2023 ANNUAL GROUNDWATER REPORT

Lateral L-40 Line Drip
Incident Number: nAUTOfAB000335
Meter Code: LD174
T28N, R4W, Sec13, Unit H

REVIEWED
By Mike Buchanan at 4:38 pm, Sep 04, 2024

Review of the 2023 Annual Groundwater Monitoring Report for Lateral L-40 Line Drip: content satisfactory
1. Continue to conduct groundwater monitoring on a semi-annual basis in wells that don't have LNAPL present.
2. Analysis will include BTEX by EPA method 8260.
3. Plan on conducting biennial sampling for site wide wells, if that was not completed in the 2nd quarter of 2024. Please notify OCD of this change in schedule if necessary.
4. Recover LNAPL in MW-5 on monthly basis if feasible.
5. Submit the 2024 annual report to OCD by April 1, 2025.

SITE DETAILS

Site Location: Latitude: 36.659672 N, Longitude: -107.194520 W
Land Type: Federal
Operator: Enterprise (Pipeline)

SITE BACKGROUND

Environmental remediation activities at Lateral L-40 Line Drip (Site) ar the procedures set forth in the document entitled, "*Remediation Plan for Groun ring Pit Closure Activities*" (Remediation Plan, El Paso Natural Gas Compan vices Company, 1995). This Remediation Plan was conditionally approved Oil Conservation Division (NMOCD) in correspondence dated November 3 OCD approval conditions were adopted into El Paso CGP Company (EPCPG) pr te is crossed by a pipeline operated by Enterprise.

The Site is located on Federal land. An initial site assessment was comple d an excavation to approximately 12 feet below ground surface (bgs) was con 995, removing approximately 60 cubic yards (cy) of soil. A monitoring well wa -1), two soil borings were advanced in 1999, and one additional soil boring (S 016. Additional monitoring wells were installed in 2016 (MW-2, MW-3, MW-4 W-6, MW-7, MW-8, MW-9, MW-10). Soil vapor extraction (SVE) test wells we E-1, SVE-2, SVE-3). Five soil borings (SB-2 through SB-6) were installed in Jul erize hydrocarbon impacts in soil. A detailed history of Site activities is provided i

Currently, groundwater sampling is conducted on a semi-annual basis. Lig quid (LNAPL) is present at the Site, and manual recovery has been performed pe SVE feasibility testing was conducted in October 2018. Mobile dual-phase extraction of LNAPL was conducted in 2022. The location of the Site is depicted on Figure 1. A Site Plan map depicting the locations of monitoring wells and current and historical site features is provided as Figure 2.

GROUNDWATER SAMPLING ACTIVITIES

Pursuant to the Remediation Plan, Stantec Consulting Services Inc. (Stantec) provided field work notifications via email to the NMOCD on May 12, 2023 and November 2, 2023, prior to initiating groundwater sampling activities at the Site. Copies of the 2023 NMOCD notifications are provided in Appendix B.

On May 21, 2023 and November 16, 2023, water levels were gauged at MW-1 through MW-10. Additionally, on November 16, 2023, SVE-1 through SVE-3 water levels were gauged. Groundwater samples were collected from monitoring wells MW-1 through MW-4, MW-6, MW-9, and MW-10 during both sampling events in 2023. Groundwater samples were also collected from MW-7 and MW-8 during the May 2023 sampling event. Groundwater samples were not collected from MW-5 in 2023 due to the presence of LNAPL during both sampling events. Groundwater samples were collected using HydraSleeve™ (HydraSleeve) no-purge groundwater sampling devices. The HydraSleeves were set during the previous sampling event, using a suspension tether and stainless-steel weights. The HydraSleeves were positioned to collect a sample from the screened interval by setting the bottom of the sleeve approximately 0.5 foot above the bottom of the monitoring well screen.

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Groundwater samples were placed into laboratory-supplied sample containers, packed on ice, and shipped under standard chain-of-custody protocols to Eurofins Environment Testing Southeast, LLC (Eurofins) in Pensacola, Florida, for analysis of benzene, toluene, ethylbenzene, and total xylenes (BTEX) according to United States Environmental Protection Agency (EPA) Method 8260. One laboratory-supplied trip blank and one blind field duplicate were collected during each groundwater sampling event.

Excess sample water was placed in a waste container and taken to Envirotech, Inc. (Envirotech) located in Bloomfield, New Mexico for disposal. Wastewater disposal documentation is included as Appendix C.

LNAPL RECOVERY

As documented in EPCGP's letter dated January 5, 2021, EPCGP initiated quarterly LNAPL recovery activities in the second calendar quarter of 2020 and continued quarterly for 2023. Documentation of NMOCD notification of site LNAPL recovery activities in 2023 is provided in Appendix B.

LNAPL was observed and recovered from MW-5 quarterly in 2023, by hand-bailing in March, May, and November. During the LNAPL recovery events in 2023, recovered LNAPL was transported for disposal at Envirotech (Appendix C).

One MDPE event was completed on August 22, 2023, by AcuVac Remediation, LLC (AcuVac). The NMOCD was notified on August 16, 2023, of the planned schedule for MDPE activities. Copies of the 2023 NMOCD notifications are provided in Appendix B. The purpose of the MDPE event was to enhance free product recovery from monitoring well MW-5.

MDPE is a process combining soil vapor extraction (SVE) with groundwater depression to enhance the removal of liquid and vapor phase hydrocarbons. A submersible pump is used to simultaneously remove groundwater, inducing a hydraulic gradient toward the extraction well, and creating groundwater depression to expose the hydrocarbon smear zone to SVE. Recovered liquids were transferred to a portable storage tank for off-site disposal. Recovered vapors were used as fuel in the MDPE internal combustion engine (ICE) to generate power for the vacuum pump, resulting in little to no emissions.

One 8-hour MDPE event was completed, using MW-5 as an extraction well on August 22, 2023. Based on field data collected by AcuVac, approximately 0.8 gallons of LNAPL, and 3.9 gallons of vapor were recovered from MW-5 during the 2023 MDPE event. AcuVac's report summarizing the MDPE event at the Site is presented as Appendix D.

Recovered fluids from the MDPE events were transported to Envirotech for disposal. Waste disposal documentation is included as Appendix C.

SUMMARY TABLES

Historic groundwater analytical results and well gauging data are summarized in Tables 2 and 3, respectively. LNAPL recovery data is summarized on Table 1.

SITE MAPS

Groundwater analytical maps (Figures 3 and 5) and groundwater elevation contour maps (Figures 4 and 6) summarize results of the 2023 groundwater sampling and gauging events.

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ANALYTICAL LAB REPORTS

The groundwater analytical lab reports are included as Appendix E.

GROUNDWATER RESULTS

- Groundwater elevations indicate the groundwater flow direction at the Site was generally to the south-southeast in 2023 (see Figures 4 and 6).
- LNAPL was observed in MW-5 in 2023 during both sampling events; therefore, no groundwater samples were collected at this location.
- Groundwater samples collected from MW-1 and MW-3 in 2023 exceeded the New Mexico Water Quality Control Commission (NMWQCC) standard (10 micrograms per liter [µg/L]) for benzene in groundwater. Benzene concentrations were either not detected or were detected below the standard in the remaining Site monitoring wells sampled in 2023.
- Concentrations of toluene were either below the NMWQCC standard (750 µg/L) or were not detected at the Site monitoring wells sampled in 2023.
- Concentrations of ethylbenzene were either below the NMWQCC standard (750 µg/L) or were not detected at the Site monitoring wells sampled in 2023.
- The Groundwater samples collected from MW-1 in November 2023 exceeded the NMWQCC standard (620 µg/L) for total xylenes in groundwater. Total xylenes were either below the standard or were not detected at the remaining Site monitoring wells sampled in 2023.
- A field duplicate was collected from MW-1 in May and November 2023. For each sampling event, no significant differences were noted between the primary and duplicate sample results.
- Detectable concentrations of BTEX constituents were not reported in the trip blanks collected and analyzed as part of the 2023 groundwater monitoring events.

PLANNED FUTURE ACTIVITIES

Groundwater monitoring events will continue to be conducted on a semi-annual basis in 2024. Groundwater samples will be collected from key monitoring wells not containing LNAPL on a semi-annual basis and analyzed for BTEX constituents using EPA Method 8260. A field duplicate and trip blank will also be collected during each groundwater sampling event. Sampling of all site monitoring wells is conducted on a biennial basis, with the next site-wide sampling event planned for the second calendar quarter of 2024.

Pursuant to EPCGP's January 5, 2021, letter, recovery of LNAPL will continue on a quarterly basis from monitoring well MW-5.

The activities completed in 2024 and their results will be summarized in the 2024 Annual Report, to be submitted by April 1, 2025.

TABLES

TABLE 1 – LIGHT NON-AQUEOUS PHASE LIQUID RECOVERY SUMMARY

TABLE 2 – GROUNDWATER ANALYTICAL RESULTS

TABLE 3 – GROUNDWATER ELEVATION TABLE

TABLE 1
LIGHT NON-AQUEOUS PHASE LIQUID RECOVERY SUMMARY

Lat. L-40 Line Drip						
Well ID - MW-5	Depth to LNAPL (Feet)	Depth to Water (Feet)	Measured Thickness (Feet)	LNAPL Recovered (gal)	Water Recovered (gal)	Recovery Type
Date						
11/1/2018	41.53	41.53	<0.01	<0.01	0.1	manual
5/24/2019	41.62	41.86	0.24	0.02	0.1	manual
11/14/2019	41.39	42.11	0.72	0.26	0.13	manual
5/14/2020	40.55	41.34	0.79	0.34	0.17	manual
8/19/2020	41.55	42.20	0.65	0.18	0.50	manual
11/15/2020	41.54	42.50	0.96	0.15	0.22	manual
3/18/2021	41.45	42.90	1.45	0.34	0.49	manual
5/23/2021	41.63	42.51	0.88	0.16	0.08	manual
8/22/2021	41.63	42.50	0.87	0.18	0.62	manual
11/13/2021	41.73	42.43	0.70	0.14	0.40	manual
3/23/2022	41.74	42.62	0.88	0.19	0.17	manual
5/18/2022	41.87	42.28	0.41	0.11	0.26	manual
8/31/2022	40.75	41.10	0.35	6.5	14.4	Mobile DPE*
10/30/2022	41.97	42.15	0.18	0.01	0.32	manual
3/29/2023	42.02	42.27	0.25	0.05	0.19	manual
5/21/2023	42.05	42.40	0.35	0.08	0.10	manual
8/22/2023	42.02	42.61	0.59	4.80	18.1	Mobile DPE*
11/16/2023	41.97	42.74	0.77	0.17	0.11	manual
			Total:	8.71	18.25	

Notes:
gal = gallons
"LNAPL" = Light non-aqueous phase liquid
LNAPL recovery data for 2003 and previous years documented in previously-submitted reports.
* = Mobile Dual Phase Extraction (DPE) includes calculated recovered hydrocarbon vapors.

TABLE 2 - GROUNDWATER ANALYTICAL RESULTS

Lat. L-40 Line Drip					
Location	Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)
NMWQCC Standards:		10	750	750	620
MW-1	09/26/95	121	218	7.4	75.1
MW-1	11/11/96	12000	20400	612	6075
MW-1	03/31/97	11100	24700	702	7440
MW-1	05/09/97	12900	22900	761	7730
MW-1	11/06/00	8.2	<0.5	15	6.9
MW-1	01/02/01	NS	NS	NS	NS
MW-1	06/08/01	NS	NS	NS	NS
MW-1	07/02/01	NS	NS	NS	NS
MW-1	08/03/01	NS	NS	NS	NS
MW-1	09/12/01	NS	NS	NS	NS
MW-1	10/12/01	NS	NS	NS	NS
MW-1	12/13/01	NS	NS	NS	NS
MW-1	03/12/02	NS	NS	NS	NS
MW-1	04/03/02	NS	NS	NS	NS
MW-1	05/20/02	NS	NS	NS	NS
MW-1	06/10/02	NS	NS	NS	NS
MW-1	07/19/02	NS	NS	NS	NS
MW-1	10/11/02	NS	NS	NS	NS
MW-1	05/06/03	NS	NS	NS	NS
MW-1	07/17/03	NS	NS	NS	NS
MW-1	10/13/03	NS	NS	NS	NS
MW-1	04/20/04	NS	NS	NS	NS
MW-1	07/27/04	NS	NS	NS	NS
MW-1	10/26/04	NS	NS	NS	NS
MW-1	04/22/05	NS	NS	NS	NS
MW-1	07/19/05	NS	NS	NS	NS
MW-1	10/21/05	NS	NS	NS	NS
MW-1	01/24/06	NS	NS	NS	NS
MW-1	05/10/06	NS	NS	NS	NS
MW-1	07/26/06	NS	NS	NS	NS
MW-1	10/22/06	NS	NS	NS	NS
MW-1	04/29/07	NS	NS	NS	NS
MW-1	07/31/07	NS	NS	NS	NS
MW-1	10/30/07	NS	NS	NS	NS
MW-1	04/17/08	396	<50	484	2770

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Lat. L-40 Line Drip					
Location	Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)
NMWQCC Standards:		10	750	750	620
MW-1	07/23/08	NS	NS	NS	NS
MW-1	10/09/08	NS	NS	NS	NS
MW-1	04/08/09	387	7.9 J	466	2680
MW-1	06/03/10	272	<50	384	2240
MW-1	09/24/10	NS	NS	NS	NS
MW-1	11/02/10	NS	NS	NS	NS
MW-1	05/03/11	115	4.8	430	2160
MW-1	09/28/11	NS	NS	NS	NS
MW-1	11/02/11	NS	NS	NS	NS
MW-1	05/09/12	302	10.2	404	1830
MW-1	06/09/13	150	13	330	2800
MW-1	09/11/13	160	330	15 J	2600
MW-1	12/14/13	160	15	320	2500
MW-1	04/06/14	150	30 J	400	2900
MW-1	10/26/14	120	9.9 J	350	2000
MW-1	06/01/15	83	12 J	250	1500
MW-1	11/23/15	150	<100	360	2100
MW-1	04/19/16	100	<25	300	1900
MW-1	10/16/16	180	<50	410	2500
MW-1	06/11/17	120	<50	350	2000
MW-1	11/11/17	120	<10	370	2000
MW-1	05/18/18	120	<10	280	1500
MW-1	11/01/18	190	48	150	1200
MW-1	05/24/19	200	18	310	1700
MW-1	11/14/19	110	9.1	160	800
MW-1	05/14/20	110	6.9	130	560
DUP-01(MW-1)*	05/14/20	110	6.4	120	520
MW-1	11/15/20	280	31	320	1400
MW-1	05/23/21	170	16	260	1200
MW-1	11/13/21	160	9.9	140	530
MW-1	05/18/22	180	14	230	990
MW-1	10/30/22	240	22	260	1100
MW-1	05/21/23	120	5.7	120	500
DUP-01(MW-1)*	05/21/23	120	5.6	110	420
MW-1	11/16/23	230	16	250	860
DUP-01(MW-1)*	11/16/23	240	18	280	930
MW-2	10/16/16	180	430	17	150
MW-2	06/11/17	2300	21	11	180
MW-2	11/11/17	1900	230	13	280
MW-2	05/18/18	1100	33	<10	<100

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Lat. L-40 Line Drip					
Location	Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)
NMWQCC Standards:		10	750	750	620
MW-2	11/01/18	130	25	<1.0	13
MW-2	05/24/19	<1.0	<1.0	<1.0	<10
MW-2	11/14/19	33	5.6	<1.0	<10
DUP-01(MW-2)*	11/14/19	37	7.1	<1.0	<10
MW-2	05/14/20	<1.0	<1.0	<1.0	<10
MW-2	11/15/20	7.4	<1.0	<1.0	<10
DUP-01(MW-2)*	11/15/20	7.1	<1.0	<1.0	<10
MW-2	05/23/21	<1.0	<1.0	<1.0	<10
DUP-1(MW-2)*	05/23/21	<1.0	<1.0	<1.0	<10
MW-2	11/13/21	<1.0	<1.0	<1.0	<10
DUP-01(MW-2)*	11/13/21	<1.0	<1.0	<1.0	<10
MW-2	05/18/22	<1.0	<1.0	<1.0	<10
DUP-01(MW-2)*	05/18/22	<1.0	<1.0	<1.0	<10
MW-2	10/30/22	<1.0	<1.0	<1.0	<10
DUP-01(MW-2)*	10/30/22	<1.0	<1.0	<1.0	<10
MW-2	05/21/23	<1.0	<1.0	<1.0	<10
MW-2	11/16/23	<1.0	<1.0	<1.0	<10
MW-3	10/16/16	3.4	<5.0	<1.0	<5.0
MW-3	06/11/17	130	<5.0	<1.0	<5.0
MW-3	11/11/17	170	<1.0	<1.0	<10
MW-3	05/18/18	130	23	<1.0	<10
DUP-01(MW-3)*	05/18/18	140	30	<1.0	<10
MW-3	11/01/18	<1.0	<1.0	<1.0	<10
MW-3	05/24/19	<1.0	<1.0	<1.0	<10
MW-3	11/14/19	9.3	<1.0	<1.0	<10
MW-3	05/14/20	4.2	<1.0	<1.0	<10
MW-3	11/15/20	2.0	<1.0	<1.0	<10
MW-3	05/23/21	33	<1.0	<1.0	<10
MW-3	11/13/21	<1.0	<1.0	<1.0	<10
MW-3	05/18/22	<1.0	<1.0	<1.0	<10
MW-3	10/30/22	<1.0	<1.0	<1.0	<10
MW-3	05/21/23	11	<1.0	<1.0	<10
MW-3	11/16/23	11	<1.0	<1.0	<10
MW-4	10/16/16	8.7	15	<1.0	6.1
MW-4	06/11/17	47	6.8	<1.0	<5.0
MW-4	11/11/17	26	<1.0	<1.0	<10
MW-4	05/18/18	11	<1.0	<1.0	<10
MW-4	11/01/18	<1.0	<1.0	<1.0	<10
MW-4	05/24/19	<1.0	<1.0	<1.0	<10
MW-4	11/14/19	8.8	<1.0	<1.0	<10

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Location	Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)
NMWQCC Standards:		10	750	750	620
MW-4	05/14/20	26	<1.0	<1.0	<10
MW-4	11/15/20	<1.0	<1.0	<1.0	<10
MW-4	05/23/21	<1.0	<1.0	<1.0	<10
MW-4	11/13/21	<1.0	<1.0	<1.0	<10
MW-4	05/18/22	<1.0	<1.0	<1.0	<10
MW-4	10/30/22	<1.0	<1.0	<1.0	<10
MW-4	05/21/23	<1.0	<1.0	<1.0	<10
MW-4	11/16/23	<1.0	<1.0	<1.0	<10
MW-5	10/16/16	750	3000	190	1600
MW-5	06/11/17	2000	230	75	710
MW-5	11/11/17	1100	550	85	820
MW-5	05/18/18	550	53	42	<50
MW-5	11/01/18	1200	370	190	810
DUP-01(MW-5)*	11/01/18	1200	270	120	550
MW-5	05/24/19	NS	NS	NS	NS
MW-5	11/14/19	NS	NS	NS	NS
MW-5	05/14/20	NS	NS	NS	NS
MW-5	11/15/20	NS	NS	NS	NS
MW-5	05/23/21	NS	NS	NS	NS
MW-5	11/13/21	NS	NS	NS	NS
MW-5	05/18/22	NS	NS	NS	NS
MW-5	10/30/22	NS	NS	NS	NS
MW-5	05/21/23	NS	NS	NS	NS
MW-5	11/16/23	NS	NS	NS	NS
MW-6	11/01/18	NS	NS	NS	NS
MW-6	05/24/19	<1.0	<1.0	<1.0	<10
MW-6	11/14/19	<1.0	<1.0	<1.0	<10
MW-6	05/14/20	<1.0	<1.0	<1.0	<10
MW-6	11/15/20	<1.0	<1.0	<1.0	<10
MW-6	05/23/21	<1.0	<1.0	<1.0	<10
MW-6	11/13/21	<1.0	<1.0	<1.0	<10
MW-6	05/18/22	<1.0	<1.0	<1.0	<10
MW-6	10/30/22	<1.0	<1.0	<1.0	<10
MW-6	05/21/23	<1.0	<1.0	<1.0	<10
MW-6	11/16/23	<1.0	<1.0	<1.0	<10
MW-7	11/01/18	<1.0	<1.0	<1.0	<10
MW-7	05/24/19	<1.0	<1.0	<1.0	<10
MW-7	11/14/19	NS	NS	NS	NS
MW-7	05/14/20	NS	NS	NS	NS

