	Colony Forming Units

CERTIFICATE OF ANALYSIS

Client Name: GZA GeoEnvironmental, Inc.
Client Project ID: Tidewater ESS Laboratory Work Order: 24F0697

ESS LABORATORY CERTIFICATIONS AND ACCREDITATIONS

ENVIRONMENTAL

Rhode Island Potable and Non Potable Water: LAI00179
http://www.health.ri.gov/find/labs/analytical/ESS.pdf

Connecticut Potable and Non Potable Water, Solid and Hazardous Waste: PH-0750
http://www.ct.gov/dph/lib/dph/environmental_health/environmental_laboratories/pdf/OutofStateCommercialLaboratories.pdf

Maine Potable and Non Potable Water, and Solid and Hazardous Waste: RI00002
http://www.maine.gov/dhhs/mecdc/environmental-health/dwp/partners/labCert.shtml

Massachusetts Potable and Non Potable Water: M-RI002
http://public.dep.state.ma.us/Labcert/Labcert.aspx

New Hampshire (NELAP accredited) Potable and Non Potable Water, Solid and Hazardous Waste: 2424
http://des.nh.gov/organization/divisions/water/dwgb/nhelap/index.htm

New York (NELAP accredited) Non Potable Water, Solid and Hazardous Waste: 11313
http://www.wadsworth.org/labcert/elap/comm.html

New Jersey (NELAP accredited) Non Potable Water, Solid and Hazardous Waste: RI006
http://datamine2.state.nj.us/DEP_OPRA/OpraMain/pi_main?mode=pi_by_site&sort_order=PI_NAMEA&Select+a+Site:=58715

Pennsylvania: 68-01752
http://www.dep.pa.gov/Business/OtherPrograms/Labs/Pages/Laboratory-Accreditation-Program.aspx

ESS Laboratory Sample and Cooler Receipt Checklist

Client: GZA - Glastonbury CT - GZA/ML

Shipped/Delivered Via: Client

ESS Project ID: 24F0697
Date Received: 6/17/2024
Project Due Date: 6/24/2024
Days for Project: 5 Day

1. Air bill manifest present? No
   Air No.: NA
2. Were custody seals present? No
3. Is radiation count <100 CPM? Yes
4. Is a Cooler Present? Yes
   Temp: 5.6 Iced with: Ice
5. Was COC signed and dated by client? Yes
6. Does COC match bottles? Yes
7. Is COC complete and correct? Yes
8. Were samples received intact? Yes
9. **Were labs informed about short holds & rushes?** Yes / No / NA
10. Were any analyses received outside of hold time? Yes / No

11. Any Subcontracting needed? Yes / No
    ESS Sample IDs:
    Analysis:
    TAT:
12. Were VOAs received? Yes / No
    a. Air bubbles in aqueous VOAs? Yes / No
    b. Does methanol cover soil completely? Yes / No / NA
13. Are the samples properly preserved? Yes / No
    a. If metals preserved upon receipt: Date: Time: By/Acid Lot#:
    b. If dissolved metals are requested, are they: Yes / No Field Filtered — Yes / No To Be Lab Filtered
    c. Low Level VOA vials frozen: Date: Time: By:

Sample Receiving Notes:

14. Was there a need to contact Project Manager? Yes / No
    a. Was there a need to contact the client? Yes / No
    Who was contacted: Date: Time: By:

Resolution:

Sample Number	Container ID	Proper Container	Air Bubbles Present	Sufficient Volume	Container Type	Preservative	Record pH (Cyanide and 608 Pesticides)
1	562487	Yes	N/A	Yes	8 oz jar	NP	
2	562488	Yes	N/A	Yes	8 oz jar	NP	
3	562489	Yes	N/A	Yes	8 oz jar	NP	
4	562490	Yes	N/A	Yes	8 oz jar	NP	
5	562491	Yes	N/A	Yes	8 oz jar	NP	
6	562492	Yes	N/A	Yes	8 oz jar	NP	
7	562493	Yes	N/A	Yes	8 oz jar	NP	
8	562494	Yes	N/A	Yes	8 oz jar	NP	
9	562495	Yes	N/A	Yes	8 oz jar	NP	
10	562496	Yes	N/A	Yes	8 oz jar	NP	
11	562497	Yes	N/A	Yes	8 oz jar	NP	
12	562498	Yes	N/A	Yes	8 oz jar	NP	
13	562499	Yes	N/A	Yes	8 oz jar	NP	
14	562500	Yes	N/A	Yes	8 oz jar	NP	
15	562501	Yes	N/A	Yes	8 oz jar	NP	
16	562502	Yes	N/A	Yes	8 oz jar	NP	
17	562503	Yes	N/A	Yes	8 oz jar	NP	
18	562504	Yes	N/A	Yes	8 oz jar	NP	

