



2904 W 2nd St.
Roswell, NM 88201
voice: 575.624.2420
fax: 575.624.2421
www.atkinseng.com

August 6, 2024

#zeuspit_env_22

Mark Andersen

Permian Asset HSEQ Manager
TETRA Technologies Inc./Swiftwater Inc.
2401 N. CR 1287 Midland, TX 79701
Phone: 432.234.0179

SUBJECT: Closure Report for the Dagger Lake Zeus Pond Release (nAPP2211527047 and NAPP2305153347), Lea County, New Mexico

Dear Mr. Anderson,

On behalf of Atkins Engineering Associates INC. (AEA) has prepared this Closure Report for releases nAPP2211527047 and NAPP2305153347. This report summarizes the remediation activities of the release of liquids related to oil and gas production and water recycling activities at the DAGGER LAKE ZEUS POND. The site is in Unit P, Section 35, Township 21S, Range 32E, Lea County, New Mexico.

Table 1: Release Information and Closure Criteria

Name	DAGGER LAKE ZEUS POND	Company	Chevron U.S.A., Inc Solaris Water Midstream, LLC
API Number		Location	32.40448, -103.55576
Incident Number	nAPP2211527047 and NAPP2305153347		
Estimated Date of Release	4/9/22 and 2/20/23	Date Reported to NMOCD	4/9/22 and 2/21/23
Landowner	Private and BLM	Reported To	NMOCD District 1
Source of Release	On 4/9/22 Chevron's Dagger Lake Zeus Pond due to a recirculation line becoming unstrapped. Approximately 10.16 barrels were released. On 2/20/23 Solaris had a release of approximately 23,187 square feet. The overlap between the two, based on a kmz, is roughly 11,100 square feet. The second release encompassed the area impacted by the first release.		
Released Volume	10.16 bbls and 225bbls	Released Material	Produced Water
Recovered Volume	0 bbls	Net Release	10.16 bbls and 225bbls
NMOCD Closure Criteria	>100 feet to groundwater		

1.0 Background

On April 9th 2022 (4/9/22) a release occurred at Chevron's Dagger Lake Zeus Pond due to a recirculation line becoming unstrapped. Approximately 10.16 barrels were released. The NMOCD release is nAPP2211527047.

On August 8th 2022 (8/17/2022) a release occurred at Chevron's Dagger Lake Zeus Pond due to "Normal operation night shift pump operator put the pump to recirculate back into the pond and the recirculation line became unstrapped and began spilling on the berm" The NMOCD release is **NAPP2222961063 and is not covered in this closure report**. This release did impact the same area but flowed off the upgradient fee land and flowed on to BLM surface and will be address in an additional report.

Release delineation activities for the nAPP2211527047 and NAPP2222961063 releases were conducted by Envirotech from September 19 through 22, 2022, which included utilizing hand tools to advance soil borings in proximity of the release path to determine the horizontal and vertical extents of the release all sample points are shown in figure 2. Concurrently, Warrior Technologies was on-site daylighting subsurface pipelines belonging to Solaris, Enterprise, Mewbourne and Matador also shown in figure 2.

NMOCD rejected the previously submitted Site Assessment and Remediation Work plan (see Appendix E) on December 23, 2022. *NMOCD Environmental staff commented*, "Remediation Plan Denied. Soil blending is not allowed. The use of SA2000 requires a meeting with OCD to discuss proper procedures and protocols."

Because the denial was based on the remedial method and not the Site assessment performed AEA decided to amend the previously submitted work plan that plan was approved by the district on 3/08/2023.

On February 7th, 2023 (2/07/2023) Solaris Water Midstream, LLC (Solaris) had a produced water release 225bbls that affected approximately 23,187 square feet on the fee or northern areas of the Dagger Lake Zeus Pond area. The overlap between the three, based on a mapping, is roughly 11,100 square feet. Solaris has not filed a site assessment for NMOCD release NAPP2305153347, so AEA has included site the site assessment performed by Terracon on

Based on land ownership (AEA) has prepared this Closure Report for releases nAPP2211527047 and NAPP2305153347 which are the releases that stayed on the northern fee area of the Dagger Zeus Pond. **NAPP2222961063** did overlap some of the same areas on the northern or fee area but flowed to the south and on to BLM surface and is addressed in another closure report.

2.0 Site Information and Closure Criteria

The subject site is 0.15 miles north of a groundwater monitoring water well (C04566). The depth of the well is recorded at 110 feet in September 2021 and was dry. The spill site and groundwater well are relatively similar in elevation (3-foot differential); therefore, depth to water at the subject site is estimated to be greater than 100 feet below ground surface (bgs). The subject site is also within a low karst occurrence area, and distance to the nearest water course is over 1,226 south of the spill site. Siting criteria documentation for the subject spill site is provided in Appendix B and shown in figure 1.

Dagger Lake Zeus Pond Closure Page 3 of 10
August 6, 2024

Closure Criteria (19.15.29.12.B(4) Table 2						
Depth to Groundwater		Closure Criteria (units in mg/kg)				
		Chloride *numerical limit or background, whichever is greater	TPH	GRO + DRO	BTEX	Benzene
< 50' BGS		600	100		50	10
51' to 100'		10000	2500	1000	50	10
>100'	110	20000	2500	1000	50	10
Surface Water	yes or no	if yes, then				
<300' from continuously flowing watercourse or other significant watercourse?	no	600	100		50	10
<200' from lakebed, sinkhole or playa lake?	no					
Water Well or Water Source						
<500 feet from spring or a private, domestic fresh water well used by less than 5 households for domestic or stock watering purposes?	no					
<1000' from fresh water well or spring?	no					
Human and Other Areas						
<300' from an occupied permanent residence, school, hospital, institution or church?	no					
within incorporated municipal boundaries or within a defined municipal fresh water well field?	no					
<100' from wetland?	no					
within area overlying a subsurface mine	no					
within an unstable area?	no					
within a 100-year floodplain?	no					

Table 2 demonstrates the Closure Criteria applicable to this location. Pertinent well data is attached in Appendix B.

The National Resources Conservation Service (NRCS) named Pyote fine sands (PU) is the underlying soil type for the location. PU is a fine sands from 0-30 inches, fine sandy loam from 30- 60 inches and classified as non-saline with a ECe less than 2.0 mS/m according to the NRCS. The unaffected soils found adjacent to the locations and its lease roads are neither saline nor sodic and are typically populated with non-saline tolerant native grasses.

AEA sampled the Northern area for releases nAPP2211527047 and NAPP2222961063 with a Simco Rig and two foot (2) stainless steel spoons. The horizontal extent was sampled by Solaris and their sub-contractor the data is shown in table 3.

Dagger Lake Zeus Pond Closure Page 4 of 10
August 6, 2024

Table 3

Sample ID	Sample Date	Depth (feet bgs)	Proposed Action/ Action Taken	BTEX mg/Kg	Benzene mg/Kg	GRO mg/Kg	DRO mg/Kg	MRO mg/Kg	Total TPH mg/Kg	Cl- mg/Kg
NMED Closure Criteria				50	10				2500	600
H3	3/16/2023	0.5	insitu	<0.00398	<0.002	<49	<49	<49	<49	173
H4	3/16/2023	0.5	insitu	<0.00398	<0.002	<49	<49	<49	<49	247
H5	3/16/2023	0.5	insitu	<0.00398	<0.002	<49	<49	<49	<49	288
H6	3/16/2023	0.5	insitu	<0.00398	<0.002	<49	<49	<49	<49	155
H7	3/16/2023	0.5	insitu	<0.00398	<0.002	<49	<49	<49	<49	145
H8	3/16/2023	0.5	insitu	<0.00398	<0.002	<49	<49	<49	<49	248
H9	3/16/2023	0.5	insitu	<0.00398	<0.002	<49	<49	<49	<49	131
H10	3/16/2023	0.5	insitu	<0.00398	<0.002	<49	<49	<49	<49	313
H11	3/16/2023	0.5	insitu	<0.00398	<0.002	<49	<49	<49	<49	59.1
H12	3/16/2023	0.5	insitu	<0.00398	<0.002	<49	<49	<49	<49	53.3
H13	3/16/2023	0.5	insitu	<0.00398	<0.002	<49	<49	<49	<49	33.6
H14	3/16/2023	0.5	insitu	<0.00398	<0.002	<49	<49	<49	<49	162
H15	3/16/2023	0.5	insitu	<0.00398	<0.002	<49	<49	<49	<49	90.4
D1-1	8/30/2023	1	excavated	"--"	"--"	"--"	"--"	"--"	"--"	3120
D1-2	8/30/2023	2	excavated	"--"	"--"	"--"	"--"	"--"	"--"	1680
D1-4	8/30/2023	4	insitu	"--"	"--"	"--"	"--"	"--"	"--"	160
D1-6	8/30/2023	6	insitu	"--"	"--"	"--"	"--"	"--"	"--"	32
D2-1	8/30/2023	1	insitu	"--"	"--"	"--"	"--"	"--"	"--"	48
D2-2	8/30/2023	2	insitu	"--"	"--"	"--"	"--"	"--"	"--"	32
D3-4	8/30/2023	4	excavated	"--"	"--"	"--"	"--"	"--"	"--"	1880
D3-6	8/30/2023	6	excavated	"--"	"--"	"--"	"--"	"--"	"--"	1100
D3-8	8/30/2023	8	insitu	"--"	"--"	"--"	"--"	"--"	"--"	80
D3-9	8/30/2023	9	insitu	"--"	"--"	"--"	"--"	"--"	"--"	80
D4-6	8/30/2023	6	insitu	"--"	"--"	"--"	"--"	"--"	"--"	32
D4-8	8/30/2023	8	insitu	"--"	"--"	"--"	"--"	"--"	"--"	48
D5-6	8/30/2023	6	insitu	"--"	"--"	"--"	"--"	"--"	"--"	272
D5-8	8/30/2023	8	insitu	"--"	"--"	"--"	"--"	"--"	"--"	144
D6-8	8/30/2023	8	insitu	"--"	"--"	"--"	"--"	"--"	"--"	3600
D6-10	8/30/2023	10	insitu	"--"	"--"	"--"	"--"	"--"	"--"	896
D6-12	8/30/2023	12	insitu	"--"	"--"	"--"	"--"	"--"	"--"	1100
D6-14	8/30/2023	14	insitu	"--"	"--"	"--"	"--"	"--"	"--"	96
D6-16	8/30/2023	16	insitu	"--"	"--"	"--"	"--"	"--"	"--"	112

"--" = Not Analyzed

AEA used the discrete sample locations above and the (Blue) horizontal extent shown in figure 2 using the KML polygon file from Solaris Midstream (Solaris) bounds as inputs into Surfer Software to compute the potential extent of the soil impacts as shown in figure 3. The Surfer calculated total cut soil volume was 2,945 cubic yards of soil.

NMOCD approved a Site Assessment and Remediation Work plan submitted October 28th, 2022 for release nAPP2211527047. Unfortunately, between the work plan approval and the remedial excavation the site received several rain events so AEA performed an additional delineation on August 30, 2023.

AEA submitted an update and email to NMOCD and the email stated, “*Conditions at the remediation of the release of liquids related to oil and gas production activities at the DAGGER LAKE ZEUS POND have changed. The site is in Unit P, Section 35, Township 21S, Range 32E, Lea County, New Mexico.*”

Dagger Lake Zeus Pond Closure Page 5 of 10
August 6, 2024

Back in October 2022 the majority of the mass load of Chloride in the affected areas was in the top (1ft) foot, because of the recent rains this has changed. Attached is a presentation and update presented to the BLM (the surface owner on the southern side). Currently the top four feet of the northern half and the top six feet of the southern half are below 600ppm Cl-. The site currently meets table (1) one standards for closure with groundwater greater than 105ft. Because of the volume of produced water, the site handles AEA request the ability to change the surface contours to reduce the leaching potential of any current and future chloride both latterly and horizontally.

The email and attachment is in appendix C of this document.

Remediation Activities

Remedial excavation was conducted to a depth of two (2) to four (4) feet starting October 2023. (AEA) prepared an update to the NMOCD approved Site Assessment and Remediation Work plan submitted October 28th, 2022 and submitted it via email on 12/22/2023.

Table 4

Sample ID	Sample Date	Depth (feet bgs)	Proposed Action/ Action Taken	BTEX mg/Kg	Benzene mg/Kg	GRO mg/Kg	DRO mg/Kg	MRO mg/Kg	Total TPH mg/Kg	Cl- mg/Kg
NMED Closure Criteria				50	10				2500	600
NESP 1	11/2/2023	2	insitu	<0.300	<0.050	<10.0	<10.0	<10.0	<30.0	16
NESP 1	11/2/2023	4	insitu	<0.300	<0.050	<10.0	<10.0	<10.0	<30.0	48
NESP 2	11/2/2023	2	insitu	<0.300	<0.050	<10.0	<10.0	<10.0	<30.0	<16.0
NESP 2	11/2/2023	4	insitu	<0.300	<0.050	<10.0	<10.0	<10.0	<30.0	16
NESP 3	11/2/2023	2	insitu	<0.300	<0.050	<10.0	<10.0	<10.0	<30.0	16
NESP 3	11/2/2023	4	insitu	<0.300	<0.050	<10.0	<10.0	<10.0	<30.0	16
NESP 4	11/2/2023	2	insitu	<0.300	<0.050	<10.0	<10.0	<10.0	<30.0	<16.0
NESP 4	11/2/2023	4	insitu	<0.300	<0.050	<10.0	<10.0	<10.0	<30.0	48
NESP 5	11/2/2023	2	pipeline	<0.300	<0.050	<10.0	17.5	<10.0	<30.0	192
NESP 5	11/2/2023	4	pipeline	<0.300	<0.050	<10.0	11.1	<10.0	<30.0	3920
NESP 6	11/2/2023	2	excavated	<0.300	<0.050	<10.0	<10.0	<10.0	<30.0	96
NESP 6	11/2/2023	4	excavated	<0.300	<0.050	<10.0	<10.0	<10.0	<30.0	3680
NESP 7	11/2/2023	3	insitu	<0.300	<0.050	<10.0	<10.0	<10.0	<30.0	48
NESP 7	11/2/2023	5	insitu	<0.300	<0.050	<10.0	<10.0	<10.0	<30.0	<16.0
NESP 8	11/2/2023	3	insitu	<0.300	<0.050	<10.0	<10.0	<10.0	<30.0	32
NESP 8	11/2/2023	5	insitu	<0.300	<0.050	<10.0	<10.0	<10.0	<30.0	16
NESP 9	11/2/2023	2	insitu	<0.300	<0.050	<10.0	<10.0	<10.0	<30.0	48
NESP 9	11/2/2023	4	insitu	<0.300	<0.050	<10.0	<10.0	<10.0	<30.0	32
NESP 10	11/2/2023	3	insitu	<0.300	<0.050	<10.0	<10.0	<10.0	<30.0	32
NESP 10	11/2/2023	5	insitu	<0.300	<0.050	<10.0	<10.0	<10.0	<30.0	48
NESP 11	11/2/2023	3	pipeline	<0.300	<0.050	<10.0	<10.0	<10.0	<30.0	1200
NESP 11	11/2/2023	5	pipeline	<0.300	<0.050	<10.0	<10.0	<10.0	<30.0	9600
NESP 12	11/2/2023	3	excavated	<0.300	<0.050	<10.0	<10.0	<10.0	<30.0	240
NESP 12	11/2/2023	5	excavated	<0.300	<0.050	<10.0	<10.0	<10.0	<30.0	672
NESP 13	11/2/2023	3	insitu	<0.300	<0.050	<10.0	<10.0	<10.0	<30.0	64
NESP 13	11/2/2023	5	insitu	<0.300	<0.050	<10.0	<10.0	<10.0	<30.0	48
NESP 14	11/2/2023	5	insitu	<0.300	<0.050	<10.0	<10.0	<10.0	<30.0	32
NESP 15	11/2/2023	3	insitu	<0.300	<0.050	<10.0	<10.0	<10.0	<30.0	80
NESP 15	11/2/2023	5	insitu	<0.300	<0.050	<10.0	<10.0	<10.0	<30.0	608
NESP 16	11/2/2023	3	pipeline	<0.300	<0.050	<10.0	<10.0	<10.0	<30.0	96
NESP 16	11/2/2023	5	pipeline	<0.300	<0.050	<10.0	<10.0	<10.0	<30.0	10400
NESP 17	11/2/2023	3	excavated	<0.300	<0.050	<10.0	<10.0	<10.0	<30.0	544
NESP 17	11/2/2023	5	excavated	<0.300	<0.050	<10.0	<10.0	<10.0	<30.0	8200
NESP 18	11/2/2023	3	excavated	<0.300	<0.050	<10.0	<10.0	<10.0	<30.0	640
NESP 18	11/2/2023	5	excavated	<0.300	<0.050	<10.0	<10.0	<10.0	<30.0	672
NESP 19			under water							
NESP 20	11/2/2023	3	excavated	<0.300	<0.050	<10.0	<10.0	<10.0	<30.0	96
NESP 20	11/2/2023	5	excavated	<0.300	<0.050	<10.0	<10.0	<10.0	<30.0	768
NESP 21	11/2/2023	3	pipeline	<0.300	<0.050	<10.0	<10.0	<10.0	<30.0	1840
NESP 21	11/2/2023	5	pipeline	<0.300	<0.050	<10.0	<10.0	<10.0	<30.0	6660
NESP 22	11/2/2023	3	excavated	<0.300	<0.050	<10.0	<10.0	<10.0	<30.0	1490
NESP 22	11/2/2023	5	excavated	<0.300	<0.050	<10.0	<10.0	<10.0	<30.0	800
NESP 23			under water							
NESP 24			under water							
NESP 25	11/2/2023	3	excavated	<0.300	<0.050	<10.0	<10.0	<10.0	<30.0	592
NESP 25	11/2/2023	0.5	excavated	<0.300	<0.050	<10.0	<10.0	<10.0	<30.0	3360

The data collected November 6th 2032 shows Cl⁻ concentrations accumulated near and under the pipelines. See tables 3 through 5. AEA excavated locations NESP 6,12,17,18,22 and 25 to six (6) foot. The release area had an estimated 1,706 cubic yards removed of addition soil to place the elevated locations to six (6) feet. Because of safety reasons (in and around utilities) an estimated 1,239 cubic yards of soil will need to remain in place see Figure 4.

Sample location NESP 1, 5, 11 and 16 represent the northern most chloride impacts between the excavation's northern sidewall and the area unsafe to excavate due to the pipeline that runs east to west and the base of the pond's impoundment. Sample location NESP 21, 22, and 25 represent the eastern most chloride impacts between the excavation's eastern sidewall and the area unsafe to excavate due to the pipelines and the manifolds that runs north to south

The six (6) foot excavation areas and the requested deferral areas are shown in figure 4 along with the closure sample locations. Based on the NMOCD approval below, sample locations were collected for the total excavation area of ten thousand nine hundred square feet (10,900 ^{ft}2) in a systematic cell of 500 ^{ft}2 each.

03/08/2023	Remediation Plan Approved with Conditions. Variance approved : Composite confirmation samples will be collected from the bottom and sidewalls of the excavation from areas representing no more than five hundred (500) square feet. Please clearly mark the outline of the excavation in the closure report.
------------	---

$$Samples = \frac{area (ft^2)}{500 ft^2}$$

All closure samples meet or exceed the fifty to one hundred (51- 100) ft to groundwater closure standards in 19.15.29 Table 1 except for the locations which are immediately adjacent to a utility making further excavation unsafe see figure 4.

Sample location SW1-SW15 and BH1 -BH12 were all collected May 16th, 2024 in the open excavation, but one of the coolers was lost in shipment and samples SW10-SW11 and BH6-BH12 had to be recollected. Although the cooler was eventually found the samples were out of the 14-day laboratory hold time for EPA 8015.

Samples SW10-SW12 and BH6-BH12 were recollected after backfilling and revegetation with an AMS Probe SDS Max Rotary hammer drill to depths of six to six and half feet 6-6.5ft

Dagger Lake Zeus Pond Closure Page 7 of 10
August 6, 2024

Table 5

Sample ID	Sample Date	Depth (feet bgs)	Proposed Action/ Action Taken	BTEX mg/Kg	Benzene mg/Kg	GRO mg/Kg	DRO mg/Kg	MRO mg/Kg	Total TPH mg/Kg	Cl- mg/Kg
NMED Closure Criteria				50	10				2500	600/10000
NESP 1	11/2/2023	2	insitu	<0.300	<0.050	<10.0	<10.0	<10.0	<30.0	16
NESP 1	11/2/2023	4	insitu	<0.300	<0.050	<10.0	<10.0	<10.0	<30.0	48
NESP 2	11/2/2023	2	insitu	<0.300	<0.050	<10.0	<10.0	<10.0	<30.0	<16.0
NESP 2	11/2/2023	4	insitu	<0.300	<0.050	<10.0	<10.0	<10.0	<30.0	16
NESP 3	11/2/2023	2	insitu	<0.300	<0.050	<10.0	<10.0	<10.0	<30.0	16
NESP 3	11/2/2023	4	insitu	<0.300	<0.050	<10.0	<10.0	<10.0	<30.0	16
NESP 4	11/2/2023	2	insitu	<0.300	<0.050	<10.0	<10.0	<10.0	<30.0	<16.0
NESP 4	11/2/2023	4	insitu	<0.300	<0.050	<10.0	<10.0	<10.0	<30.0	48
NESP 7	11/2/2023	3	insitu	<0.300	<0.050	<10.0	<10.0	<10.0	<30.0	48
NESP 7	11/2/2023	5	insitu	<0.300	<0.050	<10.0	<10.0	<10.0	<30.0	<16.0
NESP 8	11/2/2023	3	insitu	<0.300	<0.050	<10.0	<10.0	<10.0	<30.0	32
NESP 8	11/2/2023	5	insitu	<0.300	<0.050	<10.0	<10.0	<10.0	<30.0	16
NESP 9	11/2/2023	2	insitu	<0.300	<0.050	<10.0	<10.0	<10.0	<30.0	48
NESP 9	11/2/2023	4	insitu	<0.300	<0.050	<10.0	<10.0	<10.0	<30.0	32
NESP 10	11/2/2023	3	insitu	<0.300	<0.050	<10.0	<10.0	<10.0	<30.0	32
NESP 10	11/2/2023	5	insitu	<0.300	<0.050	<10.0	<10.0	<10.0	<30.0	48
NESP 13	11/2/2023	3	insitu	<0.300	<0.050	<10.0	<10.0	<10.0	<30.0	64
NESP 13	11/2/2023	5	insitu	<0.300	<0.050	<10.0	<10.0	<10.0	<30.0	48
NESP 14	11/2/2023	5	insitu	<0.300	<0.050	<10.0	<10.0	<10.0	<30.0	32
NESP 15	11/2/2023	3	insitu	<0.300	<0.050	<10.0	<10.0	<10.0	<30.0	80
NESP 15	11/2/2023	5	insitu	<0.300	<0.050	<10.0	<10.0	<10.0	<30.0	608
SW1	5/16/2024	0-4	insitu/pipeline	<0.300	<0.050	<20.0	<25.0	<50.0	<100.0	622
SW2	5/16/2024	0-6	insitu/pipeline	<0.300	<0.050	<20.0	<25.0	<50.0	<100.0	4180
SW3	5/16/2024	0-6	insitu/pipeline	<0.300	<0.050	<20.0	<25.0	<50.0	<100.0	932
SW4	5/16/2024	0-6	insitu/pipeline	<0.300	<0.050	<20.0	<25.0	<50.0	<100.0	758
SW5	5/16/2024	0-6	insitu/pipeline	<0.300	<0.050	<20.0	<25.0	<50.0	<100.0	7060
SW6	5/16/2024	0-6	insitu/pipeline	<0.300	<0.050	<20.0	<25.0	<50.0	<100.0	4260
SW7	5/16/2024	0-6	insitu/pipeline	<0.300	<0.050	<20.0	<25.0	<50.0	<100.0	968
SW8	5/16/2024	0-4	insitu	<0.300	<0.050	<20.0	<25.0	<50.0	<100.0	203
SW9	5/16/2024	0-4	insitu	<0.300	<0.050	<20.0	<25.0	<50.0	<100.0	23.7
SW10	7/17/2024	0-4	insitu	<0.300	<0.050	<20.0	<25.0	<50.0	<100.0	<20.0
SW11	7/17/2024	0-6	insitu	<0.300	<0.050	<20.0	<25.0	<50.0	<100.0	<20.0
SW12	7/17/2024	0-6	insitu	<0.300	<0.050	<20.0	<25.0	<50.0	<100.0	<20.0
SW13	5/16/2024	1	insitu	<0.300	<0.050	<20.0	<25.0	<50.0	<100.0	554
SW14	5/16/2024	1	insitu/pipeline	<0.300	<0.050	<20.0	<25.0	<50.0	<100.0	1410
SW15	5/16/2024	1	insitu/pipeline	<0.300	<0.050	<20.0	<25.0	<50.0	<100.0	1260
BH1	5/16/2024	6	insitu	<0.300	<0.050	<20.0	<25.0	<50.0	<100.0	1100
BH2	5/16/2024	6	insitu	<0.300	<0.050	<20.0	<25.0	<50.0	<100.0	917
BH3	5/16/2024	6	insitu	<0.300	<0.050	<20.0	<25.0	<50.0	<100.0	1230
BH4	5/16/2024	6	insitu	<0.300	<0.050	<20.0	<25.0	<50.0	<100.0	2070
BH5	5/16/2024	6	insitu	<0.300	<0.050	<20.0	<25.0	<50.0	<100.0	3670
BH6	7/17/2024	6	insitu	<0.300	<0.050	<20.0	<25.0	<50.0	<100.0	<20.0
BH7	7/17/2024	6	insitu	<0.300	<0.050	<20.0	<25.0	<50.0	<100.0	<20.0
BH8	7/17/2024	6	insitu	<0.300	<0.050	<20.0	<25.0	<50.0	<100.0	<20.0
BH9	7/17/2024	6	insitu	<0.300	<0.050	<20.0	<25.0	<50.0	<100.0	<20.0
BH10	7/17/2024	6	insitu	<0.300	<0.050	<20.0	<25.0	<50.0	<100.0	<20.0
BH11	7/17/2024	6	insitu	<0.300	<0.050	<20.0	<25.0	<50.0	<100.0	<20.0
BH12	7/17/2024	6	insitu	<0.300	<0.050	<20.0	<25.0	<50.0	<100.0	<20.0

Figure 3 shows the extent of the excavation and existing sample locations. All laboratory results are summarized in Table 3-5. Laboratory reports are included in Appendix D.

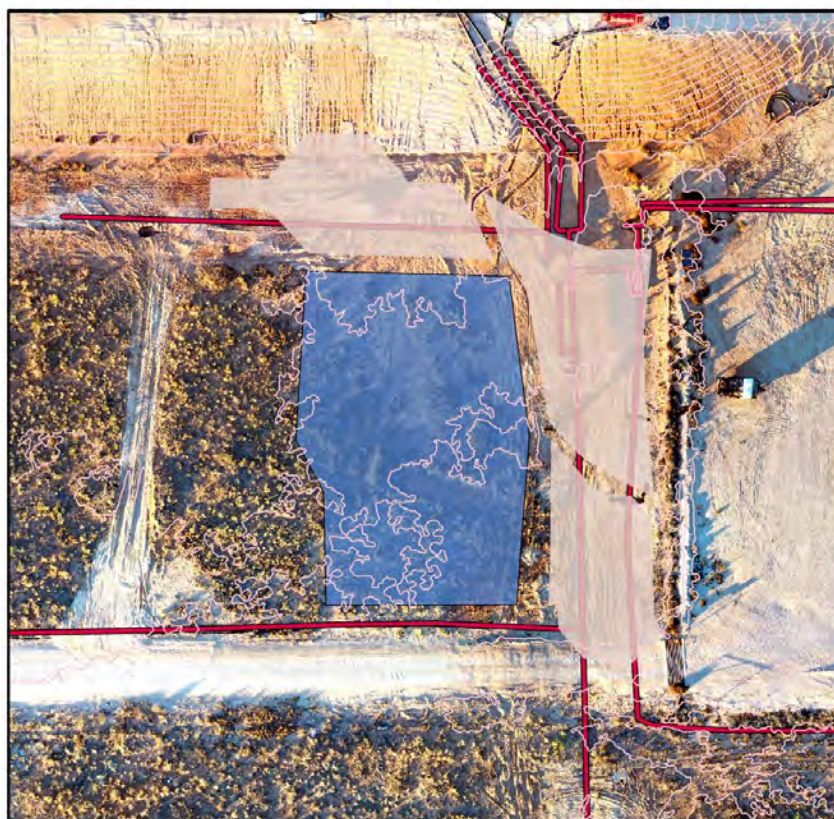
Dagger Lake Zeus Pond Closure Page 8 of 10
August 6, 2024

All contaminated soil from the location was taken to an NMOCD approved facility (waste manifest will be available upon request).