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NMWQCC Standards:		10	750	750	620
MW-7	11/15/20	NS	NS	NS	NS
MW-7	05/23/21	<1.0	<1.0	<1.0	<10
MW-7	11/13/21	NS	NS	NS	NS
MW-7	05/18/22	NS	NS	NS	NS
MW-7	10/30/22	NS	NS	NS	NS
MW-7	05/21/23	1.0	<1.0	<1.0	<10
MW-7	11/16/23	NS	NS	NS	NS
MW-8	11/01/18	<1.0	<1.0	<1.0	<10
MW-8	05/24/19	<1.0	<1.0	<1.0	<10
MW-8	11/14/19	NS	NS	NS	NS
MW-8	05/14/20	NS	NS	NS	NS
MW-8	11/15/20	NS	NS	NS	NS
MW-8	05/23/21	<1.0	<1.0	<1.0	<10
MW-8	11/13/21	NS	NS	NS	NS
MW-8	05/18/22	NS	NS	NS	NS
MW-8	10/30/22	NS	NS	NS	NS
MW-8	05/21/23	<1.0	<1.0	<1.0	<10
MW-8	11/16/23	NS	NS	NS	NS
MW-9	11/01/18	5.6	5.5	<1.0	<10
MW-9	05/24/19	<1.0	<1.0	<1.0	<10
DUP-01(MW-9)*	05/24/19	<1.0	<1.0	<1.0	<10
MW-9	11/14/19	<1.0	<1.0	<1.0	<10
MW-9	05/14/20	<1.0	<1.0	<1.0	<10
MW-9	11/15/20	<1.0	<1.0	<1.0	<10
MW-9	05/23/21	<1.0	<1.0	<1.0	<10
MW-9	11/13/21	<1.0	<1.0	<1.0	<10
MW-9	05/18/22	<1.0	<1.0	<1.0	<10
MW-9	10/30/22	<1.0	<1.0	<1.0	<10
MW-9	05/21/23	<1.0	<1.0	<1.0	<10
MW-9	11/16/23	2.3	1.3	<1.0	<10
MW-10	11/01/18	<1.0	<1.0	<1.0	<10
MW-10	05/24/19	<1.0	<1.0	<1.0	<10
MW-10	11/14/19	<1.0	<1.0	<1.0	<10
MW-10	05/14/20	<1.0	<1.0	<1.0	<10
MW-10	11/15/20	<1.0	<1.0	<1.0	<10
MW-10	05/23/21	<1.0	<1.0	<1.0	<10
MW-10	11/13/21	<1.0	<1.0	<1.0	<10
MW-10	05/18/22	<1.0	<1.0	<1.0	<10
MW-10	10/30/22	<1.0	<1.0	<1.0	<10

TABLE 2 - GROUNDWATER ANALYTICAL RESULTS

Lat. L-40 Line Drip					
Location	Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)
NMWQCC Standards:		10	750	750	620
MW-10	05/21/23	<1.0	<1.0	<1.0	<10
MW-10	11/16/23	<1.0	<1.0	<1.0	<10

Notes:
"NS" = Not Sampled
"µg/L" = micrograms per liter
Results highlighted yellow exceed their respective New Mexico Water Quality Control Commission (NMWQCC) standards.
"J" = Result is less than the reporting limit but greater than or equal to the method detection limit and the result in an approximate value.
"<" = analyte was not detected at the indicated reporting limit (some historic data were reported at the detection limit).
*Field Duplicate results presented immediately below primary sample results

TABLE 3 - GROUNDWATER ELEVATION TABLE

Lat. L-40 Line Drip						
Location	Date	TOC	Depth to LNAPL (ft.)	Depth to Water (ft.)	LNAPL Thickness (ft.)	GW Elevation (ft.)
MW-1	09/26/95	7259.57	NR	36.68		7222.89
MW-1	11/11/96	7259.57	36.16	36.62	0.46	7223.30
MW-1	03/31/97	7259.57	36.18	36.68	0.50	7223.27
MW-1	05/09/97	7259.57	36.45	36.57	0.12	7223.09
MW-1	11/06/00	7259.57	NR	35.06		7224.51
MW-1	01/02/01	7259.57	37.95	39.08	1.13	7221.34
MW-1	06/08/01	7259.57	37.89	39.00	1.11	7221.40
MW-1	07/02/01	7259.57	37.93	39.14	1.21	7221.34
MW-1	08/03/01	7259.57	37.83	39.10	1.27	7221.42
MW-1	09/12/01	7259.57	38.02	38.96	0.94	7221.32
MW-1	10/12/01	7259.57	38.19	38.43	0.24	7221.32
MW-1	12/13/01	7259.57	38.40	38.75	0.35	7221.08
MW-1	03/12/02	7259.57	38.42	38.76	0.34	7221.07
MW-1	04/03/02	7259.57	38.39	38.66	0.27	7221.11
MW-1	05/20/02	7259.57	38.46	38.56	0.10	7221.09
MW-1	06/10/02	7259.57	38.51	38.56	0.05	7221.05
MW-1	07/19/02	7259.57	NR	38.64		7220.93
MW-1	10/11/02	7259.57	38.84	38.87	0.03	7220.72
MW-1	05/06/03	7259.57	37.94	37.97	0.03	7221.62
MW-1	07/17/03	7259.57	ND	38.95		7220.62
MW-1	10/13/03	7259.57	ND	39.06		7220.51
MW-1	04/20/04	7259.57	ND	39.18		7220.39
MW-1	07/27/04	7259.57	ND	39.22		7220.35
MW-1	10/26/04	7259.57	ND	39.35		7220.22
MW-1	04/22/05	7259.57	ND	39.52		7220.05
MW-1	07/19/05	7259.57	ND	39.34		7220.23
MW-1	10/21/05	7259.57	ND	39.57		7220.00
MW-1	01/24/06	7259.57	ND	38.67		7220.90
MW-1	05/10/06	7259.57	ND	38.72		7220.85
MW-1	07/26/06	7259.57	ND	38.72		7220.85
MW-1	10/22/06	7259.57	ND	38.91		7220.66
MW-1	04/29/07	7259.57	ND	38.92		7220.65
MW-1	07/31/07	7259.57	ND	38.85		7220.72
MW-1	10/30/07	7259.57	ND	38.79		7220.78
MW-1	04/17/08	7259.57	ND	38.98		7220.59
MW-1	07/23/08	7259.57	ND	38.99		7220.58
MW-1	10/09/08	7259.57	ND	38.95		7220.62
MW-1	04/08/09	7259.57	ND	39.04		7220.53
MW-1	06/03/10	7259.57	ND	39.40		7220.17
MW-1	09/24/10	7259.57	ND	39.45		7220.12

TABLE 3 - GROUNDWATER ELEVATION TABLE

Lat. L-40 Line Drip						
Location	Date	TOC	Depth to LNAPL (ft.)	Depth to Water (ft.)	LNAPL Thickness (ft.)	GW Elevation (ft.)
MW-1	11/02/10	7259.57	ND	39.47		7220.10
MW-1	05/03/11	7259.57	ND	39.55		7220.02
MW-1	09/28/11	7259.57	ND	39.63		7219.94
MW-1	11/02/11	7259.57	ND	39.73		7219.84
MW-1	05/09/12	7259.57	ND	39.73		7219.84
MW-1	06/09/13	7259.57	ND	37.97		7221.60
MW-1	09/11/13	7259.57	ND	38.86		7220.71
MW-1	12/14/13	7259.57	ND	40.09		7219.48
MW-1	04/06/14	7259.57	ND	40.09		7219.48
MW-1	10/26/14	7259.57	ND	40.22		7219.35
MW-1	06/01/15	7259.57	ND	46.45		7213.12
MW-1	11/23/15	7259.57	ND	42.13		7217.44
MW-1	04/19/16	7259.57	ND	40.59		7218.98
MW-1	10/16/16	7259.57	ND	40.71		7218.86
MW-1	06/11/17	7259.57	ND	40.73		7218.84
MW-1	11/11/17	7259.57	ND	40.85		7218.72
MW-1	05/18/18	7259.57	ND	40.90		7218.67
MW-1	11/01/18	7259.57	ND	40.99		7218.58
MW-1	05/24/19	7259.57	ND	41.18		7218.39
MW-1	11/14/19	7259.57	ND	41.23		7218.34
MW-1	05/14/20	7259.57	ND	41.22		7218.35
MW-1	11/15/20	7259.57	ND	41.31		7218.26
MW-1	05/23/21	7259.57	ND	41.37		7218.20
MW-1	11/13/21	7259.57	ND	41.40		7218.17
MW-1	05/18/22	7259.57	ND	41.47		7218.10
MW-1	10/30/22	7259.57	ND	41.53		7218.04
MW-1	05/21/23	7259.57	ND	41.61		7217.96
MW-1	11/16/23	7259.57	ND	41.71		7217.86
MW-2	10/16/16	7259.65	ND	40.65		7219.00
MW-2	06/11/17	7259.65	ND	40.71		7218.94
MW-2	11/11/17	7259.65	ND	40.81		7218.84
MW-2	05/18/18	7259.65	ND	40.84		7218.81
MW-2	11/01/18	7259.65	ND	41.00		7218.65
MW-2	05/24/19	7259.65	ND	41.08		7218.57
MW-2	11/14/19	7259.65	ND	41.13		7218.52
MW-2	05/14/20	7259.65	NA	41.16		7218.49
MW-2	11/15/20	7259.65	NA	41.27		7218.38
MW-2	05/23/21	7259.65	NA	41.33		7218.32
MW-2	11/13/21	7259.65	NA	41.39		7218.26

TABLE 3 - GROUNDWATER ELEVATION TABLE

Lat. L-40 Line Drip						
Location	Date	TOC	Depth to LNAPL (ft.)	Depth to Water (ft.)	LNAPL Thickness (ft.)	GW Elevation (ft.)
MW-2	05/18/22	7259.65	NA	41.45		7218.20
MW-2	10/30/22	7259.65	NA	41.51		7218.14
MW-2	05/21/23	7259.65	NA	41.59		7218.06
MW-2	11/16/23	7259.65	NA	41.64		7218.01
MW-3	10/16/16	7259.10	ND	40.21		7218.89
MW-3	06/11/17	7259.10	ND	40.29		7218.81
MW-3	11/11/17	7259.10	ND	40.36		7218.74
MW-3	05/18/18	7259.10	ND	40.52		7218.58
MW-3	11/01/18	7259.10	ND	40.53		7218.57
MW-3	05/24/19	7259.10	ND	40.69		7218.41
MW-3	11/14/19	7259.10	ND	40.71		7218.39
MW-3	05/14/20	7259.10	ND	40.74		7218.36
MW-3	11/15/20	7259.10	ND	40.89		7218.21
MW-3	05/23/21	7259.10	ND	40.95		7218.15
MW-3	11/13/21	7259.10	ND	40.96		7218.14
MW-3	05/18/22	7259.10	ND	41.03		7218.07
MW-3	10/30/22	7259.10	ND	41.04		7218.06
MW-3	05/21/23	7259.10	ND	41.11		7217.99
MW-3	11/16/23	7259.10	ND	41.22		7217.88
MW-4	10/16/16	7261.59	ND	42.80		7218.79
MW-4	06/11/17	7261.59	ND	42.69		7218.90
MW-4	11/11/17	7261.59	ND	42.77		7218.82
MW-4	05/18/18	7261.59	ND	42.81		7218.78
MW-4	11/01/18	7261.59	ND	42.94		7218.65
MW-4	05/24/19	7261.59	ND	43.03		7218.56
MW-4	11/14/19	7261.59	ND	43.07		7218.52
MW-4	05/14/20	7261.59	ND	43.13		7218.46
MW-4	11/15/20	7261.59	ND	43.24		7218.35
MW-4	05/23/21	7261.59	ND	43.32		7218.27
MW-4	11/13/21	7261.59	ND	43.35		7218.24
MW-4	05/18/22	7261.59	ND	43.43		7218.16
MW-4	10/30/22	7261.59	ND	43.49		7218.10
MW-4	05/21/23	7261.59	ND	43.58		7218.01
MW-4	11/16/23	7261.59	ND	43.66		7217.93
MW-5	10/16/16	7260.08	ND	41.23		7218.85
MW-5	06/11/17	7260.08	ND	41.33		7218.75
MW-5	11/11/17	7260.08	ND	41.40		7218.68

TABLE 3 - GROUNDWATER ELEVATION TABLE

Lat. L-40 Line Drip						
Location	Date	TOC	Depth to LNAPL (ft.)	Depth to Water (ft.)	LNAPL Thickness (ft.)	GW Elevation (ft.)
MW-5	05/18/18	7260.08	ND	41.41		7218.67
MW-5	11/01/18	7260.08	ND	41.53		7218.55
MW-5	05/24/19	7260.08	41.62	41.86	0.24	7218.40
MW-5	11/14/19	7260.08	41.39	42.11	0.72	7218.51
MW-5	05/14/20	7260.08	40.55	41.34	0.79	7219.33
MW-5	08/19/20	7260.08	41.55	42.20	0.65	7218.36
MW-5	11/15/20	7260.08	41.54	42.50	0.96	7218.30
MW-5	03/18/21	7260.08	41.45	42.90	1.45	7218.26
MW-5	05/23/21	7260.08	41.63	42.51	0.88	7218.23
MW-5	08/22/21	7260.08	41.63	42.50	0.87	7218.23
MW-5	11/13/21	7260.08	41.73	42.43	0.70	7218.17
MW-5	03/23/22	7260.08	41.74	42.62	0.88	7218.12
MW-5	05/18/22	7260.08	41.87	42.28	0.41	7218.10
MW-5	08/31/22	7260.08	40.75	41.10	0.35	7219.24
MW-5	10/30/22	7260.08	41.97	42.15	0.18	7218.06
MW-5	03/29/23	7260.08	42.02	42.27	0.25	7217.99
MW-5	05/21/23	7260.08	42.05	42.40	0.35	7217.94
MW-5	08/22/23	7260.08	42.02	42.61	0.59	7217.91
MW-5	11/16/23	7260.08	41.97	42.74	0.77	7217.91
MW-6	11/01/18	7261.87	ND	Dry		Dry
MW-6	05/24/19	7261.87	ND	43.90		7217.97
MW-6	11/14/19	7261.87	ND	43.06		7218.81
MW-6	05/14/20	7261.87	ND	42.85		7219.02
MW-6	11/15/20	7261.87	ND	43.84		7218.03
MW-6	05/23/21	7261.87	ND	42.95		7218.92
MW-6	11/13/21	7261.87	ND	43.15		7218.72
MW-6	05/18/22	7261.87	ND	43.04		7218.83
MW-6	10/30/22	7261.87	ND	43.28		7218.59
MW-6	05/21/23	7261.87	ND	43.18		7218.69
MW-6	11/16/23	7261.87	ND	43.48		7218.39
MW-7	11/01/18	7259.41	ND	40.62		7218.79
MW-7	05/24/19	7259.41	ND	40.75		7218.66
MW-7	11/14/19	7259.41	ND	40.74		7218.67
MW-7	05/14/20	7259.41	ND	40.81		7218.60
MW-7	11/15/20	7259.41	ND	40.90		7218.51
MW-7	05/23/21	7259.41	ND	41.02		7218.39
MW-7	11/13/21	7259.41	ND	41.03		7218.38
MW-7	05/18/22	7259.41	ND	41.09		7218.32

TABLE 3 - GROUNDWATER ELEVATION TABLE

Lat. L-40 Line Drip						
Location	Date	TOC	Depth to LNAPL (ft.)	Depth to Water (ft.)	LNAPL Thickness (ft.)	GW Elevation (ft.)
MW-7	10/30/22	7259.41	ND	41.18		7218.23
MW-7	05/21/23	7259.41	ND	41.28		7218.13
MW-7	11/16/23	7259.41	ND	41.34		7218.07
MW-8	11/01/18	7258.82	ND	40.25		7218.57
MW-8	05/24/19	7258.82	ND	40.41		7218.41
MW-8	11/14/19	7258.82	ND	40.41		7218.41
MW-8	05/14/20	7258.82	ND	40.46		7218.36
MW-8	11/15/20	7258.82	ND	40.60		7218.22
MW-8	05/23/21	7258.82	ND	40.63		7218.19
MW-8	11/13/21	7258.82	ND	40.66		7218.16
MW-8	05/18/22	7258.82	ND	40.75		7218.07
MW-8	10/30/22	7258.82	ND	40.77		7218.05
MW-8	05/21/23	7258.82	ND	40.86		7217.96
MW-8	11/16/23	7258.82	ND	40.94		7217.88
MW-9	11/01/18	7258.82	ND	40.35		7218.47
MW-9	05/24/19	7258.82	ND	40.51		7218.31
MW-9	11/14/19	7258.82	ND	40.50		7218.32
MW-9	05/14/20	7258.82	ND	40.55		7218.27
MW-9	11/15/20	7258.82	ND	40.72		7218.10
MW-9	05/23/21	7258.82	ND	40.73		7218.09
MW-9	11/13/21	7258.82	ND	40.76		7218.06
MW-9	05/18/22	7258.82	ND	40.84		7217.98
MW-9	10/30/22	7258.82	ND	40.84		7217.98
MW-9	05/21/23	7258.82	ND	40.92		7217.90
MW-9	11/16/23	7258.82	ND	41.00		7217.82
MW-10	11/01/18	7260.89	ND	42.29		7218.60
MW-10	05/24/19	7260.89	ND	42.49		7218.40
MW-10	11/14/19	7260.89	ND	42.48		7218.41
MW-10	05/14/20	7260.89	ND	42.50		7218.39
MW-10	11/15/20	7260.89	ND	42.64		7218.25
MW-10	05/23/21	7260.89	ND	42.69		7218.20
MW-10	11/13/21	7260.89	ND	42.73		7218.16
MW-10	05/18/22	7260.89	ND	42.79		7218.10
MW-10	10/30/22	7260.89	ND	42.83		7218.06
MW-10	05/21/23	7260.89	ND	42.94		7217.95
MW-10	11/16/23	7260.89	ND	43.02		7217.87

TABLE 3 - GROUNDWATER ELEVATION TABLE

Lat. L-40 Line Drip						
Location	Date	TOC	Depth to LNAPL (ft.)	Depth to Water (ft.)	LNAPL Thickness (ft.)	GW Elevation (ft.)
SVE-1	11/14/19	7259.61	ND	32.02		7227.59
SVE-1	05/14/20	7259.61	ND	32.01		7227.60
SVE-1	11/15/20	7259.61	ND	32.01		7227.60
SVE-1	05/23/21	7259.61	ND	32.00		7227.61
SVE-1	11/13/21	7259.61	ND	31.98		7227.63
SVE-1	05/18/22	7259.61	ND	31.95		7227.66
SVE-1	10/30/22	7259.61	ND	31.95		7227.66
SVE-1	11/16/23	7259.61	ND	32.04		7227.57
SVE-2	11/14/19	7259.82	ND	24.64		7235.18
SVE-2	05/14/20	7259.82	ND	24.61		7235.21
SVE-2	11/15/20	7259.82	ND	24.60		7235.22
SVE-2	05/23/21	7259.82	ND	24.59		7235.23
SVE-2	11/13/21	7259.82	ND	Dry		---
SVE-2	05/18/22	7259.82	ND	24.55		7235.27
SVE-2	10/30/22	7259.82	ND	24.57		7235.25
SVE-2	11/16/23	7259.82	ND	24.57		7235.25
SVE-3	11/14/19	7259.89	ND	25.21		7234.68
SVE-3	05/14/20	7259.89	ND	25.15		7234.74
SVE-3	11/15/20	7259.89	ND	25.14		7234.75
SVE-3	05/23/21	7259.89	ND	25.11		7234.78
SVE-3	11/13/21	7259.89	ND	25.09		7234.80
SVE-3	05/18/22	7259.89	ND	25.03		7234.86
SVE-3	10/30/22	7259.89	ND	25.02		7234.87
SVE-3	11/16/23	7259.89	ND	24.97		7234.92