ESS Laboratory Sample and Cooler Receipt Checklist

Client: GZA - Glastonbury CT - GZA/ML

ESS Project ID: 24F0697

Date Received: 6/17/2024

2nd Review

Were all containers scanned into storage/lab? Initials TD Yes / No

Are barcode labels on correct containers? Yes / No

Are all Flashpoint stickers attached/container ID # circled? Yes / No / NA

Are all Hex Chrome stickers attached? Yes / No / NA

Are all QC stickers attached? Yes / No / NA

Are VOA stickers attached if bubbles noted? Yes / No / NA

Completed By: [signature] Date & Time: 6/17/24 1601

Reviewed By: [signature] Date & Time: 6/17/24 1611

ESS LABORATORY

185 Frances Avenue
Cranston, RI 02921
Phone: 401-461-7181
[redacted]
www.esslaboratory.com

CHAIN OF CUSTODY

ESS Lab # 24F0697 | Page 3 of 4

Turn Time: ☐ >5 ☒ 5 ☐ 4 ☐ 3 ☐ 2 ☐ 1 ☐ Same Day
Regulatory State: RI Criteria:
Is this project for any of the following?: ☐ CT RCP ☐ MA MCP ☐ RGP ☐ Permit ☐ 401 WQ

ELECTRONIC DELIVERABLES (Final Reports are PDF)
☒ Limit Checker ☐ State Forms ☐ EQuIS
☒ Excel ☐ Hard Copy ☐ Enviro Data
☐ CLP-Like Package ☒ Other (Specify) → PDF

CLIENT INFORMATION

Client: GZA
Address: 95 Glastenbury blvd.
Glastenbury, CT
Phone: 860-250-8556
Email Distribution List:
dave.rusczyk@gza.com
benjamin.rumery@gza.com

PROJECT INFORMATION

Project Name: Tradewater
Project Location: Pawtucket, RI
Project Number: 43654.00
Project Manager: Dave Ruscezyk
Bill to: GZA
PO#: –
Quote#: –

Client acknowledges that sampling is compliant with all EPA / State regulatory programs

REQUESTED ANALYSES

ESS Lab ID	Collection Date	Collection Time	Sample Type	Sample Matrix	Sample ID	PAHs	Lead	Arsenic	EPH's	PAC *	Total Number of Bottles
1	6/17/24	1040	Composite	Soil	GZ-SS-11,0-1'	X	X	X	X	X	1
2		1045			GZ-SS-11,1-2	X	X	X	X	X	1
3		1050			GZ-SS-12,0-1	X	X	X	X	X	
4		1102			GZ-SS-12,1-2	X	X	X	X	X	
5		1121			GZ-SS-13,0-1	X	X	X	X	X	
6		1200			GZ-SS-13,1-2	X	X	X	X	X	
7		1125			GZ-SS-14,0-1	X	X	X	X	X	
8		1135			GZ-SS-14,1-2	X	X	X	X	X	
9		1148			GZ-SS-15,0-1	X	X	X	X	X	
10		1152			GZ-SS-15,1-2	X	X	X	X	X	2
Container Type: AC-Air Cassette AG-Amber Glass B-BOD Bottle C-Cubitainer J-Jar O-Other P-Poly S-Sterile V-Vial						AG →					
Container Volume: 1-100 mL 2-2.5 gal 3-250 mL 4-300 mL 5-500 mL 6-1L 7-VOA 8-2 oz 9-4 oz 10-8 oz 11-Other*						10 →					10
Preservation Code: 1-Non Preserved 2-HCl 3-H2SO4 4-HNO3 5-NaOH 6-Methanol 7-Na2S2O3 8-ZnAce, NaOH 9-NH4Cl 10-DI H2O 11-Other*						2 →					

Sampled by: BB, DB, BG, KL

Chain needs to be filled out neatly and completely for on time delivery.