As all discovered impacts are on the locations pad this Closure Plan does not address or require revegetation or restoration work.

4.0 Deferral Request and Limitations

As shown in figure 4 there is approximately 1,245 yards from the north release area that is Chloride impacted in and around the area pipelines and recycling pond impoundment. The pond impoundment and neighboring SWD pad to the north and east are upgradient to the release area as shown in contours in figure 5.



The general site drainage was from north to south starting at the northern pond and eastern SWD pad down to the fee pasture across the lease road and out on to BLM surface to the south. This north to south flow is the spill path that both releases followed. Because of the multiple releases (three 3) and the volume of produced water the site handles AEA requested from the landowner the ability to change the surface contours to reduce the leaching potential of any current and future chloride both laterally and horizontally. The deferred areas have been bounded by four-to-five-foot (4-5 ft) soil berms and the culvert that ran north to south bisecting the lease road has been removed.

The deferred areas are now two-four-foot (2-4ft) below surface grade, and a sump has been created. This should decrease the risk of future releases or rain events impacting areas outside of the utility corridor. AEA also followed **API 4663 Remediation of Salt-Affected Soils at Oil and Gas Production Facilities**

Dagger Lake Zeus Pond Closure Page 9 of 10
August 6, 2024

guidance and installed at the bottom of the excavation with a Bentomat clay liner and installed dissimilar materials to form a capillary brake. The construction of a burial vault within the excavation will further decrease the likelihood that Chloride impacts within the deferral areas will leach or move to affect neighboring soils. The [API | Managing Produced Water Releases](#) 4794 numerical modeling was used to identify the potential of the release to cause future groundwater impairment (see appendix C API Amigo). According to the API Amigo model the deferred areas do not pose an imminent risk to human health, the environment, or ground water. All inputs to API Amigo assumed that remedial excavation was not performed to be conservative in the interpretation.

The area soils are not classified as “sensitive by the NRCS” and are classified as nonsaline. The areas disturbed by the excavations or grading work performed by the AEA and its sub-contractors was revegetated as specified in the NMDOT Standard Specifications for Highway and Bridge Construction Section 632 ‘Seeding’ and the BLM Gold Book 2017. This work consisted of reseeded of all areas which were denuded with vegetation during the facility’s remedial excavation operations.

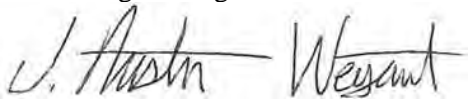
The reseeded work performed by AG Services July 2024 included. all backfilled topsoil was sourced from a neighbor pit within the soil series (NRCS).

- The site was irrigated with less than 1000ppm TDS and less than 250 ppm Cl water to prevent dust and wind erosion during restoration.
- A slope of 0-3 percent was restored to match the area contours and the area will be reseeded using NMSLO (LOAMY (L) SITES SEED MIXTURE) at double the published rates to accommodate for the use of hydroseeding.
- AEA also apply soil tackifier at NMDOT recommended rate of 100bs per acre to prevent erosion based on NMDOT Materials Quantities sheet in the appendix.
- A licensed NMDA applicator and will conduct invasive weed removal/spray event the following spring to insure no noxious or invasive weeds are present in the revegetation areas.
-

The scope of our services included: assessment sampling; verifying release stabilization; regulatory liaison; remediation; and preparing this closure report. All work has been performed in accordance with generally accepted professional environmental consulting practices for oil and gas releases in the Permian Basin in New Mexico.

If there are any questions regarding this report, please contact Austin Weyant at 575-626-3993

Submitted by:
Atkins Engineering Associates INC



Austin Weyant
Environmental Project Manager

Dagger Lake Zeus Pond Closure Page 10 of 10
August 6, 2024

ATTACHMENTS:

Figures:

Figure 1: NMOCD Setbacks and Site Map

Figure 2: Release and Sample Map

Figure 3: 4ft Excavation and Sample Map

Figure 4: 6ft Excavation and Sample Map

Tables:

Table 2: NMOCD Closure Criteria Justification

Table 3: Summary of Site assessment Sample Results

Table 4: Summary of 4ft Excavation Sample Results

Table 5: Summary of 6ft Excavation Sample Results

Appendices:

Appendix A: Form C141

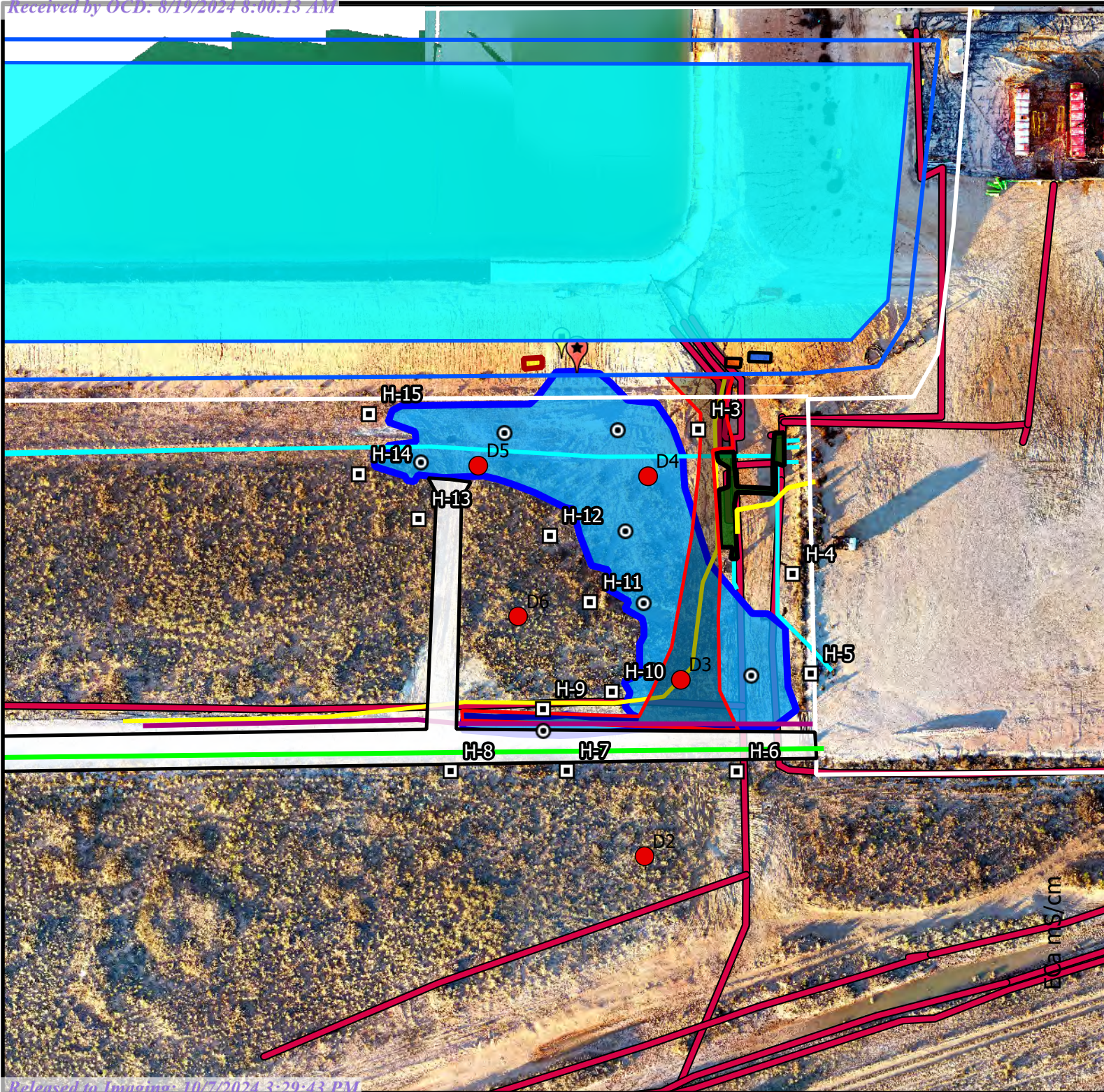
Appendix B: Siting Documentation

Appendix C: Photo Log

Appendix D: Laboratory Analytical Reports

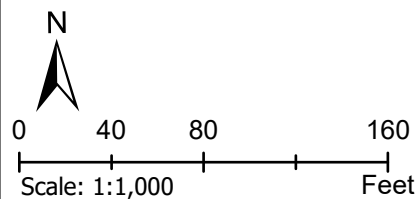
FIGURES

FIGURE 2
Zeus Pit Release
North



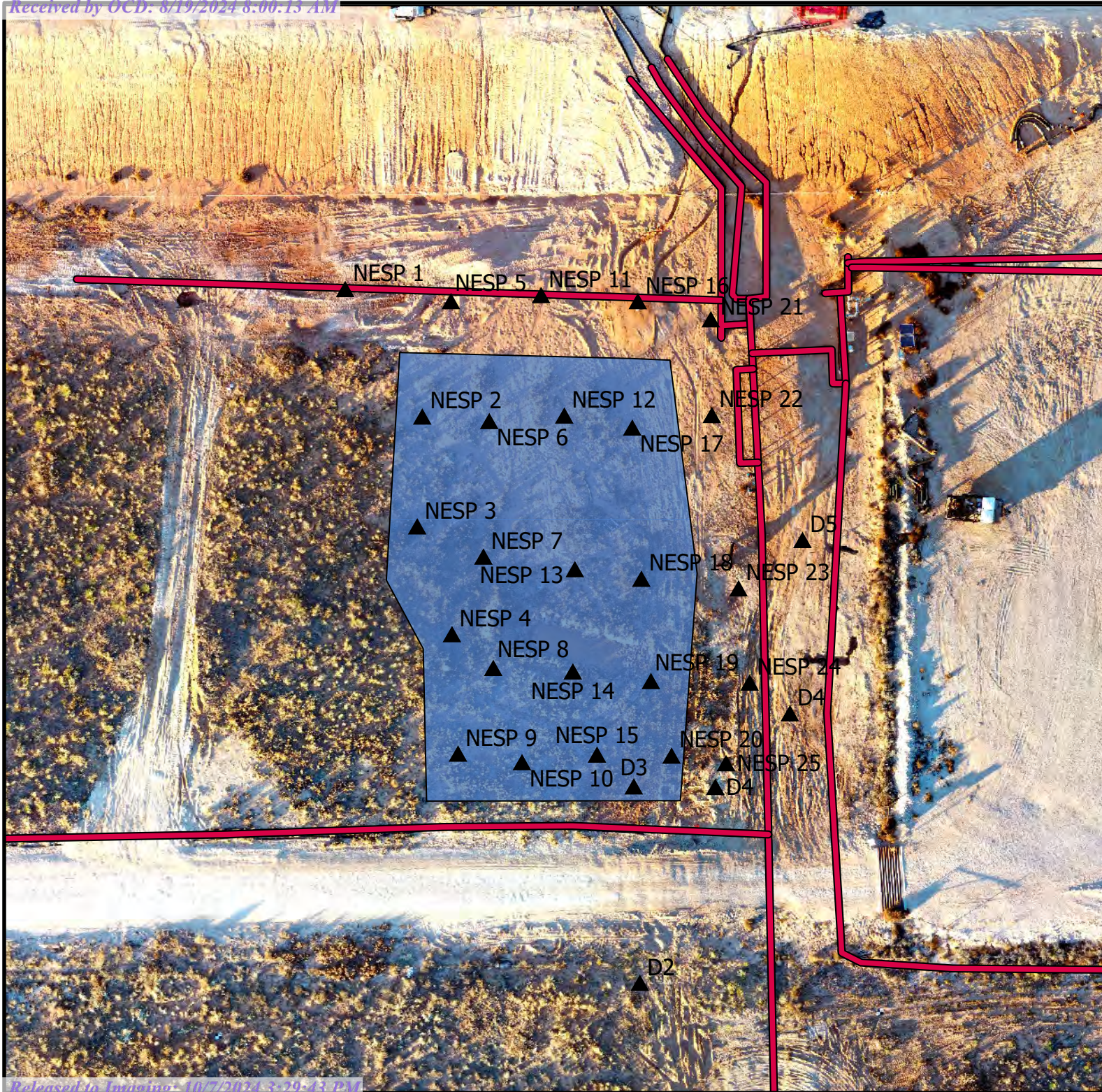
LEGEND

- Pipeline
- Soil Bores



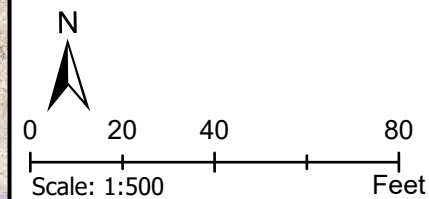
JOB No. zeuspit_env_22
 DATE FIELD: 12/21/22 DRAWN JAW
 DATE DRAWN: 8/2/2024 REVIEW LCM

FIGURE 3
Zeus 4ft Excavation
Samples



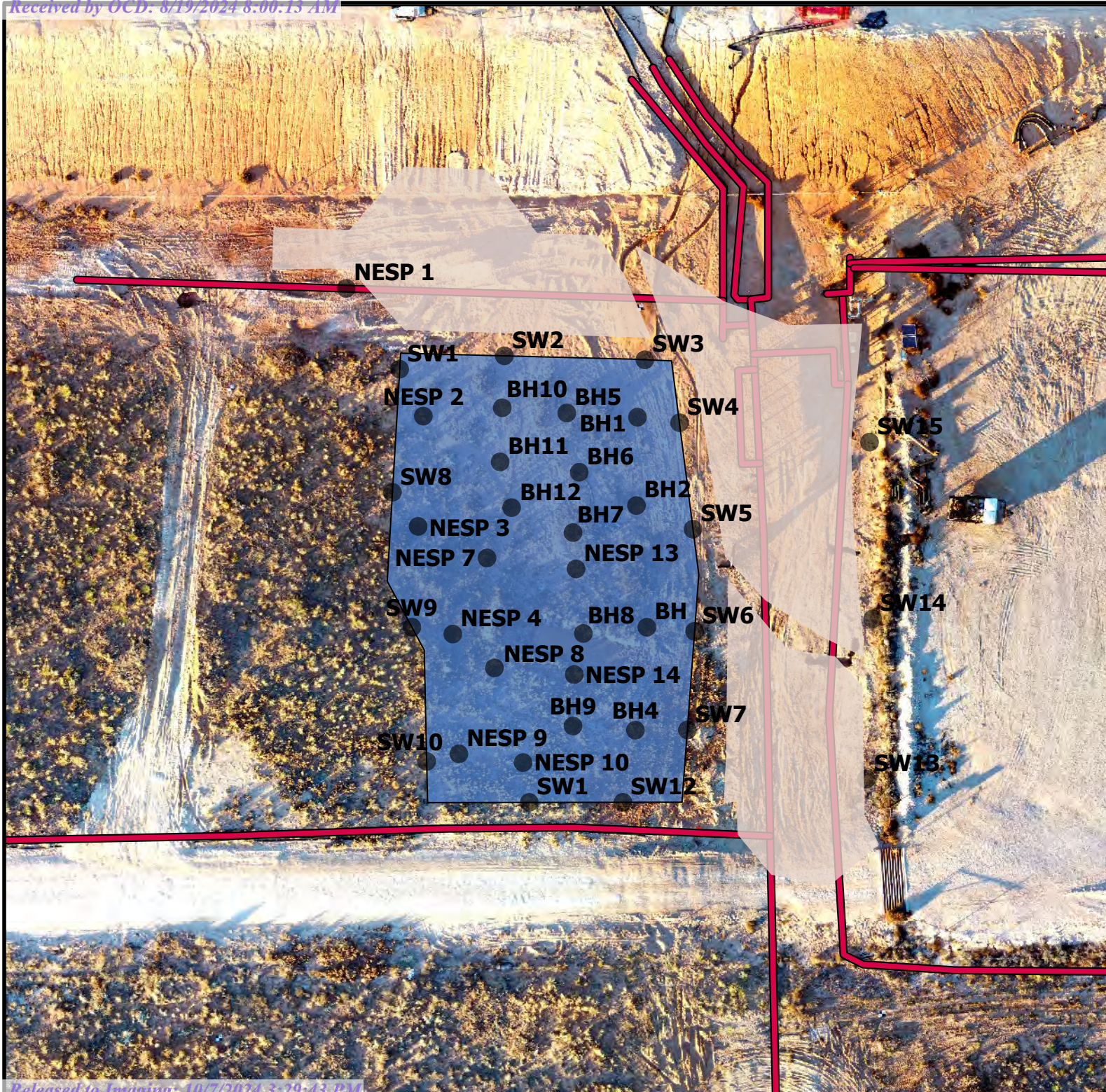
LEGEND

- Excavation Area
- Pipeline
- Sample Location







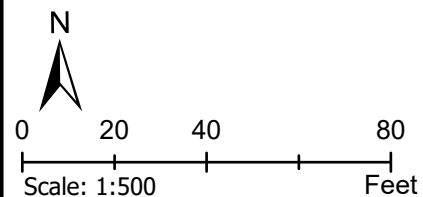
JOB No. zeuspit_env_22
DATE FIELD: 12/21/22 DRAWN JAW
DATE DRAWN: 8/6/2024 REVIEW LCM

FIGURE 4
Zeus Excavation
6ft Samples



LEGEND

-  Excavation Area
-  Closure Sample Location
-  Pipeline
-  Deferral Area



JOB No. zeuspit_env_22
DATE FIELD: 12/21/22 DRAWN JAW
DATE DRAWN: 8/6/2024 REVIEW LCM

TABLES

Site Information (19.15.29.11.A(2, 3, and 4) NMAC)		Source/Notes
Depth to Groundwater (feet bgs)	110 ft	C04566
Horizontal Distance From All Water Sources Within 1/2 Mile (ft)	2.5 miles	USA Topo
Horizontal Distance to Nearest Significant Watercourse (ft)	2.5 miles	USA Topo

Closure Criteria (19.15.29.12.B(4) Table 2						
Depth to Groundwater		Closure Criteria (units in mg/kg)				
		Chloride *numerical limit or background, whichever is greater	TPH	GRO + DRO	BTEX	Benzene
< 50' BGS		600	100		50	10
51' to 100'		10000	2500	1000	50	10
>100'	110	20000	2500	1000	50	10
Surface Water	yes or no	if yes, then				
<300' from continuously flowing watercourse or other significant watercourse?	no	600	100		50	10
<200' from lakebed, sinkhole or playa lake?	no					
Water Well or Water Source						
<500 feet from spring or a private, domestic fresh water well used by less than 5 households for domestic or stock watering purposes?	no					
<1000' from fresh water well or spring?	no					
Human and Other Areas						
<300' from an occupied permanent residence, school, hospital, institution or church?	no					
within incorporated municipal boundaries or within a defined municipal fresh water well field?	no					
<100' from wetland?	no					
within area overlying a subsurface mine	no					
within an unstable area?	no					
within a 100-year floodplain?	no					

Summary of Site Assessment Sample Results (nAPP2211527047 and nAPP2305153347)

Sample ID	Sample Date	Depth (feet bgs)	Proposed Action/ Action Taken	BTEX mg/Kg	Benzene mg/Kg	GRO mg/Kg	DRO mg/Kg	MRO mg/Kg	Total TPH mg/Kg	CI- mg/Kg
NMED Closure Criteria				50	10				2500	600
H3	3/16/2023	0.5	insitu	<0.00398	<0.002	<49	<49	<49	<49	173
H4	3/16/2023	0.5	insitu	<0.00398	<0.002	<49	<49	<49	<49	247
H5	3/16/2023	0.5	insitu	<0.00398	<0.002	<49	<49	<49	<49	288
H6	3/16/2023	0.5	insitu	<0.00398	<0.002	<49	<49	<49	<49	155
H7	3/16/2023	0.5	insitu	<0.00398	<0.002	<49	<49	<49	<49	145
H8	3/16/2023	0.5	insitu	<0.00398	<0.002	<49	<49	<49	<49	248
H9	3/16/2023	0.5	insitu	<0.00398	<0.002	<49	<49	<49	<49	131
H10	3/16/2023	0.5	insitu	<0.00398	<0.002	<49	<49	<49	<49	313
H11	3/16/2023	0.5	insitu	<0.00398	<0.002	<49	<49	<49	<49	59.1
H12	3/16/2023	0.5	insitu	<0.00398	<0.002	<49	<49	<49	<49	53.3
H13	3/16/2023	0.5	insitu	<0.00398	<0.002	<49	<49	<49	<49	33.6
H14	3/16/2023	0.5	insitu	<0.00398	<0.002	<49	<49	<49	<49	162
H15	3/16/2023	0.5	insitu	<0.00398	<0.002	<49	<49	<49	<49	90.4
D1-1	8/30/2023	1	excavted	"--"	"--"	"--"	"--"	"--"	"--"	3120
D1-2	8/30/2023	2	excavted	"--"	"--"	"--"	"--"	"--"	"--"	1680
D1-4	8/30/2023	4	insitu	"--"	"--"	"--"	"--"	"--"	"--"	160
D1-6	8/30/2023	6	insitu	"--"	"--"	"--"	"--"	"--"	"--"	32
D2-1	8/30/2023	1	insitu	"--"	"--"	"--"	"--"	"--"	"--"	48
D2-2	8/30/2023	2	insitu	"--"	"--"	"--"	"--"	"--"	"--"	32
D3-4	8/30/2023	4	excavted	"--"	"--"	"--"	"--"	"--"	"--"	1880
D3-6	8/30/2023	6	excavted	"--"	"--"	"--"	"--"	"--"	"--"	1100
D3-8	8/30/2023	8	insitu	"--"	"--"	"--"	"--"	"--"	"--"	80
D3-9	8/30/2023	9	insitu	"--"	"--"	"--"	"--"	"--"	"--"	80
D4-6	8/30/2023	6	insitu	"--"	"--"	"--"	"--"	"--"	"--"	32
D4-8	8/30/2023	8	insitu	"--"	"--"	"--"	"--"	"--"	"--"	48
D5-6	8/30/2023	6	insitu	"--"	"--"	"--"	"--"	"--"	"--"	272
D5-8	8/30/2023	8	insitu	"--"	"--"	"--"	"--"	"--"	"--"	144
D6-8	8/30/2023	8	insitu	"--"	"--"	"--"	"--"	"--"	"--"	3600
D6-10	8/30/2023	10	insitu	"--"	"--"	"--"	"--"	"--"	"--"	896
D6-12	8/30/2023	12	insitu	"--"	"--"	"--"	"--"	"--"	"--"	1100
D6-14	8/30/2023	14	insitu	"--"	"--"	"--"	"--"	"--"	"--"	96
D6-16	8/30/2023	16	insitu	"--"	"--"	"--"	"--"	"--"	"--"	112

"--" = Not Analyzed

Sample ID	Sample Date	Depth (feet bgs)	Proposed Action/ Action Taken	BTEX mg/Kg	Benzene mg/Kg	GRO mg/Kg	DRO mg/Kg	MRO mg/Kg	Total TPH mg/Kg	CI- mg/Kg
NMED Closure Criteria				50	10				2500	600
NESP 1	11/2/2023	2	insitu	<0.300	<0.050	<10.0	<10.0	<10.0	<30.0	16
NESP 1	11/2/2023	4	insitu	<0.300	<0.050	<10.0	<10.0	<10.0	<30.0	48
NESP 2	11/2/2023	2	insitu	<0.300	<0.050	<10.0	<10.0	<10.0	<30.0	<16.0
NESP 2	11/2/2023	4	insitu	<0.300	<0.050	<10.0	<10.0	<10.0	<30.0	16
NESP 3	11/2/2023	2	insitu	<0.300	<0.050	<10.0	<10.0	<10.0	<30.0	16
NESP 3	11/2/2023	4	insitu	<0.300	<0.050	<10.0	<10.0	<10.0	<30.0	16
NESP 4	11/2/2023	2	insitu	<0.300	<0.050	<10.0	<10.0	<10.0	<30.0	<16.0
NESP 4	11/2/2023	4	insitu	<0.300	<0.050	<10.0	<10.0	<10.0	<30.0	48
NESP 5	11/2/2023	2	pipeline	<0.300	<0.050	<10.0	17.5	<10.0	<30.0	192
NESP 5	11/2/2023	4	pipeline	<0.300	<0.050	<10.0	11.1	<10.0	<30.0	3920
NESP 6	11/2/2023	2	excavated	<0.300	<0.050	<10.0	<10.0	<10.0	<30.0	96
NESP 6	11/2/2023	4	excavated	<0.300	<0.050	<10.0	<10.0	<10.0	<30.0	3680
NESP 7	11/2/2023	3	insitu	<0.300	<0.050	<10.0	<10.0	<10.0	<30.0	48
NESP 7	11/2/2023	5	insitu	<0.300	<0.050	<10.0	<10.0	<10.0	<30.0	<16.0
NESP 8	11/2/2023	3	insitu	<0.300	<0.050	<10.0	<10.0	<10.0	<30.0	32
NESP 8	11/2/2023	5	insitu	<0.300	<0.050	<10.0	<10.0	<10.0	<30.0	16
NESP 9	11/2/2023	2	insitu	<0.300	<0.050	<10.0	<10.0	<10.0	<30.0	48
NESP 9	11/2/2023	4	insitu	<0.300	<0.050	<10.0	<10.0	<10.0	<30.0	32
NESP 10	11/2/2023	3	insitu	<0.300	<0.050	<10.0	<10.0	<10.0	<30.0	32
NESP 10	11/2/2023	5	insitu	<0.300	<0.050	<10.0	<10.0	<10.0	<30.0	48
NESP 11	11/2/2023	3	pipeline	<0.300	<0.050	<10.0	<10.0	<10.0	<30.0	1200
NESP 11	11/2/2023	5	pipeline	<0.300	<0.050	<10.0	<10.0	<10.0	<30.0	9600
NESP 12	11/2/2023	3	excavated	<0.300	<0.050	<10.0	<10.0	<10.0	<30.0	240
NESP 12	11/2/2023	5	excavated	<0.300	<0.050	<10.0	<10.0	<10.0	<30.0	672
NESP 13	11/2/2023	3	insitu	<0.300	<0.050	<10.0	<10.0	<10.0	<30.0	64
NESP 13	11/2/2023	5	insitu	<0.300	<0.050	<10.0	<10.0	<10.0	<30.0	48
NESP 14	11/2/2023	5	insitu	<0.300	<0.050	<10.0	<10.0	<10.0	<30.0	32
NESP 15	11/2/2023	3	insitu	<0.300	<0.050	<10.0	<10.0	<10.0	<30.0	80
NESP 15	11/2/2023	5	insitu	<0.300	<0.050	<10.0	<10.0	<10.0	<30.0	608
NESP 16	11/2/2023	3	pipeline	<0.300	<0.050	<10.0	<10.0	<10.0	<30.0	96
NESP 16	11/2/2023	5	pipeline	<0.300	<0.050	<10.0	<10.0	<10.0	<30.0	10400
NESP 17	11/2/2023	3	excavated	<0.300	<0.050	<10.0	<10.0	<10.0	<30.0	544
NESP 17	11/2/2023	5	excavated	<0.300	<0.050	<10.0	<10.0	<10.0	<30.0	8200
NESP 18	11/2/2023	3	excavated	<0.300	<0.050	<10.0	<10.0	<10.0	<30.0	640
NESP 18	11/2/2023	5	excavated	<0.300	<0.050	<10.0	<10.0	<10.0	<30.0	672
NESP 19			under water							
NESP 20	11/2/2023	3	excavated	<0.300	<0.050	<10.0	<10.0	<10.0	<30.0	96
NESP 20	11/2/2023	5	excavated	<0.300	<0.050	<10.0	<10.0	<10.0	<30.0	768
NESP 21	11/2/2023	3	pipeline	<0.300	<0.050	<10.0	<10.0	<10.0	<30.0	1840
NESP 21	11/2/2023	5	pipeline	<0.300	<0.050	<10.0	<10.0	<10.0	<30.0	6660
NESP 22	11/2/2023	3	excavated	<0.300	<0.050	<10.0	<10.0	<10.0	<30.0	1490
NESP 22	11/2/2023	5	excavated	<0.300	<0.050	<10.0	<10.0	<10.0	<30.0	800
NESP 23			under water							
NESP 24			under water							
NESP 25	11/2/2023	3	excavated	<0.300	<0.050	<10.0	<10.0	<10.0	<30.0	592
NESP 25	11/2/2023	0.5	excavated	<0.300	<0.050	<10.0	<10.0	<10.0	<30.0	3360

