Fogelson 4-1
Incident Number: nAUTOfAB000192
Meter Code: 73220
T29N, R11W, Sec 4, Unit P

### REVIEWED

By Nelson Velez at 11:46 am, May 22, 2023

### **SITE DETAILS**

Site Location: Latitude: 36.750660 N, Longitude: -107.991560 W

**Land Type:** Federal

Former Operator: Burlington Resources (well P&A'd)

# SITE BACKGROUND

Review of 2022 Annual Groundwater Report: **Content satisfactory** 

- 1. Proceed with Planned Future Activities as stated in this report.
- Submit next annual groundwater monitoring report no later than April 1, 2024.

Environmental remediation activities at Fogelson 4-1 (Site) are being managed pursuant to the procedures set forth in the document entitled, "Remediation Plan for Groundwater Encountered During Pit Closure Activities" (Remediation Plan, El Paso Natural Gas Company / El Paso Field Services Company, 1995). This Remediation Plan was conditionally approved by the New Mexico Oil Conservation Division (NMOCD) in correspondence dated November 30, 1995; and the NMOCD approval conditions were adopted into El Paso CGP Company (EPCGP's) program methods. The Site was operated by Burlington Resources Oil & Gas Company LP (BR) until January 2014, and the final reclamation was completed by BR in 2016.

The Site is located on Federal land. An initial site assessment was completed in March 1994, and an excavation of 65 cubic yards (cy), to a depth of approximately 11 feet below ground surface (bgs), was completed in April 1994. Monitoring wells were installed in 1995 (MW-1, MW-2, and MW-3), 2017 (MW-4, MW-5, MW-6, and MW-7), and 2018 (MW-1R [replaced MW-1], MW-8, and MW-9). Monitoring wells MW-10 and MW-11 were advanced and installed in 2022. One soil boring (S-12) was also advanced in 2022. The location of the Site is depicted on Figure 1. A Site Plan map depicting the locations of monitoring wells, soil borings, and current and historical site features is provided as Figure 2.

In August 2001 a nutrient injection of an Oxygen Release Compound was completed. Historically, light non-aqueous phase liquid (LNAPL) has periodically been encountered and recovered from MW-1 and MW-5. Mobile dual-phase extraction (MDPE) events to enhance LNAPL recovery were conducted in 2018 and 2021. Quarterly manual LNAPL recovery began in the second quarter of 2020 and has continued through 2022. Groundwater sampling is being conducted on a semi-annual basis.

### MONITORING WELL INSTALLATION ACTIVITIES

The planned monitoring well locations for MW-10, MW-11, and MW-12 were staked for permitting and utility locating purposes prior to completing public 811 locating activities. The advancement and installation of MW-10 was completed in accordance with the March 22, 2022 *Monitoring Well Installation Work Plan* (March 2022 Work Plan), subsequently approved by the NMOCD. The advancement and installation of MW-11 and advancement of MW-12 (advanced but not installed due to drilling auger refusal) were completed in accordance with the September 27, 2022 *Additional Monitoring Well Installation Work Plan* (September 2022 Work Plan) subsequently approved by the NMOCD. The NMOCD was notified of the start of the MW-10 drilling activities on April 11, 2022 and the start of MW-11 and MW-12 drilling activities on September 28, 2022 (Appendix A).

Monitoring well MW-10 was advanced and installed in April 2022 and monitoring well MW-11 was advanced and installed in October 2022. Monitoring well MW-12 was advanced in October 2022 but was not installed due to drilling refusal on bedrock above field-apparent groundwater. The installation of MW-10 and MW-11 served to further characterize the extent of the dissolved-phase hydrocarbons at the

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Site. Ground surface and casing elevations of the new monitoring wells were subsequently surveyed to tie-in to the existing monitoring well network.

During advancement of each monitoring well, one soil sample at MW-10, one soil sample at MW-11, and three soil samples at SB-12 were retained from above the field-interpreted water table and placed in 4-ounce jars for laboratory analysis. Retained sample jars were stored in an ice-filled cooler and shipped under standard chain-of-custody protocols to Eurofins Environment Testing Southeast, LLC, in Pensacola, Florida (Eurofins). The soil samples were analyzed for the presence of benzene, toluene, ethylbenzene, and total xylenes (BTEX) according to United States Environmental Protection Agency (EPA) Method SW846 8021B, gasoline range organics, diesel range organics, and motor oil range organics using EPA Method 8015B; and chloride according to EPA Method 325.2.

The new monitoring wells were constructed of 2-inch-diameter, Schedule 40 polyvinyl chloride (PVC), with 0.010-inch, continuous, factory-slotted PVC screen. Monitoring well MW-10 was installed with a 20 foot well screen, set from 35 to 55 feet bgs. Monitoring well MW-11 was installed with a 25-foot well screen, set from 31 to 56 feet bgs. The monitoring wells were installed at depths that bisected the field-observed or expected water table. A 3-foot seal of bentonite chips was placed above the sandpack and hydrated, and the remaining annular space was filled with bentonite grout. The two monitoring wells were completed as stick-up wells, each with a locking protective casing and a concrete surface completion. Borehole logs and well construction diagrams, and associated New Mexico Office of the State Engineer (NMOSE) forms are provided in Appendix B.

Following advancement, soil boring SB-12 was plugged and abandoned in accordance with NMOSE requirements. A copy of the NMOSE abandonment form for the borehole is included in Appendix C.

Monitoring well development was performed using a down-hole pump until visibly clear groundwater was observed. Development and decontamination water generated during the installation of MW-10 and MW-11, and advancement of SB-12, was containerized and transported to Envirotech, Inc. (Envirotech), located south of Bloomfield, NM for disposal. Copies of the wastewater disposal documentation are included as Appendix D. Soil cuttings were drummed and staged on site for later removal and disposal at Envirotech. Envirotech's soil drum disposal documentation is contained in Appendix E.

# **GROUNDWATER SAMPLING ACTIVITIES**

Pursuant to the Remediation Plan, Stantec provided field work notifications via electronic mail (e-mail) to NMOCD on May 12, 2022, and October 26, 2022, prior to initiating groundwater sampling activities at the Site. Copies of the 2022 NMOCD notifications are provided in Appendix A. On May 21 and October 30, 2022, water levels were gauged at each monitoring well. During both events, groundwater samples were collected from MW-4, MW-6, MW-7, MW-8, MW-9, and MW-10. During the October 30, 2022 event, a groundwater sample was also collected from MW-1R and MW-11. During each sampling event, groundwater samples were collected using HydraSleeve<sup>TM</sup> (HydraSleeve) no-purge groundwater sampling devices. The HydraSleeves were set during the previous sampling event. 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 screened interval.

The groundwater samples were placed into laboratory-supplied sample containers, packed on ice, and shipped under standard chain-of-custody protocols to Eurofins where they were analyzed for BTEX. One laboratory-provided trip blank and one blind field duplicate were also collected during each groundwater

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sampling event. The groundwater samples, field duplicate, and trip blank were analyzed using United States Environmental Protection Agency (EPA) Method 8260.

The unused sample water was combined in a waste container and transported to Envirotech for disposal. Waste disposal documentation is included as Appendix D.

### **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. Documentation of NMOCD notification of site LNAPL recovery activities in 2022 is provided in Appendix A. LNAPL was observed in monitoring well MW-5 during the March, May, July, and October recovery events in 2022.

The LNAPL recovery data is summarized on Table 1. During the groundwater sampling site visits in May and October, the recovered LNAPL was disposed of with wastewater generated during the monitoring well sampling activities. Recovered LNAPL from the March site visit was transported for disposal at Basin Disposal, Inc. in Bloomfield, NM, and recovered LNAPL from the August site visit was disposed at Envirotech (Appendix D).

### **SUMMARY TABLES**

Historic analytical and water level data are summarized in Table 2 and Table 3, respectively. LNAPL recovery data is summarized on Table 1. Soil analytical data is summarized in Table 4.

### **SITE MAPS**

Groundwater analytical maps (Figures 3 and 5) and groundwater elevation contour maps (Figures 4 and 6) summarize results of the 2022 groundwater sampling and gauging events. Figure 7 summarizes soil sample analytical results.

### ANALYTICAL LAB REPORTS

The groundwater analytical lab reports are included as Appendix F. The soil analytical lab report is included in Appendix G.

### **GROUNDWATER RESULTS**

- The groundwater elevations indicate the flow direction at the Site was generally to the northwest during 2022 (see Figures 4 and 6).
- LNAPL was observed in MW-5 during the May and October 2022 sampling events; therefore, no groundwater samples were collected from this location.
- The groundwater samples from both events from MW-10 exceeded the New Mexico Water Quality Control Commission (NMWQCC) standard (10 micrograms per liter [μg/L]) for benzene in groundwater. Benzene was not detected or was detected below the NMWQCC standard in the remaining groundwater samples collected from site monitoring wells in 2022.

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- Concentrations of toluene were either below the NMWQCC standard (750 μg/L) or not detected in the Site monitoring wells sampled in 2022.
- The groundwater samples collected from MW-10 during both events exceeded the NMWQCC standard (750 micrograms per liter [μg/L]) for ethylbenzene in groundwater. Ethylbenzene was not detected or was detected below the NMWQCC standard in the remaining groundwater samples collected from site monitoring wells in 2022.
- The groundwater samples collected from MW-10 during both events exceeded the NMWQCC standard (620 micrograms per liter [μg/L]) for total xylenes in groundwater. Total xylenes were not detected or detected below the NMWQCC standard in the remaining groundwater samples collected from site monitoring wells in 2022.
- Field duplicate samples were collected from monitoring well MW-7 during both events in 2022. There were no significant differences between concentrations in the primary and duplicate samples.
- Detectable concentrations of BTEX constituents were not reported in the trip blanks collected and analyzed as part of the 2022 groundwater monitoring events.

### **SOIL RESULTS**

- Soil samples were collected during advancement of soil boring SB-12 and monitoring wells MW-10 and MW-11. Results are shown in tabular format in Table 4 and graphically in Figure 7.
- Concentrations of benzene were not detected in soil samples collected during advancement of SB-12, MW-10, and MW-11.
- Concentrations of total BTEX were not detected in soil samples collected during advancement of SB-12, MW-10, and MW-11.
- Concentrations of TPH were either less than the applicable NMOCD soil closure criteria (100 mg/kg) or not detected in soil samples collected during advancement of SB-12, MW-10, and MW-11.
- Concentrations of chloride were either less than the applicable NMOCD soil closure criteria (600 mg/kg) or not detected in soil samples collected during advancement of SB-12, MW-10, and MW-11.