Notes:
"ft" = feet
"TOC" = Top of casing
"LNAPL" = Light non-aqueous phase liquid
"ND" = LNAPL not detected
"NR" = LNAPL not recorded
Groundwater elevation = TOC elevation (ft) - (Depth to Water [ft] - [LNAPL thickness [ft} x 0.75]). A specific gravity of 0.75 is within the range of gas condensate (https://www.sciencedirect.com/topics/earth-and-planetary-sciences/gas-condensate)

FIGURES

FIGURE 1: SITE LOCATION

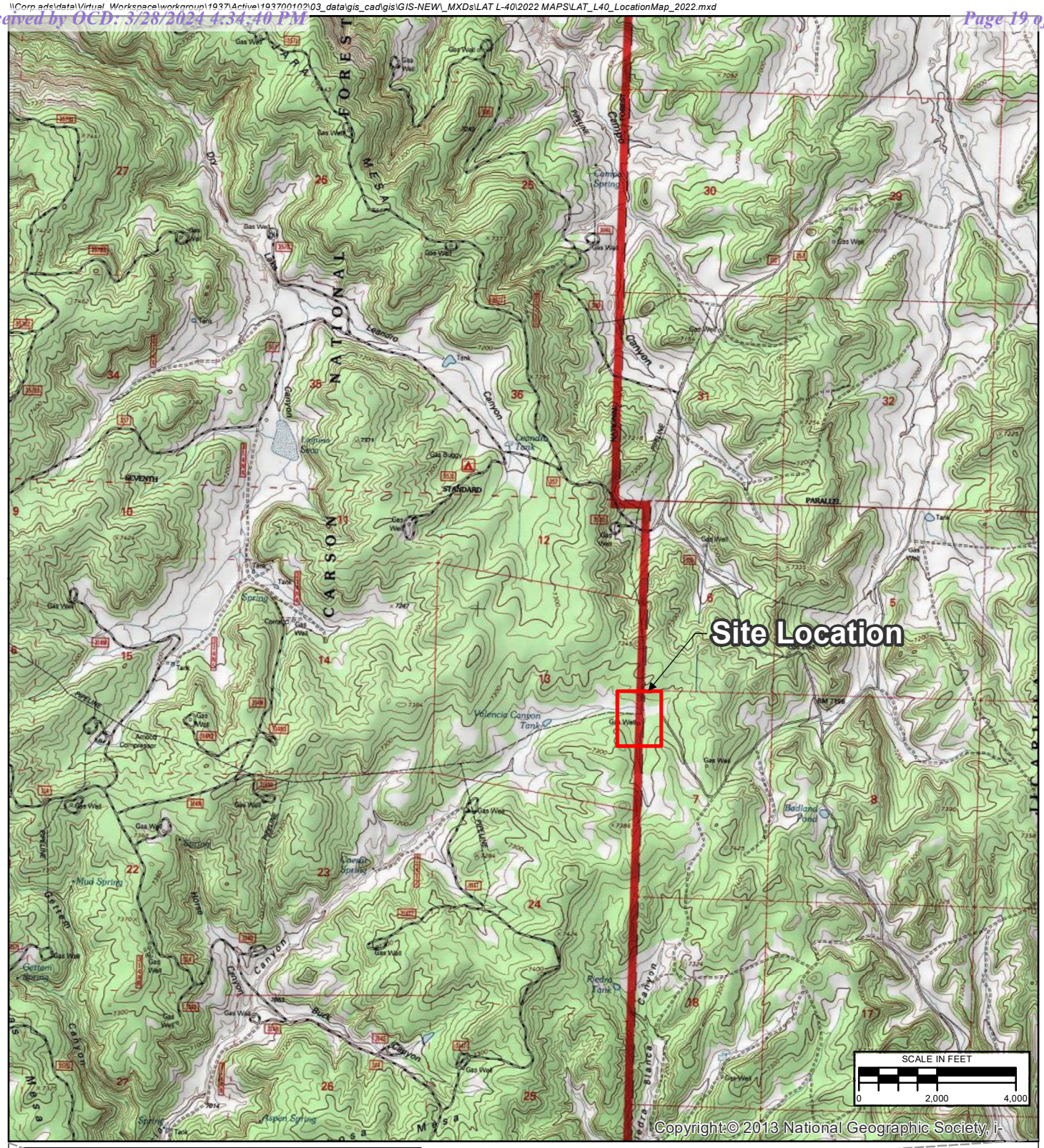
FIGURE 2: SITE PLAN

FIGURE 3: GROUNDWATER ANALYTICAL RESULTS – MAY 21, 2023

FIGURE 4: GROUNDWATER ELEVATION MAP – MAY 21, 2023

FIGURE 5: GROUNDWATER ANALYTICAL RESULTS – NOVEMBER 16, 2023

FIGURE 6: GROUNDWATER ELEVATION MAP – NOVEMBER 16, 2023



N

REVISION	DATE	DESIGN BY	DRAWN BY	REVIEWED BY
	2022-03-22	SAH	SAH	SRV

TITLE

SITE LOCATION

Stantec

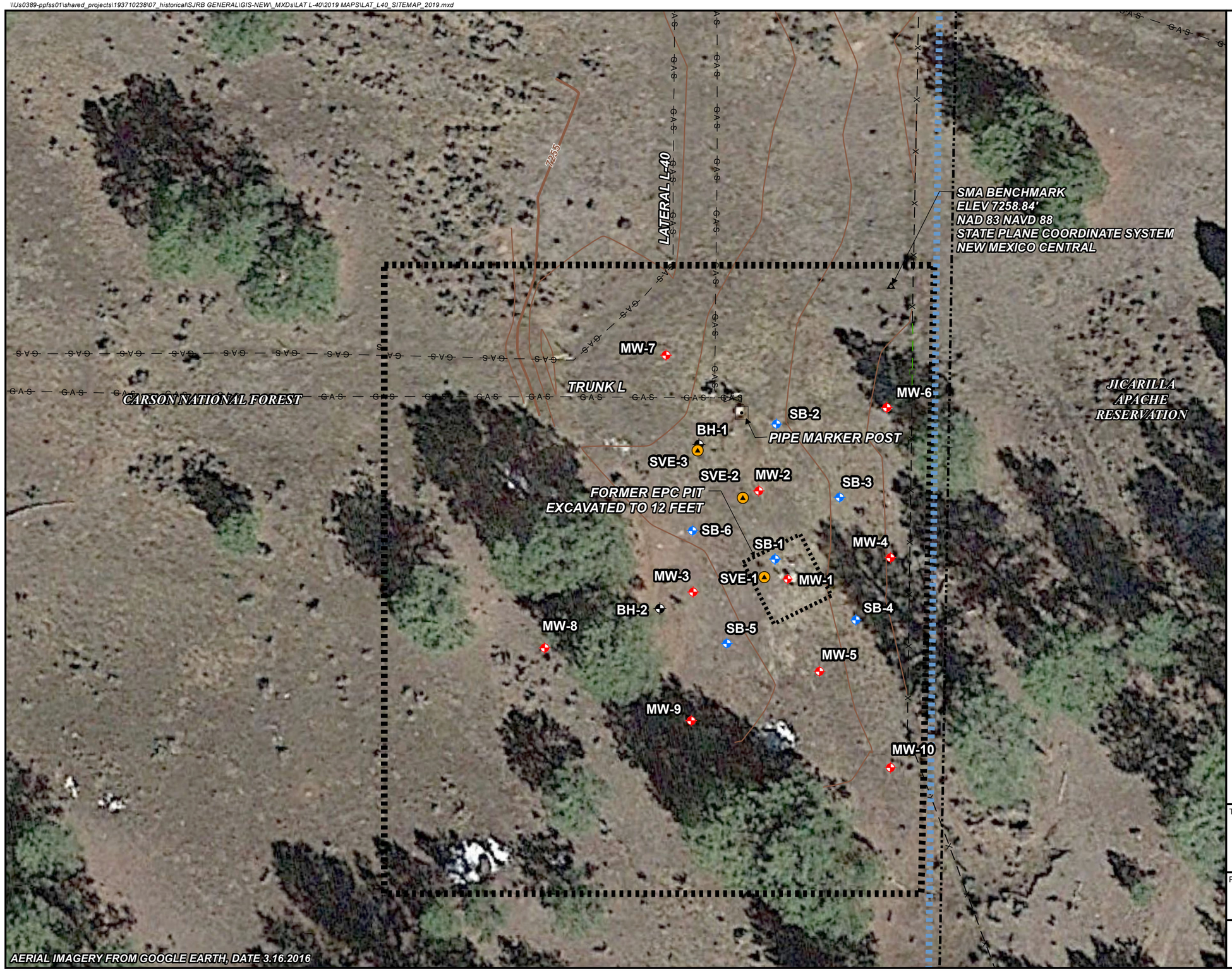
PROJECT

LAT L-40
SAN JUAN RIVER BASIN
RIO ARRIBA COUNTY, NEW MEXICO

FIGURE

1

\\Us0389-ppfss01\shared_projects\193710238\07_historical\SJRB GENERAL\GIS-NEW_MXDs\LAT L-40\2019 MAPS\LAT_L40_SITEMAP_2019.mxd



LEGEND:

- 7259 — APPROXIMATE GROUND SURFACE CONTOUR AND ELEVATION, FEET
- GAS — NATURAL GAS LINE
- FENCE
- GATE
- FORMER PIT
- MONITORING WELL
- SOIL BORING
- BOREHOLE (2000)
- SOIL VAPOR EXTRACTION WELL
- SMA BENCHMARK
- GAS LINE VALVE
- CARSON NATIONAL FOREST AND JICARILLA APACHE NATION LAND BOUNDARY
- FOREST SERVICE JIC25 PERMIT BOUNDARY (4.3 ACRES - EXPANDED PERMIT AREA)
- CARSON NATIONAL FOREST ACCESS BOUNDARY

N

SCALE IN FEET

0 30 60

REVISION	DATE	DESIGN BY	DRAWN BY	REVIEWED BY
	2/23/2021	SLG	SLG	SRV

TITLE:

SITE PLAN

PROJECT:

LAT L-40
SAN JUAN RIVER BASIN
RIO ARRIBA COUNTY, NEW MEXICO

Stantec

Figure No.: **2**

\\cd1001-c200\CTX-CIFS$\VDI\Redirect\shansen\Desktop\GIS-NEW_MXDs\LAT L-40\2023 MAPS\LAT_L40_GARM_1SA_2023.mxd

CARSON NATIONAL FOREST

LATERAL L-40

7255

SMA BENCHMARK
ELEV 7258.84'
NAD 83 NAVD 88
STATE PLANE COORDINATE SYSTEM
NEW MEXICO CENTRAL

JICARILLA APACHE RESERVATION

TRUNK L

PIPE MARKER POST

FORMER EPC PIT
EXCAVATED TO 12 FEET

MW-7
B: 1.0
T: <1.0
E: <1.0
X: <10

MW-6
B: <1.0
T: <1.0
E: <1.0
X: <10

MW-2
B: <1.0
T: <1.0
E: <1.0
X: <10

MW-4
B: <1.0
T: <1.0
E: <1.0
X: <10

MW-1
B: 120
T: 5.7
E: 120
X: 500

DUP-01
B: 120
T: 5.6
E: 110
X: 420

MW-3
B: 11
T: <1.0
E: <1.0
X: <10

MW-8
B: <1.0
T: <1.0
E: <1.0
X: <10

MW-5
NS

MW-9
B: <1.0
T: <1.0
E: <1.0
X: <10

MW-10
B: <1.0
T: <1.0
E: <1.0
X: <10

AERIAL IMAGERY FROM GOOGLE EARTH, DATE 3/16/2016

LEGEND:

- 7259 — APPROXIMATE GROUND SURFACE CONTOUR AND ELEVATION, FEET
- GAS — NATURAL GAS LINE
- FENCE
- GATE
- FORMER PIT
- CARSON NATIONAL FOREST AND JICARILLA APACHE NATION LAND BOUNDARY
- MONITORING WELL
- MONITORING WELL WITH MEASURABLE LNAPL
- SMA BENCHMARK
- GAS LINE VALVE

NOTES:
DUP = FIELD DUPLICATE SAMPLE
LNAPL = LIGHT NON-AQUEOUS PHASE LIQUID

EXPLANATION OF ANALYTES AND APPLICABLE STANDARDS:
RESULTS IN **BOLDFACE/RED** TYPE INDICATE CONCENTRATION IN EXCESS OF THE STANDARD FOR THAT ANALYTE.
µg/L = MICROGRAMS PER LITER
<10 = BELOW METHOD REPORTING LIMIT
NS = NOT SAMPLED

ANALYTE	NMWQCC STANDARDS
B = Benzene	10 µg/L
T = Toluene	750 µg/L
E = Ethylbenzene	750 µg/L
X = Total Xylenes	620 µg/L

N

SCALE IN FEET
0 30 60

REVISION	DATE	DESIGN BY	DRAWN BY	REVIEWED BY
	2024-02-06	SAH	SAH	SRV

TITLE:

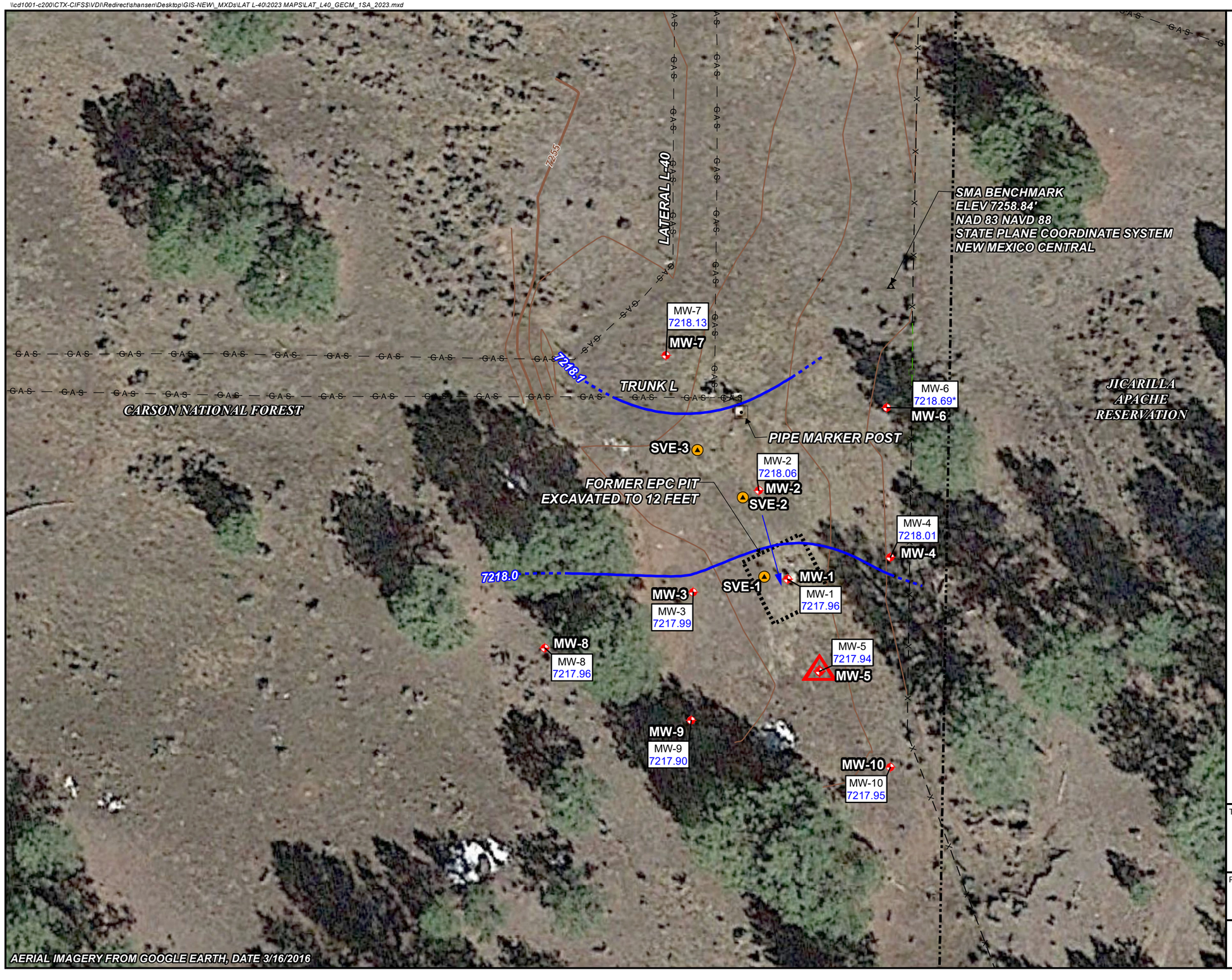
GROUNDWATER ANALYTICAL RESULTS
MAY 21, 2023

PROJECT:
LAT L-40
SAN JUAN RIVER BASIN
RIO ARRIBA COUNTY, NEW MEXICO

Stantec

Figure No.:
3

\\cd1001-c200\CTX-CIFSS\VDI\Redirect\shansen\Desktop\GIS-NEW_MXDs\LAT L-40\2023 MAPS\LAT_L40_GECM_1SA_2023.mxd



LEGEND:

- 7259 — APPROXIMATE GROUND SURFACE CONTOUR AND ELEVATION, FEET
- GAS — NATURAL GAS LINE
- FENCE
- GATE
- FORMER PIT
- CARSON NATIONAL FOREST AND JICARILLA APACHE NATION LAND BOUNDARY
- MONITORING WELL
- MONITORING WELL WITH MEASURABLE LNAPL
- SOIL VAPOR EXTRACTION WELL
- SMA BENCHMARK
- GAS LINE VALVE

NOTES:

- 7217.96 — GROUNDWATER ELEVATION (CORRECTED FOR LNAPL THICKNESS WHEN PRESENT) FEET ABOVE MEAN SEA LEVEL
- 7218.1 — CORRECTED WATER ELEVATION CONTOUR DASHED WHERE INFERRED (FEET ABOVE MEAN SEA LEVEL).
- DIRECTION OF APPARENT GROUNDWATER FLOW
- * — GROUNDWATER ELEVATION APPEARS ANOMALOUS AND WAS NOT USED TO PREPARE CONTOURING GROUNDWATER ELEVATION.