"--" = Not Analyzed

Closure Sampling

Table 5:
Summary of Closure Sample ResultsDagger Lake Zeus Pond Release
(nAPP2211527047 and NAPP2305153347)

Sample ID	Sample Date	Depth (feet bgs)	Proposed Action/ Action Taken	BTEX mg/Kg	Benzene mg/Kg	GRO mg/Kg	DRO mg/Kg	MRO mg/Kg	Total TPH mg/Kg	Cl- mg/Kg
NMED Closure Criteria				50	10				2500	600/10000
NESP 1	11/2/2023	2	insitu	<0.300	<0.050	<10.0	<10.0	<10.0	<30.0	16
NESP 1	11/2/2023	4	insitu	<0.300	<0.050	<10.0	<10.0	<10.0	<30.0	48
NESP 2	11/2/2023	2	insitu	<0.300	<0.050	<10.0	<10.0	<10.0	<30.0	<16.0
NESP 2	11/2/2023	4	insitu	<0.300	<0.050	<10.0	<10.0	<10.0	<30.0	16
NESP 3	11/2/2023	2	insitu	<0.300	<0.050	<10.0	<10.0	<10.0	<30.0	16
NESP 3	11/2/2023	4	insitu	<0.300	<0.050	<10.0	<10.0	<10.0	<30.0	16
NESP 4	11/2/2023	2	insitu	<0.300	<0.050	<10.0	<10.0	<10.0	<30.0	<16.0
NESP 4	11/2/2023	4	insitu	<0.300	<0.050	<10.0	<10.0	<10.0	<30.0	48
NESP 7	11/2/2023	3	insitu	<0.300	<0.050	<10.0	<10.0	<10.0	<30.0	48
NESP 7	11/2/2023	5	insitu	<0.300	<0.050	<10.0	<10.0	<10.0	<30.0	<16.0
NESP 8	11/2/2023	3	insitu	<0.300	<0.050	<10.0	<10.0	<10.0	<30.0	32
NESP 8	11/2/2023	5	insitu	<0.300	<0.050	<10.0	<10.0	<10.0	<30.0	16
NESP 9	11/2/2023	2	insitu	<0.300	<0.050	<10.0	<10.0	<10.0	<30.0	48
NESP 9	11/2/2023	4	insitu	<0.300	<0.050	<10.0	<10.0	<10.0	<30.0	32
NESP 10	11/2/2023	3	insitu	<0.300	<0.050	<10.0	<10.0	<10.0	<30.0	32
NESP 10	11/2/2023	5	insitu	<0.300	<0.050	<10.0	<10.0	<10.0	<30.0	48
NESP 13	11/2/2023	3	insitu	<0.300	<0.050	<10.0	<10.0	<10.0	<30.0	64
NESP 13	11/2/2023	5	insitu	<0.300	<0.050	<10.0	<10.0	<10.0	<30.0	48
NESP 14	11/2/2023	5	insitu	<0.300	<0.050	<10.0	<10.0	<10.0	<30.0	32
NESP 15	11/2/2023	3	insitu	<0.300	<0.050	<10.0	<10.0	<10.0	<30.0	80
NESP 15	11/2/2023	5	insitu	<0.300	<0.050	<10.0	<10.0	<10.0	<30.0	608
SW1	5/16/2024	0-4	insitu/pipeline	<0.300	<0.050	<20.0	<25.0	<50.0	<100.0	622
SW2	5/16/2024	0-6	insitu/pipeline	<0.300	<0.050	<20.0	<25.0	<50.0	<100.0	4180
SW3	5/16/2024	0-6	insitu/pipeline	<0.300	<0.050	<20.0	<25.0	<50.0	<100.0	932
SW4	5/16/2024	0-6	insitu/pipeline	<0.300	<0.050	<20.0	<25.0	<50.0	<100.0	758
SW5	5/16/2024	0-6	insitu/pipeline	<0.300	<0.050	<20.0	<25.0	<50.0	<100.0	7060
SW6	5/16/2024	0-6	insitu/pipeline	<0.300	<0.050	<20.0	<25.0	<50.0	<100.0	4260
SW7	5/16/2024	0-6	insitu/pipeline	<0.300	<0.050	<20.0	<25.0	<50.0	<100.0	968
SW8	5/16/2024	0-4	insitu	<0.300	<0.050	<20.0	<25.0	<50.0	<100.0	203
SW9	5/16/2024	0-4	insitu	<0.300	<0.050	<20.0	<25.0	<50.0	<100.0	23.7
SW10	7/17/2024	0-4	insitu	<0.300	<0.050	<20.0	<25.0	<50.0	<100.0	<20.0
SW11	7/17/2024	0-6	insitu	<0.300	<0.050	<20.0	<25.0	<50.0	<100.0	<20.0
SW12	7/17/2024	0-6	insitu	<0.300	<0.050	<20.0	<25.0	<50.0	<100.0	<20.0
SW13	5/16/2024	1	insitu	<0.300	<0.050	<20.0	<25.0	<50.0	<100.0	554
SW14	5/16/2024	1	insitu/pipeline	<0.300	<0.050	<20.0	<25.0	<50.0	<100.0	1410
SW15	5/16/2024	1	insitu/pipeline	<0.300	<0.050	<20.0	<25.0	<50.0	<100.0	1260
BH1	5/16/2024	6	insitu	<0.300	<0.050	<20.0	<25.0	<50.0	<100.0	1100
BH2	5/16/2024	6	insitu	<0.300	<0.050	<20.0	<25.0	<50.0	<100.0	917
BH3	5/16/2024	6	insitu	<0.300	<0.050	<20.0	<25.0	<50.0	<100.0	1230
BH4	5/16/2024	6	insitu	<0.300	<0.050	<20.0	<25.0	<50.0	<100.0	2070
BH5	5/16/2024	6	insitu	<0.300	<0.050	<20.0	<25.0	<50.0	<100.0	3670
BH6	7/17/2024	6	insitu	<0.300	<0.050	<20.0	<25.0	<50.0	<100.0	<20.0
BH7	7/17/2024	6	insitu	<0.300	<0.050	<20.0	<25.0	<50.0	<100.0	<20.0
BH8	7/17/2024	6	insitu	<0.300	<0.050	<20.0	<25.0	<50.0	<100.0	<20.0
BH9	7/17/2024	6	insitu	<0.300	<0.050	<20.0	<25.0	<50.0	<100.0	<20.0
BH10	7/17/2024	6	insitu	<0.300	<0.050	<20.0	<25.0	<50.0	<100.0	<20.0
BH11	7/17/2024	6	insitu	<0.300	<0.050	<20.0	<25.0	<50.0	<100.0	<20.0
BH12	7/17/2024	6	insitu	<0.300	<0.050	<20.0	<25.0	<50.0	<100.0	<20.0

"--" = Not Analyzed

Closure Sampling

APPENDIX A FORMS C141

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural
Resources Department

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-141
Revised August 24, 2018
Submit to appropriate OCD District office

Incident ID	nAPP2211527047
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party: Chevron USA	OGRID: 4323
Contact Name: Amy Barnhill	Contact Telephone: 432-687-7108
Contact email: ABarnhill@chevron.com	Incident # (assigned by OCD)
Contact mailing address: 6301 Deauville Blvd Midland, Tx 79706	

Location of Release Source

Latitude 32.428442 _____ Longitude -103.638817 _____
(NAD 83 in decimal degrees to 5 decimal places)

Site Name: Dagger Lake Zeus Pond	Site Type: Produced Water Recycle
Date Release Discovered: 4-9-22	API# (if applicable)

Unit Letter	Section	Township	Range	County
P	35	21S	32E	Lea

Surface Owner: ☐ State ☒ Federal ☐ Tribal ☐ Private (Name: _____)

Nature and Volume of Release

Material(s) Released (Select all that apply and attach calculations or specific justification for the volumes provided below)

<input type="checkbox"/> Crude Oil	Volume Released (bbls)	Volume Recovered (bbls)
<input type="checkbox"/> Produced Water	Volume Released (bbls)	Volume Recovered (bbls)
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	<input type="checkbox"/> Yes <input type="checkbox"/> No
<input type="checkbox"/> Condensate	Volume Released (bbls)	Volume Recovered (bbls)
<input type="checkbox"/> Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
<input checked="" type="checkbox"/> Other (describe)	Volume/Weight Released: 10.16 bbls Brackish Water 6,777ppm TDS	Volume/Weight Recovered: 0 bbls

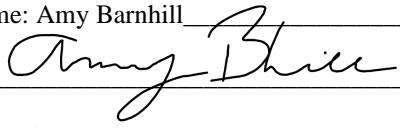
Cause of Release: Layflat hose was being pigged backed to brackish water pond after frac and was open ended at the pond. It was secured to a pump but was removed from the anchor point and left free. The line then shifted and put the effluent water to the ground.

Incident ID	nAPP2211527047
District RP	
Facility ID	
Application ID	

Was this a major release as defined by 19.15.29.7(A) NMAC? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, for what reason(s) does the responsible party consider this a major release?
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?	

Initial Response

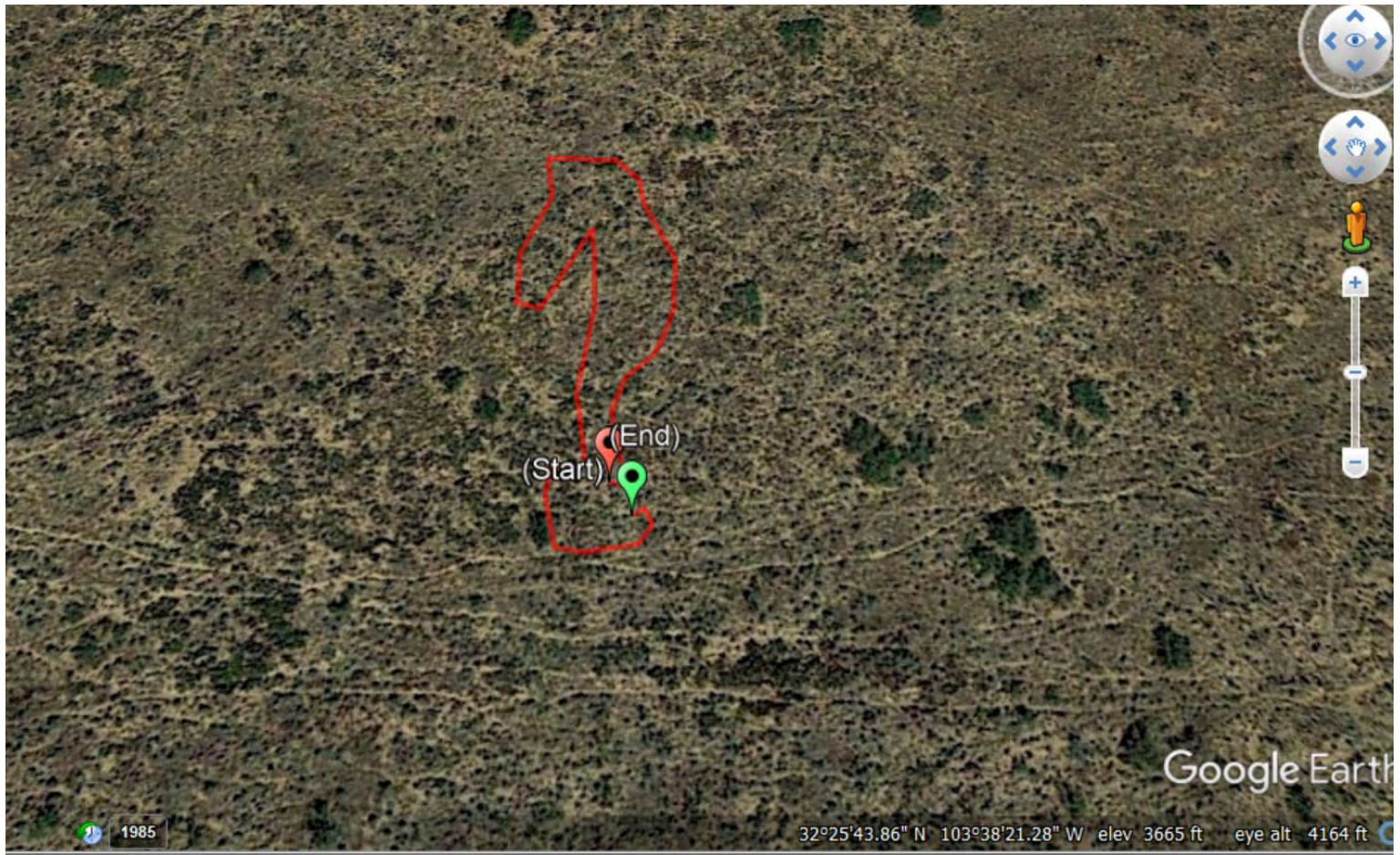
The responsible party must undertake the following actions immediately unless they could create a safety hazard that would result in injury

<input checked="" type="checkbox"/> The source of the release has been stopped.	
<input checked="" type="checkbox"/> The impacted area has been secured to protect human health and the environment.	
<input checked="" type="checkbox"/> Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices.	
<input checked="" type="checkbox"/> All free liquids and recoverable materials have been removed and managed appropriately.	
If all the actions described above have <u>not</u> been undertaken, explain why:	
Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.	
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.	
Printed Name: Amy Barnhill	Title: Water Specialist
Signature: 	Date: 4-24-22
email: ABarnhill@chevron.com	Telephone: 432-687-7108
<u>OCD Only</u>	
Received by: Jocelyn Harimon	Date: 04/25/2022

Incident ID	nAPP2211527047
District RP	
Facility ID	
Application ID	

Spill Calculations:

Area	Shape	Length in feet	Width in feet	Diameter (for circular)	Standing Depth in inches	Depth in Soil in inches	Standing Volume	In Soil Volume	Total Volume
1	Rectangle	730.00	10.00		0.000	0.625	0.00	10.16	10.16



APPENDIX B

NMOSE WELLS REPORT

RECORD OF SEISMIC SHOTHOLE

0 - 20 Sand
20 - 160 Red shale
160 - 205 Hard blue shale

Company Shell
Prospect Delaware Basin
Line S-63
S. P. No. 961

L. S. Elev.	<u>3696</u>
Depth to K.	Tc <u>20</u>
Elev. of K	Tc <u>3676</u>

CONFIDENTIAL DATA

Driller Austin Parish Data Obtained by _____
Date Drilled 7-29-53 Template position _____

RECORD OF SEISMIC SHOT HOLE

0 - 100 ✓ Sandy Shale 2
100 - 200 Red Bed

Company ShellProspect Delaware BasinLine S-43 ✓S. P. No. 829 ✓Driller AndersonDate Drilled 5-16-53L. S. Elev. 3675 ✓Depth to K. 100 ? ✓Elev. of K 3575 ? ✓CONFIDENTIAL DATA

Data Obtained by _____

Template position _____

RECORD OF SEISMIC SHOTHOLE

0 - 60 Caliche
60 - 130 Red Clay

*An electric log for this hole indicates that the top of the Triassic was encountered at a depth of 71 feet (elevation 3603).

Company Humble

Prospect Bell Lake

Line 27

S. P. No. 850

Driller _____

Date Drilled 8/25/58

L. S. Elev. _____ 3674

Depth to K. _____ Rc 60

Elev. of K _____ Rc *3614

CONFIDENTIAL DATA

Data Obtained by USGS

Template position _____

RECORD OF SEISMIC SHOT HOLE

00 - 130 Red Clay
00 - 00 Caliche

*An electric log for this hole indicates
that the top of the Triassic was encountered
at a depth of 71 feet (elevation 3033).

L.S. Elev. 3074
Depth to 10' 00
Core of 10' No #3074

CONFIDENTIAL DATA

Date Obtained by URG

Template position

02575

Date Obtained

Driller

S.P. No. 050

Line

Project Bell Lake

Company Wyandale

RECORD OF SEISMIC SHOTHOLE

0 - 80 Sand
80 - 205 Blue shale

Company ShellProspect Delaware BasinLine S-63S. P. No. 960Driller Ray AdkisonDate Drilled 7-29-53L. S. Elev. 3667Depth to K. 80Elev. of K 3587CONFIDENTIAL DATA

Data Obtained by _____

Template position _____

RECORD OF SEISMIC SHOTHOLE

0 - 65 ✓ Sand
65 - 160 Red Shale
160 - 290 Red Bed

Company ShellProspect Delaware BasinLine S-43 ✓S. P. No. 830 ✓Driller AdkisonDate Drilled 6-16-53L.S. Elev. 3655 ✓Depth to K. 65 ✓Elev. of K 3590 ✓CONFIDENTIAL DATA

Data Obtained by _____

Template position _____

RECORD OF SEISMIC SHOT HOLE

0 - 50 Sand
50 - 130 Blue shale
130 - 205 Red shale

Company Shell
Prospect Delaware Basin
Line S-63
S. P. No. 959

L. S. Elev.	<u>3662</u>
Depth to K.	<u>50</u>
Elev. of K.	<u>3612</u>

CONFIDENTIAL DATA

Driller Austin Parish Date Obtained by _____
Date Drilled 7-29-53 Template position _____

RECORD OF SEISMIC SHOTHOLE

0 - 40' Sand
40 - 145 Blue Clay & Shale
145 - 185 Red Clay

*An electric log for this hole indicates
that the top of the Triassic was encountered
at a depth of 56?feet (elevation 3600?)

Company Humble

Prospect Bell Lake

Line 27

S. P. No. 852

Driller _____

Date Drilled 8/25/58

L. S. Elev. _____ 3656

Depth to K. _____ Tc 40

Elev. of K _____ Tc *3616

CONFIDENTIAL DATA

Data Obtained by USGS

Template position _____

RECORD OF SEISMIC SHOTHOLE

145 - 105 Red Clay
150 - 145 Blue Clay & shale
155 - 145 Red Clay

*in electric log for this hole indicates that the top of the Triassic was encountered at a depth of 5000' (elevation 3000')

3050	145 Elev
3010	Depth to K
3010	Elev of K

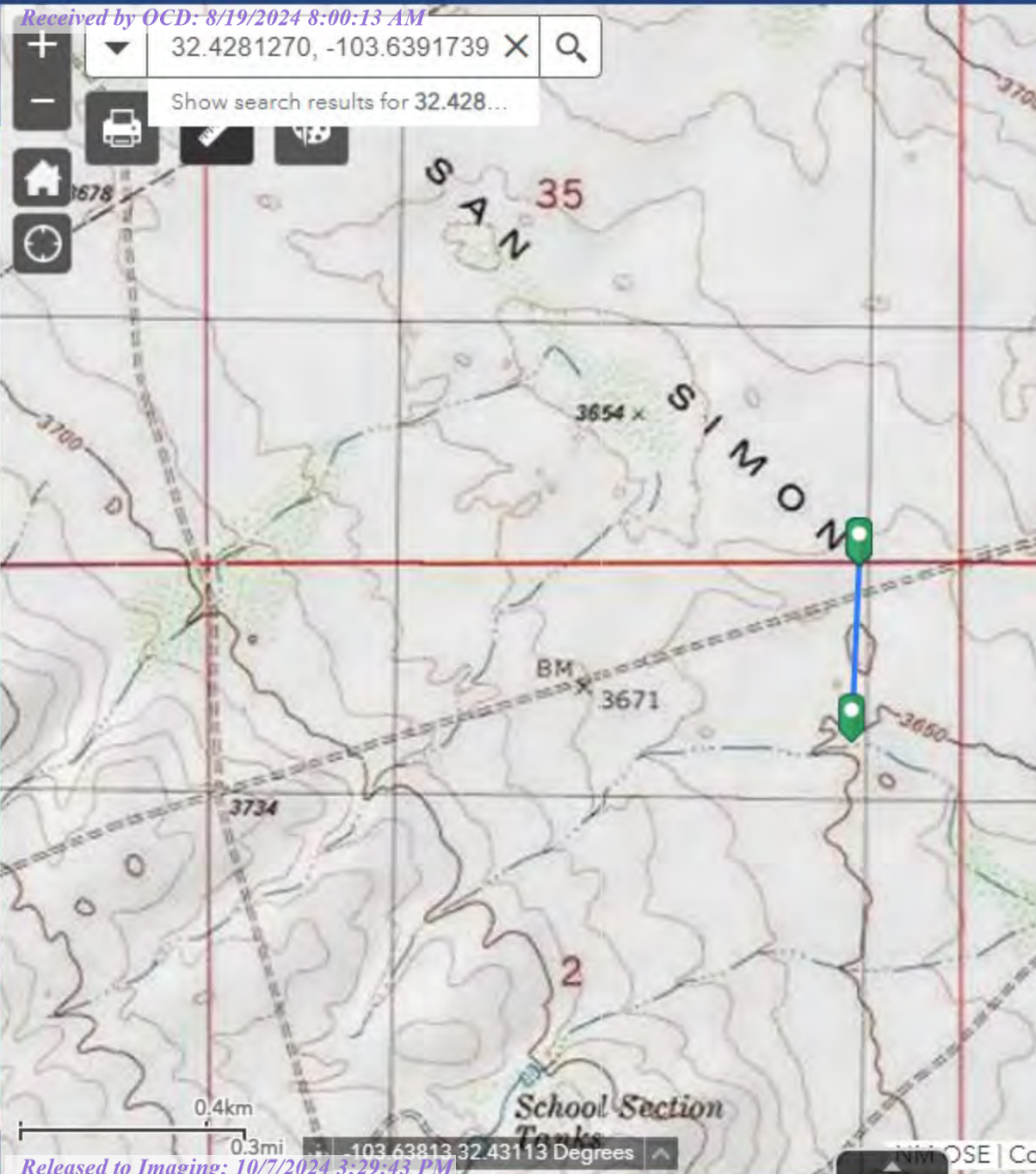
CONFIDENTIAL DATA

Date obtained by USGS

Template position

Company	Sample
Prospect	Bell Lake
Line	
S. No.	852

Date	8/23/56
Driller	



Measurement



| Feet ▾

Measurement Result

1,226.8 Feet

Clear

Press CTRL to enable snapping

32.4281270, -103.6391739

Show search results for 32.428...

CP-01701-POD1

C-04566-POD1

1:9027

0.2km

App State

Click to restore the map extent and layers visibility where you left off



New Mexico Office of the State Engineer

Transaction Summary

EXPL Permit To Explore





Transaction Number: 703676**Transaction Desc:**

C 04566 POD1

File Date: 08/02/2021**Primary Status:** PMT Permit**Secondary Status:** APR Approved**Status:****Person Assigned:** *******Applicant:** ADVANCED ENERGY PARTNERS**Contact:** BRADEN HARRIS

x

Events

	Date	Type	Description	Comment	Processed By
 get images	08/02/2021	APP	Application Received	*	*****
	08/11/2021	FTN	Finalize non-published Trans.		*****
 get images	08/12/2021	TEC	Technical Report	*PLG PLAN POD1	*****
 get images	10/22/2021	LOG	Well Log Received	*	*****
 get images	10/22/2021	LGI	Well Log Image	*PLG RECORD C-	*****
	10/27/2021	DRY	Dry well log received		*****
	11/10/2021	QAT	Quality Assurance Completed	DATA	*****
	11/16/2021	QAT	Quality Assurance Completed	IMAGE	*****

x

Water Right Information

WR File Nbr	Acres	Diversion	Consumptive	Purpose of Use
C 04566	0	0		MON MONITORING WELL

****Point of Diversion**C 04566 POD1 627930 3588524 

x

Remarks

"ANDERSON FEDERAL. A SOIL BORING TO DETERMINE DEPTH UP TO 110 FEET. TEMPORARY PVC WELL MATERIAL WILL BE PLACED TO TOTAL DEPTH AND SECURED AT SURFACE. TEMPORARY WELL WILL BE IN PLACE FOR MINIMUM OF 72 HOURS. IF GROUND WATER IS ENCOUNTERED

THE BORING WILL BE PLUGGED IMMEDIATELY USING AUGERS AS TREMIE TO LAND A SLURRY OF PORTLAND TYPE I/II NEAT CEMENT LESS THAN 6.0 GALLONS OF WATER PER 94 LB SACK. IF NO WATER IS ENCOUNTERED THEN DRILL CUTTINGS WILL BE USED TO (10) TEN FEET OF-

LAND SURFACE AND PLUGGED USING HYDRATED BENTONITE."

x

National Flood Hazard Layer FIRMette



103°38'40"W 32°25'57"N



Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS		Without Base Flood Elevation (BFE) Zone A, V, A99
		With BFE or Depth Zone AE, AO, AH, VE, AR
		Regulatory Floodway
OTHER AREAS OF FLOOD HAZARD		0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone X
		Future Conditions 1% Annual Chance Flood Hazard Zone X
		Area with Reduced Flood Risk due to Levee. See Notes. Zone X
		Area with Flood Risk due to Levee Zone D
OTHER AREAS		NO SCREEN Area of Minimal Flood Hazard Zone X
		Effective LOMRs
		Area of Undetermined Flood Hazard Zone D
GENERAL STRUCTURES		Channel, Culvert, or Storm Sewer
		Levee, Dike, or Floodwall
OTHER FEATURES		20.2 Cross Sections with 1% Annual Chance Water Surface Elevation
		17.5 Cross Sections with 1% Annual Chance Water Surface Elevation
		Coastal Transect
		Base Flood Elevation Line (BFE)
		Limit of Study
		Jurisdiction Boundary
		Coastal Transect Baseline
MAP PANELS		Digital Data Available
		No Digital Data Available
		Unmapped



The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on **10/5/2022 at 4:58 PM** and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

APPENDIX C

PHOTO LOG AND FIELD NOTES

208°SW (T) LAT: 32.428115 LON: -103.638888 ±9ft ▲ 3688ft

Zeus Pit

Excavation (South end of the release)