### **PLANNED FUTURE ACTIVITIES**

Groundwater monitoring events will continue to be conducted on a semi-annual basis. As site closure is not being recommended at this time, 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 to be conducted in the second calendar quarter of 2023.

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Quarterly site visits will continue at the Site in 2023 to facilitate removal of measurable LNAPL where it is present.

The activities conducted in 2023, and their results, will be summarized in the 2023 Annual Report, to be submitted by April 1, 2024.

# **TABLES**

TABLE 1 – LIGHT NON-AQUEOUS PHASE LIQUID RECOVERY SUMMARY

TABLE 2 – GROUNDWATER ANALYTICAL RESULTS

TABLE 3 – GROUNDWATER ELEVATION RESULTS

TABLE 4 – SOIL ANALYTICAL RESULTS

TABLE 1
LIGHT NON-AQUEOUS PHASE LIQUID RECOVERY SUMMARY

	Fogelson 4-1 Com #14								
Well ID - MW-1	Depth to LNAPL (Feet)	Depth to Water (Feet)	Measured Thickness (Feet)	LNAPL Recovered (gal)	Water Recovered (gal)	Recovery Type			
Date									
4/16/2016	45.00	45.05	0.05	<0.01	0.01	manual			
10/14/2016	45.12	45.12	<0.01	<0.01	0.01	manual			
6/10/2017	45.25	45.30	0.05	<0.01	0.01	manual			
11/13/2017	45.42	45.43	0.01	< 0.01	0.01	manual			
5/17/2018	45.48	45.48	<0.01	<0.01	0.01	manual			
	MW	-1 replaced	with MW-1R	on 9/28/2018					
			Total:	<0.01	0.05				

Well ID - MW-1R						
8/18/2020	47.69	47.69	<0.01	<0.01	0.12	manual
			Total:	0	0.12	

Well ID - MW-5						
11/10/2019	44.87	44.99	0.12	0.08	0.10	manual
5/11/2020	44.84	45.01	0.17	0.46	0.33	manual
8/18/2020	46.03	46.08	0.05	0.05	0.26	manual
11/14/2020	45.06	45.10	0.04	<0.01	0.03	manual
3/17/2021	44.87	45.05	0.18	0.08	0.54	manual
5/22/2021	45.10	45.26	0.16	0.01	0.06	manual
8/27/2021	45.11	45.35	0.24	0.50	20.5	Mobile DPE*
11/14/2021	45.03	45.72	0.69	0.21	0.21	manual
3/22/2022	44.94	45.96	1.02	0.57	0.14	manual
5/21/2022	45.02	45.55	0.53	0.30	0.17	manual
7/29/2022	45.02	45.81	0.79	0.37	0.08	manual
10/30/2022	44.96	46.14	1.18	0.76	0.00	manual
			Total:	3.39	22.42	

Notes:

gal = gallons.

DPE = dual phase extraction

LNAPL recovery data for 2015 and previous years documented in previously-submitted reports.

<sup>\* =</sup> Mobile Dual Phase Extraction (DPE) includes calculated recovered hydrocarbon vapors.

<sup>&</sup>quot;LNAPL" = light non-aqueous phase liquid

		Fogel	son 4-1		
		Benzene	Toluene	Ethylbenzene	Total Xylenes
Location	Date	(µg/L)	(µg/L)	(µg/L)	(μg/L)
NMWQC	C Standards:	10	750	750	620
MW-1	11/06/95	1520	1050	907	9180
MW-1	12/06/96	1110	388	713	7730
MW-1	03/10/97	1240	318	850	9050
MW-1	06/06/97	1080	268	747	7700
MW-1	03/30/98	1070	522	789	8430
MW-1	06/04/98	1090	627	837	8880
MW-1	06/15/99	1000	550	770	7800
MW-1	06/19/00	790	280	1100	9300
MW-1	10/02/00	580	600	950	8000
MW-1	12/05/00	420	610	770	6000
MW-1	05/30/01	340	470	710	4800
MW-1	11/26/01	420	330	760	3400
MW-1	05/15/02	430	230	900	6000
MW-1	06/10/02	NS	NS	NS	NS
MW-1	11/04/02	625	370	862	5210
MW-1	05/21/03	339	296	723	4730
MW-1	11/15/03	401	308	755	4700
MW-1	11/16/04	185	59.9	550	2800
MW-1	11/08/05	174	34.3	675	2440
MW-1	11/08/06	206	41.6	694	2460
MW-1	11/29/07	NS	NS	NS	NS
MW-1	01/25/08	NS	NS	NS	NS
MW-1	08/12/08	NS	NS	NS	NS
MW-1	11/07/08	NS	NS	NS	NS
MW-1	02/06/09	NS	NS	NS	NS
MW-1	05/04/09	NS	NS	NS	NS
MW-1	08/26/09	NS	NS	NS	NS
MW-1	11/03/09	230	24.2 J	901	3290
MW-1	02/11/10	NS	NS	NS	NS
MW-1	05/25/10	NS	NS	NS	NS
MW-1	09/24/10	NS	NS	NS	NS
MW-1	11/09/10	198	23.5	840	3170
MW-1	02/01/11	NS	NS	NS	NS
MW-1	05/03/11	NS	NS	NS	NS
MW-1	09/27/11	NS	NS	NS	NS
MW-1	11/16/11	171	3.8 J	818	2770
MW-1	02/16/12	NS	NS	NS	NS
MW-1	05/07/12	NS	NS	NS	NS
MW-1	06/04/13	20	9.3 J	650	2400
MW-1	09/09/13	160	20	760	3200
MW-1	12/13/13	150	41	630	2700

		Fogel	son 4-1		
		Benzene	Toluene	Ethylbenzene	Total Xylenes
Location	Date	(µg/L)	(µg/L)	(µg/L)	(μg/L)
NMWQC	C Standards:	10	750	750	620
MW-1	04/05/14	4.3	<0.38	20	76
MW-1	10/21/14	200	11	770	3600
MW-1	05/30/15	160	38	810	3700
MW-1	11/18/15	NS	NS	NS	NS
MW-1	04/16/16	NS	NS	NS	NS
MW-1	10/14/16	NS	NS	NS	NS
MW-1	06/10/17	NS	NS	NS	NS
MW-1	11/13/17	NS	NS	NS	NS
MW-1	05/17/18	NS	NS	NS	<0.01
	MW-1 i	replaced with	MW-1R on	9/28/2018	
MW-1R	10/28/18	1.6	<1.0	<1.0	180
MW-1R	05/23/19	2.5	<1.0	<1.0	<10
MW-1R	11/13/19	<1.0	<1.0	<1.0	<10
MW-1R	05/15/20	<1.0	<1.0	<1.0	<10
DUP-1(MW-1R)*	05/15/20	<1.0	<1.0	<1.0	<10
MW-1R	08/18/20	NS	NS	NS	NS
MW-1R	11/14/20	<1.0	<1.0	<1.0	<10
MW-1R	03/17/21	NS	NS	NS	NS
MW-1R	05/22/21	<1.0	<1.0	<1.0	<10
MW-1R	08/27/21	NS	NS	NS	NS
MW-1R	11/14/21	<1.0	<1.0	<1.0	<10
DUP-1(MW-1R)*	11/14/21	<1.0	<1.0	<1.0	<10
MW-1R	03/22/22	NS	NS	NS	NS
MW-1R	05/21/22	NS	NS	NS	NS
MW-1R	07/29/22	NS	NS	NS	NS
MW-1R	10/30/22	<1.0	<1.0	<1.0	<10
MW-2	07/27/00	<0.5	<0.5	8.8	<0.5
MW-2	05/30/01	<0.5	<0.5	7.5	1
MW-2	05/30/01	<0.5	<0.5	2	<1
MW-2	11/04/02	NS	NS	NS NS	NS
MW-2	05/21/03	NS	NS	NS NS	NS NS
MW-2	11/15/03	NS	NS	NS NS	NS NS
MW-2	11/16/04	NS	NS	NS NS	NS NS
MW-2	11/08/05	NS	NS	NS NS	NS NS
MW-2	11/08/05	NS	NS	NS NS	NS NS
MW-2	11/29/07	NS	NS	NS NS	NS NS
MW-2	08/12/08	NS	NS	NS NS	NS NS
MW-2	11/07/08	NS	NS	NS NS	NS NS
MW-2	02/06/09	NS	NS	NS NS	NS NS
MW-2	05/04/09	NS	NS	NS NS	NS NS
IVIVV-Z	03/04/09	INO	INO	INO	INO

		Fogel	son 4-1		
		Benzene	Toluene	Ethylbenzene	Total Xylenes
Location	Date	(µg/L)	(µg/L)	(µg/L)	(µg/L)
NMWQC	C Standards:	10	750	750	620
MW-2	08/26/09	NS	NS	NS	NS
MW-2	11/03/09	NS	NS	NS	NS
MW-2	02/11/10	NS	NS	NS	NS
MW-2	05/25/10	NS	NS	NS	NS
MW-2	09/24/10	NS	NS	NS	NS
MW-2	11/09/10	<2	<2	<2	<6
MW-2	02/01/11	NS	NS	NS	NS
MW-2	05/03/11	NS	NS	NS	NS
MW-2	09/27/11	NS	NS	NS	NS
MW-2	11/16/11	<1	<1	<1	<3
MW-2	02/16/12	NS	NS	NS	NS
MW-2	05/07/12	NS	NS	NS	NS
MW-2	06/04/13	<0.14	< 0.30	<0.20	<0.23
MW-2	09/09/13	<0.14	< 0.30	<0.20	<0.23
MW-2	12/13/13	<0.20	0.52 J	0.38 J	0.85 J
MW-2	04/05/14	<0.20	<0.38	<0.20	<0.65
MW-2	10/21/14	<0.38	<0.70	<0.50	<1.6
MW-2	05/30/15	<1.0	<5.0	<1.0	<5.0
MW-2	11/18/15	<1.0	<1.0	<1.0	<3.0
MW-2	04/16/16	<1.0	<5.0	<1.0	<5.0
MW-2	10/14/16	<1.0	<5.0	<1.0	<5.0
MW-2	06/10/17	<1.0	<5.0	<1.0	<5.0
MW-2	11/13/17	<1.0	<1.0	<1.0	<10
MW-2	05/17/18	<1.0	<1.0	<1.0	<10
MW-2	10/28/18	<1.0	<1.0	<1.0	<10
MW-2	05/23/19	<1.0	<1.0	<1.0	<10
MW-2	11/13/19	NS	NS	NS	NS
MW-2	05/15/20	NS	NS	NS	NS
MW-2	11/14/20	NS	NS	NS	NS
MW-2	05/22/21	<1.0	<1.0	<1.0	<10
MW-2	08/27/21	NS	NS	NS	NS
MW-2	11/14/21	NS	NS	NS	NS
MW-2	05/21/22	NS	NS	NS	NS
MW-2	10/30/22	NS	NS	NS	NS
MW-3	07/27/00	27	35	170	520
MW-3	05/30/01	1.3	<0.5	40	2.8
MW-3	05/15/02	0.64	<0.5	17	1.2
MW-3	11/04/02	NS	NS	NS	NS
MW-3	05/21/03	<1	<1	18.2	<3
MW-3	11/15/03	NS	NS	NS	NS