LNAPL = LIGHT NON-AQUEOUS PHASE LIQUID

N

SCALE IN FEET

0 30 60

REVISION	DATE	DESIGN BY	DRAWN BY	REVIEWED BY
	2024-02-06	SAH	SAH	SRV

TITLE:

GROUNDWATER ELEVATION MAP
MAY 21, 2023

PROJECT:

LAT L-40
SAN JUAN RIVER BASIN
RIO ARRIBA COUNTY, NEW MEXICO

Stantec

Figure No.: 4

\\cd1001-c200\CTX-CIFSS\VDI\Redirect\shansen\Desktop\GIS-NEW_MXDs\LAT L-40\2023 MAPS\LAT_L40_GARM_2SA_2023.mxd

LEGEND:

- 7259 — APPROXIMATE GROUND SURFACE CONTOUR AND ELEVATION, FEET
- GAS — NATURAL GAS LINE
- FENCE
- GATE
- FORMER PIT
- CARSON NATIONAL FOREST AND JICARILLA APACHE NATION LAND BOUNDARY
- MONITORING WELL
- MONITORING WELL WITH MEASURABLE LNAPL
- SMA BENCHMARK
- GAS LINE VALVE

NOTES:
DUP = FIELD DUPLICATE SAMPLE
LNAPL = LIGHT NON-AQUEOUS PHASE LIQUID

EXPLANATION OF ANALYTES AND APPLICABLE STANDARDS:
RESULTS IN **BOLDFACE/RED** TYPE INDICATE CONCENTRATION IN EXCESS OF THE STANDARD FOR THAT ANALYTE.
µg/L = MICROGRAMS PER LITER
<10 = BELOW METHOD REPORTING LIMIT
NS = NOT SAMPLED

ANALYTE	NMWQCC STANDARDS
B = Benzene	10 µg/L
T = Toluene	750 µg/L
E = Ethylbenzene	750 µg/L
X = Total Xylenes	620 µg/L

N

SCALE IN FEET
0 30 60

REVISION	DATE	DESIGN BY	DRAWN BY	REVIEWED BY
	2024-02-06	SAH	SAH	SRV

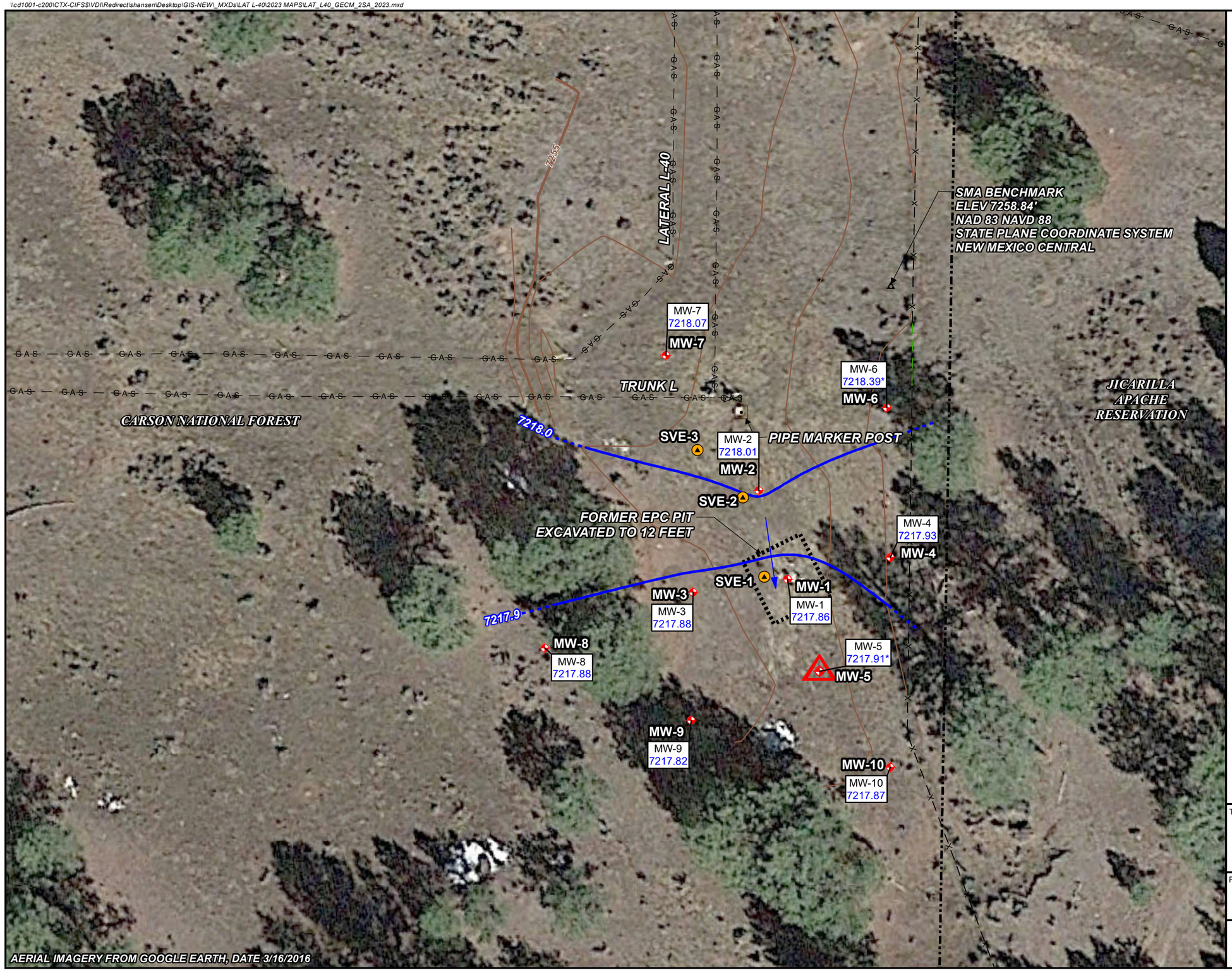
TITLE:
GROUNDWATER ANALYTICAL RESULTS
NOVEMBER 16, 2023

PROJECT:
LAT L-40
SAN JUAN RIVER BASIN
RIO ARRIBA COUNTY, NEW MEXICO

Stantec

Figure No.:
5

\\cd1001-c200\CTX-CIFSS\VDI\Redirect\shansen\Desktop\GIS-NEW_MXDs\LAT L-40\2023 MAPS\LAT_L40_GECM_2SA_2023.mxd



LEGEND:

- 7259 — APPROXIMATE GROUND SURFACE CONTOUR AND ELEVATION, FEET
- GAS — NATURAL GAS LINE
- FENCE
- GATE
- FORMER PIT
- CARSON NATIONAL FOREST AND JICARILLA APACHE NATION LAND BOUNDARY
- MONITORING WELL
- MONITORING WELL WITH MEASURABLE LNAPL
- SOIL VAPOR EXTRACTION WELL
- SMA BENCHMARK
- GAS LINE VALVE

NOTES:

7218.07 — GROUNDWATER ELEVATION (CORRECTED FOR LNAPL THICKNESS WHEN PRESENT) FEET ABOVE MEAN SEA LEVEL

7217.9 — CORRECTED WATER ELEVATION CONTOUR DASHED WHERE INFERRED (FEET ABOVE MEAN SEA LEVEL).

DIRECTION OF APPARENT GROUNDWATER FLOW

* GROUNDWATER ELEVATION APPEARS ANOMALOUS AND WAS NOT USED TO PREPARE CONTOURING GROUNDWATER ELEVATION.

LNAPL = LIGHT NON-AQUEOUS PHASE LIQUID

N

SCALE IN FEET

0 30 60

REVISION	DATE	DESIGN BY	DRAWN BY	REVIEWED BY
	2024-02-06	SAH	SAH	SRV

TITLE:

GROUNDWATER ELEVATION MAP
NOVEMBER 16, 2023

PROJECT:

LAT L-40
SAN JUAN RIVER BASIN
RIO ARRIBA COUNTY, NEW MEXICO

Stantec

Figure No.: 6

APPENDICES

APPENDIX A – SITE HISTORY

APPENDIX B – NMOCD NOTIFICATION OF SITE ACTIVITIES

APPENDIX C – WASTE DISPOSAL DOCUMENTATION

APPENDIX D – ACUVAC REPORT ON MDPE EVENTS

APPENDIX E – GROUNDWATER ANALYTICAL LAB REPORTS

APPENDIX A

Site History

Lat L-40 Line Drip
Site History
San Juan River Basin, New Mexico

Date	*Source (Regulatory File #)*	*Event/Action*	*Description/Comments*
9/16/1995	Unknown	EPFS Remediation Plan for Groundwater Encountered During Pit Closure Activities to NMOCD	Outlines approach to investigating and remediating soil and groundwater at closed pit sites.
11/29/1995	Unknown	EPFS Addendum to the Remediation Plan for Groundwater Encountered During Pit Closure Activities to NMOCD	Amends work plan for include installation of additional wells for delienation, define groundwater sampling parameters, and release closure following four consecutive quarters of results below NMWQCC standards.
11/30/1995	Unknown	NMOCD approval of the Remediation Plan with conditions	Approval of Remediation Plan and Addendum.
6/2/1997	nAUTOfAB000335 (Case # 3RP-212)	EPFS letter to NMOCD	Groundwater had been encountered at various sites while investigating and or remediating exempt hydrocarbon unlined pits. Depth to water was stated as being 40'. EPFS requested that future reports for this project be submitted on a yearly basis.
8/6/1997	nAUTOfAB000335 (Case # 3RP-212)	NMOCD approval letter for the 6/2/1997 Semiannual Groundwater Report (EPFS)	Includes EPFS's listing of San Juan Basin pit closure sites at which EPFS has encountered ground water and a proposal to modify the reporting schedule to annual.
2/27/1998	nAUTOfAB000335 (Case # 3RP-212)	Philip Services Corp 1997 Annual Report (for EPFS)	Quarterly groundwater monitoring was initiated on 11/11/96 and has continued into 1997. Further site investigation was planned for 1997 but delayed due to drill rig inaccessibility. Historical (1995-1996) well and soil boring logs and sample results also provided.
7/8/1998	nAUTOfAB000335 (Case # 3RP-212)	NMOCD 1997 Annual Report review letter	Requires EPFS install additional groundwater monitoring wells at the site to monitor and determine the extent of groundwater contamination pursuant to their previously approved groundwater investigation plan.

Lat L-40 Line Drip
Site History
San Juan River Basin, New Mexico

Date	*Source (Regulatory File #)*	*Event/Action*	*Description/Comments*
3/31/1999	nAUTOfAB000335 (Case # 3RP-212)	Philip Services Corp 1998 Annual Report (for EPFS)	LNAPL monitoring and recovery from MW-1. Quarterly sampling was discontinued due to the presence of LNAPL.
7/28/1999	nAUTOfAB000335 (Case # 3RP-212)	NMOCD review letter for 1998 Annual Groundwater Report (EPFS)	Requires that EPFS install additional groundwater monitoring wells at the site by December 31, 1999.
3/24/2000	nAUTOfAB000335 (Case # 3RP-212)	Philip Services Corp 1999 Annual Report (for EPFS)	LNAPL monitoring and removal from MW-1. Additional drilling pending United States Forest Service permtting and Jicarilla crossing approval.
2/26/2001	nAUTOfAB000335 (Case # 3RP-212)	Philip Services Corp 2000 Annual Report (for EPFS)	LNAPL monitoring and recovery from MW-1. Two soil borings (B-1 and B-2) advanced but groundwater not encountered.
2/28/2002	nAUTOfAB000335 (Case # 3RP-212)	MWH 2001 Annual Report (for EPFS)	LNAPL monitoring and removal from MW-1.
2/28/2003	nAUTOfAB000335 (Case # 3RP-212)	MWH 2002 Annual Report (for EPFS)	Quarterly free-product recovery from MW1.
2/26/2004	nAUTOfAB000335 (Case # 3RP-212)	MWH 2003 Annual Report (for EPFS)	Quarterly LNAPL recovery performed from MW-1. MW-1 was redeveloped to enhance LNAPL recovery.
2/21/2005	nAUTOfAB000335 (Case # 3RP-212)	MWH 2004 Annual Groundwater Report (for EPFS)	LNAPL recovery from MW-1. Refusal was encountered during attempt to install additional monitoring wells.
3/17/2006	nAUTOfAB000335 (Case # 3RP-212)	MWH 2005 Annual Groundwater Report (for EPTPC)	Quarterly LNAPL recovery from MW-1.
3/7/2007	nAUTOfAB000335 (Case # 3RP-212)	MWH Final 2006 Annual Groundwater Report (for EPTPC)	Quarterly LNAPL recovery from MW-1.
4/2/2008	nAUTOfAB000335 (Case # 3RP-212)	MWH 2007 Annual Groundwater Report (for EPTPC)	Qualrterly LNAPL monitoring from MW-1.
2/28/2009	nAUTOfAB000335 (Case # 3RP-212)	MWH 2008 Annual Groundwater Report (for EPTPC)	LNAPL monitoring and groundwater sampling from MW-1.

Lat L-40 Line Drip
Site History
San Juan River Basin, New Mexico

Date	*Source (Regulatory File #)*	*Event/Action*	*Description/Comments*
4/2010	nAUTOfAB000335 (Case # 3RP-212)	MWH Final 2009 Annual Report (for EPTPC)	Quarterly LNAPL monitoring and groundwater sampling from MW-1.
3/2/2011	nAUTOfAB000335 (Case # 3RP-212)	MWH Final 2010 Annual Report (for EPTPC)	Quarterly LNAPL monitoring and groundwater sampling from MW-1.
8/16/2012	nAUTOfAB000335 (Case # 3RP-212)	MWH 2011 Annual Report (for EPCGPC)	Quarterly LNAPL monitoring and groundwater sampling from MW-1.
2/27/2014	nAUTOfAB000335 (Case # 3RP-212)	MWH 2013 Annual Report (for EPCGPC)	Quarterly groundwater sampling from MW-1. Site access being established in order to install additional monitoring wells.
2/2/2015	nAUTOfAB000335 (Case # 3RP-212)	MWH 2014 Annual Report (for EPCGPC)	Semi-annual groundwater sampling from MW-1. Status of access agreement with the US Forest Service provided in order to install additional monitoring wells.
1/28/2016	Missing from NMOCD files	Monitoring Well Installation Work Plan (MWH)	Installation of four monitoring wells (MW-2 through MW-5) and advance 1 soil boring (SB-1).
2/16/2016	nAUTOfAB000335 (Case # 3RP-212)	MWH 2015 Annual Groundwater Report (for EPCGP)	Semi-annual groundwater sampling from MW-1.
3/19/2017	nAUTOfAB000335 (Case # 3RP-212)	MWH 2016 Annual Groundwater Report (for EPCGP)	Monitorings wells MW-2 through MW-5 installed, soil boring SB-1 advanced, and semi-annual groundwater sampling.
3/29/2018	nAUTOfAB000335 (Case # 3RP-212)	MWH 2017 Annual Groundwater Report (for EPCGP)	Semi-annual groundwater sampling
9/18/2018	Missing from NMOCD files	Stantec 2018 Well Installation and SVE Feastibility Testing Activities	Work plan for installing five monitoring wells, 3 SVE test wells, and conducting SVE feasibility testing
3/28/2019	nAUTOfAB000335 (Case # 3RP-212)	Stantec 2018 Annual Groundwater Report (for EPCGP)	Installed monitoring wells MW-6 through MW-10 and three SVE test wells (SVE-1 through SVE-3), conduct SVE feasibility testing, and semi-annual groundwater sampling.
5/2/2019	Missing from NMOCD files	Soil Assessment Activities Work Plan	advance 5 soil borings

Lat L-40 Line Drip
Site History
San Juan River Basin, New Mexico

Date	*Source (Regulatory File #)*	*Event/Action*	*Description/Comments*
3/26/2020	Missing from NMOCD files	Stantec 2019 Annual Groundwater Report (for EPCGP)	Advance SB-2 through SB-6, semi-annual groundwater sampling, Goshawk survey, semi-annual groundwater sampling, and LNAPL recovery from MW-5.
4/8/2021	nAUTOfAB000335	Stantec 2020 Annual Groundwater Report (for EPCGP)	Semiannual groundwater sampling and quarterly LNAPL recovery. Report approved on 1/4/2022.
3/31/2022	nAUTOfAB000335	Stantec 2021 Annual Groundwater Report (for EPCGP)	Semiannual groundwater sampling and quarterly LNAPL recovery. Report approved on 3/1/2023.
4/11/2022	nAUTOfAB000335	Stantec Work Plan for LNAPL Recovery Activities (for EPCGP)	Work plan detailed conducting LNAPL recovery using MDPE method. Work Plan is online and stamped Accepted 3/1/2023.
3/29/2023	nAUTOfAB000335	Stantec 2022 Annual Groundwater Report	MDPE event, semi-annual groundwatre sampling, and quarterly LNAPL recovery. Report approved 5/22/2023.

APPENDIX B

NMOCD Notification of Site Activities

From: Varsa, Steve
To: nelson.valez@state.nm.us
Subject: FW: El Paso CGP Company - Notice of upcoming product recovery activities
Date: Wednesday, March 22, 2023 9:51:09 PM

From: Varsa, Steve <steve.varsa@stantec.com>
Sent: Wednesday, March 22, 2023 9:33 PM
To: nelson.valez@state.nm
Cc: Bratcher, Mike, EMNRD <mike.bratcher@state.nm.us>; Wiley, Joe <joe_wiley@kindermorgan.com>
Subject: El Paso CGP Company - Notice of upcoming product recovery activities

Hi Nelson -

This correspondence is to provide notice to the NMOCD of upcoming quarterly product recovery activities at the following EPCGP project sites:

Site Name	Incident Number	Sample Date
Canada Mesa #2	nAUTOfAB000065	3/28/2023
Fields A#7A	nAUTOfAB000176	3/29/2023
Fogelson 4-1	nAUTOfAB000192	3/29/2023
Gallegos Canyon Unit #124E	nAUTOfAB000205	3/28/2023
James F. Bell #1E	nAUTOfAB000291	3/29/2023
Johnston Fed #4	nAUTOfAB000305	3/30/2023
K27 LDO72	nAUTOfAB000316	3/28/2023
Lateral L-40	nAUTOfAB000335	3/29/2023
State Gas Com N #1	nAUTOfAB000668	3/29/2023

Please feel free to contact Joe Wiley, Project Manager at EPCGP, or me, if you need further information.

Thank you,
Steve

Stephen Varsa, P.G., R.G.
Principal Hydrogeologist
Stantec Environmental Services
11311 Aurora Avenue
Des Moines, Iowa 50322
Direct: (515) 251-1020
Cell: (515) 710-7523
Office: (515) 253-0830
steve.varsa@stantec.com

From: Varsa, Steve
To: nelson.valez@state.nm.us
Cc: Bratcher, Mike, EMNRD; Wiley, Joe
Subject: El Paso CGP Company - Notice of upcoming groundwater sampling activities
Date: Friday, May 12, 2023 9:54:16 PM

Hi Nelson -

This correspondence is to provide notice to the NMOCD of upcoming semi-annual groundwater sampling and monitoring activities at the following EPCGP project sites:

Site Name	Incident Number	Sample Date
Canada Mesa #2	nAUTOfAB000065	5/20/2023
Fields A#7A	nAUTOfAB000176	5/21/2023
Fogelson 4-1	nAUTOfAB000192	5/18/2023
Gallegos Canyon Unit #124E	nAUTOfAB000205	5/17/2023
GCU Com A #142E	nAUTOfAB000219	5/21/2023
James F. Bell #1E	nAUTOfAB000291	5/18/2023
Johnston Fed #4	nAUTOfAB000305	5/19/2023
Johnston Fed #6A	nAUTOfAB000309	5/19/2023
K27 LDO72	nAUTOfAB000316	5/20/2023
Knight #1	nAUTOfAB000324	5/17/2023
Lateral L 40 Line Drip	nAUTOfAB000335	5/21/2023
Sandoval GC A #1A	nAUTOfAB000635	5/19/2023
Standard Oil Com #1	nAUTOfAB000666	5/20/2023
State Gas Com N #1	nAUTOfAB000668	5/22/2023

We also plan to conduct quarterly operation and maintenance activities on the Knight #1 air sparge/soil vapor extraction system (Incident number nAUTOAB000324) on Wednesday, May 17, 2023.

Please feel free to contact Joe Wiley, Project Manager at EPCGP, or me, if you need further information.

Thank you,
Steve

Stephen Varsa, P.G., R.G.
Principal Hydrogeologist
Stantec Environmental Services
11311 Aurora Avenue
Des Moines, Iowa 50322
Direct: (515) 251-1020
Cell: (515) 710-7523
Office: (515) 253-0830
steve.varsa@stantec.com

From: Varsa, Steve
To: nelson.valez@state.nm.us
Cc: Bratcher, Mike, EMNRD; Wiley, Joe
Bcc: Varsa, Steve
Subject: Lateral L-40 site (nAUTOfAB000335) - notice of upcoming activities
Date: Wednesday, August 16, 2023 1:11:00 PM
Attachments: 2022-04_MDPE Work Plan (Lat L-40)_nAUTOfAB000335.pdf

Hi Nelson – on behalf of El Paso CGP Company, Stantec is planning to complete free product recovery activities using mobile dual-phase extraction methods at the subject site on August 22, 2023. the MDPE methods to be utilized are anticipated to be the same as outlined in the attached work plan, previously submitted to the NMOCD. The results of the LNAPL recovery activities will be included in the 2023 annual report for the Site.

Please feel free to contact Joe Wiley, Project Manager at EPCGP, or me, if you need further information.