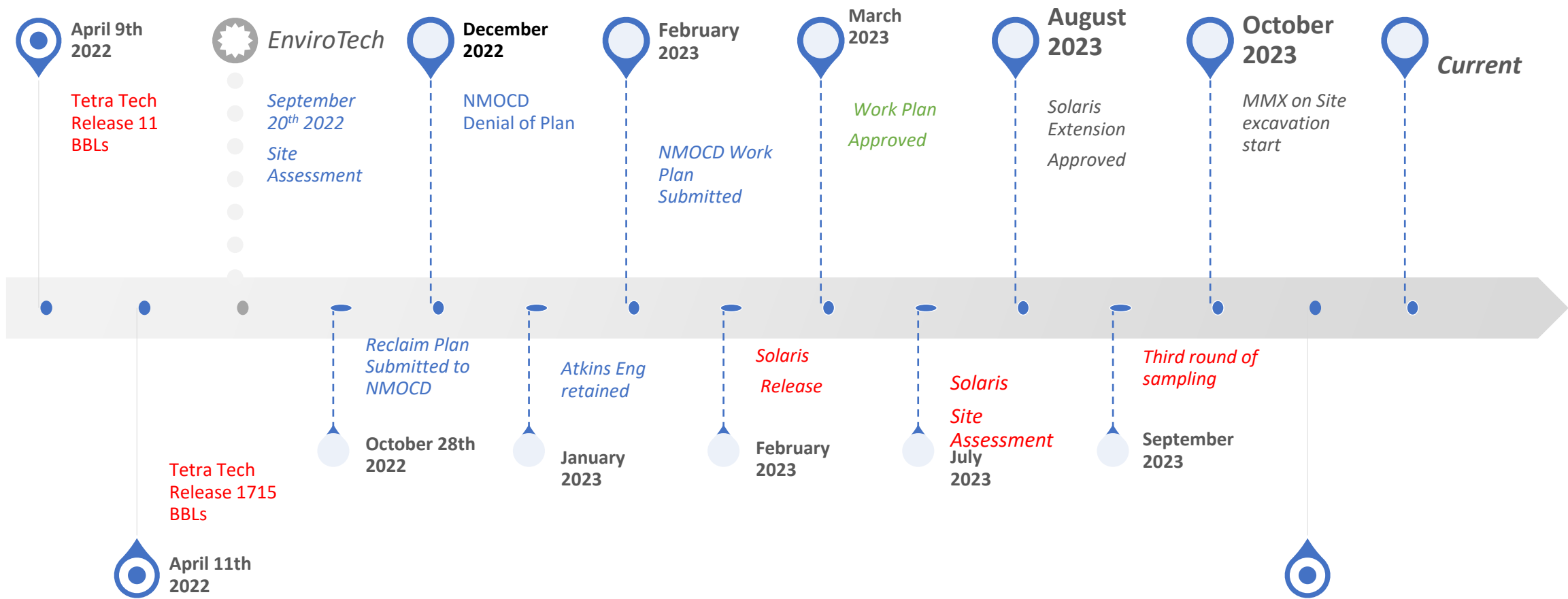
Excavation south

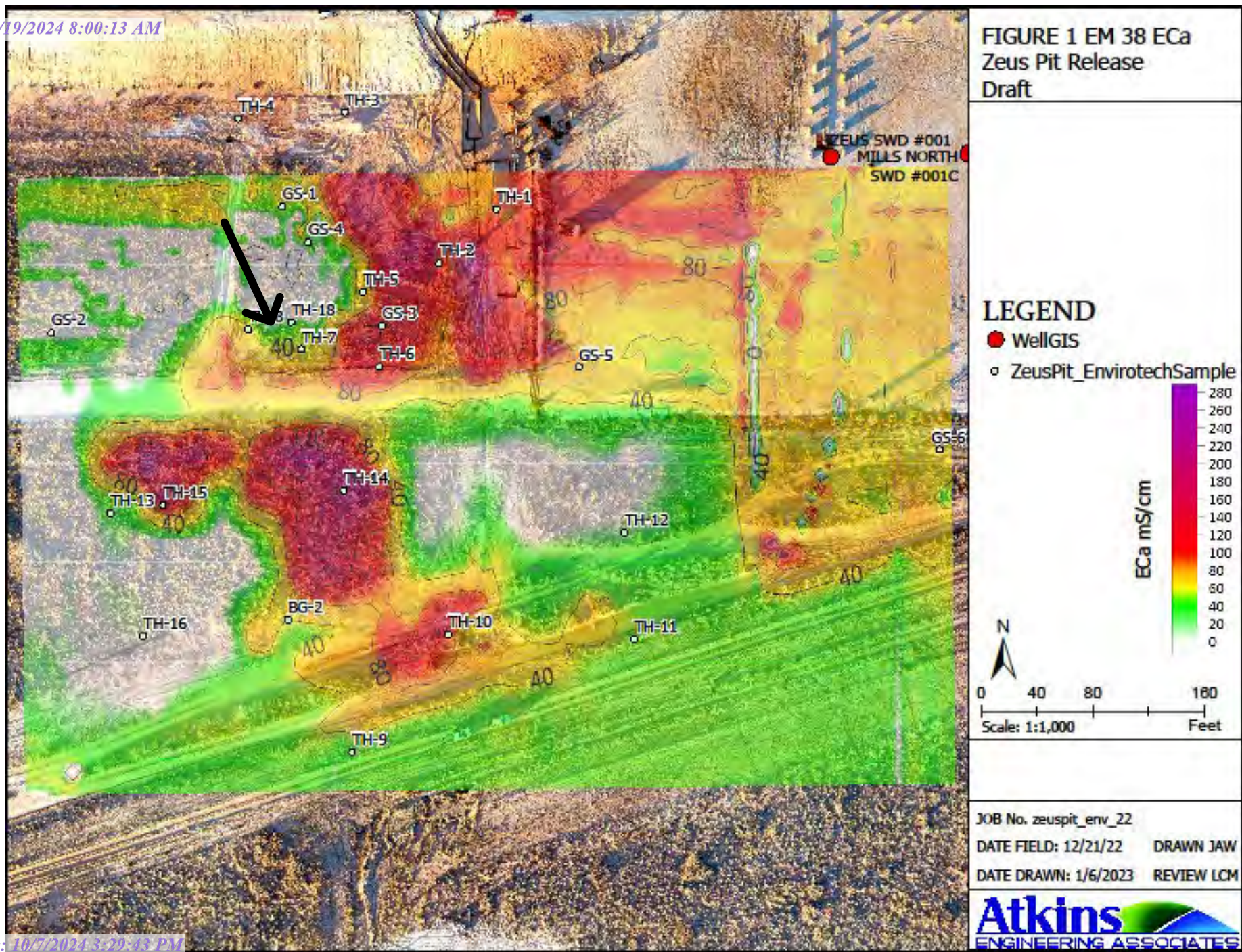
Zeus

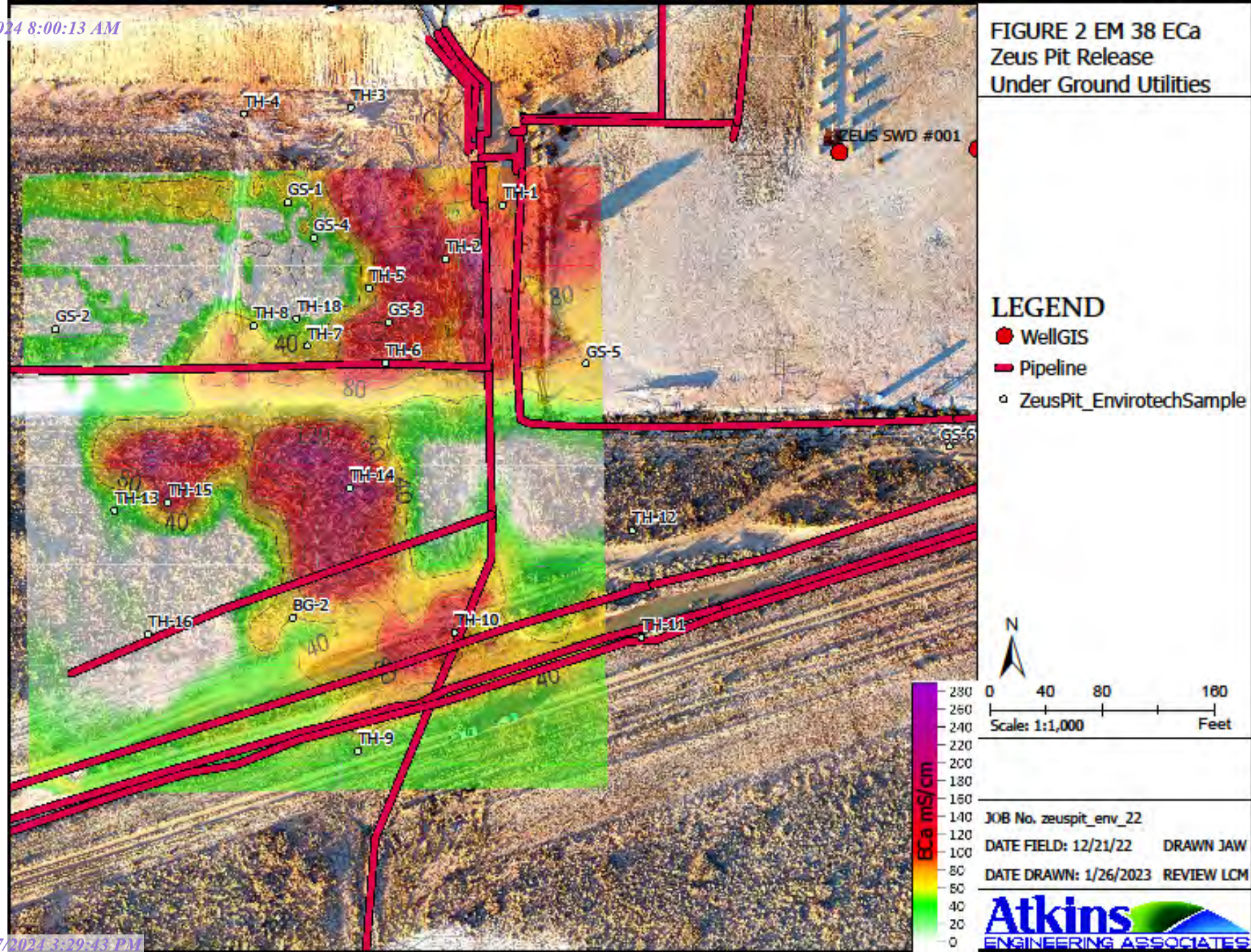
06 Nov 2023, 10:35:57

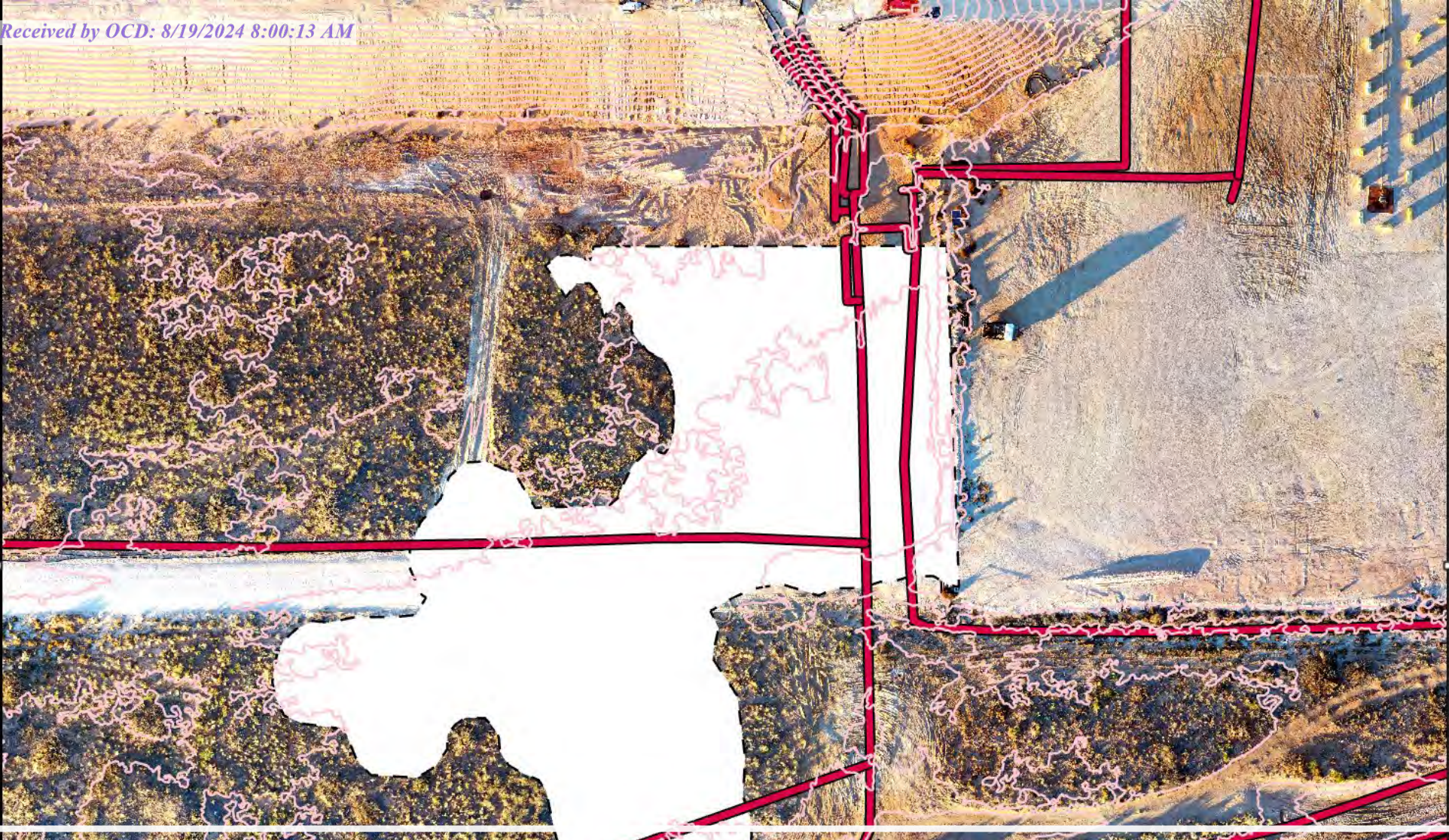


Project Timeline









LEGEND

[] Apx. Release Area

— Pipeline

● Point layer

● Point layer

— 2023-12-21_GeneralSlopes



Before the Rains





LEGEND

- Excavation Area
- Pipeline
- Point layer
- Point layer



After the Rains







Federal Lands

API Publication 4734, Modeling Study of Produced Water Release Scenarios.

Units: English (inches)

Climate: Arid Hot (NM/W.Texas, Hobbs)

Plant Uptake Trigger: 1% Input Concentration

Groundwater Characteristics

Background Cl Concentration in Aquifer: 180 [mg/L]

Aquifer porosity: 0.3 [-]

Groundwater Table Depth: 100 [ft]

Aquifer Thickness: 140 [ft]

Slope of Water Table: 0.05 [-]

Hydraulic Conductivity: 3.28084 [ft/d]

Groundwater Flux: 22.9659 [ft²/d]

Source Characteristics

Chloride Load:: 1.94 [kg/m²]

Max. length of the spill in direction of GW flow:: 300 [ft]

Soil Profiles

Surface Layer: Medium Sand

Soil Profile: P9 - Sandy Clay (30)

Red Bed Logs NMOSE vs TMW log NMOSE

0 - 100 ✓ Sandy Shale 2
100 - 200 Red Bed

Company Shell

Prospect Delaware Basin

Line S-43 ✓

S. P. No. 829 ✓

Driller Anderson

Date Drilled 5-16-53

L.S. Elev. 3675 ✓

Depth to K. 100 ? ✓

Elev. of K 3575 ✓

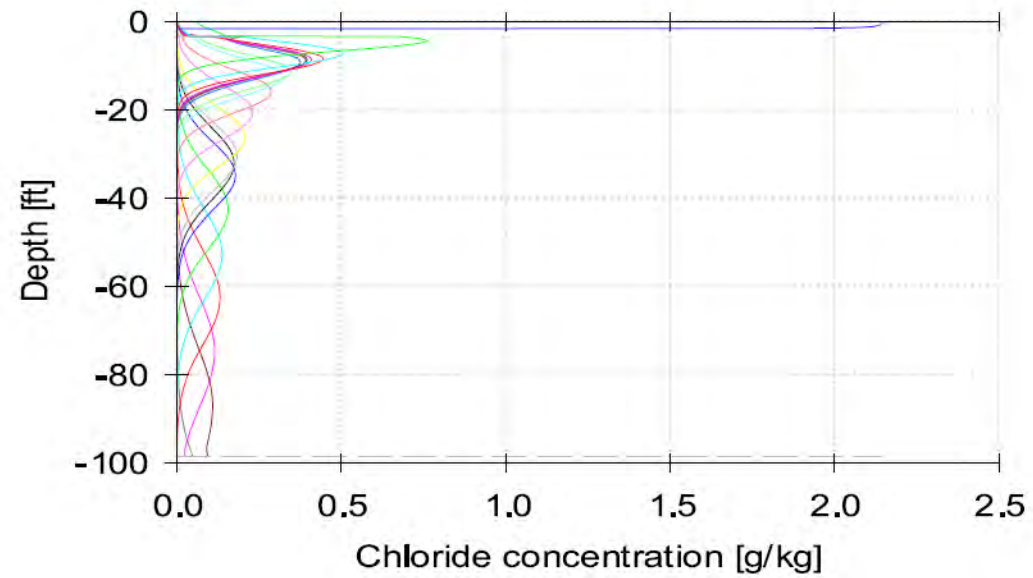
CONFIDENTIAL DATA

Data Obtained by _____

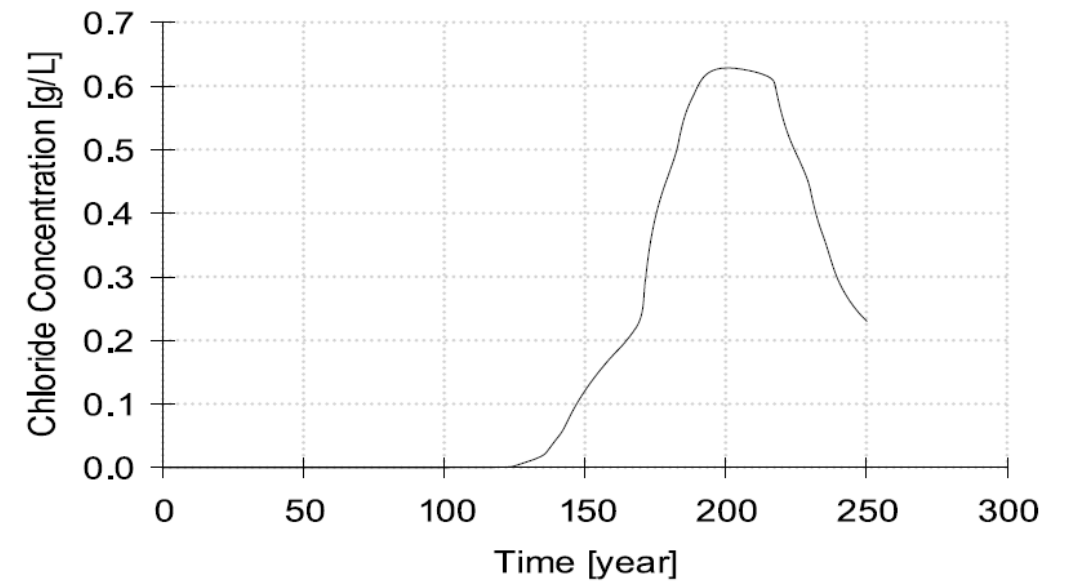
Template position _____

Location No. 21.32.35.33234

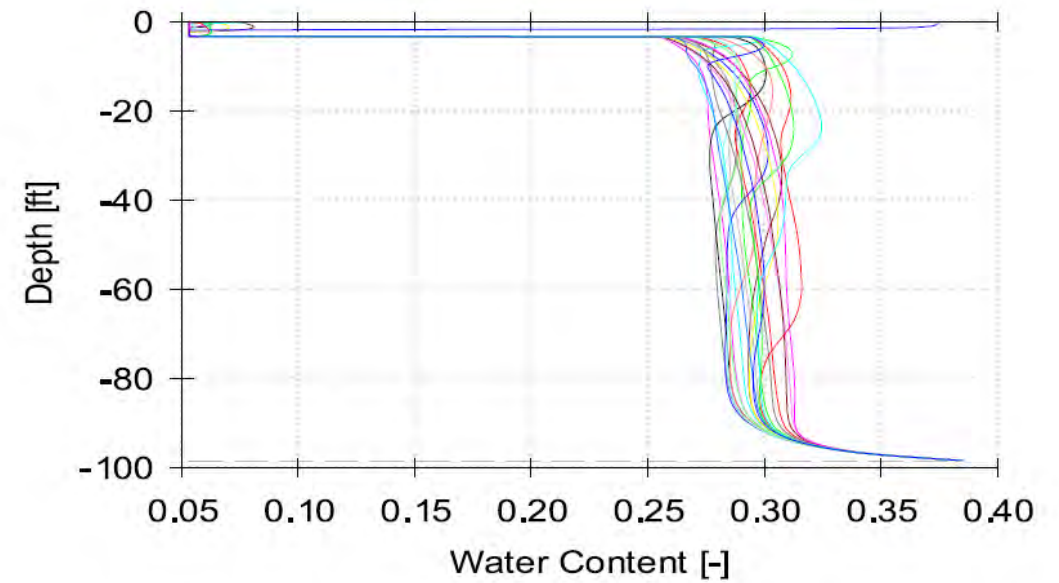
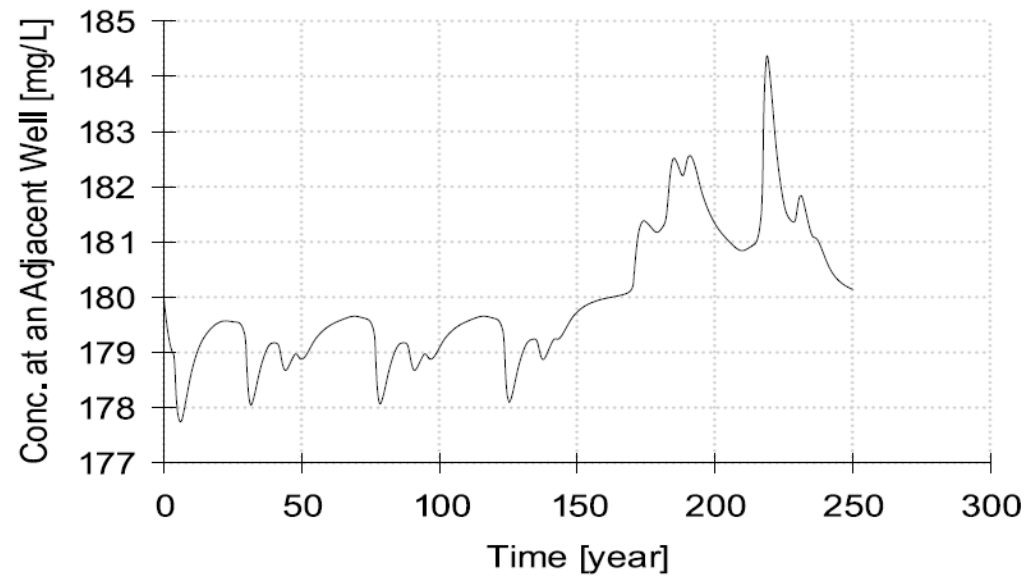
DEPTH (feet bgl)		THICKNESS (feet)	COLOR AND TYPE OF MATERIAL ENCOUNTERED - INCLUDE WATER-BEARING CAVITIES OR FRACTURE ZONES (attach supplemental sheets to fully describe all units)	WATER BEARING? (YES / NO)	ESTIMATED YIELD FOR WATER- BEARING ZONES (gpm)
FROM	TO				
0	14	14	Sand, Fine-grained, poorly graded, Brownish Red Dry	Y ✓ N	
14	24	10	Sand, Fine-grained, poorly graded, with gravel 0.25" Tan Dry	Y ✓ N	
24	54	20	Sand, Fine-grained, poorly graded, Tan Red Dry	Y ✓ N	
54	59	5	Sand, Fine-grained, poorly graded, caliche, Tan, Dry	Y ✓ N	
59	105	46	Sand, Fine-grained, poorly graded, caliche, Red Brown, Dry	Y ✓ N	
				Y N	



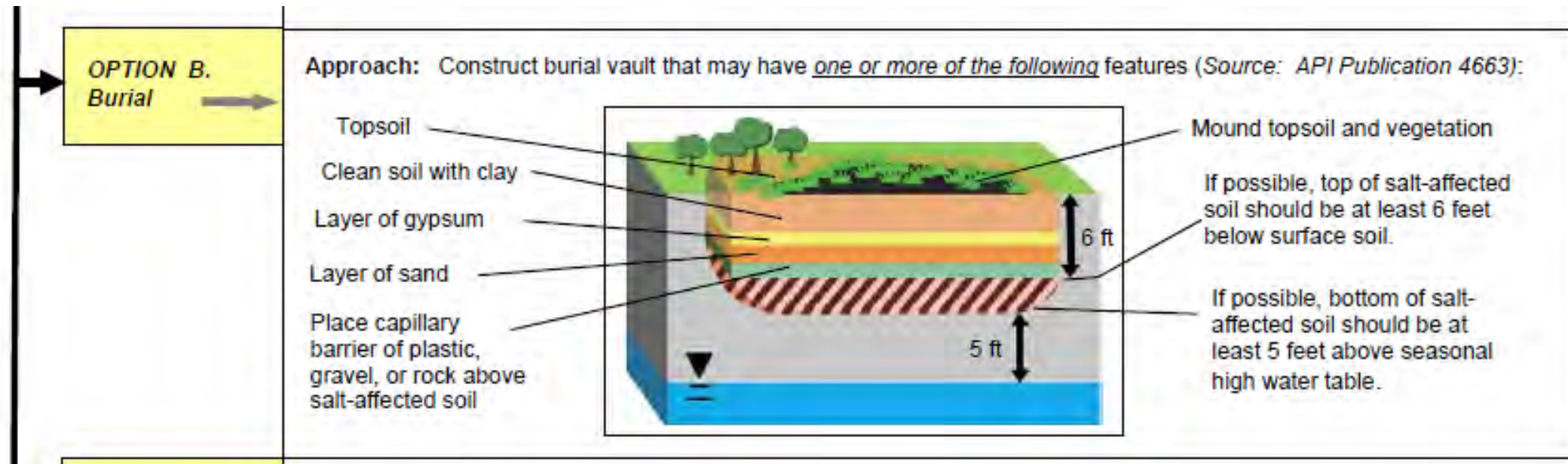
Max Concentration 0.629 [g/L] at time 200.449 Year



Max Concentration 184.372 [mg/L] at time 219.014 Year



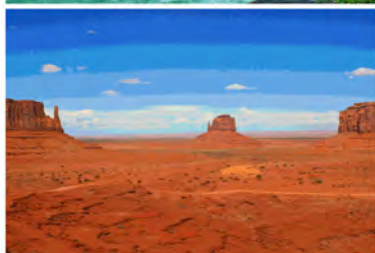
Construct burial vault (Source: API Publication 4663):



APPENDIX D

LABORATORY ANALYTICAL REPORTS

Report to:
Austin Weyant



envirotech

Practical Solutions for a Better Tomorrow

Analytical Report

Atkins Engineering Associates Inc.

Project Name: ZEUS
Work Order: E405308
Job Number: 20071-0001
Received: 5/22/2024

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
6/5/24

5796 U.S. Hwy 64
Farmington, NM 87401

Phone: (505) 632-1881
Envirotech-inc.com



Envirotech Inc. certifies the test results meet all requirements of TNI unless noted otherwise.
Statement of Data Authenticity: Envirotech Inc. attests the data reported has not been altered in any way.
Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech Inc.
Envirotech Inc. holds the Utah TNI certification NM00979 for data reported.
Envirotech Inc. holds the Texas TNI certification T104704557 for data reported.

Date Reported: 6/5/24

Austin Weyant
2904 W. 2nd
Roswell, NM 88201



Project Name: ZEUS
Workorder: E405308
Date Received: 5/22/2024 1:00:00PM

Austin Weyant,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 5/22/2024 1:00:00PM, under the Project Name: ZEUS.

The analytical test results summarized in this report with the Project Name: ZEUS apply to the individual samples collected, identified and submitted bearing the project name on the enclosed chain-of-custody. Subcontracted sample analyses not conducted by Envirotech, Inc., are attached in full as issued by the subcontract laboratory.