		Fogel	son 4-1		
		Benzene	Toluene	Ethylbenzene	Total Xylenes
Location	Date	(μg/L)	(µg/L)	(µg/L)	(μg/L)
NMWQC	C Standards:	10	750	750	620
MW-3	11/16/04	NS	NS	NS	NS
MW-3	11/08/05	NS	NS	NS	NS
MW-3	11/08/06	NS	NS	NS	NS
MW-3	11/29/07	NS	NS	NS	NS
MW-3	08/12/08	NS	NS	NS	NS
MW-3	11/07/08	NS	NS	NS	NS
MW-3	02/06/09	NS	NS	NS	NS
MW-3	05/04/09	NS	NS	NS	NS
MW-3	08/26/09	NS	NS	NS	NS
MW-3	11/03/09	NS	NS	NS	NS
MW-3	02/11/10	NS	NS	NS	NS
MW-3	05/25/10	NS	NS	NS	NS
MW-3	09/24/10	NS	NS	NS	NS
MW-3	11/09/10	<2	<2	1.9 J	<6
MW-3	02/01/11	NS	NS	NS	NS
MW-3	05/03/11	NS	NS	NS	NS
MW-3	09/27/11	NS	NS	NS	NS
MW-3	11/16/11	<1	<1	0.77 J	<3
MW-3	02/16/12	NS	NS	NS	NS
MW-3	05/07/12	NS	NS	NS	NS
MW-3	06/04/13	<0.14	< 0.30	<0.20	<0.23
MW-3	09/09/13	<0.14	< 0.30	<0.20	<0.23
MW-3	12/13/13	<0.20	0.56 J	<0.20	< 0.65
MW-3	04/05/14	<0.20	<0.38	<0.20	< 0.65
MW-3	10/21/14	<0.38	< 0.70	0.96 J	<1.6
MW-3	05/30/15	<1.0	<5.0	<1.0	<5.0
MW-3	11/18/15	<1.0	<1.0	<1.0	<3.0
MW-3	04/16/16	<1.0	<5.0	<1.0	<5.0
MW-3	10/14/16	<1.0	<5.0	<1.0	<5.0
MW-3	06/10/17	<1.0	<5.0	<1.0	<5.0
MW-3	11/13/17	<1.0	<1.0	<1.0	<10
MW-3	05/17/18	<1.0	<1.0	<1.0	<10
MW-3	10/28/18	<1.0	<1.0	<1.0	<10
MW-3	05/23/19	<1.0	<1.0	<1.0	<10
MW-3	11/13/19	NS	NS	NS	NS
MW-3	05/15/20	NS	NS	NS	NS
MW-3	11/14/20	NS	NS	NS	NS
MW-3	05/22/21	<1.0	<1.0	<1.0	<10
MW-3	08/27/21	NS	NS	NS	NS
MW-3	11/14/21	NS	NS	NS	NS

		Fogel	son 4-1		
		Benzene	Toluene	Ethylbenzene	Total Xylenes
Location	Date	(μg/L)	(µg/L)	(µg/L)	(μg/L)
NMWQC	C Standards:	10	750	750	620
MW-3	05/21/22	NS	NS	NS	NS
MW-3	10/30/22	NS	NS	NS	NS
MW-4	06/10/17	2.8	<5.0	76	<5.0
MW-4	11/13/17	2.6	<1.0	60	<10
MW-4	05/17/18	1.3	<1.0	35	<10
MW-4	10/28/18	1.5	<1.0	31	<10
MW-4	05/23/19	<1.0	<1.0	2.1	<10
DUP-1(MW-4)*	05/23/19	<1.0	<1.0	1.3	<10
MW-4	11/13/19	<1.0	<1.0	2.7	<10
DUP-1(MW-4)*	11/13/19	<1.0	<1.0	2.7	<10
MW-4	05/15/20	<1.0	<1.0	<1.0	<10
MW-4	11/14/20	<1.0	<1.0	<1.0	<10
MW-4	05/22/21	<1.0	<1.0	<1.0	<10
MW-4	08/27/21	NS	NS	NS	NS
MW-4	11/14/21	<1.0	<1.0	<1.0	<10
MW-4	05/21/22	<1.0	<1.0	<1.0	<10
MW-4	10/30/22	<1.0	<1.0	<1.0	<10
MW-5	06/10/17	24	<10	2.4	120
MW-5	11/13/17	24	<2.0	210	<20
MW-5	05/17/18	25	<2.0	280	<20
MW-5	10/28/18	25	<1.0	290	<10
DUP-01(MW-5)*	10/28/18	24	<1.0	260	<10
MW-5	05/23/19	24	<2.0	310	<20
MW-5	11/13/19	NS	NS	NS	NS
MW-5	05/15/20	NS	NS	NS	NS
MW-5	08/18/20	NS	NS	NS	NS
MW-5	11/14/20	NS	NS	NS	NS
MW-5	03/17/21	NS	NS	NS	NS
MW-5	05/22/21	NS	NS	NS	NS
MW-5	08/27/21	NS	NS	NS	NS
MW-5	11/14/21	NS	NS	NS	NS
MW-5	03/22/22	NS	NS	NS	NS
MW-5	05/21/22	NS	NS	NS	NS
MW-5	07/29/22	NS	NS	NS	NS
MW-5	10/30/22	NS	NS	NS	NS
MW-6	06/10/17	<1.0	<5.0	<1.0	<5.0
MW-6	11/13/17	<1.0	<1.0	<1.0	<10

		Fogel	son 4-1		
		Benzene	Toluene	Ethylbenzene	Total Xylenes
Location	Date	(µg/L)	(µg/L)	(µg/L)	(μg/L)
NMWQC	C Standards:	10	750	750	620
MW-6	05/17/18	1.7	<1.0	<1.0	<10
MW-6	10/28/18	<1.0	<1.0	<1.0	<10
MW-6	05/23/19	<1.0	<1.0	<1.0	<10
MW-6	11/13/19	<1.0	<1.0	<1.0	<10
MW-6	05/15/20	<1.0	<1.0	<1.0	<10
MW-6	11/14/20	<1.0	1.2	<1.0	<10
MW-6	05/22/21	<1.0	<1.0	<1.0	<10
MW-6	08/27/21	NS	NS	NS	NS
MW-6	11/14/21	<1.0	<1.0	<1.0	<10
MW-6	05/21/22	<1.0	<1.0	<1.0	<10
MW-6	10/30/22	<1.0	<1.0	<1.0	<10
MW-7	06/10/17	130	<10	150	580
MW-7	11/13/17	83	<1.0	110	96
MW-7	05/17/18	61	<1.0	89	21
DP-01(MW-7)*	05/17/18	63	<1.0	97	23
MW-7	10/28/18	50	<1.0	58	<10
MW-7	05/23/19	53	<1.0	62	<10
MW-7	11/13/19	18	<1.0	24	<10
MW-7	05/15/20	12	<1.0	16	<10
MW-7	11/14/20	12	<1.0	17	<10
DP-01(MW-7)*	11/14/20	14	<1.0	23	<10
MW-7	05/22/21	9.0	<1.0	9.0	<10
DP-01(MW-7)*	05/22/21	9.1	<1.0	9.0	<10
MW-7	08/27/21	NS	NS	NS	NS
MW-7	11/14/21	8.7	<1.0	6.4	<10
MW-7	05/21/22	5.1	<1.0	1.9	<10
DP-01(MW-7)*	05/21/22	4.6	<1.0	1.3	<10
MW-7	10/30/22	9.0	<1.0	2.1	<10
DP-01(MW-7)*	10/30/22	9.2	<1.0	2.9	<10
MW-8	10/28/18	1.7	<1.0	1.2	<10
MW-8	05/23/19	2.7	<1.0	1.1	<10
MW-8	11/13/19	1.8	<1.0	<1.0	<10
MW-8	05/15/20	<1.0	<1.0	<1.0	<10
MW-8	11/14/20	1.1	<1.0	<1.0	<10
MW-8	05/22/21	1.4	<1.0	3.0	<10
MW-8	08/27/21	NS	NS	NS	NS
MW-8	11/14/21	1.4	<1.0	<1.0	<10

# Received by OCD: 3/27/2023 7:35:23 AM GROUNDWATER ANALYTICAL RESULTS

		Foge	son 4-1		
Location	Date	Benzene (µg/L)	Toluene (μg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)
NMWQC	C Standards:	10	750	750	620
MW-8	05/21/22	<1.0	<1.0	<1.0	<10
MW-8	10/30/22	<1.0	<1.0	<1.0	<10
MW-9	10/28/18	<1.0	<1.0	<1.0	<10
MW-9	05/23/19	<1.0	<1.0	<1.0	<10
MW-9	11/13/19	<1.0	<1.0	<1.0	<10
MW-9	05/15/20	<1.0	<1.0	<1.0	<10
MW-9	11/14/20	<1.0	<1.0	<1.0	<10
MW-9	05/22/21	<1.0	<1.0	<1.0	<10
MW-9	08/27/21	NS	NS	NS	NS
MW-9	11/14/21	<1.0	<1.0	<1.0	<10
MW-9	05/21/22	<1.0	<1.0	<1.0	<10
MW-9	10/30/22	<1.0	<1.0	<1.0	<10
NAVA 4 O	05/04/00	60	11	990	2100
MW-10	05/21/22	69	11	880	3100
MW-10	10/30/22	54	<5.0	1000	2100
MW-11	10/30/22	<1.0	<1.0	<1.0	<10

### Notes:

The groundwater monitoring dates for each monitoring well where no groundwater samples were collected and analyzed have been omitted.

µg/L = micrograms per liter

Results highlighted yellow exceed their respective New Mexico Water Quality Control Commission (NMWQCC) standards.

<sup>&</sup>quot;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.

<sup>&</sup>quot;<" = analyte was not detected at the indicated reporting limit (some historic data were reported at the detection limit).