Thank you,
Steve

Stephen Varsa, P.G., R.G.
Principal Hydrogeologist
Stantec Environmental Services
11311 Aurora Avenue
Des Moines, Iowa 50322
Direct: (515) 251-1020
Cell: (515) 710-7523
Office: (515) 253-0830
steve.varsa@stantec.com

From: Varsa, Steve
To: nelson.valez@state.nm.us
Cc: Bratcher, Mike, EMNRD; Wiley, Joe
Subject: El Paso CGP Company - Notice of upcoming groundwater sampling activities
Date: Thursday, November 2, 2023 6:17:33 AM

Hi Nelson -

This correspondence is to provide notice to the NMOCD of upcoming semi-annual groundwater sampling and monitoring activities at the following EPCGP project sites:

Site Name	Incident Number	Sample Date
Canada Mesa #2	nAUTOfAB000065	11/12/2023
Fields A#7A	nAUTOfAB000176	11/15/2023
Fogelson 4-1	nAUTOfAB000192	11/8/2023
Gallegos Canyon Unit #124E	nAUTOfAB000205	11/9/2023
GCU Com A #142E	nAUTOfAB000219	11/9/2023
James F. Bell #1E	nAUTOfAB000291	11/15/2023
Johnston Fed #4	nAUTOfAB000305	11/11/2023
Johnston Fed #6A	nAUTOfAB000309	11/11/2023
K27 LDO72	nAUTOfAB000316	11/12/2023
Knight #1	nAUTOfAB000324	11/7/2023
Lateral L 40 Line Drip	nAUTOfAB000335	11/16/2023
Sandoval GC A #1A	nAUTOfAB000635	11/11/2023
Standard Oil Com #1	nAUTOfAB000666	11/12/2023
State Gas Com N #1	nAUTOfAB000668	11/10/2023

We also plan to conduct quarterly operation and maintenance activities on the Knight #1 air sparge/soil vapor extraction system (Incident number nAUTOAB000324) on Tuesday, November 7, 2023.

Please feel free to contact Joe Wiley, Project Manager at EPCGP, or me, if you need further information.

Thank you,
Steve

Stephen Varsa, P.G., R.G.
Principal Hydrogeologist
Stantec Environmental Services
11311 Aurora Avenue
Des Moines, Iowa 50322
Direct: (515) 251-1020
Cell: (515) 710-7523
Office: (515) 253-0830
steve.varsa@stantec.com

APPENDIX C

Waste Disposal Documentation

envirotech

Bill of Lading

MANIFEST # 78476
GENERATOR Kinder morgan
POINT OF ORIGIN ELPaso pit sites
TRANSPORTER Envirotech
DATE 03/31/23 JOB # 14073-0073

PHONE: (505) 632-0615 • 5796 U.S. HIGHWAY 64 • FARMINGTON, NEW MEXICO 87401

LOAD NO.	COMPLETE DESCRIPTION OF SHIPMENT						TRANSPORTING COMPANY			
	DESTINATION	MATERIAL	GRID	YDS	BBLS	DRUMS	TKT#	TRK#	TIME	DRIVER SIGNATURE
1	BF	Tankbottoms			1			991	1130	byGayR
					1					

RESULTS			LANDFARM EMPLOYEE	NOTES
-251	CHLORIDE TEST	1	Cary Robinson	
	CHLORIDE TEST		☐ Soil w/ Debris ☐ After Hours/Weekend Receival ☐ Scrape Out ☐ Wash Out	
	CHLORIDE TEST		**By signing as the driver/transporter, I certify the material hauled from the above location has not been added to or tampered with. I certify the material is from the above mentioned Generator/Point of Origin and that no additional material has been added or mixed into the load. Landfarm employee signature is certification of the above material being received and placed accordingly.**	
Pass	PAINT FILTER TEST	1		

Generator Onsite Contact _____ Phone _____

Signatures required prior to distribution of the legal document. DISTRIBUTION: **White** - Company Records / Billing **Yellow** - Customer **Pink** - LF Copy

SAN JUAN PRINTING 2021 407-3

envirotech

BOL# 78476

CHLORIDE TESTING / PAINT FILTER TESTING

DATE 03/31/23 TIME 1130

Attach test strip here

CUSTOMER Kinder Morgan

SITE ELPASO Pit Sites

DRIVER by Gary Robinson

SAMPLE Soil Straight _____ With Dirt X

CHLORIDE TEST -281 mg/Kg

ACCEPTED YES X NO _____

PAINT FILTER TEST Time started 1130 Time completed 1142

PASS YES X NO _____

SAMPLER/ANALYST Cory Robinson

5796 US Hwy 64, Farmington, NM 87401 Ph (505) 632-0615 Fr (800) 362-1879 Fx (505) 632-1865 info@envirotech-inc.com envirotech-inc.com

envirotech

Bill of Lading

MANIFEST # 79427
GENERATOR Kinder Morgan picked up from
POINT OF ORIGIN Bio Vista Comp Station *
TRANSPORTER Envirotech
DATE 5/22/2023 JOB # 14073-0073

PHONE: (505) 632-0615 • 5796 U.S. HIGHWAY 64 • FARMINGTON, NEW MEXICO 87401

LOAD NO.	COMPLETE DESCRIPTION OF SHIPMENT						TRANSPORTING COMPANY			
	DESTINATION	MATERIAL	GRID	YDS	BBLS	DRUMS	TKT#	TRK#	TIME	DRIVER SIGNATURE
1	BF	Contaminated Water				1		992/705	1550	Austin Faint
						1				
									SCANNED	

RESULTS		
-251	CHLORIDE TEST	1
	CHLORIDE TEST	
	CHLORIDE TEST	
Pass	PAINT FILTER TEST	1

LANDFARM EMPLOYEE

☐ Soil w/ Debris ☑ After Hours/Weekend Receival ☐ Scrape Out ☐ Wash Out

NOTES
* From San Juan River Plant, Blanco N. Flare, and numerous pit sites.

By signing as the driver/transporter, I certify the material hauled from the above location has not been added to or tampered with. I certify the material is from the above mentioned Generator/Point of Origin and that no additional material has been added or mixed into the load. Landfarm employee signature is certification of the above material being received and placed accordingly.

Generator Onsite Contact Sean Cleary Phone (515) 557-0109

Signatures required prior to distribution of the legal document. DISTRIBUTION: White - Company Records / Billing Yellow - Customer Pink - LF Copy

SAN JUAN PRINTING 2021 407-3

envirotech

BOL# 79427

CHLORIDE TESTING / PAINT FILTER TESTING

DATE 5/22/2023 TIME 1550

Attach test strip here

CUSTOMER Kinder Morgan

SITE Rio Vista Comp Station SJ River Plant Blanco N Flare Aluminosis Pits sites

DRIVER [redacted]

SAMPLE Soil Straight _____ With Dirt ✓

CHLORIDE TEST -281 mg/Kg

ACCEPTED YES ✓ NO _____

PAINT FILTER TEST Time started 1550 Time completed 1600

PASS YES ✓ NO _____

SAMPLER/ANALYST [redacted]

5796 US Hwy 64, Farmington, NM 87401 | Ph (505) 632-0615 Fr (800) 362-1879 Fx (505) 632-1865 | info@envirotech-inc.com envirotech-inc.com

envirotech

Bill of Lading

MANIFEST # 80964

GENERATOR El Paso And Lateral L-40

POINT OF ORIGIN James F Bell #1E

TRANSPORTER Envirotech

DATE 8/26/2023 JOB # 14073-0080

PHONE: (505) 632-0615 • 5796 U.S. HIGHWAY 64 • FARMINGTON, NEW MEXICO 87401

LOAD NO.	COMPLETE DESCRIPTION OF SHIPMENT						TRANSPORTING COMPANY			
	DESTINATION	MATERIAL	GRID	YDS	BBLS	DRUMS	TKT#	TRK#	TIME	DRIVER SIGNATURE
1	BF	Contaminated Water		-	2			992	0750	
					1/2					
							Bill 2 hrs callout			

RESULTS		
-272	CHLORIDE TEST	1
	CHLORIDE TEST	
	CHLORIDE TEST	
Pass	PAINT FILTER TEST	1

LANDFARM EMPLOYEE

☐ Soil w/ Debris ☒ After Hours/Weekend Receival ☐ Scrape Out ☐ Wash Out

NOTES Dave & Out @ 0900

By signing as the driver/transporter, I certify the material hauled from the above location has not been added to or tampered with. I certify the material is from the above mentioned Generator/Point of Origin and that no additional material has been added or mixed into the load. Landfarm employee signature is certification of the above material being received and placed accordingly.

Generator Onsite Contact _____ Phone _____

Signatures required prior to distribution of the legal document. DISTRIBUTION: **White** - Company Records / Billing **Yellow** - Customer **Pink** - LF Copy

SAN JUAN PRINTING 2021 407-3

envirotech

BOL# 80964

CHLORIDE TESTING / PAINT FILTER TESTING

DATE 8/26/2023 TIME 0750

CUSTOMER El Paso

SITE James F Bell #1E

DRIVER Colton John

SAMPLE Soil Straight ✓ With Dirt _____

CHLORIDE TEST -272 mg/Kg

ACCEPTED YES ✓ NO _____

PAINT FILTER TEST Time started 0750 Time completed 0800

PASS YES ✓ NO _____

SAMPLER/ANALYST _____

Attach test strip here

5796 US Hwy 64, Farmington, NM 87401 Ph (505) 632-0615 Fr (800) 362-1879 Fx (505) 632-1865 info@envirotech-inc.com envirotech-inc.com

envirotech

Bill of Lading

MANIFEST # 82577
GENERATOR El Paso
POINT OF ORIGIN See the C-138 for list of sites
TRANSPORTER Envirotech
DATE 11/16/23 JOB # 14073-0081

PHONE: (505) 632-0615 • 5796 U.S. HIGHWAY 64 • FARMINGTON, NEW MEXICO 87401

LOAD NO.	COMPLETE DESCRIPTION OF SHIPMENT						TRANSPORTING COMPANY			
	DESTINATION	MATERIAL	GRID	YDS	BBLS	DRUMS	TKT#	TRK#	TIME	DRIVER SIGNATURE
1	B.F	Tank bottoms			1	—	—	725	1430	
					1					

RESULTS			LANDFARM EMPLOYEE	NOTES
-272	CHLORIDE TEST	1		
	CHLORIDE TEST		☐ Soil w/ Debris ☐ After Hours/Weekend Receival ☐ Scrape Out ☐ Wash Out	
	CHLORIDE TEST		**By signing as the driver/transporter, I certify the material hauled from the above location has not been added to or tampered with. I certify the material is from the above mentioned Generator/Point of Origin and that no additional material has been added or mixed into the load. Landfarm employee signature is certification of the above material being received and placed accordingly.**	
Pass	PAINT FILTER TEST	1		

Generator Onsite Contact _____ Phone _____

Signatures required prior to distribution of the legal document. DISTRIBUTION: **White** - Company Records / Billing **Yellow** - Customer **Pink** - LF Copy

SAN JUAN PRINTING 2021 407-3

envirotech

BOL# 82577

CHLORIDE TESTING / PAINT FILTER TESTING

DATE 11/16/23 TIME 1430

CUSTOMER El Paso

SITE See Bol 82577

DRIVER Stoven by Gomez

SAMPLE Soil Straight _____ With Dirt X

CHLORIDE TEST 272 mg/Kg

ACCEPTED YES X NO _____

PAINT FILTER TEST Time started 1430 Time completed 1441

PASS YES X NO _____

SAMPLER/ANALYST _____

Attach test strip here

5796 US Hwy 64, Farmington, NM 87401 Ph (505) 632-0615 Fr (800) 362-1879 Fx (505) 632-1865 info@envirotech-inc.com envirotech-inc.com

APPENDIX D

AcuVac Report on MDPE Events

AcuVac Remediation

October 15, 2023

Mr. Stephen Varsa, P.G.
Senior Hydrogeologist
Stantec Environnemental Services
11311 Aurora Avenue
Des Moines, IA 50322

Dear Steve:

Re: Lateral L-40 Site, Rio Arriba County, NM (Site Event #3)

At your request, AcuVac Remediation, LLC (AcuVac) performed one 8.0-hour Mobile Dual Phase Extraction (MDPE) event at the above referenced site (Site) on well MW-5 on August 22, 2023. The following is the Report and a copy of the Operating Data collected during Event #3. Event #1 at this site consisted of soil vapor extraction (SVE) feasibility testing of wells MW-1, SVE-1, SVE-2 and SVE-3, conducted in October 2018. Event #2 consisted of an MDPE event on MW-5, conducted on August 31, 2022. Additionally, the attached Table #1A contains the Summary Well Data for well MW-5. Table #1B contains the Summary Recovery Data for well MW-5.

The purpose of the MDPE event was to enhance recovery of petroleum hydrocarbon impacts present at the Site through the removal of both Phase Separated Hydrocarbons (PSH) and vapor phase petroleum hydrocarbons. PSH is referred to as Light Non-Aqueous Phase Liquids (LNAPL). The source of the petroleum hydrocarbon impacts is a historical release of natural gas condensate.

OBJECTIVES

The objectives of the MDPE event were to:

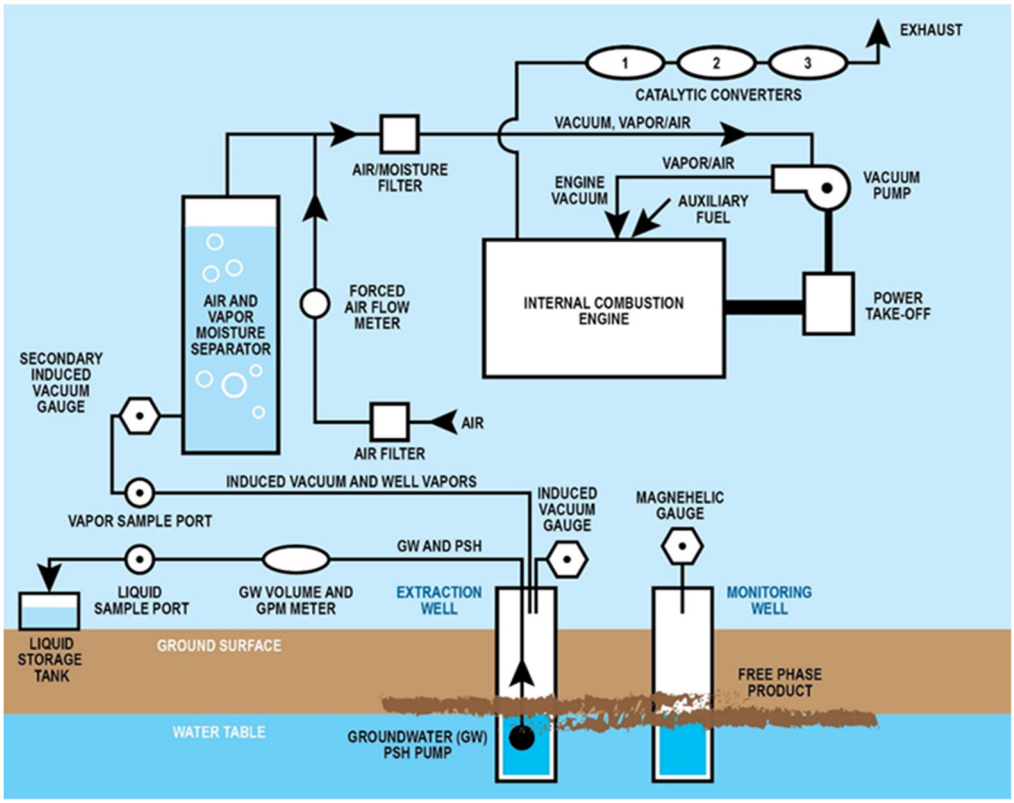
- Maximize the removal of liquid and vapor phase petroleum hydrocarbons from the groundwater and soils in the subsurface formations within the influence of the extraction well.
- Expose the capillary fringe area to an induced vacuum.
- Increase the liquid and vapor phase petroleum hydrocarbon specific yields with high induced vacuums.
- Create and monitor an induced hydraulic gradient to gain hydraulic control of the area surrounding the extraction well during the event period.
- Select and monitor the groundwater depression and pump rates to accomplish the above objectives.

METHODS AND EQUIPMENT

AcuVac owns and maintains an inventory of equipment to perform MDPE events. No third-party equipment was utilized. The events at the Site were conducted using the AcuVac I-6 System (System) with a Roots RAI-33 blower used as a vacuum pump and a Roots RAI-22 positive displacement blower. The following table lists equipment and instrumentation employed during Site Event #3 and the data element captured by each.

Equipment and Instrumentation Employed by AcuVac	
Measurement Equipment	**Data Element**
Extraction Well Induced Vacuum and Flow	
Dwyer Magnehelic Gauges	Extraction Well Vacuum
Dwyer Averaging Pitot Tubes / Magnehelic Gauges	Extraction Well Vapor Flow
Observation Wells	
Dwyer Digital Manometer	Vacuum / Pressure Influence
Extraction Well Vapor Monitoring	
V-1 Vacuum Box	Extraction Well Non-Diluted Vapor Sample Collection
HORIBA® Analyzer	Extraction Well Vapor TPH Concentration
RKI 1200 O_2, H_2S Monitor	Extraction Well Vapor Oxygen Content
LNAPL Thickness	
Solinst Interface Probes Model 122	Depth to LNAPL and Depth to Groundwater
Liquid Recovery	
Totalizer Flow Meter	Liquid Flow and Total Volume
QED AP2+ Total Fluids Pump	In-Well Pumping
Portable Air Compressor	Pump Speed
Groundwater Depression / Upwelling	
In-Situ Level Troll 700 Data Logger	Liquid Column in Extraction and Observation Wells
In-Situ Vented Cable with Chamber	Equalize Well Vacuum/Pressure
In-Situ Rugged Reader Data Logger Interface	Capture Readings from Data Logger Trolls
Atmospheric Conditions	
Testo Model 511	Relative and Absolute Barometric Pressure

ACUVAC MOBILE DUAL PHASE EXTRACTION SYSTEM



The vacuum extraction portion of the System consists of a vacuum pump driven by an internal combustion (IC) engine. The vacuum pump was connected to the extraction well, and the vacuum created on the extraction well caused light hydrocarbons in the soil and on the groundwater to volatilize and flow through a moisture knockout tank to the vacuum pump and the IC engine where they were burned as part of the normal combustion process. Propane was used as auxiliary fuel to help power the engine if the well vapors did not provide the required energy.

The IC engine provided the power necessary to achieve and maintain high induced vacuums and/or high well vapor flows required to maximize the vacuum radius of influence for pilot tests and short-term event remediation.

Emissions from the engine were passed through three catalytic converters to maximize destruction of removed hydrocarbon vapors. The engine's fuel-to-air ratio was adjusted to maintain efficient combustion. Because the engine is the power source for the equipment, the System stops when the engine stops. This prevents an uncontrolled release of hydrocarbons. Since the System is held entirely under vacuum, any leaks in the seals or connections are leaked into the System and not emitted into the atmosphere. The engine is automatically shut down by vacuum loss, low oil pressure, over speed, or overheating.

Groundwater extraction was provided by an in-well, QED AP2+ total fluids pump that discharged through a total flow meter. The discharge line from the volume meter was then connected to the stand-by tank. The air power for the groundwater pump was supplied from a portable air compressor powered by a 120v Honda generator. The groundwater flow rate was adjusted to maintain a target level. An interface meter was used to collect depth to groundwater and depth to LNAPL measurements. Groundwater samples were taken periodically in a graduated cylinder to determine the average LNAPL percentage being recovered.

The design of the AcuVac System enabled independent control of both the induced well vacuum and the groundwater pumping functions such that the AcuVac team controlled the induced hydraulic gradient to increase exposure of the formation to soil vapor extraction (SVE). The ability to separate the vapor and liquid flows within the extraction well improved the hydrocarbon recovery rates and enabled the AcuVac team to record data specific to each media.

SUMMARY OF WELL MW-5 EVENT #3

The Petroleum Hydrocarbon Recovery Summary Table below summarizes the total liquid and LNAPL recovery data for well MW-5 for Event #3.