Please review the Chain-of-Custody (COC) and Sample Receipt Checklist (SRC) for any issues regarding sample receipt temperature, containers, preservation etc. To best understand your test results, review the entire report summarizing your sample data and the associated quality control batch data.

All reported data in this analytical report were analyzed according to the referenced method(s) and are in compliance with the latest NELAC/TNI standards, unless otherwise noted. Samples or analytical quality control parameters not meeting specific QC criteria are qualified with a data flag. Data flag definitions are located in the Notes and Definitions section of this analytical report.

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

Respectfully,

Walter Hinchman
Laboratory Director
Office: 505-632-1881
Cell: 775-287-1762
whinchman@envirotech-inc.com

Raina Schwanz
Laboratory Administrator
Office: 505-632-1881
rainaschwanz@envirotech-inc.com

Alexa Michaels
Sample Custody Officer
Office: 505-632-1881
labadmin@envirotech-inc.com

Field Offices:

Southern New Mexico Area

Lynn Jarboe
Laboratory Technical Representative
Office: 505-421-LABS(5227)
Cell: 505-320-4759
ljjarboe@envirotech-inc.com

Michelle Golzaes
Client Representative
Office: 505-421-LABS(5227)
Cell: 505-947-8222
mgonzales@envirotech-inc.com

Envirotech Web Address: www.envirotech-inc.com

Table of Contents

Title Page	1
Cover Page	2
Table of Contents	3
Sample Summary	5
Sample Data	6
SW1	6
SW2	7
SW3	8
SW4	9
SW5	10
SW6	11
SW7	12
SW8	13
SW9	14
SW13	15
SW14	16
SW15	17
BH1	18
BH2	19
BH3	20
BH4	21
BH5	22
QC Summary Data	23
QC - Volatile Organic Compounds by EPA 8260B	23
QC - Nonhalogenated Organics by EPA 8015D - GRO	24

Table of Contents (continued)

QC - Nonhalogenated Organics by EPA 8015D - DRO/ORO	25
QC - Anions by EPA 300.0/9056A	26
Definitions and Notes	28
Chain of Custody etc.	29

Sample Summary

Atkins Engineering Associates Inc.	Project Name:	ZEUS	Reported:
2904 W. 2nd	Project Number:	20071-0001	
Roswell NM, 88201	Project Manager:	Austin Weyant	06/05/24 11:38

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
SW1	E405308-01A	Soil	05/16/24	05/22/24	Glass Jar, 2 oz.
SW2	E405308-02A	Soil	05/16/24	05/22/24	Glass Jar, 2 oz.
SW3	E405308-03A	Soil	05/16/24	05/22/24	Glass Jar, 2 oz.
SW4	E405308-04A	Soil	05/16/24	05/22/24	Glass Jar, 2 oz.
SW5	E405308-05A	Soil	05/16/24	05/22/24	Glass Jar, 2 oz.
SW6	E405308-06A	Soil	05/16/24	05/22/24	Glass Jar, 2 oz.
SW7	E405308-07A	Soil	05/16/24	05/22/24	Glass Jar, 2 oz.
SW8	E405308-08A	Soil	05/16/24	05/22/24	Glass Jar, 2 oz.
SW9	E405308-09A	Soil	05/16/24	05/22/24	Glass Jar, 2 oz.
SW13	E405308-10A	Soil	05/16/24	05/22/24	Glass Jar, 2 oz.
SW14	E405308-11A	Soil	05/16/24	05/22/24	Glass Jar, 2 oz.
SW15	E405308-12A	Soil	05/16/24	05/22/24	Glass Jar, 2 oz.
BH1	E405308-13A	Soil	05/16/24	05/22/24	Glass Jar, 2 oz.
BH2	E405308-14A	Soil	05/16/24	05/22/24	Glass Jar, 2 oz.
BH3	E405308-15A	Soil	05/16/24	05/22/24	Glass Jar, 2 oz.
BH4	E405308-16A	Soil	05/16/24	05/22/24	Glass Jar, 2 oz.
BH5	E405308-17A	Soil	05/16/24	05/22/24	Glass Jar, 2 oz.



Sample Data

Atkins Engineering Associates Inc. 2904 W. 2nd Roswell NM, 88201	Project Name: ZEUS Project Number: 20071-0001 Project Manager: Austin Weyant	Reported: 6/5/2024 11:38:38AM
--	--	----------------------------------

SW1
E405308-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg	Analyst: IY		Batch: 2421160	
Benzene	ND	0.0250	1	05/24/24	05/30/24	G1a
Ethylbenzene	ND	0.0250	1	05/24/24	05/30/24	
Toluene	ND	0.0250	1	05/24/24	05/30/24	
o-Xylene	ND	0.0250	1	05/24/24	05/30/24	
p,m-Xylene	ND	0.0500	1	05/24/24	05/30/24	
Total Xylenes	ND	0.0250	1	05/24/24	05/30/24	
Surrogate: Bromofluorobenzene		109 %	70-130	05/24/24	05/30/24	
Surrogate: 1,2-Dichloroethane-d4		87.8 %	70-130	05/24/24	05/30/24	
Surrogate: Toluene-d8		104 %	70-130	05/24/24	05/30/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: IY		Batch: 2421160	
Gasoline Range Organics (C6-C10)	ND	20.0	1	05/24/24	05/30/24	G1a
Surrogate: Bromofluorobenzene		109 %	70-130	05/24/24	05/30/24	
Surrogate: 1,2-Dichloroethane-d4		87.8 %	70-130	05/24/24	05/30/24	
Surrogate: Toluene-d8		104 %	70-130	05/24/24	05/30/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: KM		Batch: 2422076	
Diesel Range Organics (C10-C28)	ND	25.0	1	05/30/24	05/31/24	
Oil Range Organics (C28-C36)	ND	50.0	1	05/30/24	05/31/24	
Surrogate: n-Nonane		120 %	50-200	05/30/24	05/31/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: IY		Batch: 2422044	
Chloride	622	20.0	1	05/29/24	05/30/24	



Sample Data

Atkins Engineering Associates Inc.
2904 W. 2nd
Roswell NM, 88201

Project Name: ZEUS
Project Number: 20071-0001
Project Manager: Austin Weyant

Reported:
6/5/2024 11:38:38AM

SW2

E405308-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2421160
Benzene	ND	0.0250	1	05/24/24	05/30/24	G1
Ethylbenzene	ND	0.0250	1	05/24/24	05/30/24	
Toluene	ND	0.0250	1	05/24/24	05/30/24	
o-Xylene	ND	0.0250	1	05/24/24	05/30/24	
p,m-Xylene	ND	0.0500	1	05/24/24	05/30/24	
Total Xylenes	ND	0.0250	1	05/24/24	05/30/24	
Surrogate: Bromofluorobenzene		109 %	70-130	05/24/24	05/30/24	
Surrogate: 1,2-Dichloroethane-d4		90.2 %	70-130	05/24/24	05/30/24	
Surrogate: Toluene-d8		105 %	70-130	05/24/24	05/30/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2421160
Gasoline Range Organics (C6-C10)	ND	20.0	1	05/24/24	05/30/24	G1
Surrogate: Bromofluorobenzene		109 %	70-130	05/24/24	05/30/24	
Surrogate: 1,2-Dichloroethane-d4		90.2 %	70-130	05/24/24	05/30/24	
Surrogate: Toluene-d8		105 %	70-130	05/24/24	05/30/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2422076
Diesel Range Organics (C10-C28)	ND	25.0	1	05/30/24	05/31/24	
Oil Range Organics (C28-C36)	ND	50.0	1	05/30/24	05/31/24	
Surrogate: n-Nonane		105 %	50-200	05/30/24	05/31/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: IY		Batch: 2422044
Chloride	4180	40.0	2	05/29/24	05/30/24	



Sample Data

Atkins Engineering Associates Inc.
2904 W. 2nd
Roswell NM, 88201

Project Name: ZEUS
Project Number: 20071-0001
Project Manager: Austin Weyant

Reported:
6/5/2024 11:38:38AM

SW3

E405308-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2421160
Benzene	ND	0.0250	1	05/24/24	05/30/24	G1f
Ethylbenzene	ND	0.0250	1	05/24/24	05/30/24	
Toluene	ND	0.0250	1	05/24/24	05/30/24	
o-Xylene	ND	0.0250	1	05/24/24	05/30/24	
p,m-Xylene	ND	0.0500	1	05/24/24	05/30/24	
Total Xylenes	ND	0.0250	1	05/24/24	05/30/24	
Surrogate: Bromofluorobenzene		109 %	70-130	05/24/24	05/30/24	
Surrogate: 1,2-Dichloroethane-d4		90.5 %	70-130	05/24/24	05/30/24	
Surrogate: Toluene-d8		105 %	70-130	05/24/24	05/30/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2421160
Gasoline Range Organics (C6-C10)	ND	20.0	1	05/24/24	05/30/24	G1g
Surrogate: Bromofluorobenzene		109 %	70-130	05/24/24	05/30/24	
Surrogate: 1,2-Dichloroethane-d4		90.5 %	70-130	05/24/24	05/30/24	
Surrogate: Toluene-d8		105 %	70-130	05/24/24	05/30/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2422076
Diesel Range Organics (C10-C28)	ND	25.0	1	05/30/24	05/31/24	
Oil Range Organics (C28-C36)	ND	50.0	1	05/30/24	05/31/24	
Surrogate: n-Nonane		107 %	50-200	05/30/24	05/31/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: IY		Batch: 2422044
Chloride	932	20.0	1	05/29/24	05/30/24	



Sample Data

Atkins Engineering Associates Inc.
2904 W. 2nd
Roswell NM, 88201

Project Name: ZEUS
Project Number: 20071-0001
Project Manager: Austin Weyant

Reported:
6/5/2024 11:38:38AM

SW4

E405308-04

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2421160
Benzene	ND	0.0250	1	05/24/24	05/30/24	G1k
Ethylbenzene	ND	0.0250	1	05/24/24	05/30/24	
Toluene	ND	0.0250	1	05/24/24	05/30/24	
o-Xylene	ND	0.0250	1	05/24/24	05/30/24	
p,m-Xylene	ND	0.0500	1	05/24/24	05/30/24	
Total Xylenes	ND	0.0250	1	05/24/24	05/30/24	
Surrogate: Bromofluorobenzene		111 %	70-130	05/24/24	05/30/24	
Surrogate: 1,2-Dichloroethane-d4		94.6 %	70-130	05/24/24	05/30/24	
Surrogate: Toluene-d8		106 %	70-130	05/24/24	05/30/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2421160
Gasoline Range Organics (C6-C10)	ND	20.0	1	05/24/24	05/30/24	G1k
Surrogate: Bromofluorobenzene		111 %	70-130	05/24/24	05/30/24	
Surrogate: 1,2-Dichloroethane-d4		94.6 %	70-130	05/24/24	05/30/24	
Surrogate: Toluene-d8		106 %	70-130	05/24/24	05/30/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2422076
Diesel Range Organics (C10-C28)	ND	25.0	1	05/30/24	05/31/24	
Oil Range Organics (C28-C36)	ND	50.0	1	05/30/24	05/31/24	
Surrogate: n-Nonane		109 %	50-200	05/30/24	05/31/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: IY		Batch: 2422044
Chloride	758	20.0	1	05/29/24	05/30/24	



Sample Data

Atkins Engineering Associates Inc.
2904 W. 2nd
Roswell NM, 88201

Project Name: ZEUS
Project Number: 20071-0001
Project Manager: Austin Weyant

Reported:
6/5/2024 11:38:38AM

SW5

E405308-05

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg	Analyst: IY		Batch: 2421160	
Benzene	ND	0.0250	1	05/24/24	05/30/24	G1g
Ethylbenzene	ND	0.0250	1	05/24/24	05/30/24	
Toluene	ND	0.0250	1	05/24/24	05/30/24	
o-Xylene	ND	0.0250	1	05/24/24	05/30/24	
p,m-Xylene	ND	0.0500	1	05/24/24	05/30/24	
Total Xylenes	ND	0.0250	1	05/24/24	05/30/24	
Surrogate: Bromofluorobenzene		110 %	70-130	05/24/24	05/30/24	
Surrogate: 1,2-Dichloroethane-d4		90.4 %	70-130	05/24/24	05/30/24	
Surrogate: Toluene-d8		105 %	70-130	05/24/24	05/30/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: IY		Batch: 2421160	
Gasoline Range Organics (C6-C10)	ND	20.0	1	05/24/24	05/30/24	G1g
Surrogate: Bromofluorobenzene		110 %	70-130	05/24/24	05/30/24	
Surrogate: 1,2-Dichloroethane-d4		90.4 %	70-130	05/24/24	05/30/24	
Surrogate: Toluene-d8		105 %	70-130	05/24/24	05/30/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: KM		Batch: 2422076	
Diesel Range Organics (C10-C28)	ND	25.0	1	05/30/24	05/31/24	
Oil Range Organics (C28-C36)	ND	50.0	1	05/30/24	05/31/24	
Surrogate: n-Nonane		107 %	50-200	05/30/24	05/31/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: IY		Batch: 2422044	
Chloride	7060	100	5	05/29/24	05/30/24	



Sample Data

Atkins Engineering Associates Inc. 2904 W. 2nd Roswell NM, 88201	Project Name: ZEUS Project Number: 20071-0001 Project Manager: Austin Weyant	Reported: 6/5/2024 11:38:38AM
--	--	----------------------------------

SW6

E405308-06

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg	Analyst: IY		Batch: 2421160	
Benzene	ND	0.0250	1	05/24/24	05/30/24	G1d
Ethylbenzene	ND	0.0250	1	05/24/24	05/30/24	
Toluene	ND	0.0250	1	05/24/24	05/30/24	
o-Xylene	ND	0.0250	1	05/24/24	05/30/24	
p,m-Xylene	ND	0.0500	1	05/24/24	05/30/24	
Total Xylenes	ND	0.0250	1	05/24/24	05/30/24	
Surrogate: Bromofluorobenzene	108 %	70-130		05/24/24	05/30/24	
Surrogate: 1,2-Dichloroethane-d4	91.0 %	70-130		05/24/24	05/30/24	
Surrogate: Toluene-d8	106 %	70-130		05/24/24	05/30/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: IY		Batch: 2421160	
Gasoline Range Organics (C6-C10)	ND	20.0	1	05/24/24	05/30/24	G1e
Surrogate: Bromofluorobenzene	108 %	70-130		05/24/24	05/30/24	
Surrogate: 1,2-Dichloroethane-d4	91.0 %	70-130		05/24/24	05/30/24	
Surrogate: Toluene-d8	106 %	70-130		05/24/24	05/30/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: KM		Batch: 2422076	
Diesel Range Organics (C10-C28)	ND	25.0	1	05/30/24	05/31/24	
Oil Range Organics (C28-C36)	ND	50.0	1	05/30/24	05/31/24	
Surrogate: n-Nonane	109 %	50-200		05/30/24	05/31/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: IY		Batch: 2422044	
Chloride	4260	40.0	2	05/29/24	05/30/24	



Sample Data

Atkins Engineering Associates Inc. 2904 W. 2nd Roswell NM, 88201	Project Name: ZEUS Project Number: 20071-0001 Project Manager: Austin Weyant	Reported: 6/5/2024 11:38:38AM
--	--	----------------------------------

SW7

E405308-07

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg	Analyst: IY			Batch: 2421160
Benzene	ND	0.0250	1	05/24/24	05/30/24	G1j
Ethylbenzene	ND	0.0250	1	05/24/24	05/30/24	
Toluene	ND	0.0250	1	05/24/24	05/30/24	
o-Xylene	ND	0.0250	1	05/24/24	05/30/24	
p,m-Xylene	ND	0.0500	1	05/24/24	05/30/24	
Total Xylenes	ND	0.0250	1	05/24/24	05/30/24	
Surrogate: Bromofluorobenzene	109 %	70-130		05/24/24	05/30/24	
Surrogate: 1,2-Dichloroethane-d4	93.1 %	70-130		05/24/24	05/30/24	
Surrogate: Toluene-d8	105 %	70-130		05/24/24	05/30/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: IY			Batch: 2421160
Gasoline Range Organics (C6-C10)	ND	20.0	1	05/24/24	05/30/24	G1j
Surrogate: Bromofluorobenzene	109 %	70-130		05/24/24	05/30/24	
Surrogate: 1,2-Dichloroethane-d4	93.1 %	70-130		05/24/24	05/30/24	
Surrogate: Toluene-d8	105 %	70-130		05/24/24	05/30/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: KM			Batch: 2422076
Diesel Range Organics (C10-C28)	ND	25.0	1	05/30/24	05/31/24	
Oil Range Organics (C28-C36)	ND	50.0	1	05/30/24	05/31/24	
Surrogate: n-Nonane	110 %	50-200		05/30/24	05/31/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: IY			Batch: 2422044
Chloride	968	20.0	1	05/29/24	05/30/24	



Sample Data

Atkins Engineering Associates Inc.
2904 W. 2nd
Roswell NM, 88201

Project Name: ZEUS
Project Number: 20071-0001
Project Manager: Austin Weyant

Reported:
6/5/2024 11:38:38AM

SW8

E405308-08

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg	Analyst: IY		Batch: 2421160	
Benzene	ND	0.0250	1	05/24/24	05/30/24	G1h
Ethylbenzene	ND	0.0250	1	05/24/24	05/30/24	
Toluene	ND	0.0250	1	05/24/24	05/30/24	
o-Xylene	ND	0.0250	1	05/24/24	05/30/24	
p,m-Xylene	ND	0.0500	1	05/24/24	05/30/24	
Total Xylenes	ND	0.0250	1	05/24/24	05/30/24	
Surrogate: Bromofluorobenzene	108 %	70-130		05/24/24	05/30/24	
Surrogate: 1,2-Dichloroethane-d4	87.7 %	70-130		05/24/24	05/30/24	
Surrogate: Toluene-d8	107 %	70-130		05/24/24	05/30/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: IY		Batch: 2421160	
Gasoline Range Organics (C6-C10)	ND	20.0	1	05/24/24	05/30/24	G1h
Surrogate: Bromofluorobenzene	108 %	70-130		05/24/24	05/30/24	
Surrogate: 1,2-Dichloroethane-d4	87.7 %	70-130		05/24/24	05/30/24	
Surrogate: Toluene-d8	107 %	70-130		05/24/24	05/30/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: KM		Batch: 2422076	
Diesel Range Organics (C10-C28)	ND	25.0	1	05/30/24	05/31/24	
Oil Range Organics (C28-C36)	ND	50.0	1	05/30/24	05/31/24	
Surrogate: n-Nonane	106 %	50-200		05/30/24	05/31/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: IY		Batch: 2422044	
Chloride	203	20.0	1	05/29/24	05/30/24	



Sample Data

Atkins Engineering Associates Inc. 2904 W. 2nd Roswell NM, 88201	Project Name: ZEUS Project Number: 20071-0001 Project Manager: Austin Weyant	Reported: 6/5/2024 11:38:38AM
--	--	----------------------------------

SW9

E405308-09

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg	Analyst: IY		Batch: 2421160	
Benzene	ND	0.0250	1	05/24/24	05/30/24	G1s
Ethylbenzene	ND	0.0250	1	05/24/24	05/30/24	
Toluene	ND	0.0250	1	05/24/24	05/30/24	
o-Xylene	ND	0.0250	1	05/24/24	05/30/24	
p,m-Xylene	ND	0.0500	1	05/24/24	05/30/24	
Total Xylenes	ND	0.0250	1	05/24/24	05/30/24	
Surrogate: Bromofluorobenzene		113 %	70-130	05/24/24	05/30/24	
Surrogate: 1,2-Dichloroethane-d4		92.9 %	70-130	05/24/24	05/30/24	
Surrogate: Toluene-d8		106 %	70-130	05/24/24	05/30/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: IY		Batch: 2421160	
Gasoline Range Organics (C6-C10)	ND	20.0	1	05/24/24	05/30/24	G1i
Surrogate: Bromofluorobenzene		113 %	70-130	05/24/24	05/30/24	
Surrogate: 1,2-Dichloroethane-d4		92.9 %	70-130	05/24/24	05/30/24	
Surrogate: Toluene-d8		106 %	70-130	05/24/24	05/30/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: KM		Batch: 2422076	
Diesel Range Organics (C10-C28)	ND	25.0	1	05/30/24	06/03/24	
Oil Range Organics (C28-C36)	ND	50.0	1	05/30/24	06/03/24	
Surrogate: n-Nonane		99.5 %	50-200	05/30/24	06/03/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: IY		Batch: 2422044	
Chloride	23.7	20.0	1	05/29/24	05/30/24	



Sample Data

Atkins Engineering Associates Inc. 2904 W. 2nd Roswell NM, 88201	Project Name: ZEUS Project Number: 20071-0001 Project Manager: Austin Weyant	Reported: 6/5/2024 11:38:38AM
--	--	----------------------------------

SW13

E405308-10

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg	Analyst: IY			Batch: 2421160
Benzene	ND	0.0250	1	05/24/24	05/30/24	G1m
Ethylbenzene	ND	0.0250	1	05/24/24	05/30/24	
Toluene	ND	0.0250	1	05/24/24	05/30/24	
o-Xylene	ND	0.0250	1	05/24/24	05/30/24	
p,m-Xylene	ND	0.0500	1	05/24/24	05/30/24	
Total Xylenes	ND	0.0250	1	05/24/24	05/30/24	
Surrogate: Bromofluorobenzene		110 %	70-130	05/24/24	05/30/24	
Surrogate: 1,2-Dichloroethane-d4		92.3 %	70-130	05/24/24	05/30/24	
Surrogate: Toluene-d8		104 %	70-130	05/24/24	05/30/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: IY			Batch: 2421160
Gasoline Range Organics (C6-C10)	ND	20.0	1	05/24/24	05/30/24	G1m
Surrogate: Bromofluorobenzene		110 %	70-130	05/24/24	05/30/24	
Surrogate: 1,2-Dichloroethane-d4		92.3 %	70-130	05/24/24	05/30/24	
Surrogate: Toluene-d8		104 %	70-130	05/24/24	05/30/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: KM			Batch: 2422076
Diesel Range Organics (C10-C28)	31.1	25.0	1	05/30/24	05/31/24	
Oil Range Organics (C28-C36)	ND	50.0	1	05/30/24	05/31/24	
Surrogate: n-Nonane		109 %	50-200	05/30/24	05/31/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: WF			Batch: 2423024
Chloride	554	20.0	1	06/03/24	06/03/24	



Sample Data

Atkins Engineering Associates Inc.
2904 W. 2nd
Roswell NM, 88201

Project Name: ZEUS
Project Number: 20071-0001
Project Manager: Austin Weyant

Reported:
6/5/2024 11:38:38AM

SW14

E405308-11

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2421160
Benzene	ND	0.0250	1	05/24/24	05/30/24	G1c
Ethylbenzene	ND	0.0250	1	05/24/24	05/30/24	
Toluene	ND	0.0250	1	05/24/24	05/30/24	
o-Xylene	ND	0.0250	1	05/24/24	05/30/24	
p,m-Xylene	ND	0.0500	1	05/24/24	05/30/24	
Total Xylenes	ND	0.0250	1	05/24/24	05/30/24	
Surrogate: Bromofluorobenzene		111 %	70-130	05/24/24	05/30/24	
Surrogate: 1,2-Dichloroethane-d4		88.2 %	70-130	05/24/24	05/30/24	
Surrogate: Toluene-d8		107 %	70-130	05/24/24	05/30/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2421160
Gasoline Range Organics (C6-C10)	ND	20.0	1	05/24/24	05/30/24	G1c
Surrogate: Bromofluorobenzene		111 %	70-130	05/24/24	05/30/24	
Surrogate: 1,2-Dichloroethane-d4		88.2 %	70-130	05/24/24	05/30/24	
Surrogate: Toluene-d8		107 %	70-130	05/24/24	05/30/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2422076
Diesel Range Organics (C10-C28)	30.5	25.0	1	05/30/24	05/31/24	
Oil Range Organics (C28-C36)	ND	50.0	1	05/30/24	05/31/24	
Surrogate: n-Nonane		108 %	50-200	05/30/24	05/31/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: IY		Batch: 2422044
Chloride	1410	20.0	1	05/29/24	05/30/24	



Sample Data

Atkins Engineering Associates Inc.
2904 W. 2nd
Roswell NM, 88201

Project Name: ZEUS
Project Number: 20071-0001
Project Manager: Austin Weyant

Reported:
6/5/2024 11:38:38AM

SW15

E405308-12

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg	Analyst: IY		Batch: 2421160	
Benzene	ND	0.0250	1	05/24/24	05/30/24	G1t
Ethylbenzene	ND	0.0250	1	05/24/24	05/30/24	
Toluene	ND	0.0250	1	05/24/24	05/30/24	
o-Xylene	ND	0.0250	1	05/24/24	05/30/24	
p,m-Xylene	ND	0.0500	1	05/24/24	05/30/24	
Total Xylenes	ND	0.0250	1	05/24/24	05/30/24	
Surrogate: Bromofluorobenzene	108 %	70-130		05/24/24	05/30/24	
Surrogate: 1,2-Dichloroethane-d4	87.2 %	70-130		05/24/24	05/30/24	
Surrogate: Toluene-d8	107 %	70-130		05/24/24	05/30/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: IY		Batch: 2421160	
Gasoline Range Organics (C6-C10)	ND	20.0	1	05/24/24	05/30/24	G11
Surrogate: Bromofluorobenzene	108 %	70-130		05/24/24	05/30/24	
Surrogate: 1,2-Dichloroethane-d4	87.2 %	70-130		05/24/24	05/30/24	
Surrogate: Toluene-d8	107 %	70-130		05/24/24	05/30/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: KM		Batch: 2422076	
Diesel Range Organics (C10-C28)	ND	25.0	1	05/30/24	05/31/24	
Oil Range Organics (C28-C36)	ND	50.0	1	05/30/24	05/31/24	
Surrogate: n-Nonane	110 %	50-200		05/30/24	05/31/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: IY		Batch: 2422044	
Chloride	1260	20.0	1	05/29/24	05/30/24	



Sample Data

Atkins Engineering Associates Inc. 2904 W. 2nd Roswell NM, 88201	Project Name: ZEUS Project Number: 20071-0001 Project Manager: Austin Weyant	Reported: 6/5/2024 11:38:38AM
--	--	----------------------------------

BH1
E405308-13

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg	Analyst: IY			Batch: 2421160
Benzene	ND	0.0250	1	05/24/24	05/30/24	G1p
Ethylbenzene	ND	0.0250	1	05/24/24	05/30/24	
Toluene	ND	0.0250	1	05/24/24	05/30/24	
o-Xylene	ND	0.0250	1	05/24/24	05/30/24	
p,m-Xylene	ND	0.0500	1	05/24/24	05/30/24	
Total Xylenes	ND	0.0250	1	05/24/24	05/30/24	
Surrogate: Bromofluorobenzene	108 %	70-130		05/24/24	05/30/24	
Surrogate: 1,2-Dichloroethane-d4	89.7 %	70-130		05/24/24	05/30/24	
Surrogate: Toluene-d8	107 %	70-130		05/24/24	05/30/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: IY			Batch: 2421160
Gasoline Range Organics (C6-C10)	ND	20.0	1	05/24/24	05/30/24	G1p
Surrogate: Bromofluorobenzene	108 %	70-130		05/24/24	05/30/24	
Surrogate: 1,2-Dichloroethane-d4	89.7 %	70-130		05/24/24	05/30/24	
Surrogate: Toluene-d8	107 %	70-130		05/24/24	05/30/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: KM			Batch: 2422076
Diesel Range Organics (C10-C28)	ND	25.0	1	05/30/24	05/31/24	
Oil Range Organics (C28-C36)	ND	50.0	1	05/30/24	05/31/24	
Surrogate: n-Nonane	106 %	50-200		05/30/24	05/31/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: IY			Batch: 2422044
Chloride	1100	20.0	1	05/29/24	05/30/24	