<sup>\*</sup>Field Duplicate results presented immediately below primary sample result

# Received by OCD: 3/27/2023 7:35:23 AM GROUNDWATER ELEVATION RESULTS

	Fogelson 4-1							
			Depth to		LNAPL	GW		
			LNAPL	Depth to	Thickness	Elevation		
Location	Date	TOC	(ft.)	Water (ft.)	(ft.)	(ft.)		
MW-1	11/06/95	5784.77	NR	39.99		5744.78		
MW-1	12/06/96	5784.77	NR	40.74		5744.03		
MW-1	03/10/97	5784.77	NR	41.23		5743.54		
MW-1	06/06/97	5784.77	NR	41.44		5743.33		
MW-1	03/30/98	5784.77	NR	41.08		5743.69		
MW-1	06/04/98	5784.77	NR	41.02		5743.75		
MW-1	06/15/99	5784.77	NR	41.88		5742.89		
MW-1	06/19/00	5784.77	NR	40.17		5744.60		
MW-1	10/02/00	5784.77	NR	40.22		5744.55		
MW-1	12/05/00	5784.77	NR	40.09		5744.68		
MW-1	05/30/01	5784.77	NR	40.54		5744.23		
MW-1	11/26/01	5784.77	NR	41.00		5743.77		
MW-1	05/15/02	5784.77	NR	41.37		5743.40		
MW-1	06/10/02	5784.77	NR	41.54		5743.23		
MW-1	11/04/02	5784.77	NR	41.54		5743.23		
				41.57				
MW-1	05/21/03	5784.77	ND	_		5743.20		
MW-1	11/15/03	5784.77	ND	41.00		5743.77		
MW-1	11/16/04	5784.77	ND	40.10		5744.67		
MW-1	11/08/05	5784.77	ND	40.68		5744.09		
MW-1	11/08/06	5784.77	ND	42.16		5742.61		
MW-1	11/29/07	5784.77	ND	42.16		5742.61		
MW-1	01/25/08	5784.77	43.00	43.10	0.10	5741.75		
MW-1	08/12/08	5784.77	ND	43.14		5741.63		
MW-1	11/07/08	5784.77	43.24	43.32	0.08	5741.51		
MW-1	02/06/09	5784.77	ND	43.12		5741.65		
MW-1	05/04/09	5784.77	ND	43.22		5741.55		
MW-1	08/26/09	5784.77	43.46	43.53	0.07	5741.29		
MW-1	11/03/09	5784.77	ND	43.52		5741.25		
MW-1	02/11/10	5784.77	ND	43.64		5741.13		
MW-1	05/25/10	5784.77	ND	43.75		5741.02		
MW-1	09/24/10	5784.77	ND	43.95		5740.82		
MW-1	11/09/10	5784.77	43.88	43.89	0.01	5740.89		
MW-1	02/01/11	5784.77	ND	44.03		5740.74		
MW-1	05/03/11	5784.77	ND	44.14		5740.63		
MW-1	09/27/11	5784.77	ND	44.30		5740.47		
MW-1	11/16/11	5784.77	ND	44.33		5740.44		
MW-1	02/16/12	5784.77	ND	44.43		5740.34		
MW-1	05/07/12	5784.77	ND	44.50		5740.27		
MW-1	06/04/13	5784.77	ND	44.75		5740.02		
MW-1	09/09/13	5784.77	ND	44.87		5739.90		
MW-1	12/13/13	5784.77	ND	44.85		5739.92		
MW-1	04/05/14	5784.77	ND	44.75		5740.02		
MW-1	10/21/14	5784.77	ND	44.86		5739.91		
MW-1	05/30/15	5784.77	ND	44.81		5739.96		
MW-1	11/18/15	5784.77	44.91	44.91	<0.01	5739.86		
MW-1	04/16/16	5784.77	45.00	45.05	0.05	5739.76		
MW-1	10/14/16	5784.77	45.12	45.12	<0.01	5739.65		
MW-1	06/10/17	5784.77	45.25	45.30	0.05	5739.51		
MW-1	11/13/17	5784.77	45.42	45.43	0.01	5739.35		
MW-1	05/05/18	5784.77	ND	45.49	3.01	5739.28		
MW-1	05/03/18	5784.77	45.48	45.48	<0.01	5739.29		
1 V I V I		1		W-1R on 9/2		0100.20		
		иии-т теріа Т	ac <del>c</del> u willi ivi	VV-11\ 011 9/2	0,2010			
MW-1R	10/28/18	5784.02	ND	48.27		5735.75		
MW-1R	05/23/19	5784.02	ND	47.00		5737.02		

Fogelson 4-1							
			Depth to		LNAPL	GW	
			LNAPL	Depth to	Thickness	Elevation	
Location	Date	TOC	(ft.)	Water (ft.)	(ft.)	(ft.)	
MW-1R	11/13/19	5784.02	ND	47.32		5736.70	
MW-1R	05/15/20	5784.02	ND	47.32		5736.70	
MW-1R	08/18/20	5784.02	47.69	47.69		5736.33	
MW-1R	11/14/20	5784.02	ND	47.45		5736.57	
MW-1R	03/17/21	5784.02	ND	47.46		5736.56	
MW-1R	05/22/21	5784.02	ND	47.56		5736.46	
MW-1R	08/27/21	5784.02	ND	47.70		5736.32	
MW-1R	11/14/21	5784.02	ND	47.84		5736.18	
MW-1R	03/22/22	5784.02	ND	47.65		5736.37	
MW-1R	05/21/22	5784.02	ND	47.70		5736.32	
MW-1R	07/29/22	5784.02	ND	47.95		5736.07	
MW-1R	10/30/22	5784.02	ND	47.99		5736.03	
1414	07/07/00	5700.00	ND	00.05		5744 70	
MW-2	07/27/00	5780.03	NR	38.25		5741.78	
MW-2	05/30/01	5780.03	NR	38.17		5741.86	
MW-2	05/15/02	5780.03	NR	38.56		5741.47	
MW-2	11/04/02	5780.03	NR	38.99		5741.05	
MW-2	05/21/03	5780.03	ND	39.24		5740.79	
MW-2	11/15/03	5780.03	ND	38.70		5741.34	
MW-2	11/16/04	5780.03	ND	37.40		5742.63	
MW-2	11/08/05	5780.03	ND	37.76		5742.27	
MW-2	11/08/06	5780.03	ND	38.65		5741.38	
MW-2	11/29/07	5780.03	ND	39.67		5740.36	
MW-2	08/12/08	5780.03	ND	39.75		5740.28	
MW-2	11/07/08	5780.03	ND	39.97		5740.06	
MW-2	02/06/09	5780.03	ND	39.73		5740.30	
MW-2	05/04/09	5780.03	ND	39.83		5740.20	
MW-2	08/26/09	5780.03	ND	40.19		5739.84	
MW-2	11/03/09	5780.03	ND	40.32		5739.71	
MW-2	02/11/10	5780.03	ND	40.17		5739.86	
MW-2	05/25/10	5780.03	ND	40.40		5739.63	
MW-2	09/24/10	5780.03	ND	40.74		5739.29	
MW-2	11/09/10	5780.03	ND	40.35		5739.68	
MW-2	02/01/11	5780.03	ND	40.39		5739.64	
MW-2	05/03/11	5780.03	ND	40.96		5739.07	
MW-2	09/27/11	5780.03	ND	41.05		5738.98	
MW-2	11/16/11	5780.03	ND	41.07		5738.96	
MW-2	02/16/12	5780.03	ND	41.15		5738.88	
MW-2	05/07/12	5780.03	ND	41.15		5738.88	
MW-2	06/04/13	5780.03	ND	41.54		5738.49	
MW-2	09/09/13	5780.03	ND	41.64		5738.39	
MW-2	12/13/13	5780.03	ND	41.66		5738.37	
MW-2	04/05/14	5780.03	ND	41.64		5738.39	
MW-2	10/21/14	5780.03	ND	41.93		5738.10	
MW-2	05/30/15	5780.03	ND	42.10		5737.93	
MW-2	11/18/15	5780.03	ND	42.03		5738.00	
MW-2	04/16/16	5780.03	ND	42.01		5738.02	
MW-2	10/14/16	5780.03	ND	42.38		5737.65	
MW-2	06/10/17	5780.03	ND	42.08		5737.95	
MW-2	11/13/17	5780.03	ND	42.24		5737.79	
MW-2	05/17/18	5780.03	ND	42.12		5737.91	
MW-2	10/28/18	5780.03	ND	42.51		5737.52	
MW-2	05/23/19	5780.03	ND	42.31		5737.72	
MW-2	11/13/19	5780.03	ND	42.58		5737.45	
MW-2	05/15/20	5780.03	ND	42.64		5737.39	
MW-2	11/14/20	5780.03	ND	42.78		5737.25	
MW-2	05/22/21	5780.03	ND	42.90		5737.13	
MW-2	08/27/21	5780.03	ND	42.99		5737.04	
MW-2	11/14/21	5780.03	ND	43.11		5736.92	