Laboratory Use Only
Cooler Temperature (°C): 5.0 / 4.0

Comments: * Please specify "Other" preservative and containers types in this space
*Physiologically Available Cyanide
① Compare to RI Residential DEC

All samples submitted are subject to ESS Laboratory's payment terms and conditions.

Dissolved Filtration
☐ Lab Filter

Relinquished by (Signature)	Date	Time	Received by (Signature)	Relinquished by (Signature)	Date	Time	Received by (Signature)
[signature]	6/17/24	1533	[signature]				
Relinquished by (Signature)	Date	Time	Received by (Signature)	Relinquished by (Signature)	Date	Time	Received by (Signature)

ESS LABORATORY

185 Frances Avenue
Cranston, RI 02910
Phone: 401-461-7181
[redacted]
www.esslaboratory.com

CHAIN OF CUSTODY

ESS Lab # 24F0097 | Page 4 of 4

Turn Time (Days) ☐ > 5 ☒ 5 ☐ 4 ☐ 3 ☐ 2 ☐ 1 ☐ Same Day

Regulatory State: RI Criteria:

Is this project for any of the following?:
☐ CT RCP ☐ MA MCP ☐ RGP ☐ Permit ☐ 401 WQ

ELECTRONIC DELIVERABLES (Final Reports are PDF)
☒ Limit Checker ☐ State Forms ☐ EQuIS
☒ Excel ☐ State Upload ☐ Enviro Data
☐ CLP-Like Package ☒ Other (Specify) → PDF

CLIENT INFORMATION

Client: GZA
Address: [redacted]
Phone: [redacted]
Email: benjamin.ramos@gza.com
Distribution List: dave.ruszczyk@gza.com

PROJECT INFORMATION

Project Name: Tridentarium
Project Location: Portsmouth RI
Project Number: 43654.00
Project Manager: Dave Ruszczyk
Bill to: GZA
PO#: –
Quote#: –

Client acknowledges that sampling is compliant with all EPA / State regulatory programs

REQUESTED ANALYSES

ESS Lab ID	Collection Date	Collection Time	Sample Type	Sample Matrix	Sample ID	PAHs	Lead	Arsenic	TPHs	PAC's	Total Number of Bottles
11	6/17/24	1155	Composite	Soil	GZ-SS-16 0-1	X	X	X	X	X	1
12	"	1210	"	"	GZ-SS-16 1-2	X	X	X	X	X	1
13	"	1245	"	"	GZ-SS-17 0-1	X	X	X	X	X	1
14	"	1300	"	"	GZ-SS-17 1-2	X	X	X	X	X	1
15	"	1215	"	"	GZ-SS-18 0-1	X	X	X	X	X	1
16	"	1230	"	"	GZ-SS-18 1-2	X	X	X	X	X	1
17	"	1245	"	"	GZ-SS-19 0-1	X	X	X	X	X	1
18	"	1300	"	"	GZ-SS-19 1-2	X	X	X	X	X	1

Container Type: AC-Air Cassette AG-Amber Glass B-BOD Bottle C-Cubitainer J-Jar O-Other P-Poly S-Sterile V-Vial — AG
Container Volume: 1-100 mL 2-2.5 gal 3-250 mL 4-300 mL 5-500 mL 6-1L 7-VOA 8-2 oz 9-4 oz 10-8 oz 11-Other* — 10 — 4
Preservation Code: 1-Non Preserved 2-HCl 3-H2SO4 4-HNO3 5-NaOH 6-Methanol 7-Na2S2O3 8-ZnAce, NaOH 9-NH4Cl 10-DI H2O 11-Other* — 1

Sampled by: Ben Ramos (BNR)

Chain needs to be filled out neatly and completely for on time delivery.

Laboratory Use Only
Cooler Temperature (°C): 5.0 ICE

Comments: * Please specify "Other" preservative and containers types in this space
* Physiologically Available Cyanide @ Compare to RI Residential DEC

All samples submitted are subject to ESS Laboratory's payment terms and conditions.

Dissolved Filtration
☐ Lab Filter

Relinquished by (Signature)	Date	Time	Received by (Signature)	Relinquished by (Signature)	Date	Time	Received by (Signature)
[signature]	6/17/24	1533	[signature]				
Relinquished by (Signature)	Date	Time	Received by (Signature)	Relinquished by (Signature)	Date	Time	Received by (Signature)

95 Glastenbury blvd.
Glastenbury CT