Sample Data

Atkins Engineering Associates Inc. 2904 W. 2nd Roswell NM, 88201	Project Name: ZEUS Project Number: 20071-0001 Project Manager: Austin Weyant	Reported: 6/5/2024 11:38:38AM
--	--	----------------------------------

BH2

E405308-14

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg	Analyst: IY			Batch: 2421160
Benzene	ND	0.0250	1	05/24/24	05/30/24	G1n
Ethylbenzene	ND	0.0250	1	05/24/24	05/30/24	
Toluene	ND	0.0250	1	05/24/24	05/30/24	
o-Xylene	ND	0.0250	1	05/24/24	05/30/24	
p,m-Xylene	ND	0.0500	1	05/24/24	05/30/24	
Total Xylenes	ND	0.0250	1	05/24/24	05/30/24	
Surrogate: Bromofluorobenzene		111 %	70-130	05/24/24	05/30/24	
Surrogate: 1,2-Dichloroethane-d4		92.8 %	70-130	05/24/24	05/30/24	
Surrogate: Toluene-d8		106 %	70-130	05/24/24	05/30/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: IY			Batch: 2421160
Gasoline Range Organics (C6-C10)	ND	20.0	1	05/24/24	05/30/24	G1o
Surrogate: Bromofluorobenzene		111 %	70-130	05/24/24	05/30/24	
Surrogate: 1,2-Dichloroethane-d4		92.8 %	70-130	05/24/24	05/30/24	
Surrogate: Toluene-d8		106 %	70-130	05/24/24	05/30/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: KM			Batch: 2422076
Diesel Range Organics (C10-C28)	ND	25.0	1	05/30/24	05/31/24	
Oil Range Organics (C28-C36)	ND	50.0	1	05/30/24	05/31/24	
Surrogate: n-Nonane		102 %	50-200	05/30/24	05/31/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: IY			Batch: 2422044
Chloride	917	20.0	1	05/29/24	05/30/24	



Sample Data

Atkins Engineering Associates Inc.
2904 W. 2nd
Roswell NM, 88201

Project Name: ZEUS
Project Number: 20071-0001
Project Manager: Austin Weyant

Reported:
6/5/2024 11:38:38AM

BH3

E405308-15

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg	Analyst: IY		Batch: 2421160	
Benzene	ND	0.0250	1	05/24/24	05/30/24	G1q
Ethylbenzene	ND	0.0250	1	05/24/24	05/30/24	
Toluene	ND	0.0250	1	05/24/24	05/30/24	
o-Xylene	ND	0.0250	1	05/24/24	05/30/24	
p,m-Xylene	ND	0.0500	1	05/24/24	05/30/24	
Total Xylenes	ND	0.0250	1	05/24/24	05/30/24	
Surrogate: Bromofluorobenzene	108 %	70-130		05/24/24	05/30/24	
Surrogate: 1,2-Dichloroethane-d4	89.2 %	70-130		05/24/24	05/30/24	
Surrogate: Toluene-d8	106 %	70-130		05/24/24	05/30/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: IY		Batch: 2421160	
Gasoline Range Organics (C6-C10)	ND	20.0	1	05/24/24	05/30/24	G1q
Surrogate: Bromofluorobenzene	108 %	70-130		05/24/24	05/30/24	
Surrogate: 1,2-Dichloroethane-d4	89.2 %	70-130		05/24/24	05/30/24	
Surrogate: Toluene-d8	106 %	70-130		05/24/24	05/30/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: KM		Batch: 2422076	
Diesel Range Organics (C10-C28)	ND	25.0	1	05/30/24	05/31/24	
Oil Range Organics (C28-C36)	ND	50.0	1	05/30/24	05/31/24	
Surrogate: n-Nonane	108 %	50-200		05/30/24	05/31/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: IY		Batch: 2422044	
Chloride	1230	20.0	1	05/29/24	05/30/24	



Sample Data

Atkins Engineering Associates Inc. 2904 W. 2nd Roswell NM, 88201	Project Name: ZEUS Project Number: 20071-0001 Project Manager: Austin Weyant	Reported: 6/5/2024 11:38:38AM
--	--	----------------------------------

BH4

E405308-16

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg	Analyst: IY			Batch: 2421160
Benzene	ND	0.0250	1	05/24/24	05/30/24	G1r
Ethylbenzene	ND	0.0250	1	05/24/24	05/30/24	
Toluene	ND	0.0250	1	05/24/24	05/30/24	
o-Xylene	ND	0.0250	1	05/24/24	05/30/24	
p,m-Xylene	ND	0.0500	1	05/24/24	05/30/24	
Total Xylenes	ND	0.0250	1	05/24/24	05/30/24	
Surrogate: Bromofluorobenzene	108 %	70-130		05/24/24	05/30/24	
Surrogate: 1,2-Dichloroethane-d4	88.8 %	70-130		05/24/24	05/30/24	
Surrogate: Toluene-d8	106 %	70-130		05/24/24	05/30/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: IY			Batch: 2421160
Gasoline Range Organics (C6-C10)	ND	20.0	1	05/24/24	05/30/24	G1r
Surrogate: Bromofluorobenzene	108 %	70-130		05/24/24	05/30/24	
Surrogate: 1,2-Dichloroethane-d4	88.8 %	70-130		05/24/24	05/30/24	
Surrogate: Toluene-d8	106 %	70-130		05/24/24	05/30/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: KM			Batch: 2422076
Diesel Range Organics (C10-C28)	ND	25.0	1	05/30/24	05/31/24	
Oil Range Organics (C28-C36)	ND	50.0	1	05/30/24	05/31/24	
Surrogate: n-Nonane	102 %	50-200		05/30/24	05/31/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: IY			Batch: 2422044
Chloride	2070	20.0	1	05/29/24	05/30/24	



Sample Data

Atkins Engineering Associates Inc. 2904 W. 2nd Roswell NM, 88201	Project Name: ZEUS Project Number: 20071-0001 Project Manager: Austin Weyant	Reported: 6/5/2024 11:38:38AM
--	--	----------------------------------

BH5
E405308-17

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg	Analyst: IY		Batch: 2421160	
Benzene	ND	0.0250	1	05/24/24	05/30/24	G1b
Ethylbenzene	ND	0.0250	1	05/24/24	05/30/24	
Toluene	ND	0.0250	1	05/24/24	05/30/24	
o-Xylene	ND	0.0250	1	05/24/24	05/30/24	
p,m-Xylene	ND	0.0500	1	05/24/24	05/30/24	
Total Xylenes	ND	0.0250	1	05/24/24	05/30/24	
Surrogate: Bromofluorobenzene		112 %	70-130	05/24/24	05/30/24	
Surrogate: 1,2-Dichloroethane-d4		91.4 %	70-130	05/24/24	05/30/24	
Surrogate: Toluene-d8		106 %	70-130	05/24/24	05/30/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: IY		Batch: 2421160	
Gasoline Range Organics (C6-C10)	ND	20.0	1	05/24/24	05/30/24	G1b
Surrogate: Bromofluorobenzene		112 %	70-130	05/24/24	05/30/24	
Surrogate: 1,2-Dichloroethane-d4		91.4 %	70-130	05/24/24	05/30/24	
Surrogate: Toluene-d8		106 %	70-130	05/24/24	05/30/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: KM		Batch: 2422076	
Diesel Range Organics (C10-C28)	ND	25.0	1	05/30/24	05/31/24	
Oil Range Organics (C28-C36)	ND	50.0	1	05/30/24	05/31/24	
Surrogate: n-Nonane		109 %	50-200	05/30/24	05/31/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: IY		Batch: 2422044	
Chloride	3670	40.0	2	05/29/24	05/30/24	



QC Summary Data

Atkins Engineering Associates Inc.	Project Name:	ZEUS	Reported:
2904 W. 2nd	Project Number:	20071-0001	
Roswell NM, 88201	Project Manager:	Austin Weyant	6/5/2024 11:38:38AM

Volatile Organic Compounds by EPA 8260B

Analyst: IY

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	

Blank (2421160-BLK1) Prepared: 05/24/24 Analyzed: 05/30/24

Benzene	ND	0.0250							
Ethylbenzene	ND	0.0250							
Toluene	ND	0.0250							
o-Xylene	ND	0.0250							
p,m-Xylene	ND	0.0500							
Total Xylenes	ND	0.0250							
Surrogate: Bromofluorobenzene	0.549		0.500		110	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.458		0.500		91.6	70-130			
Surrogate: Toluene-d8	0.535		0.500		107	70-130			

LCS (2421160-BS1) Prepared: 05/24/24 Analyzed: 05/30/24

Benzene	2.29	0.0250	2.50		91.8	70-130			
Ethylbenzene	2.50	0.0250	2.50		100	70-130			
Toluene	2.51	0.0250	2.50		100	70-130			
o-Xylene	2.65	0.0250	2.50		106	70-130			
p,m-Xylene	5.28	0.0500	5.00		106	70-130			
Total Xylenes	7.93	0.0250	7.50		106	70-130			
Surrogate: Bromofluorobenzene	0.563		0.500		113	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.462		0.500		92.3	70-130			
Surrogate: Toluene-d8	0.523		0.500		105	70-130			

LCS Dup (2421160-BSD1) Prepared: 05/24/24 Analyzed: 05/30/24

Benzene	2.28	0.0250	2.50		91.3	70-130	0.524	23	
Ethylbenzene	2.52	0.0250	2.50		101	70-130	0.578	27	
Toluene	2.53	0.0250	2.50		101	70-130	1.09	24	
o-Xylene	2.69	0.0250	2.50		108	70-130	1.71	27	
p,m-Xylene	5.38	0.0500	5.00		108	70-130	1.73	27	
Total Xylenes	8.07	0.0250	7.50		108	70-130	1.72	27	
Surrogate: Bromofluorobenzene	0.568		0.500		114	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.462		0.500		92.3	70-130			
Surrogate: Toluene-d8	0.529		0.500		106	70-130			



QC Summary Data

Atkins Engineering Associates Inc.	Project Name:	ZEUS	Reported:
2904 W. 2nd	Project Number:	20071-0001	
Roswell NM, 88201	Project Manager:	Austin Weyant	6/5/2024 11:38:38AM

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: IY

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
---------	-----------------	-----------------------------	-------------------------	---------------------------	----------	--------------------	----------	-------------------	-------

Blank (2421160-BLK1) Prepared: 05/24/24 Analyzed: 05/30/24

Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: Bromofluorobenzene	0.549		0.500		110	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.458		0.500		91.6	70-130			
Surrogate: Toluene-d8	0.535		0.500		107	70-130			

LCS (2421160-BS2) Prepared: 05/24/24 Analyzed: 05/30/24

Gasoline Range Organics (C6-C10)	58.0	20.0	50.0		116	70-130			
Surrogate: Bromofluorobenzene	0.573		0.500		115	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.448		0.500		89.6	70-130			
Surrogate: Toluene-d8	0.539		0.500		108	70-130			

LCS Dup (2421160-BSD2) Prepared: 05/24/24 Analyzed: 05/30/24

Gasoline Range Organics (C6-C10)	55.1	20.0	50.0		110	70-130	5.14	20	
Surrogate: Bromofluorobenzene	0.555		0.500		111	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.445		0.500		89.0	70-130			
Surrogate: Toluene-d8	0.535		0.500		107	70-130			



QC Summary Data

Atkins Engineering Associates Inc.	Project Name:	ZEUS	Reported:
2904 W. 2nd	Project Number:	20071-0001	
Roswell NM, 88201	Project Manager:	Austin Weyant	6/5/2024 11:38:38AM

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: KM

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
---------	-----------------	-----------------------------	-------------------------	---------------------------	----------	--------------------	----------	-------------------	-------

Blank (2422076-BLK1)					Prepared: 05/30/24 Analyzed: 05/31/24				
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	55.1		50.0		110	50-200			

LCS (2422076-BS1)					Prepared: 05/30/24 Analyzed: 05/31/24				
Diesel Range Organics (C10-C28)	280	25.0	250		112	38-132			
Surrogate: n-Nonane	55.5		50.0		111	50-200			

LCS Dup (2422076-BSD1)					Prepared: 05/30/24 Analyzed: 05/31/24				
Diesel Range Organics (C10-C28)	287	25.0	250		115	38-132	2.33	20	
Surrogate: n-Nonane	56.6		50.0		113	50-200			



QC Summary Data

Atkins Engineering Associates Inc.	Project Name:	ZEUS	Reported:
2904 W. 2nd	Project Number:	20071-0001	
Roswell NM, 88201	Project Manager:	Austin Weyant	6/5/2024 11:38:38AM

Anions by EPA 300.0/9056A

Analyst: IY

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	

Blank (2422044-BLK1)					Prepared: 05/29/24 Analyzed: 05/30/24				
Chloride	ND	20.0							
LCS (2422044-BS1)					Prepared: 05/29/24 Analyzed: 05/30/24				
Chloride	246	20.0	250		98.5	90-110			
LCS Dup (2422044-BSD1)					Prepared: 05/29/24 Analyzed: 05/30/24				
Chloride	255	20.0	250		102	90-110	3.30	20	



QC Summary Data

Atkins Engineering Associates Inc.	Project Name:	ZEUS	Reported:
2904 W. 2nd	Project Number:	20071-0001	
Roswell NM, 88201	Project Manager:	Austin Weyant	6/5/2024 11:38:38AM

Anions by EPA 300.0/9056A

Analyst: WF

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
---------	-----------------	-----------------------------	-------------------------	---------------------------	----------	--------------------	----------	-------------------	-------

Blank (2423024-BLK1)					Prepared: 06/03/24 Analyzed: 06/03/24				
Chloride	ND	20.0							
LCS (2423024-BS1)					Prepared: 06/03/24 Analyzed: 06/03/24				
Chloride	239	20.0	250		95.4	90-110			
LCS Dup (2423024-BSD1)					Prepared: 06/03/24 Analyzed: 06/03/24				
Chloride	251	20.0	250		100	90-110	4.99	20	

QC Summary Report Comment:
Calculations are based off of the raw (non-rounded) data. However, for reporting purposes all QC data is rounded to three significant figures.
Therefore, hand calculated values may differ slightly.



Definitions and Notes

Atkins Engineering Associates Inc.	Project Name:	ZEUS	
2904 W. 2nd	Project Number:	20071-0001	Reported:
Roswell NM, 88201	Project Manager:	Austin Weyant	06/05/24 11:38

- G1 Sample analyzed 1 hour 30 mins past hold time.
- G1a Sample analyzed 1 hour past hold time.
- G1b Sample analyzed 10 hours past hold time.
- G1c Sample analyzed 17 mins past hold time.
- G1d Sample analyzed 2 hours 30 mins past hold time.
- G1e Sample analyzed 2 hours 30mins past hold time.
- G1f Sample analyzed 2 hours past hold time.
- G1g Sample analyzed 2 hours past hold time.
- G1h Sample analyzed 3 hours 30 mins past hold time.
- G1i Sample analyzed 3 hours 45 mins past hold time.
- G1j Sample analyzed 3 hours past hold time.
- G1k Sample analyzed 3 mins past hold time.
- G1l Sample analyzed 4 hours 20mins past hold time.
- G1m Sample analyzed 4 hours past hold time.
- G1n Sample analyzed 5 hours 30 mins past hold time.
- G1o Sample analyzed 5 hours 30 minspast hold time.
- G1p Sample analyzed 5 hours past hold time.
- G1q Sample analyzed 6 hours past hold time.
- G1r Sample analyzed 9 hours 45 mins past hold time.
- G1s Samples analyzed 3 hours 45 mins past hold time.
- G1t Samples analyzed 4 hours 20 mins past hold time.
- ND Analyte NOT DETECTED at or above the reporting limit
- NR Not Reported
- RPD Relative Percent Difference
- DNI Did Not Ignite
- DNR Did not react with the addition of acid or base.

Note (1): Methods marked with ** are non-accredited methods.

Note (2): Soil data is reported on an "as received" weight basis, unless reported otherwise.

Project Information

Chain of Custody

Page 1 of 4

Client: AEA		Bill To		Lab Use Only		TAT			EPA Program					
Project: ZEUS		Attention: ATKINS		Lab WO# E405308		Job Number 20071-0001			1D	2D	3D	Standard	CWA	SDWA
Project Manager: AUSTIN WEHANT		Address: 2904 W 2ND		City, State, Zip ROSWELL		Analysis and Method						RCRA		
Address:		Phone:		Email:								State		
City, State, Zip												NM CO UT AZ TX		
Phone:														
Email: austin@atkmseng														
Report due by:														

Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Lab Number	DRO/ORO by 8015	GRO/DRO by 8015	BTEX by 8021	VOC by 8260	Metals 6010	Chloride 300.0	1D	2D	3D	Standard	Remarks
9:05	5/16	S	1	SW1	1	X	X	X			X					
9:03				SW2	2	X	X	X			X					
9:03				SW3	3	X	X	X			X					
9:07				SW4	4	X	X	X			X					
9:08				SW5	5	X	X	X			X					
9:09				SW6	6	X	X	X			X					
9:11				SW7	7	X	X	X			X					
9:12				SW8	8	X	X	X			X					
9:12				SW9	9	X	X	X			X					
				SW10 - LOST		X	X	X			X					

Additional Instructions:

I, (field sampler) attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabelling the sample location, date or time of collection is considered fraud and may be grounds for legal action.

Sampled by: **Michelle Gonzales** Date: **5/16** Time: **13:19**

Relinquished by: (Signature) **J. H. H.** Date: **5-21-24** Time: **1014**

Relinquished by: (Signature) **Michelle Gonzales** Date: **5-21-24** Time: **1650**

Relinquished by: (Signature) **C. H.** Date: **5-21-24** Time: **2300**

Relinquished by: (Signature) **C. H.** Date: **5/21/24** Time: **1300**

Samples requiring thermal preservation must be received on ice the day they are sampled or received packed in ice at an avg temp above 0 but less than 6 °C on subsequent days.

Received on ice: **(Y) N**

T1 _____ T2 _____ T3 _____

AVG Temp °C **4**

Sample Matrix: S - Soil, Sd - Solid, Sg - Sludge, A - Aqueous, O - Other

Container Type: g - glass, p - poly/plastic, ag - amber glass, v - VOA

Note: Samples are discarded 30 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at the client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for on the report.

Project Information

Chain of Custody

Page 214 of 214

Client: AEA	Bill To: ATKINS ENG	Lab Use Only		TAT				EPA Program	
Project: ZEUS	Attention: 2904 W 2ND	Lab WO# E 405308	Job Number 2071-0001	1D	2D	3D	Standard	CWA	SDWA
Project Manager:	Address: DOSWELL	Analysis and Method				RCRA			
Address:	City, State, Zip								
City, State, Zip	Phone:								
Phone:	Email:								
Email:									
Report due by:									

Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Lab Number	DRO/ORO by 8015	GRO/DRO by 8015	BTEX by 8021	VOC by 8260	Metals 6010	Chloride 300.0	1D	2D	3D	Standard	State	Remarks
				SW11	1087	X	X	X		X							
9:12	5/16	S	1	SW12	10	X	X	X		X							
9:19				SW13	11	X	X	X		X							
9:20				SW14	12	X	X	X		X							
9:21				SW15	13	X	X	X		X							
8:56				BH1	14	X	X	X		X							
8:58				BH2	15	X	X	X		X							
8:59				BH3	16	X	X	X		X							
9:00				BH4	17	X	X	X		X							
9:01				BH5	18	X	X	X		X							

Additional Instructions:

I, (field sampler), attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabelling the sample location, date or time of collection is considered fraud and may be grounds for legal action.

Samples requiring thermal preservation must be received on ice the day they are sampled or received packed in ice at an avg temp above 0 but less than 6 °C on subsequent days.

Relinquished by: (Signature) <i>[Signature]</i>	Date 5/16	Time 13:19	Received by: (Signature) <i>Michelle Gonzales</i>	Date 5-21-24	Time 1014	Lab Use Only
Relinquished by: (Signature) <i>Michelle Gonzales</i>	Date 5-21-24	Time 1650	Received by: (Signature) <i>[Signature]</i>	Date 5-21-24	Time 1650	Received on ice: <input checked="" type="radio"/> Y / <input type="radio"/> N
Relinquished by: (Signature) <i>[Signature]</i>	Date 5-21-24	Time 2300	Received by: (Signature) <i>[Signature]</i>	Date 5-22-24	Time 1300	T1 _____ T2 _____ T3 _____
Sample Matrix: S - Soil, Sd - Solid, Sg - Sludge, A - Aqueous, O - Other				AVG Temp °C 4		
Container Type: g - glass, p - poly/plastic, ag - amber glass, v - VOA						

Note: Samples are discarded 30 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at the client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for on the report.

Project Information

Chain of Custody

Page 1 of 4

Client: <u>AEA</u>		Bill To		Lab Use Only		TAT		EPA Program					
Project: <u>ZEUS</u>		Attention: <u>ATKINS</u>		Lab WO# <u>E405308</u>		Job Number <u>20071-0001</u>		1D	2D	3D	Standard	CWA	SDWA
Project Manager: <u>AUSTIN WEHANT</u>		Address: <u>2404 W 2ND</u>		City, State, Zip <u>DOSWELL</u>		Analysis and Method						RCRA	
Address:		Phone:		Phone:								State	
City, State, Zip		Email: <u>austin@atkmsorg</u>		Email:								NM CO UT AZ TX	
Report due by:													

Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Lab Number	DRO/ORO by 8015	GRO/DRO by 8015	BTEX by 8021	VOC by 8260	Metals 6010	Chloride 300.0							Remarks
9:05	5/14	S	1	SW1	1	X	X	X		X								
9:03				SW2	2	X	X	X		X								
9:03				SW3	3	X	X	X		X								
9:07				SW4	4	X	X	X		X								
9:08				SW5	5	X	X	X		X								
9:09				SW6	6	X	X	X		X								
9:11				SW7	7	X	X	X		X								
9:12				SW8	8	X	X	X		X								
9:12				SW9	9	X	X	X		X								
				SW10 - LOST		X	X	X		X								

Additional Instructions:

I, (field sampler) attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabelling the sample location, date or time of collection is considered fraud and may be grounds for legal action.

Sampled by:

Samples requiring thermal preservation must be received on ice the day they are sampled or received packed in ice at an avg temp above 0 but less than 6 °C on subsequent days.

Relinquished by: (Signature) <u>J. Atkins</u>	Date <u>5/16</u>	Time <u>13:19</u>	Received by: (Signature) <u>Michelle Gonzales</u>	Date <u>5-21-24</u>	Time <u>1014</u>	Lab Use Only Received on ice: <u>Y/N</u> T1 _____ T2 _____ T3 _____ AVG Temp °C <u>4</u>
Relinquished by: (Signature) <u>Michelle Gonzales</u>	Date <u>5-21-24</u>	Time <u>1650</u>	Received by: (Signature) <u>C.H.</u>	Date <u>5-21-24</u>	Time <u>1650</u>	
Relinquished by: (Signature) <u>C.H.</u>	Date <u>5-21-24</u>	Time <u>2300</u>	Received by: (Signature) <u>DR</u>	Date <u>5/22/24</u>	Time <u>1300</u>	

Sample Matrix: S - Soil, Sd - Solid, Sg - Sludge, A - Aqueous, O - Other

Container Type: g - glass, p - poly/plastic, ag - amber glass, v - VOA

Note: Samples are discarded 30 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at the client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for on the report.


envirotech

Project Information

Chain of Custody

Page 2 of 2

214

Client: AEA				Bill To: ATKINS ENG				Lab Use Only				TAT				EPA Program					
Project: ZEUS				Attention: 2904 W 2ND				Lab WO# E 405308				Job Number 200711-0001				1D	2D	3D	Standard	CWA	SDWA
Project Manager:				Address: DORWELL				Analysis and Method								RCRA					
Address:				City, State, Zip																	
City, State, Zip				Phone:				DRO/ORO by 8015				GRO/DRO by 8015				BTEX by 8021					
Phone:				Email:				VOC by 8260				Metals 6010				Chloride 300.0					
Email:																					
Report due by:																					

Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Lab Number	DRO/ORO by 8015	GRO/DRO by 8015	BTEX by 8021	VOC by 8260	Metals 6010	Chloride 300.0	1D	2D	3D	Standard	CWA	SDWA	Remarks
				SW11	LOST	X	X	X		X								
9:12	5/16	S	1	SW12	LOST AP 5/22	X	X	X		X								
9:19				SW13	10	X	X	X		X								
9:20				SW14	11	X	X	X		X								
9:21				SW15	12	X	X	X		X								
8:56				BH1	13	X	X	X		X								
8:58				BH2	14	X	X	X		X								
8:59				BH3	15	X	X	X		X								
9:00				BH4	16	X	X	X		X								
9:01				BH5	17	X	X	X		X								

Additional Instructions:

I, (field sampler), attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabelling the sample location, date or time of collection is considered fraud and may be grounds for legal action.

Samples requiring thermal preservation must be received on ice the day they are sampled or received packed in ice at an avg temp above 0 but less than 6 °C on subsequent days.

Relinquished by: (Signature)		Date	Time	Received by: (Signature)		Date	Time	Lab Use Only	
<i>[Signature]</i>		5/16	13:19	<i>Michelle Gonzales</i>		5-21-24	1014	Received on ice: <input checked="" type="radio"/> Y / <input type="radio"/> N	
Relinquished by: (Signature)		Date	Time	Received by: (Signature)		Date	Time	T1	
<i>Michelle Gonzales</i>		5-21-24	1650	<i>C.H.</i>		5-21-24	1650	T2	
Relinquished by: (Signature)		Date	Time	Received by: (Signature)		Date	Time	T3	
<i>C.H.</i>		5-21-24	2300	<i>[Signature]</i>		5/22/24	1300	AVG Temp °C <u>4</u>	

Sample Matrix: S - Soil, Sd - Solid, Sg - Sludge, A - Aqueous, O - Other

Container Type: g - glass, p - poly/plastic, ag - amber glass, v - VOA

Note: Samples are discarded 30 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at the client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for on the report.



Envirotech Analytical Laboratory

Printed: 5/28/2024 2:20:08PM

Sample Receipt Checklist (SRC)

Instructions: Please take note of any NO checkmarks.

If we receive no response concerning these items within 24 hours of the date of this notice, all the samples will be analyzed as requested.

Client:	Atkins Engineering Associates Inc.	Date Received:	05/22/24 13:00	Work Order ID:	E405308
Phone:	(575) 626-3993	Date Logged In:	05/21/24 18:07	Logged In By:	Alexa Michaels
Email:	austin@atkinseng.com	Due Date:	05/30/24 17:00 (5 day TAT)		

Chain of Custody (COC)

1. Does the sample ID match the COC? Yes
2. Does the number of samples per sampling site location match the COC? Yes
3. Were samples dropped off by client or carrier? Yes
4. Was the COC complete, i.e., signatures, dates/times, requested analyses? Yes
5. Were all samples received within holding time? Yes

Note: Analysis, such as pH which should be conducted in the field, i.e., 15 minute hold time, are not included in this discussion.

Carrier: CourierComments/Resolution

Project Zeus has been separated into multiple workorders due to high sample volume. WO are as follows: E405308, 405309.