# Received by OCD: 3/27/2023 7:35:23 AM GROUNDWATER ELEVATION RESULTS

Fogelson 4-1						
			Depth to		LNAPL	GW
			LNAPL	Depth to	Thickness	Elevation
Location	Date	TOC	(ft.)	Water (ft.)	(ft.)	(ft.)
MW-2	05/21/22	5780.03	ND	43.07		5736.96
MW-2	10/30/22	5780.03	ND	43.18		5736.85
MW-3	07/27/00	5780.83	NR	41.21		5739.62
MW-3	05/30/01	5780.83	NR	40.77		5740.06
MW-3	05/15/02	5780.83	NR	41.14		5739.69
MW-3	11/04/02	5780.83	NR	41.48		5739.35
MW-3	05/21/03	5780.83	ND	41.71		5739.12
MW-3	11/15/03	5780.83	ND	41.30		5739.53
MW-3	11/16/04	5780.83	ND	40.10		5740.73
MW-3	11/08/05	5780.83	ND	40.71		5740.12
MW-3	11/08/06	5780.83	ND	41.47		5739.36
MW-3	11/29/07	5780.83	43.01	43.10	0.09	5737.80
MW-3	08/12/08	5780.83	ND	42.47		5738.36
MW-3	11/07/08	5780.83	ND	42.69		5738.14
MW-3	02/06/09	5780.83	ND	42.47		5738.36
MW-3	05/04/09	5780.83	ND	42.50		5738.33
MW-3	08/26/09	5780.83	ND	42.90		5737.93
MW-3	11/03/09	5780.83	ND	43.03		5737.80
MW-3	02/11/10	5780.83	ND	42.79		5738.04
MW-3	05/25/10	5780.83	ND	42.97		5737.86
MW-3	09/24/10	5780.83	ND	43.25		5737.58
MW-3	11/09/10	5780.83	ND	42.97		5737.86
MW-3	02/01/11	5780.83	ND	42.82		5738.01
MW-3	05/03/11	5780.83	ND	43.41		5737.42
MW-3	09/27/11	5780.83	ND	43.40		5737.43
MW-3	11/16/11	5780.83	ND	43.36		5737.47
MW-3	02/16/12	5780.83	ND	43.41		5737.42
MW-3	05/07/12	5780.83	ND	43.46		5737.37
MW-3	06/04/13	5780.83	ND	43.82		5737.01
MW-3	09/09/13	5780.83	ND	43.93		5736.90
MW-3	12/13/13	5780.83	ND	43.93		5736.90
MW-3	04/05/14	5780.83	ND	43.88		5736.95
MW-3	10/21/14	5780.83	ND	44.16		5736.67
MW-3	05/30/15	5780.83	ND	44.31		5736.52
MW-3	11/18/15	5780.83	ND	44.18		5736.65
MW-3	04/16/16	5780.83	ND	44.10		5736.73
MW-3	10/14/16	5780.83	ND	44.58		5736.25
MW-3	06/10/17	5780.83	ND	44.25		5736.58
MW-3	11/13/17	5780.83	ND	44.44		5736.39
MW-3	05/17/18	5780.83	ND	44.32		5736.51
MW-3	10/28/18	5780.83	ND	44.67		5736.16
MW-3	05/23/19	5780.83	ND	44.37		5736.46
MW-3	11/13/19	5780.83	ND	44.70		5736.13
MW-3	05/15/20	5780.83	ND	44.72		5736.11
MW-3	11/14/20	5780.83	ND	44.85		5735.98
MW-3	05/22/21	5780.83	ND	45.09		5735.74
MW-3	08/27/21	5780.83	ND	45.22		5735.61
MW-3	11/14/21	5780.83	ND	45.30		5735.53
MW-3	05/21/22	5780.83	ND	45.30		5735.53
MW-3	10/30/22	5780.83	ND	45.34		5735.49
MW-4	06/10/17	5782.14	ND	46.36		5735.78
MW-4	11/13/17	5782.14	ND	46.49		5735.65

	Fogelson 4-1						
			Depth to	T	LNAPL	GW	
			LNAPL	Depth to	Thickness	Elevation	
Location	Date	тос	(ft.)	Water (ft.)	(ft.)	(ft.)	
MW-4	05/17/18	5782.14	ND	46.49	()	5735.65	
MW-4	10/28/18	5782.14	ND	46.74		5735.40	
MW-4	05/23/19	5782.14	ND	46.67		5735.47	
MW-4	11/13/19	5782.14	ND	46.75		5735.39	
MW-4	05/15/20	5782.14	ND	46.83		5735.31	
MW-4	11/14/20	5782.14	ND	46.95		5735.19	
MW-4	05/22/21	5782.14	ND	47.03		5735.11	
MW-4	08/27/21	5782.14	ND	47.05		5735.09	
MW-4	11/14/21	5782.14	ND	47.07		5735.07	
MW-4	05/21/22	5782.14	ND	47.13		5735.01	
MW-4	10/30/22	5782.14	ND	47.12		5735.02	
IVIVV -		0702.14	IVE	77.12		0700.02	
MW-5	06/10/17	5780.92	ND	44.21		5736.71	
MW-5	11/13/17	5780.92	ND	44.49		5736.43	
MW-5	05/17/18	5780.92	ND	44.56		5736.36	
MW-5	10/28/18	5780.92	ND	44.74		5736.18	
MW-5	05/23/19	5780.92	ND	44.73		5736.19	
MW-5	11/13/19	5780.92	44.87	44.99	0.12	5736.02	
MW-5	05/15/20	5780.92	44.84	45.01	0.17	5736.04	
MW-5	08/18/20	5780.92	46.03	46.08	0.05	5734.88	
MW-5	11/14/20	5780.92	45.06	45.10	0.04	5735.85	
MW-5	03/17/21	5780.92	44.87	45.05	0.18	5736.01	
MW-5	05/22/21	5780.92	45.10	45.26	0.16	5735.78	
MW-5	08/27/21	5780.92	45.11	45.35	0.24	5735.75	
MW-5	11/14/21	5780.92	45.03	45.72	0.69	5735.72	
MW-5	03/22/22	5780.92	44.94	45.96	1.02	5735.73	
MW-5	05/21/22	5780.92	45.02	45.55	0.53	5735.77	
MW-5	07/29/22	5780.92	45.02	45.81	0.79	5735.70	
MW-5	10/30/22	5780.92	44.96	46.14	1.18	5735.67	
				1			
MW-6	06/10/17	5783.82	ND	47.78		5736.04	
MW-6	11/13/17	5783.82	ND	48.03		5735.79	
MW-6	05/17/18	5783.82	ND	47.85		5735.97	
MW-6	10/28/18	5783.82	ND	48.11		5735.71	
MW-6	05/23/19	5783.82	ND	47.48		5736.34	
MW-6	11/13/19	5783.82	ND	47.92		5735.90	
MW-6	05/15/20	5783.82	ND	47.85		5735.97	
MW-6	11/14/20	5783.82	ND	47.94		5735.88	
MW-6	05/22/21	5783.82	ND	48.06		5735.76	
MW-6	08/27/21	5783.82	ND	48.20		5735.62	
MW-6	11/14/21	5783.82	ND	48.37		5735.45	
MW-6	05/21/22	5783.82	ND	48.19		5735.63	
MW-6	10/30/22	5783.82	ND	48.38		5735.44	
MW-7	06/10/17	5702 OF	ND	13 00		5740.00	
MW-7	06/10/17	5783.95	ND ND	43.89		5740.06	
	11/13/17	5783.95		44.09		5739.86	
MW-7 MW-7	05/17/18	5783.95	ND	44.12		5739.83	
	10/28/18	5783.95	ND	44.30		5739.65	
MW-7	05/23/19	5783.95	ND	44.33		5739.62	
MW-7	11/13/19	5783.95	ND	44.51		5739.44	
MW-7	05/15/20	5783.95	ND	44.60		5739.35	
MW-7	11/14/20	5783.95	ND	44.76		5739.19	
MW-7	05/22/21	5783.95	ND	44.84		5739.11	
MW-7	08/27/21	5783.95	ND	44.90		5739.05	
MW-7	11/14/21	5783.95	ND	44.96	<u> </u>	5738.99	

# Received by OCD: 3/27/2023 7:35:23 AM GROUNDWATER ELEVATION RESULTS

Fogelson 4-1						
		Depth to			LNAPL	GW
			LNAPL	Depth to	Thickness	Elevation
Location	Date	TOC	(ft.)	Water (ft.)	(ft.)	(ft.)
MW-7	05/21/22	5783.95	ND	45.00		5738.99
MW-7	10/30/22	5783.95	ND	45.14		5738.99
MW-8	10/28/18	5784.44	ND	43.30		5741.14
MW-8	05/23/19	5784.44	ND	42.65		5741.79
MW-8	11/13/19	5784.44	ND	42.65		5741.79
MW-8	05/15/20	5784.44	ND	42.54		5741.90
MW-8	11/14/20	5784.44	ND	42.88		5741.56
MW-8	05/22/21	5784.44	ND	44.05		5740.39
MW-8	08/27/21	5784.44	ND	44.22		5740.22
MW-8	11/14/21	5784.44	ND	44.51		5739.93
MW-8	05/21/22	5784.44	ND	44.39		5740.05
MW-8	10/30/22	5784.44	ND	44.28		5740.16
MW-9	10/28/18	5784.19	ND	49.66		5734.53
MW-9	05/23/19	5784.19	ND	49.41		5734.78
MW-9	11/13/19	5784.19	ND	49.48		5734.71
MW-9	05/15/20	5784.19	ND	49.52		5734.67
MW-9	11/14/20	5784.19	ND	49.61		5734.58
MW-9	05/22/21	5784.19	ND	49.85		5734.34
MW-9	08/27/21	5784.19	ND	49.67		5734.52
MW-9	11/14/21	5784.19	ND	49.71		5734.48
MW-9	05/21/22	5784.19	ND	49.72		5734.47
MW-9	10/30/22	5784.19	ND	49.71		5734.48
MW-10	05/21/22	5783.11	ND	48.72		5734.39
MW-10	10/30/22	5783.11	ND	48.50		5734.61
MW-11	10/30/22	5782.08	ND	57.33		5724.75

Notes:

Groundwater elevation = Top of Casing elevation (TOC, ft) - Depth to Water [ft] + (LPH 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-planetarysciences/gas-condensate)

<sup>&</sup>quot;ft" = feet

<sup>&</sup>quot;TOC" = Top of casing

<sup>&</sup>quot;LNAPL" = light non-aqueous phase liquid

<sup>&</sup>quot;ND" = LNAPL not detected

<sup>&</sup>quot;NR" = LNAPL not recorded

### **TABLE 4 - SOIL ANALYTICAL RESULTS**

Fogelson 4-1 Com #14 Soil Results											
Location (depth in feet bgs)	Date (mm/dd/yy)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Total Xylenes (mg/kg)	BTEX Total (mg/kg)	GRO C6-10 (mg/kg)	DRO C10-28 (mg/kg)	MRO C28-35 (mg/kg)	TPH (mg/kg)	Chloride (mg/kg)
	NMOCD Criteria:	10	NE	NE	NE	50	NE	NE	NE	100	600
MW-4 (39-40)	04/07/17	BRL	3.1	1.6	1.2	5.9	200	130	BRL	330	BRL
MW-5 (42-43)	04/08/17	BRL	3.8	2.8	12	18.6	540	250	BRL	790	BRL
MW-6 (19-20)	04/08/17	BRL	BRL	0.087	0.35	0.44	40	43	BRL	83	BRL
MW-7 (38-39)	04/08/17	BRL	5.3	3.7	26	35	780	270	BRL	1050	BRL
SB-1 (19-20)	04/09/17	BRL	12	4.0	150	166	5700	3300	11	9011	BRL
SB-1 (29-30)	04/09/17	BRL	8.0	1.4	68	77	1300	600	BRL	1900	BRL
SB-1 (38-39)	04/09/17	BRL	9.0	3.1	55	67	620	110	BRL	730	BRL
MW-8 (38-39)	09/28/18	BRL	0.35	0.092	0.29	0.73	65	140	BRL	205	99
MW-9 (19-20)	09/28/18	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL
MW-10 (39-40)	04/20/22	BRL	BRL	BRL	BRL	BRL	0.30	64	8.4	72.7	34
MW-11 (40-41)	10/04/22	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL
SB-12 (25-26)	10/04/22	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL
SB-12 (32-33)	10/05/22	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL
SB-12 (42-43)	10/05/22	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL

#### Notes:

mg/kg Milligrams per kilogram
BRL Below Reporting Limits

NE New Mexico Oil Conservation Division (NMOCD) Standard Not Established

BTEX Benzene, toluene, ethylbenzene, xylenes

GRO Gasoline range organics
DRO Diesel range organics
MRO Motor oil range organics

Total BTEX Sum of the detectable concentrations of individual BTEX constituents

TPH Total Petroleum Hydrocarbon concentration is calculated by adding the detectable concentrations of GRO, DRO, and MRO and rounded to the nearest mg/kg.