Petroleum Hydrocarbon Recovery Summary		
Site Event Number		**Event #3**
Well Number		**MW-5**
Event Date		**08/22/2023**
Event Hours		**8.0**
Total Liquid Recovery		
Total Liquid Recovery	gals	19
Petroleum Hydrocarbon Recovery		
Liquid	gals	0.8
Vapor	gals	3.9
Total	gals	4.7
Gallons/Hour	gals	0.59

- Total vapor hydrocarbons burned as IC engine fuel in the Petroleum Hydrocarbon Recovery Summary Table above are based on the HORIBA® data recorded in the Influent Vapor Data Table below.

Influent Vapor Data Well MW-5		
Site Event Number		**Event #3**
Well Number		**MW-5**
Event Date		**08/22/2023**
Event Hours		**8.0**
Data Element		
TPH- Maximum	ppmv	20,360
TPH- Average	ppmv	18,226
TPH- Minimum	ppmv	11,460
TPH- Initial	ppmv	11,460
TPH- Ending	ppmv	20,240
CO_2	%	5.70
O_2	%	11.1
H_2S	ppm	NM

- The Event #3 extraction well induced vacuum and well vapor flow is shown in the following table.

Well Vacuum and Well Vapor Flow Well MW-5		
Site Event Number		**Event #3**
Well Number		**MW-5**
Event Date		**08/22/2023**
Event Hours		**8.0**
Data Element		
Well Vacuum- Maximum	InH_2O	150.00
Well Vacuum- Average	InH_2O	143.53
Well Vacuum- Minimum	InH_2O	120.00.
Well Vapor Flow- Maximum	scfm	12.72
Well Vapor Flow- Average	scfm	12.45
Well Vapor Flow- Minimum	scfm	10.94

- For Event #3, the total fluids pump inlet was set at approximately 1.50 ft above the well bottom.

- Depth to groundwater, depth to LNAPL, and LNAPL thickness at the start and end of Event #3 are presented in the table below.

LNAPL Thickness Well MW-5		
Site Event Number		**Event #3**
Well Number		**MW-5**
Event Date		**08/22/2023**
Event Hours		**8.0**
Data Element		
Start of Event		
Depth to LNAPL	ft BTOC	42.02
Depth to Groundwater	ft BTOC	42.61
LNAPL Thickness	ft	0.59
End of Event		
Depth to LNAPL	ft BTOC	48.45
Depth to Groundwater	ft BTOC	48.82
LNAPL Thickness	ft	0.37

- Certain outer wells as outlined in the table below were monitored for vacuum influence from the extraction well MW-5.

Outer Well Vacuum Influence Well MW-5		
Site Event Number		**Event #3**
Event Date		**08/22/2023**
Event Hours		**8.0**
Extraction Well		
Average Extraction Well Vacuum	InH_2O	145.53
Average Vacuum Influence Monitoring Point / Distance from Extraction Well		
MW- 1 (31.0 ft)	InH_2O	6.50
SVE-1 (34.6 ft)	InH_2O	1.70
MW-10 (37.5 ft)	InH_2O	6.64
SVE-2 (59.6 ft)	InH_2O	0.05
MW-2- (60.0 ft)	InH_2O	0.20

METHOD OF CALIBRATION AND CALCULATIONS

The HORIBA® Analytical instrument is calibrated with hexane, carbon monoxide and carbon dioxide. The formula used to calculate the emission rate is:

Emission Rate (ER) =

TPH (ppmv) x MW (hexane) x Flow Rate (scfm) x $1.58E^{-7}$ $\frac{(min)(lb\ mole)}{(hr)(ppmv)(ft^3)}$ = lbs/hr

INFORMATION INCLUDED WITH REPORT

- Table #1A Summary Data Well MW-5
- Table #1B Summary Recovery Data Well MW-5
- Recorded Data

After you have reviewed the report and if you have any questions, please contact me. We appreciate you selecting AcuVac to provide this service.

Sincerely,
ACUVAC REMEDIATION, LLC

Paul D. Faucher
President

Summary Well Data
Table #1A

Site Event		3
EXTRACTION WELL ID		**MW-5**
Event Date		08/222023
Current Event Hours		8.0
Total Event Hours		8.0
Total Depth	ft BGS	49.7
Well Screen	ft BGS	29.7 – 49.7
Well Diameter	in	2.0
Extraction Well Data		
Depth To Groundwater - Static - Start Event	ft BTOC	42.02
Depth To LNAPL - Static - Start Event	ft BTOC	42.61
LNAPL Thickness	ft	0.59
Hydro-Equivalent- Beginning	ft BTOC	42.17
Depth To Groundwater - End Event	ft BTOC	48.45
Depth To LNAPL - End Event	ft BTOC	48.82
LNAPL Thickness	ft	0.37
Hydro-Equivalent- Ending	ft BTOC	48.55
Extraction Data		
Maximum Extraction Well Vacuum	"H_2O	150.00
Average Extraction Well Vacuum	"H_2O	143.53
Minimum Extraction Well Vacuum	"H_2O	120.00.
Maximum Extraction Well Vapor Flow	scfm	12.72
Average Extraction Well Vapor Flow	scfm	12.45
Minimum Extraction Well Vapor Flow	scfm	10.94
Maximum GW / LNAPL Pump Rate	gpm	0.07
Average GW / LNAPL Pump Rate	gpm	0.04
Influent Data		
Maximum TPH	ppmv	20,360
Average TPH	ppmv	18,226
Minimum TPH	ppmv	11,460
Initial TPH	ppmv	11,460
Final TPH	ppmv	20,240
Average CO_2	%	5.70
Average O_2	%	11.1
Average H_2S	ppm	NM

Summary Recovery Data
Table #1B

Site Event		3
EXTRACTION WELL ID		**MW-5**
Recovery Data- Current Event		
Total Liquid Volume Recovered	gals	19
Total Liquid LNAPL Recovered	gals	0.8
Total Liquid LNAPL Recovered / Total Liquid	%	4.2
Total Liquid LNAPL Recovered / Total LNAPL	%	16.9
Total Vapor LNAPL Recovered	gals	3.9
Total Vapor LNAPL Recovered / Total LNAPL	%	83.1
Total Vapor and Liquid LNAPL Recovered	gals	4.7
Average LNAPL Recovery	gals/hr	0.59
Total LNAPL Recovered	lbs	33
Total Volume of Well Vapors	cu. ft	5,976
Recovery Data- Cumulative		
Total Liquid Volume Recovered	gals	35
Total Liquid LNAPL Recovered	gals	2.4
Total Vapor LNAPL Recovered	gals	8.8
Total Vapor and Liquid LNAPL Recovered	gals	11.2
Average LNAPL Recovery	gals/hr	0.7
Total LNAPL Recovered	lbs	79
Total Volume of Well Vapors	cu. ft	13,080

APPENDIX E

Groundwater Analytical Lab Reports

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Steve Varsa
Stantec Consulting Services Inc
11311 Aurora Avenue
Des Moines, Iowa 50322-7904

Generated 6/13/2023 5:57:06 PM

JOB DESCRIPTION

Lateral L-40.00
SDG NUMBER Lat L-40

JOB NUMBER

400-238138-1

Eurofins Pensacola
3355 McLemore Drive
Pensacola FL 32514

See page two for job notes and contact information.

my EOL

Eurofins Pensacola

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing Southeast, LLC Project Manager.

Authorization

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Authorized for release by
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Designee for
Cheyenne Whitmire, Project Manager II
Cheyenne.Whitmire@et.eurofinsus.com
(850)471-6222

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Receipt Checklists 27
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Case Narrative

Client: Stantec Consulting Services Inc
Project/Site: Lateral L-40.00

Job ID: 400-238138-1
SDG: Lat L-40

Job ID: 400-238138-1

Laboratory: Eurofins Pensacola

Narrative

Job Narrative
400-238138-1

Comments
No additional comments.

Receipt
The samples were received on 5/23/2023 9:10 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 1.1º C.

GC/MS VOA
Method 8260D: The following sample was diluted to bring the concentration of target analytes within the calibration range: MW-1 (400-238138-3). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

VOA Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Detection Summary

Client: Stantec Consulting Services Inc
Project/Site: Lateral L-40.00

Job ID: 400-238138-1
SDG: Lat L-40

Client Sample ID: TRIP BLANK — Lab Sample ID: 400-238138-1

No Detections.

Client Sample ID: DUP-01 — Lab Sample ID: 400-238138-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	120		5.0		ug/L	5		8260D	Total/NA
Toluene	5.6		5.0		ug/L	5		8260D	Total/NA
Ethylbenzene	110		5.0		ug/L	5		8260D	Total/NA
Xylenes, Total	420		50		ug/L	5		8260D	Total/NA

Client Sample ID: MW-1 — Lab Sample ID: 400-238138-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	120		5.0		ug/L	5		8260D	Total/NA
Toluene	5.7		5.0		ug/L	5		8260D	Total/NA
Ethylbenzene	120		5.0		ug/L	5		8260D	Total/NA
Xylenes, Total	500		50		ug/L	5		8260D	Total/NA

Client Sample ID: MW-2 — Lab Sample ID: 400-238138-4

No Detections.

Client Sample ID: MW-3 — Lab Sample ID: 400-238138-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	11		1.0		ug/L	1		8260D	Total/NA

Client Sample ID: MW-4 — Lab Sample ID: 400-238138-6

No Detections.

Client Sample ID: MW-6 — Lab Sample ID: 400-238138-7

No Detections.

Client Sample ID: MW-7 — Lab Sample ID: 400-238138-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	1.0		1.0		ug/L	1		8260D	Total/NA

Client Sample ID: MW-8 — Lab Sample ID: 400-238138-9

No Detections.

Client Sample ID: MW-9 — Lab Sample ID: 400-238138-10

No Detections.

Client Sample ID: MW-10 — Lab Sample ID: 400-238138-11

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins Pensacola

Method Summary

Client: Stantec Consulting Services Inc
Project/Site: Lateral L-40.00

Job ID: 400-238138-1
SDG: Lat L-40

Method	Method Description	Protocol	Laboratory
8260D	Volatile Organic Compounds by GC/MS	SW846	EET PEN
5030C	Purge and Trap	SW846	EET PEN

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET PEN = Eurofins Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

Sample Summary

Client: Stantec Consulting Services Inc
Project/Site: Lateral L-40.00

Job ID: 400-238138-1
SDG: Lat L-40

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-238138-1	TRIP BLANK	Water	05/21/23 13:50	05/23/23 09:10
400-238138-2	DUP-01	Water	05/21/23 13:55	05/23/23 09:10
400-238138-3	MW-1	Water	05/21/23 15:10	05/23/23 09:10
400-238138-4	MW-2	Water	05/21/23 15:08	05/23/23 09:10
400-238138-5	MW-3	Water	05/21/23 15:03	05/23/23 09:10
400-238138-6	MW-4	Water	05/21/23 14:50	05/23/23 09:10
400-238138-7	MW-6	Water	05/21/23 14:55	05/23/23 09:10
400-238138-8	MW-7	Water	05/21/23 14:09	05/23/23 09:10
400-238138-9	MW-8	Water	05/21/23 14:40	05/23/23 09:10
400-238138-10	MW-9	Water	05/21/23 14:30	05/23/23 09:10
400-238138-11	MW-10	Water	05/21/23 14:35	05/23/23 09:10

Client Sample Results

Client: Stantec Consulting Services Inc
Project/Site: Lateral L-40.00

Job ID: 400-238138-1
SDG: Lat L-40

Client Sample ID: TRIP BLANK

Date Collected: 05/21/23 13:50
Date Received: 05/23/23 09:10

Lab Sample ID: 400-238138-1

Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0		ug/L			06/02/23 21:51	1
Toluene	<1.0		1.0		ug/L			06/02/23 21:51	1
Ethylbenzene	<1.0		1.0		ug/L			06/02/23 21:51	1
Xylenes, Total	<10		10		ug/L			06/02/23 21:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*93*		*64 - 132*		*06/02/23 21:51*	*1*
Dibromofluoromethane	*113*		*75 - 126*		*06/02/23 21:51*	*1*
4-Bromofluorobenzene	*93*		*72 - 130*		*06/02/23 21:51*	*1*

Client Sample Results

Client: Stantec Consulting Services Inc
Project/Site: Lateral L-40.00

Job ID: 400-238138-1
SDG: Lat L-40

Client Sample ID: DUP-01

Date Collected: 05/21/23 13:55
Date Received: 05/23/23 09:10

Lab Sample ID: 400-238138-2

Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	120		5.0		ug/L			05/26/23 21:48	5
Toluene	5.6		5.0		ug/L			05/26/23 21:48	5
Ethylbenzene	110		5.0		ug/L			05/26/23 21:48	5
Xylenes, Total	420		50		ug/L			05/26/23 21:48	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*99*		*64 - 132*		*05/26/23 21:48*	*5*
Dibromofluoromethane	*103*		*75 - 126*		*05/26/23 21:48*	*5*
4-Bromofluorobenzene	*94*		*72 - 130*		*05/26/23 21:48*	*5*

Client Sample Results

Client: Stantec Consulting Services Inc
Project/Site: Lateral L-40.00

Job ID: 400-238138-1
SDG: Lat L-40

Client Sample ID: MW-1

Date Collected: 05/21/23 15:10
Date Received: 05/23/23 09:10

Lab Sample ID: 400-238138-3

Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	120		5.0		ug/L			05/27/23 22:20	5
Toluene	5.7		5.0		ug/L			05/27/23 22:20	5
Ethylbenzene	120		5.0		ug/L			05/27/23 22:20	5
Xylenes, Total	500		50		ug/L			05/27/23 22:20	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*101*		*64 - 132*		*05/27/23 22:20*	*5*
Dibromofluoromethane	*104*		*75 - 126*		*05/27/23 22:20*	*5*
4-Bromofluorobenzene	*95*		*72 - 130*		*05/27/23 22:20*	*5*

Client Sample Results

Client: Stantec Consulting Services Inc
Project/Site: Lateral L-40.00

Job ID: 400-238138-1
SDG: Lat L-40

Client Sample ID: MW-2

Date Collected: 05/21/23 15:08
Date Received: 05/23/23 09:10

Lab Sample ID: 400-238138-4

Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0		ug/L			05/26/23 19:36	1
Toluene	<1.0		1.0		ug/L			05/26/23 19:36	1
Ethylbenzene	<1.0		1.0		ug/L			05/26/23 19:36	1
Xylenes, Total	<10		10		ug/L			05/26/23 19:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*93*		*64 - 132*		*05/26/23 19:36*	*1*
Dibromofluoromethane	*109*		*75 - 126*		*05/26/23 19:36*	*1*
4-Bromofluorobenzene	*92*		*72 - 130*		*05/26/23 19:36*	*1*

Client Sample Results

Client: Stantec Consulting Services Inc
Project/Site: Lateral L-40.00

Job ID: 400-238138-1
SDG: Lat L-40

Client Sample ID: MW-3

Date Collected: 05/21/23 15:03
Date Received: 05/23/23 09:10

Lab Sample ID: 400-238138-5

Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**11**		1.0		ug/L			05/26/23 20:03	1
Toluene	<1.0		1.0		ug/L			05/26/23 20:03	1
Ethylbenzene	<1.0		1.0		ug/L			05/26/23 20:03	1
Xylenes, Total	<10		10		ug/L			05/26/23 20:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*95*		*64 - 132*		*05/26/23 20:03*	*1*
Dibromofluoromethane	*113*		*75 - 126*		*05/26/23 20:03*	*1*
4-Bromofluorobenzene	*95*		*72 - 130*		*05/26/23 20:03*	*1*

Client Sample Results

Client: Stantec Consulting Services Inc
Project/Site: Lateral L-40.00

Job ID: 400-238138-1
SDG: Lat L-40

Client Sample ID: MW-4

Date Collected: 05/21/23 14:50
Date Received: 05/23/23 09:10

Lab Sample ID: 400-238138-6

Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0		ug/L			05/26/23 20:29	1
Toluene	<1.0		1.0		ug/L			05/26/23 20:29	1
Ethylbenzene	<1.0		1.0		ug/L			05/26/23 20:29	1
Xylenes, Total	<10		10		ug/L			05/26/23 20:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*96*		*64 - 132*		*05/26/23 20:29*	*1*
Dibromofluoromethane	*114*		*75 - 126*		*05/26/23 20:29*	*1*
4-Bromofluorobenzene	*95*		*72 - 130*		*05/26/23 20:29*	*1*

Client Sample Results

Client: Stantec Consulting Services Inc
Project/Site: Lateral L-40.00

Job ID: 400-238138-1
SDG: Lat L-40

Client Sample ID: MW-6

Date Collected: 05/21/23 14:55
Date Received: 05/23/23 09:10

Lab Sample ID: 400-238138-7

Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0		ug/L			06/02/23 22:14	1
Toluene	<1.0		1.0		ug/L			06/02/23 22:14	1
Ethylbenzene	<1.0		1.0		ug/L			06/02/23 22:14	1
Xylenes, Total	<10		10		ug/L			06/02/23 22:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*93*		*64 - 132*		*06/02/23 22:14*	*1*
Dibromofluoromethane	*113*		*75 - 126*		*06/02/23 22:14*	*1*
4-Bromofluorobenzene	*93*		*72 - 130*		*06/02/23 22:14*	*1*

Client Sample Results

Client: Stantec Consulting Services Inc
Project/Site: Lateral L-40.00

Job ID: 400-238138-1
SDG: Lat L-40

Client Sample ID: MW-7

Date Collected: 05/21/23 14:09
Date Received: 05/23/23 09:10

Lab Sample ID: 400-238138-8

Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**1.0**		1.0		ug/L			06/02/23 22:36	1
Toluene	<1.0		1.0		ug/L			06/02/23 22:36	1
Ethylbenzene	<1.0		1.0		ug/L			06/02/23 22:36	1
Xylenes, Total	<10		10		ug/L			06/02/23 22:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*93*		*64 - 132*		*06/02/23 22:36*	*1*
Dibromofluoromethane	*114*		*75 - 126*		*06/02/23 22:36*	*1*
4-Bromofluorobenzene	*93*		*72 - 130*		*06/02/23 22:36*	*1*

Client Sample Results

Client: Stantec Consulting Services Inc
Project/Site: Lateral L-40.00

Job ID: 400-238138-1
SDG: Lat L-40

Client Sample ID: MW-8

Date Collected: 05/21/23 14:40
Date Received: 05/23/23 09:10

Lab Sample ID: 400-238138-9

Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0		ug/L			06/02/23 22:59	1
Toluene	<1.0		1.0		ug/L			06/02/23 22:59	1
Ethylbenzene	<1.0		1.0		ug/L			06/02/23 22:59	1
Xylenes, Total	<10		10		ug/L			06/02/23 22:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*93*		*64 - 132*		*06/02/23 22:59*	*1*
Dibromofluoromethane	*113*		*75 - 126*		*06/02/23 22:59*	*1*
4-Bromofluorobenzene	*90*		*72 - 130*		*06/02/23 22:59*	*1*

Client Sample Results

Client: Stantec Consulting Services Inc
Project/Site: Lateral L-40.00

Job ID: 400-238138-1
SDG: Lat L-40

Client Sample ID: MW-9

Date Collected: 05/21/23 14:30
Date Received: 05/23/23 09:10

Lab Sample ID: 400-238138-10

Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0		ug/L			05/26/23 20:56	1
Toluene	<1.0		1.0		ug/L			05/26/23 20:56	1
Ethylbenzene	<1.0		1.0		ug/L			05/26/23 20:56	1
Xylenes, Total	<10		10		ug/L			05/26/23 20:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*97*		*64 - 132*		*05/26/23 20:56*	*1*
Dibromofluoromethane	*113*		*75 - 126*		*05/26/23 20:56*	*1*
4-Bromofluorobenzene	*95*		*72 - 130*		*05/26/23 20:56*	*1*