Sample Turn Around Time (TAT)

6. Did the COC indicate standard TAT, or Expedited TAT? No

Sample Cooler

7. Was a sample cooler received? Yes
8. If yes, was cooler received in good condition? Yes
9. Was the sample(s) received intact, i.e., not broken? Yes
10. Were custody/security seals present? No
11. If yes, were custody/security seals intact? NA
12. Was the sample received on ice? If yes, the recorded temp is 4°C, i.e., 6°±2°C Yes

Note: Thermal preservation is not required, if samples are received w/i 15 minutes of sampling

13. If no visible ice, record the temperature. Actual sample temperature: 4°C

Sample Container

14. Are aqueous VOC samples present? No
15. Are VOC samples collected in VOA Vials? NA
16. Is the head space less than 6-8 mm (pea sized or less)? NA
17. Was a trip blank (TB) included for VOC analyses? NA
18. Are non-VOC samples collected in the correct containers? Yes
19. Is the appropriate volume/weight or number of sample containers collected? Yes

Field Label

20. Were field sample labels filled out with the minimum information:
Sample ID? Yes
Date/Time Collected? Yes
Collectors name? Yes

Sample Preservation

21. Does the COC or field labels indicate the samples were preserved? No
22. Are sample(s) correctly preserved? NA
24. Is lab filtration required and/or requested for dissolved metals? No

Multiphase Sample Matrix

26. Does the sample have more than one phase, i.e., multiphase? No
27. If yes, does the COC specify which phase(s) is to be analyzed? NA

Subcontract Laboratory

28. Are samples required to get sent to a subcontract laboratory? No
29. Was a subcontract laboratory specified by the client and if so who? NA Subcontract Lab: NA

Client Instruction

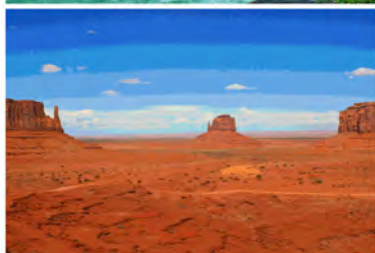
Signature of client authorizing changes to the COC or sample disposition.

Date



envirotech Inc.

Report to:
Austin Weyant



envirotech

Practical Solutions for a Better Tomorrow

Analytical Report

Atkins Engineering Associates Inc.

Project Name: Zeus Pit

Work Order: E407178

Job Number: 20071-0001

Received: 7/24/2024

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
7/29/24

5796 U.S. Hwy 64
Farmington, NM 87401

Phone: (505) 632-1881
Envirotech-inc.com



Envirotech Inc. certifies the test results meet all requirements of TNI unless noted otherwise.
Statement of Data Authenticity: Envirotech Inc. attests the data reported has not been altered in any way.
Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech Inc.
Envirotech Inc. holds the Utah TNI certification NM00979 for data reported.
Envirotech Inc. holds the Texas TNI certification T104704557 for data reported.

Date Reported: 7/29/24

Austin Weyant
2904 W. 2nd
Roswell, NM 88201



Project Name: Zeus Pit
Workorder: E407178
Date Received: 7/24/2024 5:00:00AM

Austin Weyant,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 7/24/2024 5:00:00AM, under the Project Name: Zeus Pit.

The analytical test results summarized in this report with the Project Name: Zeus Pit apply to the individual samples collected, identified and submitted bearing the project name on the enclosed chain-of-custody. Subcontracted sample analyses not conducted by Envirotech, Inc., are attached in full as issued by the subcontract laboratory.

Please review the Chain-of-Custody (COC) and Sample Receipt Checklist (SRC) for any issues regarding sample receipt temperature, containers, preservation etc. To best understand your test results, review the entire report summarizing your sample data and the associated quality control batch data.

All reported data in this analytical report were analyzed according to the referenced method(s) and are in compliance with the latest NELAC/TNI standards, unless otherwise noted. Samples or analytical quality control parameters not meeting specific QC criteria are qualified with a data flag. Data flag definitions are located in the Notes and Definitions section of this analytical report.

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

Respectfully,

Walter Hinchman
Laboratory Director
Office: 505-632-1881
Cell: 775-287-1762
whinchman@envirotech-inc.com

Raina Schwanz
Laboratory Administrator
Office: 505-632-1881
rainaschwanz@envirotech-inc.com

Field Offices:

Southern New Mexico Area

Lynn Jarboe
Laboratory Technical Representative
Office: 505-421-LABS(5227)
Cell: 505-320-4759
ljjarboe@envirotech-inc.com

Michelle Gonzales
Client Representative
Office: 505-421-LABS(5227)
Cell: 505-947-8222
mgonzaless@envirotech-inc.com

Envirotech Web Address: www.envirotech-inc.com

Table of Contents

Title Page	1
Cover Page	2
Table of Contents	3
Sample Summary	4
Sample Data	5
SW11	5
SW12	6
SW10	7
BH 6	8
BH 7	9
BH 8	10
BH 9	11
BH 10	12
BH 11	13
BH 12	14
QC Summary Data	15
QC - Volatile Organic Compounds by EPA8260B	15
QC - Nonhalogenated Organics by EPA 8015D - GRO	16
QC - Nonhalogenated Organics by EPA 8015D - DRO/ORO	17
QC - Anions by EPA 300.0/9056A	18
Definitions and Notes	19
Chain of Custody etc.	20

Sample Summary

Atkins Engineering Associates Inc.	Project Name:	Zeus Pit	Reported:
2904 W. 2nd	Project Number:	20071-0001	
Roswell NM, 88201	Project Manager:	Austin Weyant	07/29/24 15:47

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
SW11	E407178-01A	Soil	07/17/24	07/24/24	Glass Jar, 2 oz.
SW12	E407178-02A	Soil	07/17/24	07/24/24	Glass Jar, 2 oz.
SW10	E407178-03A	Soil	07/17/24	07/24/24	Glass Jar, 2 oz.
BH 6	E407178-04A	Soil	07/17/24	07/24/24	Glass Jar, 2 oz.
BH 7	E407178-05A	Soil	07/17/24	07/24/24	Glass Jar, 2 oz.
BH 8	E407178-06A	Soil	07/17/24	07/24/24	Glass Jar, 2 oz.
BH 9	E407178-07A	Soil	07/17/24	07/24/24	Glass Jar, 2 oz.
BH 10	E407178-08A	Soil	07/17/24	07/24/24	Glass Jar, 2 oz.
BH 11	E407178-09A	Soil	07/17/24	07/24/24	Glass Jar, 2 oz.
BH 12	E407178-10A	Soil	07/17/24	07/24/24	Glass Jar, 2 oz.



Sample Data

Atkins Engineering Associates Inc. 2904 W. 2nd Roswell NM, 88201	Project Name: Zeus Pit Project Number: 20071-0001 Project Manager: Austin Weyant	Reported: 7/29/2024 3:47:11PM
--	--	----------------------------------

SW11

E407178-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg	Analyst: BA		Batch: 2430059	
Benzene	ND	0.0250	1	07/24/24	07/24/24	
Ethylbenzene	ND	0.0250	1	07/24/24	07/24/24	
Toluene	ND	0.0250	1	07/24/24	07/24/24	
o-Xylene	ND	0.0250	1	07/24/24	07/24/24	
p,m-Xylene	ND	0.0500	1	07/24/24	07/24/24	
Total Xylenes	ND	0.0250	1	07/24/24	07/24/24	
Surrogate: Bromofluorobenzene		113 %	70-130	07/24/24	07/24/24	
Surrogate: 1,2-Dichloroethane-d4		90.2 %	70-130	07/24/24	07/24/24	
Surrogate: Toluene-d8		108 %	70-130	07/24/24	07/24/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: BA		Batch: 2430059	
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/24/24	07/24/24	
Surrogate: Bromofluorobenzene		113 %	70-130	07/24/24	07/24/24	
Surrogate: 1,2-Dichloroethane-d4		90.2 %	70-130	07/24/24	07/24/24	
Surrogate: Toluene-d8		108 %	70-130	07/24/24	07/24/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: KM		Batch: 2430056	
Diesel Range Organics (C10-C28)	ND	25.0	1	07/24/24	07/24/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/24/24	07/24/24	
Surrogate: n-Nonane		98.6 %	50-200	07/24/24	07/24/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: JM		Batch: 2430068	
Chloride	ND	20.0	1	07/24/24	07/24/24	



Sample Data

Atkins Engineering Associates Inc.
2904 W. 2nd
Roswell NM, 88201

Project Name: Zeus Pit
Project Number: 20071-0001
Project Manager: Austin Weyant

Reported:
7/29/2024 3:47:11PM

SW12

E407178-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg	Analyst: BA		Batch: 2430059	
Benzene	ND	0.0250	1	07/24/24	07/24/24	
Ethylbenzene	ND	0.0250	1	07/24/24	07/24/24	
Toluene	ND	0.0250	1	07/24/24	07/24/24	
o-Xylene	ND	0.0250	1	07/24/24	07/24/24	
p,m-Xylene	ND	0.0500	1	07/24/24	07/24/24	
Total Xylenes	ND	0.0250	1	07/24/24	07/24/24	
Surrogate: Bromofluorobenzene		115 %	70-130	07/24/24	07/24/24	
Surrogate: 1,2-Dichloroethane-d4		89.3 %	70-130	07/24/24	07/24/24	
Surrogate: Toluene-d8		108 %	70-130	07/24/24	07/24/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: BA		Batch: 2430059	
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/24/24	07/24/24	
Surrogate: Bromofluorobenzene		115 %	70-130	07/24/24	07/24/24	
Surrogate: 1,2-Dichloroethane-d4		89.3 %	70-130	07/24/24	07/24/24	
Surrogate: Toluene-d8		108 %	70-130	07/24/24	07/24/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: KM		Batch: 2430056	
Diesel Range Organics (C10-C28)	ND	25.0	1	07/24/24	07/24/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/24/24	07/24/24	
Surrogate: n-Nonane		100 %	50-200	07/24/24	07/24/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: JM		Batch: 2430068	
Chloride	ND	20.0	1	07/24/24	07/24/24	



Sample Data

Atkins Engineering Associates Inc.
2904 W. 2nd
Roswell NM, 88201

Project Name: Zeus Pit
Project Number: 20071-0001
Project Manager: Austin Weyant

Reported:
7/29/2024 3:47:11PM

SW10

E407178-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: BA		Batch: 2430059
Benzene	ND	0.0250	1	07/24/24	07/24/24	
Ethylbenzene	ND	0.0250	1	07/24/24	07/24/24	
Toluene	ND	0.0250	1	07/24/24	07/24/24	
o-Xylene	ND	0.0250	1	07/24/24	07/24/24	
p,m-Xylene	ND	0.0500	1	07/24/24	07/24/24	
Total Xylenes	ND	0.0250	1	07/24/24	07/24/24	
Surrogate: Bromofluorobenzene		116 %	70-130	07/24/24	07/24/24	
Surrogate: 1,2-Dichloroethane-d4		93.2 %	70-130	07/24/24	07/24/24	
Surrogate: Toluene-d8		107 %	70-130	07/24/24	07/24/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: BA		Batch: 2430059
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/24/24	07/24/24	
Surrogate: Bromofluorobenzene		116 %	70-130	07/24/24	07/24/24	
Surrogate: 1,2-Dichloroethane-d4		93.2 %	70-130	07/24/24	07/24/24	
Surrogate: Toluene-d8		107 %	70-130	07/24/24	07/24/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2430056
Diesel Range Organics (C10-C28)	ND	25.0	1	07/24/24	07/25/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/24/24	07/25/24	
Surrogate: n-Nonane		92.0 %	50-200	07/24/24	07/25/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: JM		Batch: 2430068
Chloride	ND	20.0	1	07/24/24	07/24/24	



Sample Data

Atkins Engineering Associates Inc. 2904 W. 2nd Roswell NM, 88201	Project Name: Zeus Pit Project Number: 20071-0001 Project Manager: Austin Weyant	Reported: 7/29/2024 3:47:11PM
--	--	----------------------------------

BH 6
E407178-04

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg	Analyst: BA		Batch: 2430059	
Benzene	ND	0.0250	1	07/24/24	07/24/24	
Ethylbenzene	ND	0.0250	1	07/24/24	07/24/24	
Toluene	ND	0.0250	1	07/24/24	07/24/24	
o-Xylene	ND	0.0250	1	07/24/24	07/24/24	
p,m-Xylene	ND	0.0500	1	07/24/24	07/24/24	
Total Xylenes	ND	0.0250	1	07/24/24	07/24/24	
Surrogate: Bromofluorobenzene	118 %	70-130		07/24/24	07/24/24	
Surrogate: 1,2-Dichloroethane-d4	91.9 %	70-130		07/24/24	07/24/24	
Surrogate: Toluene-d8	107 %	70-130		07/24/24	07/24/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: BA		Batch: 2430059	
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/24/24	07/24/24	
Surrogate: Bromofluorobenzene	118 %	70-130		07/24/24	07/24/24	
Surrogate: 1,2-Dichloroethane-d4	91.9 %	70-130		07/24/24	07/24/24	
Surrogate: Toluene-d8	107 %	70-130		07/24/24	07/24/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: KM		Batch: 2430056	
Diesel Range Organics (C10-C28)	ND	25.0	1	07/24/24	07/25/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/24/24	07/25/24	
Surrogate: n-Nonane	97.1 %	50-200		07/24/24	07/25/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: JM		Batch: 2430068	
Chloride	ND	20.0	1	07/24/24	07/24/24	



Sample Data

Atkins Engineering Associates Inc. 2904 W. 2nd Roswell NM, 88201	Project Name: Zeus Pit Project Number: 20071-0001 Project Manager: Austin Weyant	Reported: 7/29/2024 3:47:11PM
--	--	----------------------------------

BH 7

E407178-05

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg	Analyst: BA		Batch: 2430059	
Benzene	ND	0.0250	1	07/24/24	07/24/24	
Ethylbenzene	ND	0.0250	1	07/24/24	07/24/24	
Toluene	ND	0.0250	1	07/24/24	07/24/24	
o-Xylene	ND	0.0250	1	07/24/24	07/24/24	
p,m-Xylene	ND	0.0500	1	07/24/24	07/24/24	
Total Xylenes	ND	0.0250	1	07/24/24	07/24/24	
Surrogate: Bromofluorobenzene		116 %	70-130	07/24/24	07/24/24	
Surrogate: 1,2-Dichloroethane-d4		90.4 %	70-130	07/24/24	07/24/24	
Surrogate: Toluene-d8		109 %	70-130	07/24/24	07/24/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: BA		Batch: 2430059	
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/24/24	07/24/24	
Surrogate: Bromofluorobenzene		116 %	70-130	07/24/24	07/24/24	
Surrogate: 1,2-Dichloroethane-d4		90.4 %	70-130	07/24/24	07/24/24	
Surrogate: Toluene-d8		109 %	70-130	07/24/24	07/24/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: KM		Batch: 2430056	
Diesel Range Organics (C10-C28)	ND	25.0	1	07/24/24	07/25/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/24/24	07/25/24	
Surrogate: n-Nonane		101 %	50-200	07/24/24	07/25/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: JM		Batch: 2430068	
Chloride	ND	20.0	1	07/24/24	07/24/24	



Sample Data

Atkins Engineering Associates Inc. 2904 W. 2nd Roswell NM, 88201	Project Name: Zeus Pit Project Number: 20071-0001 Project Manager: Austin Weyant	Reported: 7/29/2024 3:47:11PM
--	--	----------------------------------

BH 8

E407178-06

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg	Analyst: BA		Batch: 2430059	
Benzene	ND	0.0250	1	07/24/24	07/24/24	
Ethylbenzene	ND	0.0250	1	07/24/24	07/24/24	
Toluene	ND	0.0250	1	07/24/24	07/24/24	
o-Xylene	ND	0.0250	1	07/24/24	07/24/24	
p,m-Xylene	ND	0.0500	1	07/24/24	07/24/24	
Total Xylenes	ND	0.0250	1	07/24/24	07/24/24	
Surrogate: Bromofluorobenzene		116 %	70-130	07/24/24	07/24/24	
Surrogate: 1,2-Dichloroethane-d4		93.0 %	70-130	07/24/24	07/24/24	
Surrogate: Toluene-d8		109 %	70-130	07/24/24	07/24/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: BA		Batch: 2430059	
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/24/24	07/24/24	
Surrogate: Bromofluorobenzene		116 %	70-130	07/24/24	07/24/24	
Surrogate: 1,2-Dichloroethane-d4		93.0 %	70-130	07/24/24	07/24/24	
Surrogate: Toluene-d8		109 %	70-130	07/24/24	07/24/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: KM		Batch: 2430056	
Diesel Range Organics (C10-C28)	ND	25.0	1	07/24/24	07/25/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/24/24	07/25/24	
Surrogate: n-Nonane		101 %	50-200	07/24/24	07/25/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: JM		Batch: 2430068	
Chloride	ND	20.0	1	07/24/24	07/24/24	



Sample Data

Atkins Engineering Associates Inc. 2904 W. 2nd Roswell NM, 88201	Project Name: Zeus Pit Project Number: 20071-0001 Project Manager: Austin Weyant	Reported: 7/29/2024 3:47:11PM
--	--	----------------------------------

BH 9

E407178-07

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg	Analyst: BA		Batch: 2430059	
Benzene	ND	0.0250	1	07/24/24	07/24/24	
Ethylbenzene	ND	0.0250	1	07/24/24	07/24/24	
Toluene	ND	0.0250	1	07/24/24	07/24/24	
o-Xylene	ND	0.0250	1	07/24/24	07/24/24	
p,m-Xylene	ND	0.0500	1	07/24/24	07/24/24	
Total Xylenes	ND	0.0250	1	07/24/24	07/24/24	
Surrogate: Bromofluorobenzene		114 %	70-130	07/24/24	07/24/24	
Surrogate: 1,2-Dichloroethane-d4		91.1 %	70-130	07/24/24	07/24/24	
Surrogate: Toluene-d8		108 %	70-130	07/24/24	07/24/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: BA		Batch: 2430059	
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/24/24	07/24/24	
Surrogate: Bromofluorobenzene		114 %	70-130	07/24/24	07/24/24	
Surrogate: 1,2-Dichloroethane-d4		91.1 %	70-130	07/24/24	07/24/24	
Surrogate: Toluene-d8		108 %	70-130	07/24/24	07/24/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: KM		Batch: 2430056	
Diesel Range Organics (C10-C28)	ND	25.0	1	07/24/24	07/25/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/24/24	07/25/24	
Surrogate: n-Nonane		96.7 %	50-200	07/24/24	07/25/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: JM		Batch: 2430068	
Chloride	ND	20.0	1	07/24/24	07/24/24	



Sample Data

Atkins Engineering Associates Inc. 2904 W. 2nd Roswell NM, 88201	Project Name: Zeus Pit Project Number: 20071-0001 Project Manager: Austin Weyant	Reported: 7/29/2024 3:47:11PM
--	--	----------------------------------

BH 10
E407178-08

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: BA		Batch: 2430059
Benzene	ND	0.0250	1	07/24/24	07/24/24	
Ethylbenzene	ND	0.0250	1	07/24/24	07/24/24	
Toluene	ND	0.0250	1	07/24/24	07/24/24	
o-Xylene	ND	0.0250	1	07/24/24	07/24/24	
p,m-Xylene	ND	0.0500	1	07/24/24	07/24/24	
Total Xylenes	ND	0.0250	1	07/24/24	07/24/24	
Surrogate: Bromofluorobenzene		115 %	70-130	07/24/24	07/24/24	
Surrogate: 1,2-Dichloroethane-d4		91.7 %	70-130	07/24/24	07/24/24	
Surrogate: Toluene-d8		107 %	70-130	07/24/24	07/24/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: BA		Batch: 2430059
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/24/24	07/24/24	
Surrogate: Bromofluorobenzene		115 %	70-130	07/24/24	07/24/24	
Surrogate: 1,2-Dichloroethane-d4		91.7 %	70-130	07/24/24	07/24/24	
Surrogate: Toluene-d8		107 %	70-130	07/24/24	07/24/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2430056
Diesel Range Organics (C10-C28)	ND	25.0	1	07/24/24	07/25/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/24/24	07/25/24	
Surrogate: n-Nonane		98.9 %	50-200	07/24/24	07/25/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: JM		Batch: 2430068
Chloride	ND	20.0	1	07/24/24	07/24/24	



Sample Data

Atkins Engineering Associates Inc. 2904 W. 2nd Roswell NM, 88201	Project Name: Zeus Pit Project Number: 20071-0001 Project Manager: Austin Weyant	Reported: 7/29/2024 3:47:11PM
--	--	----------------------------------

BH 11
E407178-09

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: BA		Batch: 2430059
Benzene	ND	0.0250	1	07/24/24	07/24/24	
Ethylbenzene	ND	0.0250	1	07/24/24	07/24/24	
Toluene	ND	0.0250	1	07/24/24	07/24/24	
o-Xylene	ND	0.0250	1	07/24/24	07/24/24	
p,m-Xylene	ND	0.0500	1	07/24/24	07/24/24	
Total Xylenes	ND	0.0250	1	07/24/24	07/24/24	
Surrogate: Bromofluorobenzene		116 %	70-130	07/24/24	07/24/24	
Surrogate: 1,2-Dichloroethane-d4		92.5 %	70-130	07/24/24	07/24/24	
Surrogate: Toluene-d8		107 %	70-130	07/24/24	07/24/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: BA		Batch: 2430059
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/24/24	07/24/24	
Surrogate: Bromofluorobenzene		116 %	70-130	07/24/24	07/24/24	
Surrogate: 1,2-Dichloroethane-d4		92.5 %	70-130	07/24/24	07/24/24	
Surrogate: Toluene-d8		107 %	70-130	07/24/24	07/24/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2430056
Diesel Range Organics (C10-C28)	ND	25.0	1	07/24/24	07/25/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/24/24	07/25/24	
Surrogate: n-Nonane		95.7 %	50-200	07/24/24	07/25/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: JM		Batch: 2430068
Chloride	ND	20.0	1	07/24/24	07/24/24	



Sample Data

Atkins Engineering Associates Inc. 2904 W. 2nd Roswell NM, 88201	Project Name: Zeus Pit Project Number: 20071-0001 Project Manager: Austin Weyant	Reported: 7/29/2024 3:47:11PM
--	--	----------------------------------

BH 12
E407178-10

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg	Analyst: BA		Batch: 2430059	
Benzene	ND	0.0250	1	07/24/24	07/24/24	
Ethylbenzene	ND	0.0250	1	07/24/24	07/24/24	
Toluene	ND	0.0250	1	07/24/24	07/24/24	
o-Xylene	ND	0.0250	1	07/24/24	07/24/24	
p,m-Xylene	ND	0.0500	1	07/24/24	07/24/24	
Total Xylenes	ND	0.0250	1	07/24/24	07/24/24	
Surrogate: Bromofluorobenzene	119 %	70-130		07/24/24	07/24/24	
Surrogate: 1,2-Dichloroethane-d4	89.4 %	70-130		07/24/24	07/24/24	
Surrogate: Toluene-d8	108 %	70-130		07/24/24	07/24/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: BA		Batch: 2430059	
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/24/24	07/24/24	
Surrogate: Bromofluorobenzene	119 %	70-130		07/24/24	07/24/24	
Surrogate: 1,2-Dichloroethane-d4	89.4 %	70-130		07/24/24	07/24/24	
Surrogate: Toluene-d8	108 %	70-130		07/24/24	07/24/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: KM		Batch: 2430056	
Diesel Range Organics (C10-C28)	ND	25.0	1	07/24/24	07/25/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/24/24	07/25/24	
Surrogate: n-Nonane	97.3 %	50-200		07/24/24	07/25/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: JM		Batch: 2430068	
Chloride	ND	20.0	1	07/24/24	07/24/24	



QC Summary Data

Atkins Engineering Associates Inc.	Project Name:	Zeus Pit	Reported:
2904 W. 2nd	Project Number:	20071-0001	
Roswell NM, 88201	Project Manager:	Austin Weyant	7/29/2024 3:47:11PM

Volatile Organic Compounds by EPA 8260B

Analyst: BA

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	

Blank (2430059-BLK1) Prepared: 07/24/24 Analyzed: 07/24/24

Benzene	ND	0.0250							
Ethylbenzene	ND	0.0250							
Toluene	ND	0.0250							
o-Xylene	ND	0.0250							
p,m-Xylene	ND	0.0500							
Total Xylenes	ND	0.0250							
Surrogate: Bromofluorobenzene	0.584		0.500		117	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.449		0.500		89.8	70-130			
Surrogate: Toluene-d8	0.533		0.500		107	70-130			

LCS (2430059-BS1) Prepared: 07/24/24 Analyzed: 07/24/24

Benzene	2.20	0.0250	2.50		88.0	70-130			
Ethylbenzene	2.51	0.0250	2.50		100	70-130			
Toluene	2.49	0.0250	2.50		99.7	70-130			
o-Xylene	2.71	0.0250	2.50		108	70-130			
p,m-Xylene	5.45	0.0500	5.00		109	70-130			
Total Xylenes	8.16	0.0250	7.50		109	70-130			
Surrogate: Bromofluorobenzene	0.586		0.500		117	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.464		0.500		92.8	70-130			
Surrogate: Toluene-d8	0.543		0.500		109	70-130			

Matrix Spike (2430059-MS1) Source: E407178-10 Prepared: 07/24/24 Analyzed: 07/24/24

Benzene	2.20	0.0250	2.50	ND	88.0	48-131			
Ethylbenzene	2.50	0.0250	2.50	ND	100	45-135			
Toluene	2.49	0.0250	2.50	ND	99.5	48-130			
o-Xylene	2.67	0.0250	2.50	ND	107	43-135			
p,m-Xylene	5.29	0.0500	5.00	ND	106	43-135			
Total Xylenes	7.96	0.0250	7.50	ND	106	43-135			
Surrogate: Bromofluorobenzene	0.571		0.500		114	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.468		0.500		93.6	70-130			
Surrogate: Toluene-d8	0.538		0.500		108	70-130			

Matrix Spike Dup (2430059-MSD1) Source: E407178-10 Prepared: 07/24/24 Analyzed: 07/24/24

Benzene	2.17	0.0250	2.50	ND	86.7	48-131	1.47	23	
Ethylbenzene	2.46	0.0250	2.50	ND	98.6	45-135	1.49	27	
Toluene	2.45	0.0250	2.50	ND	98.1	48-130	1.44	24	
o-Xylene	2.67	0.0250	2.50	ND	107	43-135	0.281	27	
p,m-Xylene	5.31	0.0500	5.00	ND	106	43-135	0.377	27	
Total Xylenes	7.98	0.0250	7.50	ND	106	43-135	0.157	27	
Surrogate: Bromofluorobenzene	0.582		0.500		116	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.479		0.500		95.8	70-130			
Surrogate: Toluene-d8	0.538		0.500		108	70-130			



QC Summary Data

Atkins Engineering Associates Inc.	Project Name:	Zeus Pit	Reported:
2904 W. 2nd	Project Number:	20071-0001	
Roswell NM, 88201	Project Manager:	Austin Weyant	7/29/2024 3:47:11PM

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: BA

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
---------	-----------------	-----------------------------	-------------------------	---------------------------	----------	--------------------	----------	-------------------	-------

Blank (2430059-BLK1) Prepared: 07/24/24 Analyzed: 07/24/24

Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: Bromofluorobenzene	0.584		0.500		117	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.449		0.500		89.8	70-130			
Surrogate: Toluene-d8	0.533		0.500		107	70-130			

LCS (2430059-BS2) Prepared: 07/24/24 Analyzed: 07/24/24

Gasoline Range Organics (C6-C10)	53.2	20.0	50.0		106	70-130			
Surrogate: Bromofluorobenzene	0.580		0.500		116	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.475		0.500		94.9	70-130			
Surrogate: Toluene-d8	0.550		0.500		110	70-130			

Matrix Spike (2430059-MS2) Source: E407178-10 Prepared: 07/24/24 Analyzed: 07/24/24

Gasoline Range Organics (C6-C10)	53.5	20.0	50.0	ND	107	70-130			
Surrogate: Bromofluorobenzene	0.594		0.500		119	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.443		0.500		88.5	70-130			
Surrogate: Toluene-d8	0.547		0.500		109	70-130			

Matrix Spike Dup (2430059-MSD2) Source: E407178-10 Prepared: 07/24/24 Analyzed: 07/24/24

Gasoline Range Organics (C6-C10)	53.0	20.0	50.0	ND	106	70-130	0.930	20	
Surrogate: Bromofluorobenzene	0.588		0.500		118	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.448		0.500		89.5	70-130			
Surrogate: Toluene-d8	0.555		0.500		111	70-130			



QC Summary Data

Atkins Engineering Associates Inc.	Project Name:	Zeus Pit	Reported:
2904 W. 2nd	Project Number:	20071-0001	
Roswell NM, 88201	Project Manager:	Austin Weyant	7/29/2024 3:47:11PM

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: KM

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
---------	-----------------	-----------------------------	-------------------------	---------------------------	----------	--------------------	----------	-------------------	-------

Blank (2430056-BLK1)					Prepared: 07/24/24 Analyzed: 07/24/24				
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	56.1		50.0		112	50-200			

LCS (2430056-BS1)					Prepared: 07/24/24 Analyzed: 07/24/24				
Diesel Range Organics (C10-C28)	218	25.0	250		87.2	38-132			
Surrogate: n-Nonane	57.2		50.0		114	50-200			

Matrix Spike (2430056-MS1)					Source: E407176-06		Prepared: 07/24/24 Analyzed: 07/24/24		
Diesel Range Organics (C10-C28)	221	25.0	250	ND	88.5	38-132			
Surrogate: n-Nonane	53.7		50.0		107	50-200			

Matrix Spike Dup (2430056-MSD1)					Source: E407176-06		Prepared: 07/24/24 Analyzed: 07/24/24		
Diesel Range Organics (C10-C28)	224	25.0	250	ND	89.8	38-132	1.45	20	
Surrogate: n-Nonane	57.7		50.0		115	50-200			



QC Summary Data

Atkins Engineering Associates Inc.	Project Name:	Zeus Pit	Reported:
2904 W. 2nd	Project Number:	20071-0001	
Roswell NM, 88201	Project Manager:	Austin Weyant	7/29/2024 3:47:11PM

Anions by EPA 300.0/9056A

Analyst: JM

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
---------	-----------------	-----------------------------	-------------------------	---------------------------	----------	--------------------	----------	-------------------	-------

Blank (2430068-BLK1)					Prepared: 07/24/24 Analyzed: 07/24/24				
Chloride	ND	20.0							
LCS (2430068-BS1)					Prepared: 07/24/24 Analyzed: 07/24/24				
Chloride	249	20.0	250		99.6	90-110			
Matrix Spike (2430068-MS1)					Source: E407178-08		Prepared: 07/24/24 Analyzed: 07/24/24		
Chloride	249	20.0	250	ND	99.7	80-120			
Matrix Spike Dup (2430068-MSD1)					Source: E407178-08		Prepared: 07/24/24 Analyzed: 07/24/24		
Chloride	248	20.0	250	ND	99.3	80-120	0.397	20	

QC Summary Report Comment:
Calculations are based off of the raw (non-rounded) data. However, for reporting purposes all QC data is rounded to three significant figures.
Therefore, hand calculated values may differ slightly.