NMOCD Criteria

New Mexico Oil Conservation Division closure criteria for groundwater ≤50 feet below bottom of pit to groundwater less than 10,000 mg/L TDS

Results bolded and highlighted yellow exceed their respective NMOCD Standards

Shaded Soil sample interval appears to be submerged based on available static water level gauging data.

### **FIGURES**

FIGURE 1: SITE LOCATION

FIGURE 2: SITE PLAN

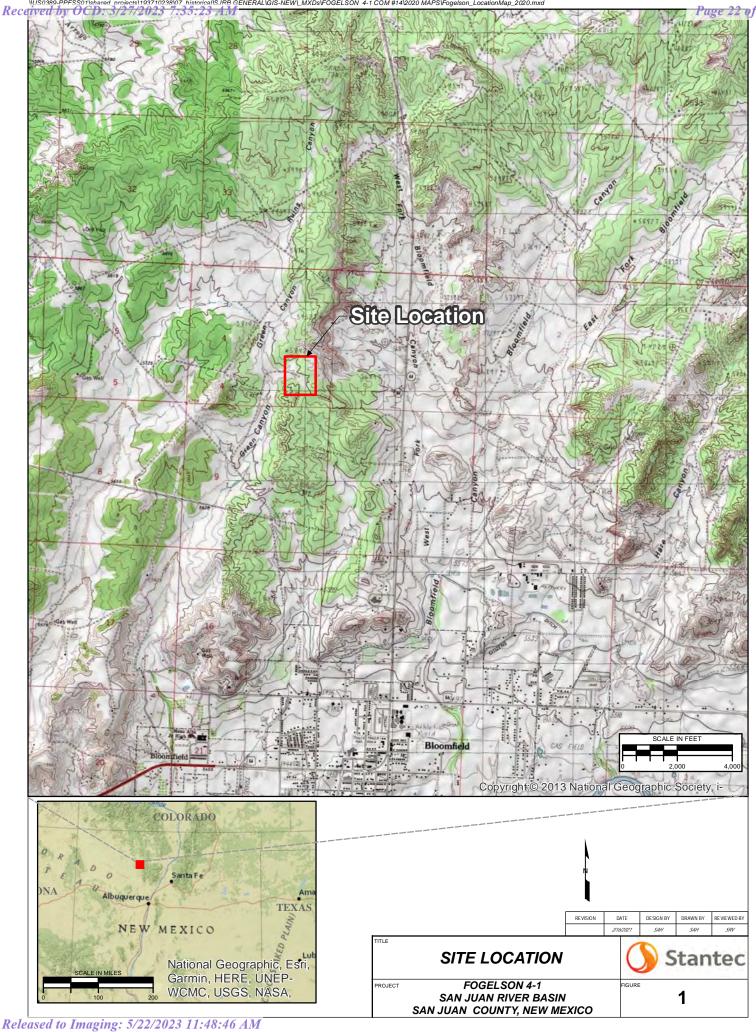
FIGURE 3: GROUNDWATER ANALYTICAL RESULTS – MAY 21, 2022

FIGURE 4: GROUNDWATER ELEVATION MAP – MAY 21, 2022

FIGURE 5: GROUNDWATER ANALYTICAL RESULTS – OCTOBER 30, 2022

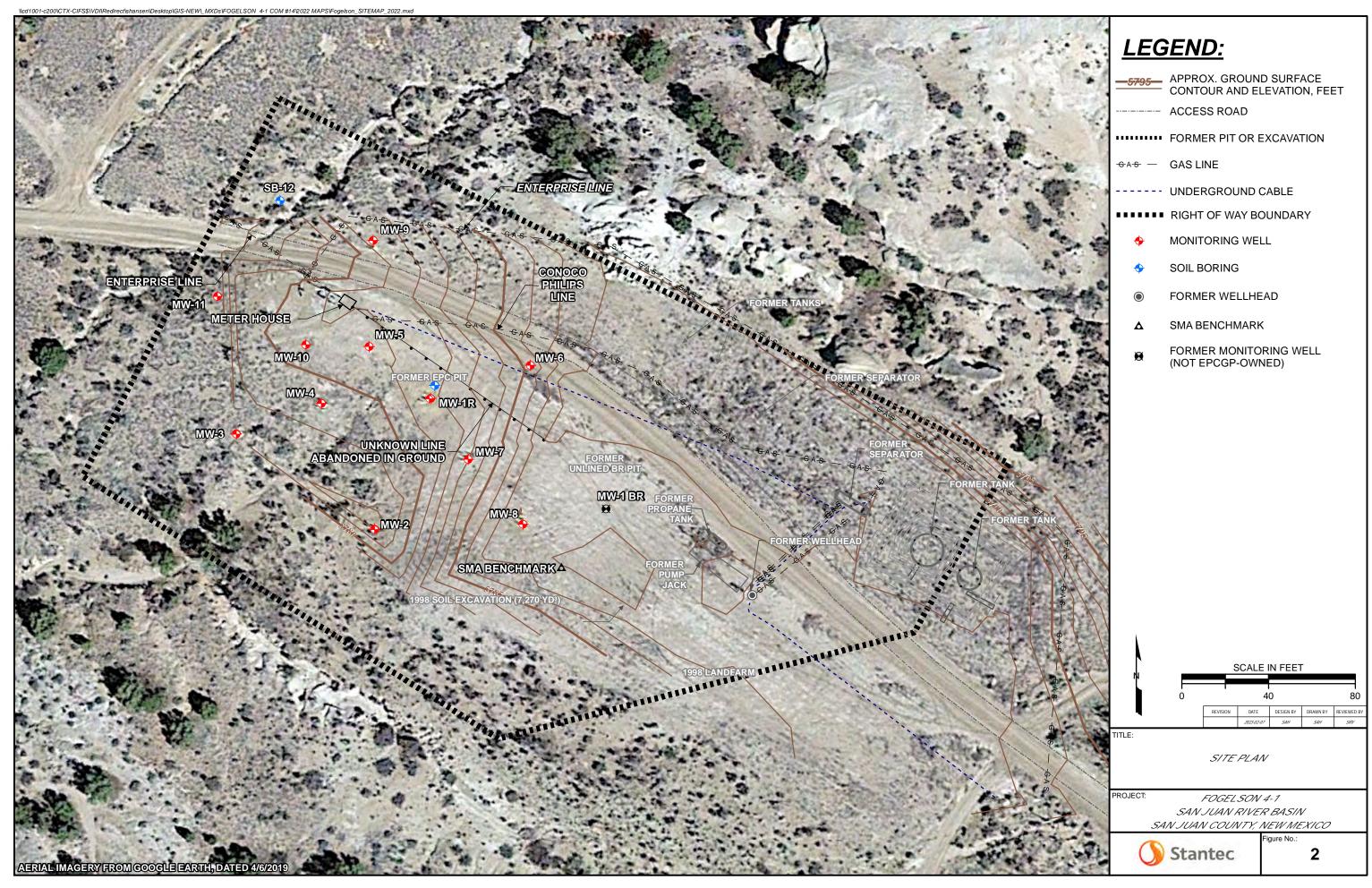
FIGURE 6: GROUNDWATER ELEVATION MAP – OCTOBER 30, 2022

FIGURE 7: SOIL ANALYTICAL RESULTS



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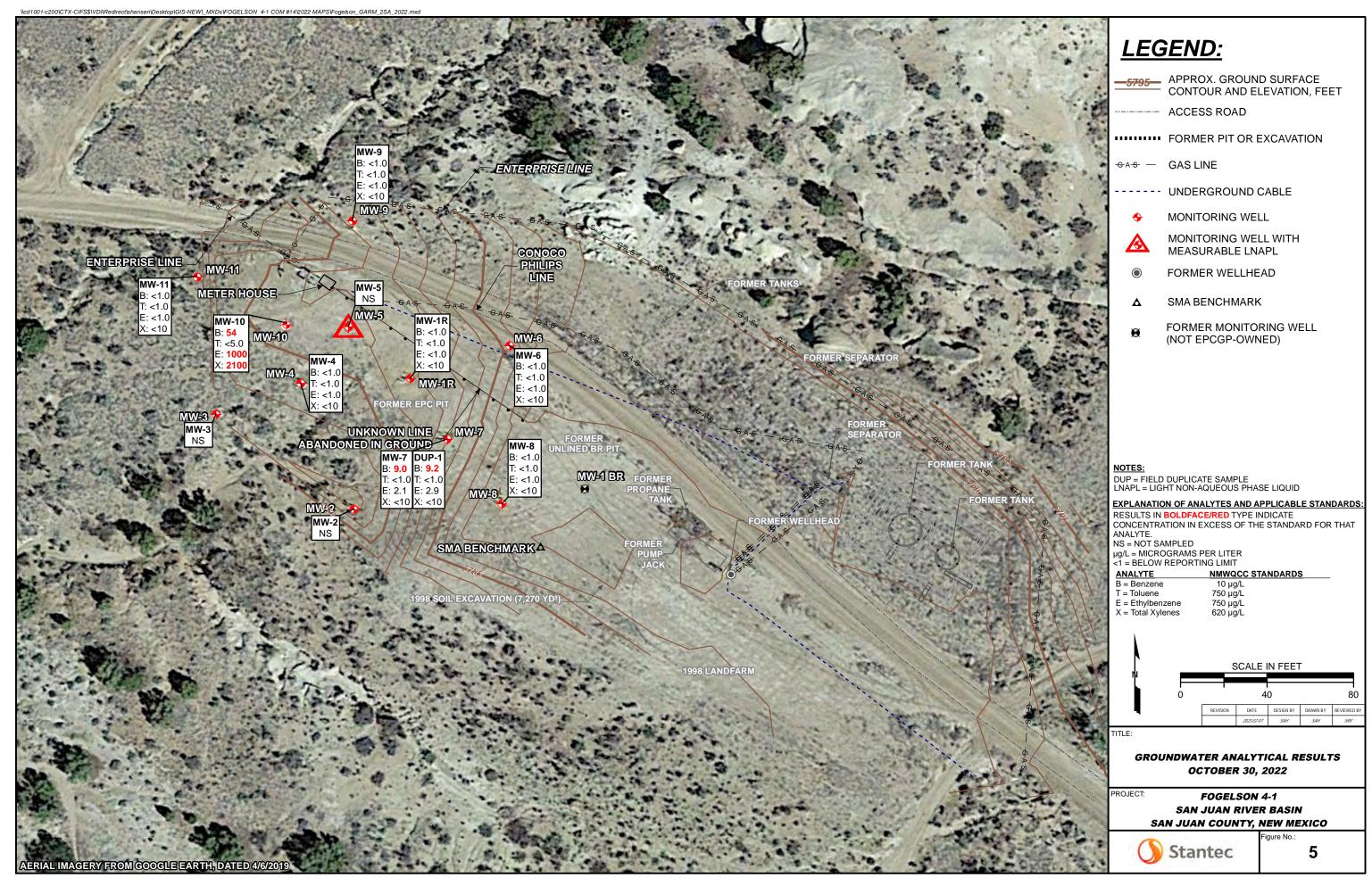
Received by OCD: 3/27/2023 7:35:23 AM