Client Sample Results

Client: Stantec Consulting Services Inc
Project/Site: Lateral L-40.00

Job ID: 400-238138-1
SDG: Lat L-40

Client Sample ID: MW-10

Date Collected: 05/21/23 14:35
Date Received: 05/23/23 09:10

Lab Sample ID: 400-238138-11

Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0		ug/L			05/26/23 21:22	1
Toluene	<1.0		1.0		ug/L			05/26/23 21:22	1
Ethylbenzene	<1.0		1.0		ug/L			05/26/23 21:22	1
Xylenes, Total	<10		10		ug/L			05/26/23 21:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*96*		*64 - 132*		*05/26/23 21:22*	*1*
Dibromofluoromethane	*113*		*75 - 126*		*05/26/23 21:22*	*1*
4-Bromofluorobenzene	*96*		*72 - 130*		*05/26/23 21:22*	*1*

Definitions/Glossary

Client: Stantec Consulting Services Inc
Project/Site: Lateral L-40.00

Job ID: 400-238138-1
SDG: Lat L-40

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Lab Chronicle

Client: Stantec Consulting Services Inc
Project/Site: Lateral L-40.00

Job ID: 400-238138-1
SDG: Lat L-40

Client Sample ID: TRIP BLANK
Lab Sample ID: 400-238138-1
Date Collected: 05/21/23 13:50
Matrix: Water
Date Received: 05/23/23 09:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	627521	06/02/23 21:51	WPD	EET PEN

Client Sample ID: DUP-01
Lab Sample ID: 400-238138-2
Date Collected: 05/21/23 13:55
Matrix: Water
Date Received: 05/23/23 09:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		5	5 mL	5 mL	626672	05/26/23 21:48	CAR	EET PEN

Client Sample ID: MW-1
Lab Sample ID: 400-238138-3
Date Collected: 05/21/23 15:10
Matrix: Water
Date Received: 05/23/23 09:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		5	5 mL	5 mL	626821	05/27/23 22:20	WPD	EET PEN

Client Sample ID: MW-2
Lab Sample ID: 400-238138-4
Date Collected: 05/21/23 15:08
Matrix: Water
Date Received: 05/23/23 09:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	626672	05/26/23 19:36	CAR	EET PEN

Client Sample ID: MW-3
Lab Sample ID: 400-238138-5
Date Collected: 05/21/23 15:03
Matrix: Water
Date Received: 05/23/23 09:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	626672	05/26/23 20:03	CAR	EET PEN

Client Sample ID: MW-4
Lab Sample ID: 400-238138-6
Date Collected: 05/21/23 14:50
Matrix: Water
Date Received: 05/23/23 09:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	626672	05/26/23 20:29	CAR	EET PEN

Client Sample ID: MW-6
Lab Sample ID: 400-238138-7
Date Collected: 05/21/23 14:55
Matrix: Water
Date Received: 05/23/23 09:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	627521	06/02/23 22:14	WPD	EET PEN

Lab Chronicle

Client: Stantec Consulting Services Inc
Project/Site: Lateral L-40.00

Job ID: 400-238138-1
SDG: Lat L-40

Client Sample ID: MW-7
Date Collected: 05/21/23 14:09
Date Received: 05/23/23 09:10

Lab Sample ID: 400-238138-8
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	627521	06/02/23 22:36	WPD	EET PEN

Client Sample ID: MW-8
Date Collected: 05/21/23 14:40
Date Received: 05/23/23 09:10

Lab Sample ID: 400-238138-9
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	627521	06/02/23 22:59	WPD	EET PEN

Client Sample ID: MW-9
Date Collected: 05/21/23 14:30
Date Received: 05/23/23 09:10

Lab Sample ID: 400-238138-10
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	626672	05/26/23 20:56	CAR	EET PEN

Client Sample ID: MW-10
Date Collected: 05/21/23 14:35
Date Received: 05/23/23 09:10

Lab Sample ID: 400-238138-11
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	626672	05/26/23 21:22	CAR	EET PEN

Client Sample ID: Method Blank
Date Collected: N/A
Date Received: N/A

Lab Sample ID: MB 400-626672/4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	626672	05/26/23 12:50	CAR	EET PEN

Client Sample ID: Method Blank
Date Collected: N/A
Date Received: N/A

Lab Sample ID: MB 400-626821/4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	626821	05/27/23 13:00	WPD	EET PEN

Client Sample ID: Method Blank
Date Collected: N/A
Date Received: N/A

Lab Sample ID: MB 400-627521/4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	627521	06/02/23 15:01	WPD	EET PEN

Lab Chronicle

Client: Stantec Consulting Services Inc
Project/Site: Lateral L-40.00

Job ID: 400-238138-1
SDG: Lat L-40

Client Sample ID: Lab Control Sample
Date Collected: N/A
Date Received: N/A

Lab Sample ID: LCS 400-626672/1002
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	626672	05/26/23 10:44	CAR	EET PEN

Client Sample ID: Lab Control Sample
Date Collected: N/A
Date Received: N/A

Lab Sample ID: LCS 400-626821/1002
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	626821	05/27/23 11:52	WPD	EET PEN

Client Sample ID: Lab Control Sample
Date Collected: N/A
Date Received: N/A

Lab Sample ID: LCS 400-627521/1002
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	627521	06/02/23 13:57	WPD	EET PEN

Laboratory References:
EET PEN = Eurofins Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

QC Association Summary

Client: Stantec Consulting Services Inc
Project/Site: Lateral L-40.00

Job ID: 400-238138-1
SDG: Lat L-40

GC/MS VOA

Analysis Batch: 626672

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-238138-2	DUP-01	Total/NA	Water	8260D	
400-238138-4	MW-2	Total/NA	Water	8260D	
400-238138-5	MW-3	Total/NA	Water	8260D	
400-238138-6	MW-4	Total/NA	Water	8260D	
400-238138-10	MW-9	Total/NA	Water	8260D	
400-238138-11	MW-10	Total/NA	Water	8260D	
MB 400-626672/4	Method Blank	Total/NA	Water	8260D	
LCS 400-626672/1002	Lab Control Sample	Total/NA	Water	8260D	

Analysis Batch: 626821

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-238138-3	MW-1	Total/NA	Water	8260D	
MB 400-626821/4	Method Blank	Total/NA	Water	8260D	
LCS 400-626821/1002	Lab Control Sample	Total/NA	Water	8260D	

Analysis Batch: 627521

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-238138-1	TRIP BLANK	Total/NA	Water	8260D	
400-238138-7	MW-6	Total/NA	Water	8260D	
400-238138-8	MW-7	Total/NA	Water	8260D	
400-238138-9	MW-8	Total/NA	Water	8260D	
MB 400-627521/4	Method Blank	Total/NA	Water	8260D	
LCS 400-627521/1002	Lab Control Sample	Total/NA	Water	8260D	

QC Sample Results

Client: Stantec Consulting Services Inc
Project/Site: Lateral L-40.00

Job ID: 400-238138-1
SDG: Lat L-40

Method: 8260D - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 400-626672/4
Matrix: Water
Analysis Batch: 626672

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0		ug/L			05/26/23 12:50	1
Toluene	<1.0		1.0		ug/L			05/26/23 12:50	1
Ethylbenzene	<1.0		1.0		ug/L			05/26/23 12:50	1
Xylenes, Total	<10		10		ug/L			05/26/23 12:50	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*97*		*64 - 132*		*05/26/23 12:50*	*1*
Dibromofluoromethane	*112*		*75 - 126*		*05/26/23 12:50*	*1*
4-Bromofluorobenzene	*94*		*72 - 130*		*05/26/23 12:50*	*1*

Lab Sample ID: LCS 400-626672/1002
Matrix: Water
Analysis Batch: 626672

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	50.0	42.2		ug/L		84	70 - 130
Toluene	50.0	42.3		ug/L		85	70 - 130
Ethylbenzene	50.0	46.2		ug/L		92	70 - 130
Xylenes, Total	100	95.0		ug/L		95	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Toluene-d8 (Surr)	*96*		*64 - 132*
Dibromofluoromethane	*104*		*75 - 126*
4-Bromofluorobenzene	*92*		*72 - 130*

Lab Sample ID: MB 400-626821/4
Matrix: Water
Analysis Batch: 626821

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0		ug/L			05/27/23 13:00	1
Toluene	<1.0		1.0		ug/L			05/27/23 13:00	1
Ethylbenzene	<1.0		1.0		ug/L			05/27/23 13:00	1
Xylenes, Total	<10		10		ug/L			05/27/23 13:00	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*94*		*64 - 132*		*05/27/23 13:00*	*1*
Dibromofluoromethane	*115*		*75 - 126*		*05/27/23 13:00*	*1*
4-Bromofluorobenzene	*92*		*72 - 130*		*05/27/23 13:00*	*1*

Lab Sample ID: LCS 400-626821/1002
Matrix: Water
Analysis Batch: 626821

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	50.0	47.0		ug/L		94	70 - 130
Toluene	50.0	47.8		ug/L		96	70 - 130
Ethylbenzene	50.0	52.9		ug/L		106	70 - 130

QC Sample Results

Client: Stantec Consulting Services Inc
Project/Site: Lateral L-40.00

Job ID: 400-238138-1
SDG: Lat L-40

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 400-626821/1002
Matrix: Water
Analysis Batch: 626821

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Xylenes, Total			100	108		ug/L		108	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Toluene-d8 (Surr)	*99*		*64 - 132*
Dibromofluoromethane	*103*		*75 - 126*
4-Bromofluorobenzene	*92*		*72 - 130*

Lab Sample ID: MB 400-627521/4
Matrix: Water
Analysis Batch: 627521

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0		ug/L			06/02/23 15:01	1
Toluene	<1.0		1.0		ug/L			06/02/23 15:01	1
Ethylbenzene	<1.0		1.0		ug/L			06/02/23 15:01	1
Xylenes, Total	<10		10		ug/L			06/02/23 15:01	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*94*		*64 - 132*		*06/02/23 15:01*	*1*
Dibromofluoromethane	*111*		*75 - 126*		*06/02/23 15:01*	*1*
4-Bromofluorobenzene	*91*		*72 - 130*		*06/02/23 15:01*	*1*

Lab Sample ID: LCS 400-627521/1002
Matrix: Water
Analysis Batch: 627521

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			50.0	51.2		ug/L		102	70 - 130		
Toluene			50.0	49.1		ug/L		98	70 - 130		
Ethylbenzene			50.0	51.7		ug/L		103	70 - 130		
Xylenes, Total			100	103		ug/L		103	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Toluene-d8 (Surr)	*94*		*64 - 132*
Dibromofluoromethane	*106*		*75 - 126*
4-Bromofluorobenzene	*95*		*72 - 130*

Eurofins Pensacola
3355 McLemore Drive
Pensacola, FL 32514
Phone: 850-474-1001 Fax: 850-478-2671

Chain of Custody Record

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Client Information	Sampler: Sarah Gardner/Sam C.	Lab PM: Whitmire, Cheyenne R	Carrier Tracking No(s):	COC No: 400-120301-41361.2
Client Contact: Joe Wiley	Phone: 303-291-2239	E-Mail: Cheyenne.Whitmire@et.eurofinsus.com	State of Origin:	Page: Page ~~2 of 2~~ 1 of 1
Company: El Paso Energy Corporation	PWSID:			Job #:
Address: 1001 Louisiana Street Room S1905B	Due Date Requested: Standard			
City: Houston	TAT Requested (days): Standard			
State, Zip: TX, 77002	Compliance Project: Δ Yes Δ No			
Phone:	PO #: WD1040027			
Email: joe.wiley@kindermorgan.com	WO #: Lateral L-40_ERG_ARF_04-26-2023			
Project Name: Lateral L-40.00	Project #: 40015823			
Site: Lat L-40	SSOW#:			

Analysis Requested

400-238138 COC

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	8260D - BTEX - 8260	8260D - BTEX - 8260	Total Number of containers	Special Instructions/Note:
			Preservation Code:			A	N		
Trip Blank	5/21/23	1350	—	Water	—	2	—	2	Trip Blank
DUP-01	5/21/23	1355	G	Water	—	2	—	2	Unpreserved
MW-1	5/21/23	1510	G	Water	—	2	—	2	Unpreserved
MW-2	5/21/23	1508	G	Water	—	2	—	2	Unpreserved
MW-3	5/21/23	1503	G	Water	—	2	—	2	Unpreserved
MW-4	5/21/23	1450	G	Water	—	2	—	2	Unpreserved
MW-6	5/21/23	1455	G	Water	—	2		2	
MW-7	5/21/23	1409	G	Water	—	2		2	
MW-8	5/21/23	1440	G	W	—	2		2	
MW-9	5/21/23	1430	G	W	—		2	2	Unpreserved
MW-10	5/21/23	1435	G	W	—		2	2	Unpreserved

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
[signature]	5/22/23 1200	Stantec	[signature]	5/23/23 910	[illegible]
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks: 1.1°C IR8

Ver: 06/08/2021

Login Sample Receipt Checklist

Client: Stantec Consulting Services Inc

Job Number: 400-238138-1
SDG Number: Lat L-40

Login Number: 238138
List Number: 1
Creator: Perez, Trina M

List Source: Eurofins Pensacola

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	1.1°C IR-8
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Accreditation/Certification Summary

Client: Stantec Consulting Services Inc
Project/Site: Lateral L-40.00

Job ID: 400-238138-1
SDG: Lat L-40

Laboratory: Eurofins Pensacola

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alabama	State	40150	06-30-23
ANAB	ISO/IEC 17025	L2471	02-22-26
Arkansas DEQ	State	88-0689	09-01-23
California	State	2510	06-30-23
Florida	NELAP	E81010	06-30-23
Georgia	State	E81010(FL)	06-30-23
Illinois	NELAP	200041	10-09-23
Kansas	NELAP	E-10253	10-31-23
Kentucky (UST)	State	53	06-30-23
Louisiana (All)	NELAP	30976	06-30-23
Louisiana (DW)	State	LA017	12-31-23
Maryland	State	233	09-30-23
Michigan	State	9912	06-30-23
North Carolina (WW/SW)	State	314	12-31-23
Oklahoma	NELAP	9810	08-31-23
Pennsylvania	NELAP	68-00467	01-31-24
South Carolina	State	96026	06-30-23
Tennessee	State	TN02907	06-30-23
Texas	NELAP	T104704286	09-30-23
US Fish & Wildlife	US Federal Programs	A22340	06-30-23
USDA	US Federal Programs	P330-21-00056	05-17-24
USDA	US Federal Programs	FLGNV23001	01-08-26
Virginia	NELAP	460166	06-14-23
West Virginia DEP	State	136	03-31-24

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ANALYTICAL REPORT

PREPARED FOR

Attn: Steve Varsa
Stantec Consulting Services Inc
11311 Aurora Avenue
Des Moines, Iowa 50322-7904

Generated 12/5/2023 8:09:12 PM

JOB DESCRIPTION

Lateral L-40.00

JOB NUMBER

400-246943-1

Eurofins Pensacola
3355 McLemore Drive
Pensacola FL 32514

See page two for job notes and contact information.

my EOL

Eurofins Pensacola

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing Southeast, LLC Project Manager.

Authorization

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(850)471-6222

Client: Stantec Consulting Services Inc
Project/Site: Lateral L-40.00

Laboratory Job ID: 400-246943-1

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Case Narrative

Client: Stantec Consulting Services Inc
Project/Site: Lateral L-40.00

Job ID: 400-246943-1

Job ID: 400-246943-1

Laboratory: Eurofins Pensacola

Narrative

Job Narrative
400-246943-1

Receipt
The samples were received on 11/17/2023 9:28 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 2.3º C.

GC/MS VOA
Method 8260D: Surrogate recovery for the following sample was outside the upper control limit: TB-01 (400-246943-9). This sample did not contain any target analytes; therefore, re-extraction and/or re-analysis was not performed.

Method 8260D: The following samples were diluted to bring the concentration of target analytes within the calibration range: MW-1 (400-246943-1) and DUP-01 (400-246943-8). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

VOA Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Detection Summary

Client: Stantec Consulting Services Inc
Project/Site: Lateral L-40.00

Job ID: 400-246943-1

Client Sample ID: MW-1 — Lab Sample ID: 400-246943-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	230		5.0		ug/L	5		8260D	Total/NA
Ethylbenzene	250		5.0		ug/L	5		8260D	Total/NA
Toluene	16		5.0		ug/L	5		8260D	Total/NA
Xylenes, Total	860		50		ug/L	5		8260D	Total/NA

Client Sample ID: MW-2 — Lab Sample ID: 400-246943-2

No Detections.

Client Sample ID: MW-3 — Lab Sample ID: 400-246943-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	11		1.0		ug/L	1		8260D	Total/NA

Client Sample ID: MW-4 — Lab Sample ID: 400-246943-4

No Detections.

Client Sample ID: MW-6 — Lab Sample ID: 400-246943-5

No Detections.

Client Sample ID: MW-9 — Lab Sample ID: 400-246943-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	2.3		1.0		ug/L	1		8260D	Total/NA
Toluene	1.3		1.0		ug/L	1		8260D	Total/NA

Client Sample ID: MW-10 — Lab Sample ID: 400-246943-7

No Detections.

Client Sample ID: DUP-01 — Lab Sample ID: 400-246943-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	240		5.0		ug/L	5		8260D	Total/NA
Ethylbenzene	280		5.0		ug/L	5		8260D	Total/NA
Toluene	18		5.0		ug/L	5		8260D	Total/NA
Xylenes, Total	930		50		ug/L	5		8260D	Total/NA

Client Sample ID: TB-01 — Lab Sample ID: 400-246943-9

No Detections.

This Detection Summary does not include radiochemical test results.