Definitions and Notes

Atkins Engineering Associates Inc.	Project Name:	Zeus Pit	
2904 W. 2nd	Project Number:	20071-0001	Reported:
Roswell NM, 88201	Project Manager:	Austin Weyant	07/29/24 15:47

- ND Analyte NOT DETECTED at or above the reporting limit
- NR Not Reported
- RPD Relative Percent Difference
- DNI Did Not Ignite
- DNR Did not react with the addition of acid or base.

Note (1): Methods marked with ** are non-accredited methods.

Note (2): Soil data is reported on an "as received" weight basis, unless reported otherwise.



Project Information

Chain of Custody

Page 1 of 1

Client: ATKINS ENG				Bill To		Lab Use Only				TAT				EPA Program		
Project: ZEUS P-17				Attention:		Lab WO# E407178		Job Number 20071080		1D	2D	3D	Standard	CWA	SDWA	
Project Manager: AUSTIN WEHART				Address:		Analysis and Method										RCRA
Address: 26104 W 2ND				City, State, Zip												
City, State, Zip: DOWELL, NM				Phone:		State										
Phone:				Email:												NM
Email:						Remarks										
Report due by: 8/1/24																
Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Lab Number	DRO/ORO by 8015	GRO/DRO by 8015	BTEX by 8021	VOC by 8260	Metals 6010	Chloride 300.0					
9:05	7/17	S		SW11	1	X	X	X		X						
9:02	7/17			SW12	2	X	X	X		X						
9:02	7/17			SW10	3	X	X	X		X						
9:12	7/17			BH 6	4	X	X	X		X						
9:11	7/17			BH 7	5	X	X	X		X						
9:11	7/17			BH 8	6	X	X	X		X						
9:09	7/17			BH 9	7	X	X	X		X						
9:08	7/17			BH 10	8	X	X	X		X						
9:15	7/17			BH 11	9	X	X	X		X						
9:15	7/17			BH 12	10	X	X	X		X						
Additional Instructions:																
I, (field sampler), attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may be grounds for legal action.										Samples requiring thermal preservation must be received on ice the day they are sampled or received packed in ice at an avg temp above 0 but less than 6 °C on subsequent days.						
Relinquished by: (Signature) <i>[Signature]</i>										Lab Use Only						
Date: 7/17/23 Time: 13:02										Received on ice: Y / N						
Relinquished by: (Signature) <i>Michelle Gonzales</i>										T1 T2 T3						
Date: 7-23-24 Time: 1645										AVG Temp °C 4						
Relinquished by: (Signature) <i>[Signature]</i>										Container Type: g - glass, p - poly/plastic, ag - amber glass, v - VOA						
Date: 7.23.24 Time: 2330										Note: Samples are discarded 30 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at the client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for on the report.						

Envirotech Analytical Laboratory

Printed: 7/24/2024 9:33:01AM

Sample Receipt Checklist (SRC)

Instructions: Please take note of any NO checkmarks.

If we receive no response concerning these items within 24 hours of the date of this notice, all the samples will be analyzed as requested.

Client:	Atkins Engineering Associates Inc.	Date Received:	07/24/24 05:00	Work Order ID:	E407178
Phone:	(575) 626-3993	Date Logged In:	07/23/24 14:40	Logged In By:	Noe Soto
Email:	austin@atkinseng.com	Due Date:	07/30/24 17:00 (4 day TAT)		

Chain of Custody (COC)

1. Does the sample ID match the COC? Yes
2. Does the number of samples per sampling site location match the COC? Yes
3. Were samples dropped off by client or carrier? Yes
4. Was the COC complete, i.e., signatures, dates/times, requested analyses? Yes
5. Were all samples received within holding time? Yes

Note: Analysis, such as pH which should be conducted in the field, i.e., 15 minute hold time, are not included in this discussion.

Carrier: Courrier**Comments/Resolution**

No. of Containers and Sampler name is not listed in th COC by client.

Sample Turn Around Time (TAT)

6. Did the COC indicate standard TAT, or Expedited TAT? Yes

Sample Cooler

7. Was a sample cooler received? Yes
8. If yes, was cooler received in good condition? Yes
9. Was the sample(s) received intact, i.e., not broken? Yes
10. Were custody/security seals present? No
11. If yes, were custody/security seals intact? NA
12. Was the sample received on ice? If yes, the recorded temp is 4°C, i.e., 6°±2°C? Yes

Note: Thermal preservation is not required, if samples are received w/i 15 minutes of sampling

13. If no visible ice, record the temperature. Actual sample temperature: 4°C

Sample Container

14. Are aqueous VOC samples present? No
15. Are VOC samples collected in VOA Vials? NA
16. Is the head space less than 6-8 mm (pea sized or less)? NA
17. Was a trip blank (TB) included for VOC analyses? NA
18. Are non-VOC samples collected in the correct containers? Yes
19. Is the appropriate volume/weight or number of sample containers collected? Yes

Field Label

20. Were field sample labels filled out with the minimum information:
 - Sample ID? Yes
 - Date/Time Collected? Yes
 - Collectors name? Yes

Sample Preservation

21. Does the COC or field labels indicate the samples were preserved? No
22. Are sample(s) correctly preserved? NA
24. Is lab filtration required and/or requested for dissolved metals? No

Multiphase Sample Matrix

26. Does the sample have more than one phase, i.e., multiphase? No
27. If yes, does the COC specify which phase(s) is to be analyzed? NA

Subcontract Laboratory

28. Are samples required to get sent to a subcontract laboratory? No
29. Was a subcontract laboratory specified by the client and if so who? NA Subcontract Lab:

Client Instruction

Signature of client authorizing changes to the COC or sample disposition.

Date



envirotech Inc.



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

August 31, 2023

Bob Allen

Safety & Environmental Solutions

703 East Clinton

Hobbs, NM 88240

RE: DAGGER LAKE ZEUS POND

Enclosed are the results of analyses for samples received by the laboratory on 08/31/23 11:00.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-22-15. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

Cardinal Laboratories is accredited through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink that reads "Celey D. Keene". The signature is written in a cursive style with a large, stylized 'C' and 'K'.

Celey D. Keene

Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

Safety & Environmental Solutions
 Bob Allen
 703 East Clinton
 Hobbs NM, 88240
 Fax To: (575) 393-4388

Received: 08/31/2023
 Reported: 08/31/2023
 Project Name: DAGGER LAKE ZEUS POND
 Project Number: ATK - 22 - 001
 Project Location: ATKINS - ZEUS SWD

Sampling Date: 08/30/2023
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: DP 1 - 1FT (H234733-01)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	3120	16.0	08/31/2023	ND	400	100	400	3.92	

Sample ID: DP 1 - 2FT (H234733-02)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1680	16.0	08/31/2023	ND	400	100	400	3.92	

Sample ID: DP 1 - 4FT (H234733-03)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	160	16.0	08/31/2023	ND	400	100	400	3.92	

Sample ID: DP 1 - 6FT (H234733-04)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	08/31/2023	ND	400	100	400	3.92	

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

Safety & Environmental Solutions
 Bob Allen
 703 East Clinton
 Hobbs NM, 88240
 Fax To: (575) 393-4388

Received: 08/31/2023
 Reported: 08/31/2023
 Project Name: DAGGER LAKE ZEUS POND
 Project Number: ATK - 22 - 001
 Project Location: ATKINS - ZEUS SWD

Sampling Date: 08/30/2023
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: DP 2 - SURFACE (H234733-05)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	08/31/2023	ND	400	100	400	3.92	

Sample ID: DP 2 - 4FT (H234733-06)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	08/31/2023	ND	400	100	400	3.92	

Sample ID: DP 3 - 4FT (H234733-07)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1880	16.0	08/31/2023	ND	400	100	400	3.92	

Sample ID: DP 3 - 6FT (H234733-08)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1100	16.0	08/31/2023	ND	400	100	400	3.92	

Sample ID: DP 3 - 8FT (H234733-09)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	80.0	16.0	08/31/2023	ND	400	100	400	3.92	

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

Safety & Environmental Solutions
 Bob Allen
 703 East Clinton
 Hobbs NM, 88240
 Fax To: (575) 393-4388

Received: 08/31/2023
 Reported: 08/31/2023
 Project Name: DAGGER LAKE ZEUS POND
 Project Number: ATK - 22 - 001
 Project Location: ATKINS - ZEUS SWD

Sampling Date: 08/30/2023
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: DP 3 - 9FT (H234733-10)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	08/31/2023	ND	400	100	400	3.92	

Sample ID: DP 4 - 6FT (H234733-11)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	08/31/2023	ND	400	100	400	3.92	

Sample ID: DP 4 - 8FT (H234733-12)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	08/31/2023	ND	400	100	400	3.92	

Sample ID: DP 5 - 6FT (H234733-13)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	272	16.0	08/31/2023	ND	400	100	400	3.92	

Sample ID: DP 5 - 8FT (H234733-14)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	144	16.0	08/31/2023	ND	400	100	400	3.92	

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

Safety & Environmental Solutions
 Bob Allen
 703 East Clinton
 Hobbs NM, 88240
 Fax To: (575) 393-4388

Received: 08/31/2023
 Reported: 08/31/2023
 Project Name: DAGGER LAKE ZEUS POND
 Project Number: ATK - 22 - 001
 Project Location: ATKINS - ZEUS SWD

Sampling Date: 08/30/2023
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: DP 6 - 8FT (H234733-15)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	3600	16.0	08/31/2023	ND	400	100	400	3.92	

Sample ID: DP 6 - 10FT (H234733-16)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	896	16.0	08/31/2023	ND	400	100	400	3.92	

Sample ID: DP 6 - 12FT (H234733-17)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1100	16.0	08/31/2023	ND	400	100	400	3.92	

Sample ID: DP 6 - 14FT (H234733-18)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	96.0	16.0	08/31/2023	ND	368	92.0	400	16.0	

Sample ID: DP 6 - 16FT (H234733-19)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	112	16.0	08/31/2023	ND	368	92.0	400	16.0	

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Notes and Definitions

ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C Samples reported on an as received basis (wet) unless otherwise noted on report

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

A handwritten signature in black ink, appearing to read "Celey D. Keene".

Celey D. Keene, Lab Director/Quality Manager

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

101 East Marland, Hobbs, NM 88240
(575) 393-2326 FAX (575) 393-2476

Company Name: Safety and Environmental Solutions

Project Manager: Bob Allen

Address: 703 East Clinton, PO Box 1613

City: Hobbs State: NM Zip: 88240

Phone #: 575 397-0510 Fax #: 575 393-4388

Project #: ATK-22-001 Project Owner: Atkins

Project Name: Dagger Lake Zeus Pond

Project Location: Zeus SWD

Sampler Name: Haden Able

BILL TO

P.O. #:

Company: Same

Attn:

Address:

City:

State: Zip:

Phone #:

Fax #:

ANALYSIS REQUEST

FOR LAB USE ONLY

Lab I.D. H334733

Sample I.D.

(G)RAB OR (C)OMP.

CONTAINERS

GROUNDWATER

WASTEWATER

SOIL

OIL

SLUDGE

OTHER :

ACID/BASE:

ICE / COOL

OTHER :

DATE

TIME

Chlorides

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.

Relinquished By:

Haden Able

Relinquished By:

Date: 8-31-23

Time: 1100

Date:

Time:

Received By:

Received By:

Date:

Time:

Delivered By: (Circle One)

Sampler - UPS - Bus - Other:

Sample Condition

Cool Intact

Yes Yes

No No

CHECKED BY:

(Initials)

Phone Result:

Fax Result:

REMARKS:

Yes No

Yes No

ballen@sesi-nm.com

hable@sesi-nm.com

Push Order

Add'l Phone #: 575 397 0510

Add'l Fax #:

CARDINAL Laboratories

101 East Marland, Hobbs, NM 88240
(575) 393-2326 FAX (575) 393-2476

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: Safety and Environmental Solutions

Project Manager: Bob Allen

Address: 703 East Clinton, PO Box 1613

City: Hobbs State: NM Zip: 88240

Phone #: 575 397-0510 Fax #: 575 393-4388

Project #: ATK-22-001 Project Owner: Atkins

Project Name: Dagger Lake Zeus Pond

Project Location:

Sampler Name:

FOR LAB USE ONLY

H034733

Lab I.D.

Sample I.D.

(G)RAB OR (C)OMP.

CONTAINERS

GROUNDWATER

WASTEWATER

SOIL

OIL

SLUDGE

OTHER :

ACID/BASE:

ICE / COOL

OTHER :

DATE

TIME

Chlorides

Matrix

PRESERV.

SAMPLING

DP4-6ft
DP4-8ft
DP5-6ft
DP5-8ft
DP6-8ft
DP6-10ft
DP6-12ft
DP6-14ft
DP6-16ft

G

G

G

G

G

G

G

G

G

G

G

G

G

G

G

PLEASE NOTE: Liability and Damages, Cardinal's liability and client's exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the analyses. All claims including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, states or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.

Relinquished By:

Rayden Able

Relinquished By:

Rayden Able

Relinquished By:

Rayden Able

Relinquished By:

Rayden Able

Relinquished By:

Rayden Able

Date: 8-31-23
Time: 1100
Date:
Time:

Received By:

Rayden Able

Received By:

Rayden Able

Received By:

Rayden Able

Received By:

Rayden Able

Received By:

Rayden Able

Delivered By: (Circle One)

Sampler - UPS - Bus - Other:

2.1c

#140

Sample Condition

Cool Intact

Yes Yes

No No

CHECKED BY:

(Initials)

Rayden Able

Phone Result: ☒ Yes ☐ No

Fax Result: ☐ Yes ☐ No

REMARKS:

ballen @ sesi-nm.com

hable @ sesi-nm.com

Rush order

Rayden Able

Rayden Able

Rayden Able

Add'l Phone #: 575 3970510

Add'l Fax #:

Rayden Able

Rayden Able

Rayden Able

Rayden Able

Rayden Able

Rayden Able

District I

1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720

District II

811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720

District III

1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170

District IV

1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

QUESTIONS

Action 373810

QUESTIONS

Operator: CHEVRON U S A INC 6301 Deauville Blvd Midland, TX 79706	OGRID: 4323
	Action Number: 373810
	Action Type: [C-141] Deferral Request C-141 (C-141-v-Deferral)

QUESTIONS

Prerequisites	
Incident ID (n#)	nAPP2211527047
Incident Name	NAPP2211527047 DAGGER LAKE ZEUS POND @ 0
Incident Type	Release Other
Incident Status	Deferral Request Received

Location of Release Source

Please answer all the questions in this group.

Site Name	DAGGER LAKE ZEUS POND
Date Release Discovered	04/09/2022
Surface Owner	Private

Incident Details

Please answer all the questions in this group.

Incident Type	Release Other
Did this release result in a fire or is the result of a fire	No
Did this release result in any injuries	No
Has this release reached or does it have a reasonable probability of reaching a watercourse	No
Has this release endangered or does it have a reasonable probability of endangering public health	No
Has this release substantially damaged or will it substantially damage property or the environment	No
Is this release of a volume that is or may with reasonable probability be detrimental to fresh water	No

Nature and Volume of Release

Material(s) released, please answer all that apply below. Any calculations or specific justifications for the volumes provided should be attached to the follow-up C-141 submission.

Crude Oil Released (bbls) Details	Not answered.
Produced Water Released (bbls) Details	Not answered.
Is the concentration of chloride in the produced water >10,000 mg/l	No
Condensate Released (bbls) Details	Not answered.
Natural Gas Vented (Mcf) Details	Not answered.
Natural Gas Flared (Mcf) Details	Not answered.
Other Released Details	Cause: Other Other (Specify) Other (Specify) Released: 10 BBL Recovered: 0 BBL Lost: 10 BBL.
Are there additional details for the questions above (i.e. any answer containing Other, Specify, Unknown, and/or Fire, or any negative lost amounts)	Layflat hose was being pigged backed to brackish water pond after frac and was open ended at the pond. It was secured to a pump but was removed from the anchor point and left free. The line then shifted and put the effluent water to the ground.

District I

1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720

District II

811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720

District III

1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170

District IV

1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

QUESTIONS, Page 2

Action 373810

QUESTIONS (continued)

Operator: CHEVRON U S A INC 6301 Deauville Blvd Midland, TX 79706	OGRID:
	4323
	Action Number:
	373810
Action Type:	
[C-141] Deferral Request C-141 (C-141-v-Deferral)	

QUESTIONS

Nature and Volume of Release (continued)	
Is this a gas only submission (i.e. only significant Mcf values reported)	No, according to supplied volumes this does not appear to be a "gas only" report.
Was this a major release as defined by Subsection A of 19.15.29.7 NMAC	No
Reasons why this would be considered a submission for a notification of a major release	Unavailable.
With the implementation of the 19.15.27 NMAC (05/25/2021), venting and/or flaring of natural gas (i.e. gas only) are to be submitted on the C-129 form.	

Initial Response

The responsible party must undertake the following actions immediately unless they could create a safety hazard that would result in injury.

The source of the release has been stopped	True
The impacted area has been secured to protect human health and the environment	True
Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices	True
All free liquids and recoverable materials have been removed and managed appropriately	True
If all the actions described above have not been undertaken, explain why	Not answered.

Per Paragraph (4) of Subsection B of 19.15.29.8 NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please prepare and attach a narrative of actions to date in the follow-up C-141 submission. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see Subparagraph (a) of Paragraph (5) of Subsection A of 19.15.29.11 NMAC), please prepare and attach all information needed for closure evaluation in the follow-up C-141 submission.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

I hereby agree and sign off to the above statement	Name: Amy Barnhill Title: Waste & Water Specialist Email: ABarnhill@chevron.com Date: 08/14/2024
--	---

District I

1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720

District II

811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720

District III

1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170

District IV

1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

QUESTIONS, Page 3

Action 373810

QUESTIONS (continued)

Operator: CHEVRON U S A INC 6301 Deauville Blvd Midland, TX 79706	OGRID:	4323
	Action Number:	373810
	Action Type:	[C-141] Deferral Request C-141 (C-141-v-Deferral)

QUESTIONS**Site Characterization**

Please answer all the questions in this group (only required when seeking remediation plan approval and beyond). This information must be provided to the appropriate district office no later than 90 days after the release discovery date.

What is the shallowest depth to groundwater beneath the area affected by the release in feet below ground surface (ft bgs)	Between 100 and 500 (ft.)
What method was used to determine the depth to ground water	NM OSE iWaters Database Search
Did this release impact groundwater or surface water	No
What is the minimum distance, between the closest lateral extents of the release and the following surface areas:	
A continuously flowing watercourse or any other significant watercourse	Between 1000 (ft.) and ½ (mi.)
Any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)	Between 1000 (ft.) and ½ (mi.)
An occupied permanent residence, school, hospital, institution, or church	Between 1000 (ft.) and ½ (mi.)
A spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes	Between 1000 (ft.) and ½ (mi.)
Any other fresh water well or spring	Between 1000 (ft.) and ½ (mi.)
Incorporated municipal boundaries or a defined municipal fresh water well field	Between 1000 (ft.) and ½ (mi.)
A wetland	Between 1000 (ft.) and ½ (mi.)
A subsurface mine	Between 1000 (ft.) and ½ (mi.)
An (non-karst) unstable area	Between 1000 (ft.) and ½ (mi.)
Categorize the risk of this well / site being in a karst geology	Low
A 100-year floodplain	Between 1000 (ft.) and ½ (mi.)
Did the release impact areas not on an exploration, development, production, or storage site	Yes

Remediation Plan

Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.

Requesting a remediation plan approval with this submission	Yes
Attach a comprehensive report demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined, pursuant to 19.15.29.11 NMAC and 19.15.29.13 NMAC.	
Have the lateral and vertical extents of contamination been fully delineated	Yes
Was this release entirely contained within a lined containment area	No
Soil Contamination Sampling: (Provide the highest observable value for each, in milligrams per kilograms.)	
Chloride (EPA 300.0 or SM4500 Cl B)	7060
TPH (GRO+DRO+MRO) (EPA SW-846 Method 8015M)	50
GRO+DRO (EPA SW-846 Method 8015M)	50
BTEX (EPA SW-846 Method 8021B or 8260B)	0
Benzene (EPA SW-846 Method 8021B or 8260B)	0

Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.

On what estimated date will the remediation commence	10/01/2023
On what date will (or did) the final sampling or liner inspection occur	05/16/2024
On what date will (or was) the remediation complete(d)	05/31/2024
What is the estimated surface area (in square feet) that will be reclaimed	10900
What is the estimated volume (in cubic yards) that will be reclaimed	5450
What is the estimated surface area (in square feet) that will be remediated	10900
What is the estimated volume (in cubic yards) that will be remediated	5450

These estimated dates and measurements are recognized to be the best guess or calculation at the time of submission and may (be) change(d) over time as more remediation efforts are completed.

The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.

District I

1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720

District II

811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720

District III

1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170

District IV

1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

QUESTIONS, Page 4

Action 373810

QUESTIONS (continued)

Operator: CHEVRON U S A INC 6301 Deauville Blvd Midland, TX 79706	OGRID:	4323
	Action Number:	373810
	Action Type:	[C-141] Deferral Request C-141 (C-141-v-Deferral)

QUESTIONS

Remediation Plan (continued)	
<i>Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.</i>	
This remediation will (or is expected to) utilize the following processes to remediate / reduce contaminants:	
<i>(Select all answers below that apply.)</i>	
(Ex Situ) Excavation and off-site disposal (i.e. dig and haul, hydrovac, etc.)	Yes
Which OCD approved facility will be used for off-site disposal	LEA LAND LANDFILL [fEEM0112342028]
OR which OCD approved well (API) will be used for off-site disposal	Not answered.
OR is the off-site disposal site, to be used, out-of-state	Not answered.
OR is the off-site disposal site, to be used, an NMED facility	Not answered.
(Ex Situ) Excavation and on-site remediation (i.e. On-Site Land Farms)	Not answered.
(In Situ) Soil Vapor Extraction	Not answered.
(In Situ) Chemical processing (i.e. Soil Shredding, Potassium Permanganate, etc.)	Not answered.
(In Situ) Biological processing (i.e. Microbes / Fertilizer, etc.)	Not answered.
(In Situ) Physical processing (i.e. Soil Washing, Gypsum, Disking, etc.)	Not answered.
Ground Water Abatement pursuant to 19.15.30 NMAC	Not answered.
OTHER (Non-listed remedial process)	Not answered.
<i>Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.</i>	
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.	
I hereby agree and sign off to the above statement	Name: Amy Barnhill Title: Waste & Water Specialist Email: ABarnhill@chevron.com Date: 08/14/2024
<i>The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.</i>	

District I

1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720

District II

811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720

District III

1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170

District IV

1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

QUESTIONS, Page 5

Action 373810

QUESTIONS (continued)

Operator: CHEVRON U S A INC 6301 Deauville Blvd Midland, TX 79706	OGRID:	4323
	Action Number:	373810
	Action Type:	[C-141] Deferral Request C-141 (C-141-v-Deferral)

QUESTIONS**Deferral Requests Only**

Only answer the questions in this group if seeking a deferral upon approval this submission. Each of the following items must be confirmed as part of any request for deferral of remediation.

Requesting a deferral of the remediation closure due date with the approval of this submission	Yes
Have the lateral and vertical extents of contamination been fully delineated	Yes
Is the remaining contamination in areas immediately under or around production equipment where remediation could cause a major facility deconstruction	Yes
Please list or describe the production equipment and how (re)moving the equipment would cause major facility deconstruction	Chloride impacted soils remain in place in and around the area pipelines and recycling pond impoundment.
What is the remaining surface area (in square feet) that will still need to be remediated if a deferral is granted	1245
What is the remaining volume (in cubic yards) that will still need to be remediated if a deferral is granted	620
Per Paragraph (2) of Subsection C of 19.15.29.12 NMAC if contamination is located in areas immediately under or around production equipment such as production tanks, wellheads and pipelines where remediation could cause a major facility deconstruction, the remediation, restoration and reclamation may be deferred with division written approval until the equipment is removed during other operations, or when the well or facility is plugged or abandoned, whichever comes first.	
Enter the facility ID (f#) on which this deferral should be granted	ZEUS CONTAINMENT [fVV2203339361]
Enter the well API (30-) on which this deferral should be granted	Not answered.
Contamination does not cause an imminent risk to human health, the environment, or groundwater	True
Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.	
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.	
I hereby agree and sign off to the above statement	Name: Amy Barnhill Title: Waste & Water Specialist Email: ABarnhill@chevron.com Date: 08/19/2024

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

QUESTIONS, Page 6

Action 373810

QUESTIONS (continued)

Operator: CHEVRON U S A INC 6301 Deauville Blvd Midland, TX 79706	OGRID:	4323
	Action Number:	373810
	Action Type:	[C-141] Deferral Request C-141 (C-141-v-Deferral)

QUESTIONS

Sampling Event Information	
Last sampling notification (C-141N) recorded	343588
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	05/16/2024
What was the (estimated) number of samples that were to be gathered	55
What was the sampling surface area in square feet	2300

Remediation Closure Request	
Only answer the questions in this group if seeking remediation closure for this release because all remediation steps have been completed.	
Requesting a remediation closure approval with this submission	No

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

CONDITIONS

Action 373810

CONDITIONS

Operator: CHEVRON U S A INC 6301 Deauville Blvd Midland, TX 79706	OGRID: 4323
	Action Number: 373810
	Action Type: [C-141] Deferral Request C-141 (C-141-v-Deferral)

CONDITIONS

Created By	Condition	Condition Date
nvelez	Deferral is approved. Remediation Due date will be left open until the site has been plugged and abandoned or a major facility deconstruction takes place.	10/7/2024