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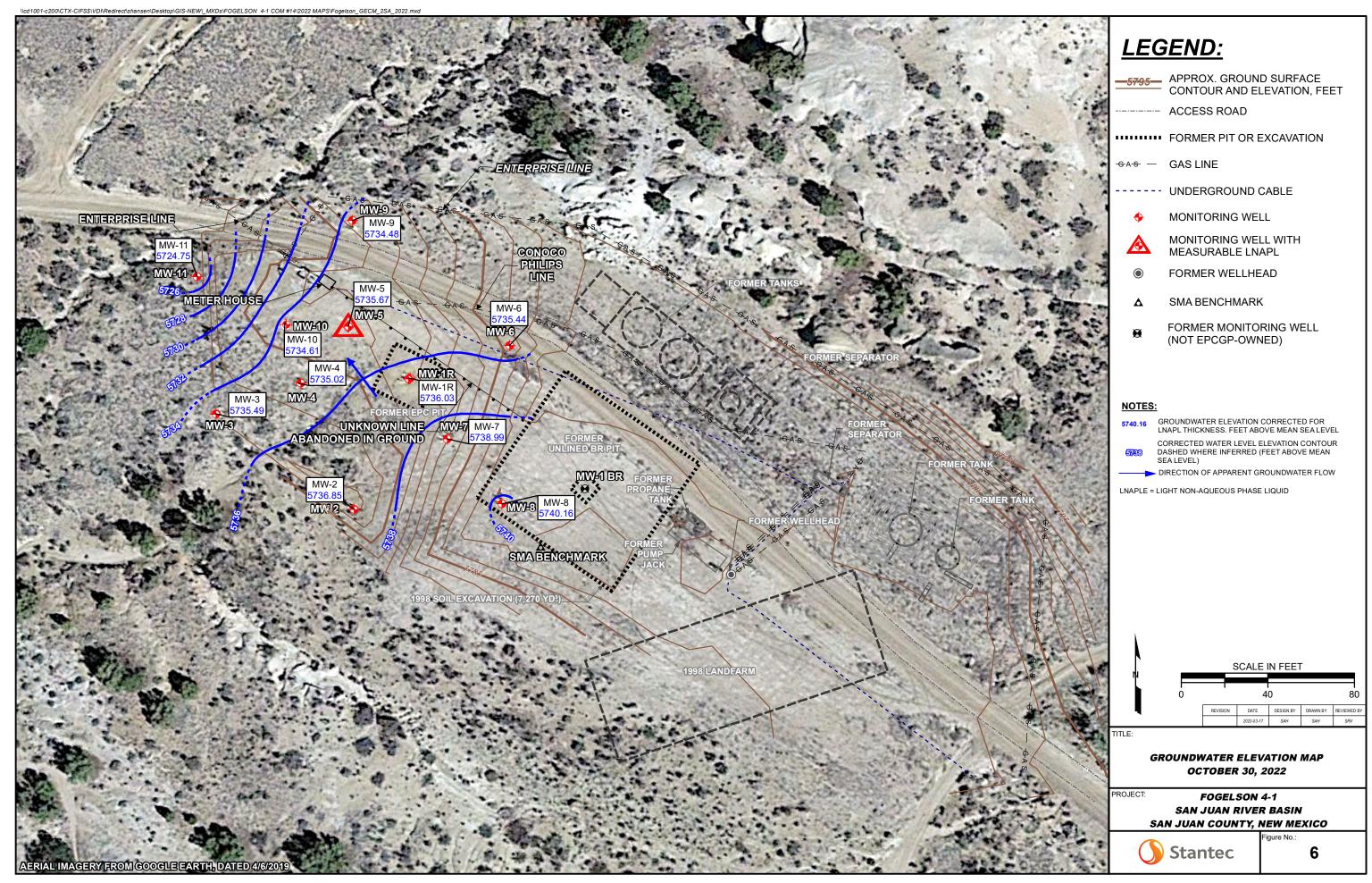
Received by OCD: 3/27/2023 7:35:23 AM

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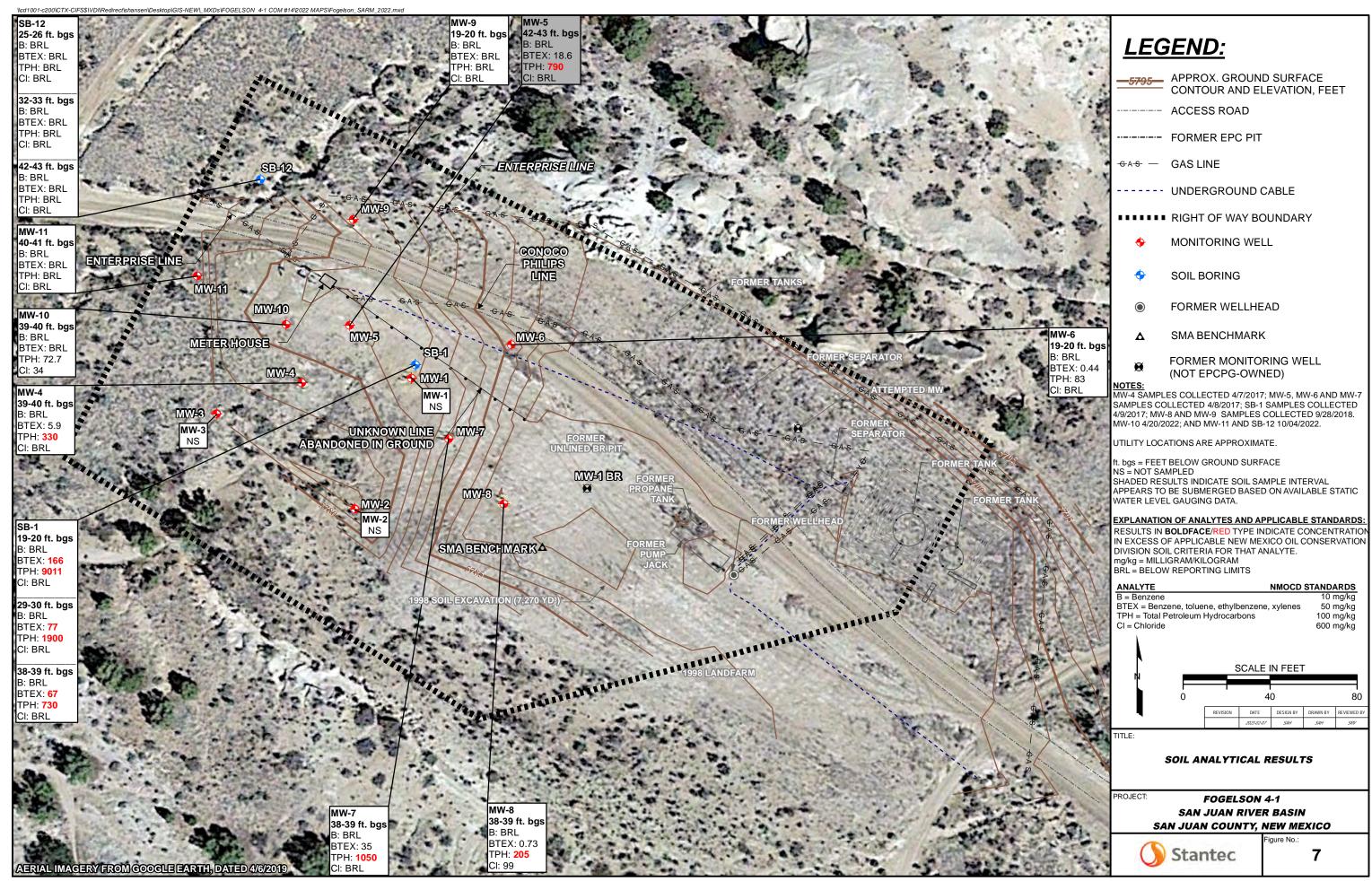


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### **APPENDICES**

APPENDIX A – NMOCD NOTIFICATIONS OF SITE ACTIVITIES

APPENDIX B – SOIL BORING LOGS

APPENDIX C – BOREHOLE ABANDONMENT FORM

APPENDIX D – WASTEWATER DISPOSAL DOCUMENTATION

APPENDIX E – SOIL DISPOSAL DOCUMENTATION

APPENDIX F – GROUNDWATER SAMPLING ANALYTICAL REPORTS

APPENDIX G – SOIL ANALYTICAL REPORTS

# **APPENDIX A**

Stantec

From: <u>Varsa, Steve</u>
To: <u>Smith, Cory, EMNRD</u>

Cc: <u>Griswold, Jim, EMNRD</u>; <u>Wiley, Joe</u>

Subject: El Paso CGP Company - Notice of upcoming product recovery activities

**Date:** Tuesday, March 15, 2022 5:10:25 PM

### Hi Cory -

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	3/21/2022
Fields A#7A	nAUTOfAB000176	3/22/2022
Fogelson 4-1	nAUTOfAB000192	3/22/2022
Gallegos Canyon Unit #124E	nAUTOfAB000205	3/21/2022
James F. Bell #1E	nAUTOfAB000291	3/22/2022
Johnston Fed #4	nAUTOfAB000305	3/23/2022
Johnston Fed #6A	nAUTOfAB000309	3/23/2022
K27 LDO72	nAUTOfAB000316	3/21/2022
Knight #1	nAUTOfAB000324	3/22/2022
Lateral L 40 Line Drip	nAUTOfAB000335	3/23/2022
State Gas Com N #1	nAUTOfAB000668	3/22/2022

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.