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Method Summary

Client: Stantec Consulting Services Inc
Project/Site: Lateral L-40.00

Job ID: 400-246943-1

Method	Method Description	Protocol	Laboratory
8260D	Volatile Organic Compounds by GC/MS	SW846	EET PEN
5030C	Purge and Trap	SW846	EET PEN

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET PEN = Eurofins Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

Sample Summary

Client: Stantec Consulting Services Inc
Project/Site: Lateral L-40.00

Job ID: 400-246943-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-246943-1	MW-1	Water	11/16/23 08:34	11/17/23 09:28
400-246943-2	MW-2	Water	11/16/23 08:42	11/17/23 09:28
400-246943-3	MW-3	Water	11/16/23 08:48	11/17/23 09:28
400-246943-4	MW-4	Water	11/16/23 08:58	11/17/23 09:28
400-246943-5	MW-6	Water	11/16/23 09:04	11/17/23 09:28
400-246943-6	MW-9	Water	11/16/23 09:10	11/17/23 09:28
400-246943-7	MW-10	Water	11/16/23 09:16	11/17/23 09:28
400-246943-8	DUP-01	Water	11/16/23 00:00	11/17/23 09:28
400-246943-9	TB-01	Water	11/16/23 08:00	11/17/23 09:28

Client Sample Results

Client: Stantec Consulting Services Inc
Project/Site: Lateral L-40.00

Job ID: 400-246943-1

Client Sample ID: MW-1

Date Collected: 11/16/23 08:34
Date Received: 11/17/23 09:28

Lab Sample ID: 400-246943-1

Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**230**		5.0		ug/L			11/22/23 13:32	5
Ethylbenzene	**250**		5.0		ug/L			11/22/23 13:32	5
Toluene	**16**		5.0		ug/L			11/22/23 13:32	5
Xylenes, Total	**860**		50		ug/L			11/22/23 13:32	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*98*		*72 - 130*		*11/22/23 13:32*	*5*
Dibromofluoromethane	*101*		*75 - 126*		*11/22/23 13:32*	*5*
Toluene-d8 (Surr)	*90*		*64 - 132*		*11/22/23 13:32*	*5*

Client Sample Results

Client: Stantec Consulting Services Inc
Project/Site: Lateral L-40.00

Job ID: 400-246943-1

Client Sample ID: MW-2

Date Collected: 11/16/23 08:42
Date Received: 11/17/23 09:28

Lab Sample ID: 400-246943-2

Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0		ug/L			11/22/23 08:17	1
Ethylbenzene	<1.0		1.0		ug/L			11/22/23 08:17	1
Toluene	<1.0		1.0		ug/L			11/22/23 08:17	1
Xylenes, Total	<10		10		ug/L			11/22/23 08:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*100*		*72 - 130*		*11/22/23 08:17*	*1*
Dibromofluoromethane	*108*		*75 - 126*		*11/22/23 08:17*	*1*
Toluene-d8 (Surr)	*92*		*64 - 132*		*11/22/23 08:17*	*1*

Client Sample Results

Client: Stantec Consulting Services Inc
Project/Site: Lateral L-40.00

Job ID: 400-246943-1

Client Sample ID: MW-3

Date Collected: 11/16/23 08:48
Date Received: 11/17/23 09:28

Lab Sample ID: 400-246943-3

Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**11**		1.0		ug/L			11/22/23 08:37	1
Ethylbenzene	<1.0		1.0		ug/L			11/22/23 08:37	1
Toluene	<1.0		1.0		ug/L			11/22/23 08:37	1
Xylenes, Total	<10		10		ug/L			11/22/23 08:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*97*		*72 - 130*		*11/22/23 08:37*	*1*
Dibromofluoromethane	*108*		*75 - 126*		*11/22/23 08:37*	*1*
Toluene-d8 (Surr)	*94*		*64 - 132*		*11/22/23 08:37*	*1*

Client Sample Results

Client: Stantec Consulting Services Inc
Project/Site: Lateral L-40.00

Job ID: 400-246943-1

Client Sample ID: MW-4

Date Collected: 11/16/23 08:58
Date Received: 11/17/23 09:28

Lab Sample ID: 400-246943-4

Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0		ug/L			11/22/23 08:56	1
Ethylbenzene	<1.0		1.0		ug/L			11/22/23 08:56	1
Toluene	<1.0		1.0		ug/L			11/22/23 08:56	1
Xylenes, Total	<10		10		ug/L			11/22/23 08:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*96*		*72 - 130*		*11/22/23 08:56*	*1*
Dibromofluoromethane	*116*		*75 - 126*		*11/22/23 08:56*	*1*
Toluene-d8 (Surr)	*92*		*64 - 132*		*11/22/23 08:56*	*1*

Client Sample Results

Client: Stantec Consulting Services Inc
Project/Site: Lateral L-40.00

Job ID: 400-246943-1

Client Sample ID: MW-6

Date Collected: 11/16/23 09:04
Date Received: 11/17/23 09:28

Lab Sample ID: 400-246943-5

Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0		ug/L			11/24/23 18:36	1
Ethylbenzene	<1.0		1.0		ug/L			11/24/23 18:36	1
Toluene	<1.0		1.0		ug/L			11/24/23 18:36	1
Xylenes, Total	<10		10		ug/L			11/24/23 18:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*106*		*72 - 130*		*11/24/23 18:36*	*1*
Dibromofluoromethane	*114*		*75 - 126*		*11/24/23 18:36*	*1*
Toluene-d8 (Surr)	*99*		*64 - 132*		*11/24/23 18:36*	*1*

Client Sample Results

Client: Stantec Consulting Services Inc
Project/Site: Lateral L-40.00

Job ID: 400-246943-1

Client Sample ID: MW-9
Date Collected: 11/16/23 09:10
Date Received: 11/17/23 09:28

Lab Sample ID: 400-246943-6
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**2.3**		1.0		ug/L			11/24/23 19:03	1
Ethylbenzene	<1.0		1.0		ug/L			11/24/23 19:03	1
Toluene	**1.3**		1.0		ug/L			11/24/23 19:03	1
Xylenes, Total	<10		10		ug/L			11/24/23 19:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*105*		*72 - 130*		*11/24/23 19:03*	*1*
Dibromofluoromethane	*113*		*75 - 126*		*11/24/23 19:03*	*1*
Toluene-d8 (Surr)	*99*		*64 - 132*		*11/24/23 19:03*	*1*

Client Sample Results

Client: Stantec Consulting Services Inc
Project/Site: Lateral L-40.00

Job ID: 400-246943-1

Client Sample ID: MW-10

Date Collected: 11/16/23 09:16
Date Received: 11/17/23 09:28

Lab Sample ID: 400-246943-7

Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0		ug/L			11/22/23 09:15	1
Ethylbenzene	<1.0		1.0		ug/L			11/22/23 09:15	1
Toluene	<1.0		1.0		ug/L			11/22/23 09:15	1
Xylenes, Total	<10		10		ug/L			11/22/23 09:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*95*		*72 - 130*		*11/22/23 09:15*	*1*
Dibromofluoromethane	*112*		*75 - 126*		*11/22/23 09:15*	*1*
Toluene-d8 (Surr)	*94*		*64 - 132*		*11/22/23 09:15*	*1*

Client Sample Results

Client: Stantec Consulting Services Inc
Project/Site: Lateral L-40.00

Job ID: 400-246943-1

Client Sample ID: DUP-01

Date Collected: 11/16/23 00:00
Date Received: 11/17/23 09:28

Lab Sample ID: 400-246943-8

Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**240**		5.0		ug/L			11/22/23 13:51	5
Ethylbenzene	**280**		5.0		ug/L			11/22/23 13:51	5
Toluene	**18**		5.0		ug/L			11/22/23 13:51	5
Xylenes, Total	**930**		50		ug/L			11/22/23 13:51	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*99*		*72 - 130*		*11/22/23 13:51*	*5*
Dibromofluoromethane	*103*		*75 - 126*		*11/22/23 13:51*	*5*
Toluene-d8 (Surr)	*92*		*64 - 132*		*11/22/23 13:51*	*5*

Client Sample Results

Client: Stantec Consulting Services Inc
Project/Site: Lateral L-40.00

Job ID: 400-246943-1

Client Sample ID: TB-01

Date Collected: 11/16/23 08:00
Date Received: 11/17/23 09:28

Lab Sample ID: 400-246943-9

Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0		ug/L			11/24/23 15:29	1
Ethylbenzene	<1.0		1.0		ug/L			11/24/23 15:29	1
Toluene	<1.0		1.0		ug/L			11/24/23 15:29	1
Xylenes, Total	<10		10		ug/L			11/24/23 15:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*107*		*72 - 130*		*11/24/23 15:29*	*1*
Dibromofluoromethane	*132*	*S1+*	*75 - 126*		*11/24/23 15:29*	*1*
Toluene-d8 (Surr)	*97*		*64 - 132*		*11/24/23 15:29*	*1*

Definitions/Glossary

Client: Stantec Consulting Services Inc
Project/Site: Lateral L-40.00

Job ID: 400-246943-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
S1+	Surrogate recovery exceeds control limits, high biased.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Lab Chronicle

Client: Stantec Consulting Services Inc
Project/Site: Lateral L-40.00

Job ID: 400-246943-1

Client Sample ID: MW-1
Date Collected: 11/16/23 08:34
Date Received: 11/17/23 09:28

Lab Sample ID: 400-246943-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		5	5 mL	5 mL	651404	11/22/23 13:32	WPD	EET PEN

Client Sample ID: MW-2
Date Collected: 11/16/23 08:42
Date Received: 11/17/23 09:28

Lab Sample ID: 400-246943-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	651404	11/22/23 08:17	WPD	EET PEN

Client Sample ID: MW-3
Date Collected: 11/16/23 08:48
Date Received: 11/17/23 09:28

Lab Sample ID: 400-246943-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	651404	11/22/23 08:37	WPD	EET PEN

Client Sample ID: MW-4
Date Collected: 11/16/23 08:58
Date Received: 11/17/23 09:28

Lab Sample ID: 400-246943-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	651404	11/22/23 08:56	WPD	EET PEN

Client Sample ID: MW-6
Date Collected: 11/16/23 09:04
Date Received: 11/17/23 09:28

Lab Sample ID: 400-246943-5
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	651607	11/24/23 18:36	BPO	EET PEN

Client Sample ID: MW-9
Date Collected: 11/16/23 09:10
Date Received: 11/17/23 09:28

Lab Sample ID: 400-246943-6
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	651607	11/24/23 19:03	BPO	EET PEN

Client Sample ID: MW-10
Date Collected: 11/16/23 09:16
Date Received: 11/17/23 09:28

Lab Sample ID: 400-246943-7
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	651404	11/22/23 09:15	WPD	EET PEN

Lab Chronicle

Client: Stantec Consulting Services Inc
Project/Site: Lateral L-40.00

Job ID: 400-246943-1

Client Sample ID: DUP-01
Date Collected: 11/16/23 00:00
Date Received: 11/17/23 09:28

Lab Sample ID: 400-246943-8
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		5	5 mL	5 mL	651404	11/22/23 13:51	WPD	EET PEN

Client Sample ID: TB-01
Date Collected: 11/16/23 08:00
Date Received: 11/17/23 09:28

Lab Sample ID: 400-246943-9
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	651607	11/24/23 15:29	BPO	EET PEN

Client Sample ID: Method Blank
Date Collected: N/A
Date Received: N/A

Lab Sample ID: MB 400-651404/4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	651404	11/22/23 07:58	WPD	EET PEN

Client Sample ID: Method Blank
Date Collected: N/A
Date Received: N/A

Lab Sample ID: MB 400-651607/29
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	651607	11/24/23 10:34	BPO	EET PEN

Client Sample ID: Lab Control Sample
Date Collected: N/A
Date Received: N/A

Lab Sample ID: LCS 400-651404/1002
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	651404	11/22/23 07:19	WPD	EET PEN

Client Sample ID: Lab Control Sample
Date Collected: N/A
Date Received: N/A

Lab Sample ID: LCS 400-651607/1001
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	651607	11/24/23 09:19	BPO	EET PEN

Client Sample ID: MW-3
Date Collected: 11/16/23 08:48
Date Received: 11/17/23 09:28

Lab Sample ID: 400-246943-3 MS
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	651404	11/22/23 12:14	WPD	EET PEN

Lab Chronicle

Client: Stantec Consulting Services Inc
Project/Site: Lateral L-40.00

Job ID: 400-246943-1

Client Sample ID: MW-3
Date Collected: 11/16/23 08:48
Date Received: 11/17/23 09:28

Lab Sample ID: 400-246943-3 MSD
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	651404	11/22/23 12:34	WPD	EET PEN

Laboratory References:

EET PEN = Eurofins Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

QC Association Summary

Client: Stantec Consulting Services Inc
Project/Site: Lateral L-40.00

Job ID: 400-246943-1

GC/MS VOA

Analysis Batch: 651404

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-246943-1	MW-1	Total/NA	Water	8260D	
400-246943-2	MW-2	Total/NA	Water	8260D	
400-246943-3	MW-3	Total/NA	Water	8260D	
400-246943-4	MW-4	Total/NA	Water	8260D	
400-246943-7	MW-10	Total/NA	Water	8260D	
400-246943-8	DUP-01	Total/NA	Water	8260D	
MB 400-651404/4	Method Blank	Total/NA	Water	8260D	
LCS 400-651404/1002	Lab Control Sample	Total/NA	Water	8260D	
400-246943-3 MS	MW-3	Total/NA	Water	8260D	
400-246943-3 MSD	MW-3	Total/NA	Water	8260D	

Analysis Batch: 651607

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-246943-5	MW-6	Total/NA	Water	8260D	
400-246943-6	MW-9	Total/NA	Water	8260D	
400-246943-9	TB-01	Total/NA	Water	8260D	
MB 400-651607/29	Method Blank	Total/NA	Water	8260D	
LCS 400-651607/1001	Lab Control Sample	Total/NA	Water	8260D	

QC Sample Results

Client: Stantec Consulting Services Inc
Project/Site: Lateral L-40.00

Job ID: 400-246943-1

Method: 8260D - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 400-651404/4
Matrix: Water
Analysis Batch: 651404

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0		ug/L			11/22/23 07:58	1
Ethylbenzene	<1.0		1.0		ug/L			11/22/23 07:58	1
Toluene	<1.0		1.0		ug/L			11/22/23 07:58	1
Xylenes, Total	<10		10		ug/L			11/22/23 07:58	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*96*		*72 - 130*		*11/22/23 07:58*	*1*
Dibromofluoromethane	*110*		*75 - 126*		*11/22/23 07:58*	*1*
Toluene-d8 (Surr)	*95*		*64 - 132*		*11/22/23 07:58*	*1*

Lab Sample ID: LCS 400-651404/1002
Matrix: Water
Analysis Batch: 651404

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	50.0	47.3		ug/L		95	70 - 130
m-Xylene & p-Xylene	50.0	45.7		ug/L		91	70 - 130
o-Xylene	50.0	46.5		ug/L		93	70 - 130
Ethylbenzene	50.0	44.7		ug/L		89	70 - 130
Toluene	50.0	42.6		ug/L		85	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*98*		*72 - 130*
Dibromofluoromethane	*104*		*75 - 126*
Toluene-d8 (Surr)	*93*		*64 - 132*
1,2-Dichloroethane-d4 (Surr)	*122*		*67 - 134*

Lab Sample ID: 400-246943-3 MS
Matrix: Water
Analysis Batch: 651404

Client Sample ID: MW-3
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	11		50.0	68.0		ug/L		113	56 - 142
m-Xylene & p-Xylene	<5.0		50.0	53.4		ug/L		107	57 - 130
o-Xylene	<5.0		50.0	55.8		ug/L		112	61 - 130
Ethylbenzene	<1.0		50.0	52.0		ug/L		104	58 - 131
Toluene	<1.0		50.0	49.6		ug/L		99	65 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene	*100*		*72 - 130*
Dibromofluoromethane	*103*		*75 - 126*
Toluene-d8 (Surr)	*91*		*64 - 132*
1,2-Dichloroethane-d4 (Surr)	*134*		*67 - 134*

QC Sample Results

Client: Stantec Consulting Services Inc
Project/Site: Lateral L-40.00

Job ID: 400-246943-1

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 400-246943-3 MSD
Matrix: Water
Analysis Batch: 651404

Client Sample ID: MW-3
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	11		50.0	67.4		ug/L		112	56 - 142	1	30
m-Xylene & p-Xylene	<5.0		50.0	56.2		ug/L		112	57 - 130	5	30
o-Xylene	<5.0		50.0	57.9		ug/L		116	61 - 130	4	30
Ethylbenzene	<1.0		50.0	53.9		ug/L		108	58 - 131	4	30
Toluene	<1.0		50.0	54.2		ug/L		108	65 - 130	9	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene	*108*		*72 - 130*
Dibromofluoromethane	*99*		*75 - 126*
Toluene-d8 (Surr)	*96*		*64 - 132*
1,2-Dichloroethane-d4 (Surr)	*129*		*67 - 134*

Lab Sample ID: MB 400-651607/29
Matrix: Water
Analysis Batch: 651607

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0		ug/L			11/24/23 10:34	1
Ethylbenzene	<1.0		1.0		ug/L			11/24/23 10:34	1
Toluene	<1.0		1.0		ug/L			11/24/23 10:34	1
Xylenes, Total	<10		10		ug/L			11/24/23 10:34	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*106*		*72 - 130*		*11/24/23 10:34*	*1*
Dibromofluoromethane	*113*		*75 - 126*		*11/24/23 10:34*	*1*
Toluene-d8 (Surr)	*98*		*64 - 132*		*11/24/23 10:34*	*1*

Lab Sample ID: LCS 400-651607/1001
Matrix: Water
Analysis Batch: 651607

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	50.0	44.9		ug/L		90	70 - 130
m-Xylene & p-Xylene	50.0	41.8		ug/L		84	70 - 130
o-Xylene	50.0	40.5		ug/L		81	70 - 130
Ethylbenzene	50.0	42.4		ug/L		85	70 - 130
Toluene	50.0	44.5		ug/L		89	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*107*		*72 - 130*
Dibromofluoromethane	*106*		*75 - 126*
Toluene-d8 (Surr)	*101*		*64 - 132*
1,2-Dichloroethane-d4 (Surr)	*107*		*67 - 134*

Eurofins Pensacola
3355 McLemore Drive
Pensacola, FL 32514
Phone: 850-474-1001 Fax: 850-478-2671

Chain of Custody Record

eurofins | Environment Testing

400-246943 COC

Client Information	Sampler: SRC / ERB	Lab PM: Whitmire, Cheyenne R	er Tracking No(s):	COC No: 400-124040-41361.2
Client Contact: Joe Wiley	Phone: 515-253-0830	E-Mail: Cheyenne.Whitmire@et.eurofinsus.com	State of Origin:	Page: Page 2 of 2 ERB
Company: El Paso Energy Corporation	PWSID:			Job #:
Address: 1001 Louisiana Street Room S1905B	Due Date Requested: STD			
City: Houston	TAT Requested (days):			
State, Zip: TX, 77002	Compliance Project: Δ Yes Δ No			
Phone:	PO #: WD1040027			
Email: joe.wiley@kindermorgan.com	WO #: Lateral L-40_ERG_ARF_10_24_2023			
Project Name: Lateral L-40.00	Project #: 40015823			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260D - BTEX - 8260	8260D - BTEX - 8260	Total Number of containers	Special Instructions/Note:
			Preservation Code:				A	N		
MW-1	11/16/2023	0834	G	Water	N	N	-	X		
MW-2	11/16/2023	0842	G	Water	N	N	-	X		
MW-3	11/16/2023	0848	G	Water	N	N	-	X		
MW-4	11/16/2023	0858	G	Water	N	N	-	X		
MW-6	11/16/2023	0904	G	Water	N	N	X			
MW-9	11/16/2023	0910	G	Water	N	N	X			
MW-10	11/16/2023	0916	G	Water	N	N	-	X		
DUP-01	11/16/2023	—	G	Water	N	N	-	X		
TB-01	11/16/2023	0800	G	Water	N	N	X			

ERB

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company:	Received by:	Date/Time:	Company
Eric Early	11/16/2023 1130	STN	BP	11/16/23 928	
Relinquished by:	Date/Time	Company	Received by:	Date/Time	Company
				BP	
Relinquished by:	Date/Time	Company	Received by:	Date/Time.	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 2.3°C IR8

Ver: 06/08/2021

Login Sample Receipt Checklist

Client: Stantec Consulting Services Inc Job Number: 400-246943-1

Login Number: 246943 **List Source: Eurofins Pensacola**
List Number: 1
Creator: Earnest, Tamantha

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	2.3°C IR8
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Accreditation/Certification Summary

Client: Stantec Consulting Services Inc
Job ID: 400-246943-1
Project/Site: Lateral L-40.00

Laboratory: Eurofins Pensacola

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alabama	State	40150	06-30-24
ANAB	ISO/IEC 17025	L2471	02-22-26
Arkansas DEQ	State	88-00689	08-01-24
California	State	2510	06-30-24
Florida	NELAP	E81010	06-30-24
Georgia	State	E81010(FL)	06-30-24
Illinois	NELAP	200041	10-09-24
Kansas	NELAP	E-10253	10-31-24
Kentucky (UST)	State	53	06-30-24
Louisiana (All)	NELAP	30976	06-30-24
Louisiana (DW)	State	LA017	12-31-23
North Carolina (WW/SW)	State	314	12-31-23
Oklahoma	NELAP	9810	08-31-24
Pennsylvania	NELAP	68-00467	01-31-24
South Carolina	State	96026	06-30-24
Tennessee	State	TN02907	06-30-24
Texas	NELAP	T104704286	09-30-24
US Fish & Wildlife	US Federal Programs	A22340	06-30-24
USDA	US Federal Programs	P330-21-00056	05-17-24
USDA	US Federal Programs	FLGNV23001	01-08-26
Virginia	NELAP	460166	06-14-24
West Virginia DEP	State	136	03-31-24
West Virginia DEP	State	136	03-31-24

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

CONDITIONS

Action 327994

CONDITIONS

Operator:	OGRID:
El Paso Natural Gas Company, L.L.C 1001 Louisiana Street Houston, TX 77002	7046
	Action Number: 327994
	Action Type: [UF-GWA] Ground Water Abatement (GROUND WATER ABATEMENT)

CONDITIONS

Created By	Condition	Condition Date
michael.buchanan	Review of the 2023 Annual Groundwater Monitoring Report for Lateral L-40 Line Drip: content satisfactory 1. Continue to conduct groundwater monitoring on a semi-annual basis in wells that don't have LNAPL present. 2. Analysis will include BTEX by EPA method 8260. 3. Plan on conducting biennial sampling for site wide wells, if that was not completed in the 2nd quarter of 2024. Please notify OCD of this change in schedule if necessary. 4. Recover LNAPL in MW-5 on monthly basis if feasible. 5. Submit the 2024 annual report to OCD by April 1, 2025.	9/4/2024