Senior Hydrogeologist Stantec Environmental Services 11313 Aurora Avenue Des Moines, Iowa 50322 Direct: (515) 251-1020

Cell: (515) 710-7523 Office: (515) 253-0830 <u>steve.varsa@stantec.com</u>

To: Nelson.Velez@state.nm.us
Cc: Bratcher, Mike, EMNRD; Wiley, Joe

Subject: Fogelson #4-1 (Incident Number nAUTOfAB000192) - Notice of upcoming sampling activities

**Date:** Monday, April 11, 2022 6:24:40 AM

### Hi Nelson –

This correspondence is to provide notice to the NMOCD of planned monitoring well installation activities at the above-referenced El Paso site. The well installation activities are to begin on April 19, 2022. A work plan for these activities was submitted in the e-permitting portal.

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

Thank you, Steve

### Stephen Varsa, P.G.

Senior Hydrogeologist Stantec Environmental Services Note – we have moved! 11311 Aurora Avenue Des Moines, Iowa 50322 Direct: (515) 251-1020

Cell: (515) 710-7523 Office: (515) 253-0830 steve.varsa@stantec.com

To: Nelson.Velez@state.nm.us
Cc: Bratcher, Mike, EMNRD; Wiley, Joe

Subject: FW: El Paso CGP Company - Notice of upcoming groundwater sampling activities

**Date:** Thursday, May 12, 2022 8:33:41 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	5/21/2022
Fields A#7A	nAUTOfAB000176	5/22/2022
Fogelson 4-1	nAUTOfAB000192	5/22/2022
Gallegos Canyon Unit #124E	nAUTOfAB000205	5/19/2022
GCU Com A #142E	nAUTOfAB000219	5/19/2022
James F. Bell #1E	nAUTOfAB000291	5/18/2022
Johnston Fed #4	nAUTOfAB000305	5/20/2022
Johnston Fed #6A	nAUTOfAB000309	5/20/2022
K27 LDO72	nAUTOfAB000316	5/21/2022
Knight #1	nAUTOfAB000324	5/19/2022
Lateral L 40 Line Drip	nAUTOfAB000335	5/18/2022
Miles Fed #1A	nAUTOfAB000391	5/21/2022
Sandoval GC A #1A	nAUTOfAB000635	5/20/2022
Standard Oil Com #1	nAUTOfAB000666	5/21/2022
State Gas Com N #1	nAUTOfAB000668	5/22/2022

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.

Senior Hydrogeologist Stantec Environmental Services 11153 Aurora Avenue Des Moines, Iowa 50322 Direct: (515) 251-1020 Cell: (515) 710-7523

Office: (515) 253-0830 steve.varsa@stantec.com

To: Nelson.Velez@state.nm.us
Cc: Bratcher, Mike, EMNRD; Wiley, Joe

Subject: El Paso CGP Company - Notice of upcoming product recovery activities

**Date:** Monday, July 18, 2022 3:30:01 PM

### 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	7/30/2022
Fields A#7A	nAUTOfAB000176	8/01/2022
Fogelson 4-1	nAUTOfAB000192	8/01/2022
Gallegos Canyon Unit #124E	nAUTOfAB000205	7/30/2022
Johnston Fed #4	nAUTOfAB000305	7/29/2022
Johnston Fed #6A	nAUTOfAB000309	7/29/2022
K27 LDO72	nAUTOfAB000316	7/30/2022
Knight #1	nAUTOfAB000324	8/01/2022
State Gas Com N #1	nAUTOfAB000668	8/01/2022

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.

Senior Hydrogeologist Stantec Environmental Services 11313 Aurora Avenue Des Moines, Iowa 50322 Direct: (515) 251-1020

Cell: (515) 710-7523 Office: (515) 253-0830 steve.varsa@stantec.com

To: Nelson.Velez@state.nm.us
Cc: Bratcher, Mike, EMNRD; Wiley, Joe

Subject: Fogelson #4-1 (Incident Number nAUTOfAB000192) - Notice of upcoming field activities

Date: Wednesday, September 28, 2022 2:31:37 PM

### Hi Nelson –

This correspondence is to provide notice to the NMOCD of planned monitoring well installation activities at the above-referenced El Paso site. The well installation activities are to begin on October 4, 2022. A work plan for these activities was submitted in the e-permitting portal.

Please feel free to contact Joe Wiley, Project Manager at El Paso, 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

To: Nelson.Velez@state.nm.us
Cc: Bratcher, Mike, EMNRD; Wiley, Joe

Subject: El Paso CGP Company - Notice of upcoming groundwater sampling activities

Date: Wednesday, October 26, 2022 3:13:50 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	11/6/2022
Fields A#7A	nAUTOfAB000176	10/31/2022
Fogelson 4-1	nAUTOfAB000192	10/30/2022
Gallegos Canyon Unit #124E	nAUTOfAB000205	11/3/2022
GCU Com A #142E	nAUTOfAB000219	11/2/2022
James F. Bell #1E	nAUTOfAB000291	11/4/2022
Johnston Fed #4	nAUTOfAB000305	11/5/2022
Johnston Fed #6A	nAUTOfAB000309	11/5/2022
K27 LDO72	nAUTOfAB000316	11/6/2022
Knight #1	nAUTOfAB000324	11/4/2022
Lateral L 40 Line Drip	nAUTOfAB000335	10/30/2022
Sandoval GC A #1A	nAUTOfAB000635	11/5/2022
Standard Oil Com #1	nAUTOfAB000666	11/6/2022
State Gas Com N #1	nAUTOfAB000668	11/1/2022

We also plan to conduct quarterly operation and maintenance activities on the Knight #1 air sparge/soil vapor extraction system (Incident number nAUTOAB000324) on Saturday, October 29, 2022

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 B**

**Stanted** 

#### **Drilling Log**



Monitoring Well MW-10 Page: 1 of 2 **COMMENTS** Project Fogelson 4-1 Owner El Paso CGP Company, LLC 0-8' hvdro-excavated. Location San Juan County, New Mexico Project Number 193709201 Surface Elev. 5781.02 ft North NA East NA Top of Casing  $\underline{5783.11 \, ft}$  Water Level Initial  $\underline{\nabla}$ Static ▼ 5734.39 Hole Depth 55.0 ft \_ Screen: Diameter 2 in Length 20.0 ft Type/Size PVC/0.01 in Hole Diameter 8.25 in Casing: Diameter 2 in Length 37.5 ft \_ Type PVC Sand Pack 10/20 Drill Co. Cascade Drilling Drilling Method Hollow Stem Auger Driller Brendon Remillard Driller Reg. # WD-1664 Log By Rob Malcomson Start Date 4/20/2022 Completion Date 4/20/2022 Checked By S. Varsa Bentonite Chips Bentonite Granules Grout Bentonite Pellets Sand Pack PP Sand Pack Description Recovery Graphic Log uscs Jepth (ff) PID (ppm) (Color, Moisture, Texture, Structure, Odor) Geologic Descriptions are Based on the USCS. 0 0-8' hydro-excavated. (Sand, silt, and clay; brown to brownish-gray, dry, loose to medium dense.) NM NM NM NM 100% 5 NM NM NM Silt, clayey, brown to grayish-brown, dry, loose to medium dense, no ML hydrocarbon odor. 0.0 100% 0.0 10 Silt and clay, sandy, grayish-brown, dry, hard, no bedding, trace caliche, no hydrocarbon odor. 0.0 0.0 ML 100% 0.0 0.0 SM Sand, silty, grayish-tan, dry, loose, fine-grained, no hydrocarbon odor. 15 0.0 No recovery. NR NR Silt and clay, sandy, grayish-brown, dry, hard, no bedding, trace caliche. 0.0 ML 2017 FOGELSON 4-1 LOGS.GPJ MWH IA.GDT 12/8/22 Sand, silty to silt, grayish-brown, dry, loose, fine-grained. 0.0 SM 20 0.0 No recovery. NR Silt, sandy, grayish-brown, dry, moderately cemented, thinly bedded, trace ML 0.0 80% 0.0 Clay and silt, sandy, yellowish-brown, dry, hard, moderately cemented. 0.0 CL 25 0.0 No recovery. NR NR Clay and silt, sandy, yellowish-brown, dry, hard, moderately cemented. CL 60% 0.0 Silt, sandy, grayish-brown, dry, medium stiff, trace calcite crystals, no 0.0 ML hydrocarbon odor.

Continued Next Page

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#### **Drilling Log**



Monitoring Well MW-10

Page: 2 of 2

Project Fogelson 4-1 Owner El Paso CGP Company, LLC Location San Juan County, New Mexico Project Number 193709201 Recovery Graphic Log uscs Depth (ft) PID (ppm) Description (Color, Moisture, Texture, Structure, Odor) Geologic Descriptions are Based on the USCS. Continued 30 No recovery. NR NR 20% NR NR Sand, silty, dry, loose, fine-grained, no hydrocarbon odor. SM 35 0.0 No recovery. NR Sand, silty/clayey, grayish-brown, damp, medium dense. 1.7 SM 80% 1.1 0.8\* Clay, sandy, silty, olive and orange, damp, slight hydrocarbon odor. CL 14.4\* \*Sample collected: MW-10 39-40'. 40 No recovery. NR Clay, sandy, olive and orangish-brown, dry to damp, stiff to very stiff, slight CL 0.9 hydrocarbon odor. 80% CL Clay, sandy, gray to dark gray, dry to damp, stiff to hard, hydrocarbon 4.7 staining and odor. 103 Sand. silty, gray, medium dense, fine to medium-grained, hydrocarbon SM staining and odor. 533 45 No recovery. NR NR Sand, silty, clayey with depth, gray to dark gray, some orangish-60% yellowish-tan 48-50', dry to moist, sand becomes finer-grained with depth, 149 SM intermittent hydrocarbon staining 47.5-49.5', hydrocarbon odor. 83.6 50 62.7 Weathered sandstone, minor weathered shale and fragments from 49.5-52', gray, damp to moist, strongly cemented becoming weak to 45.4 moderate with depth, bedded, fine-grained. 4.1 100% 4.7 1.0 55 0.9 End of boring = 55'. Well set at 55'. Drilling Log 2017 FOGELSON 4-1 LOGS.GPJ MWH IA.GDT 12/8/22 60 65 70



## WELL RECORD & LOG

### OFFICE OF THE STATE ENGINEER

www.ose.state.nm.us

NC	POD 10	). (WELL NO	).)		WELL TAG ID NO. MW-10			SJ-4237	\$).					
OCATI	WELL OWN El Paso CO							PHONE (OPTIO 713-420-347						
WELL L	WELL OWN 1001 Louis		GADDRESS et Room 1445B					CITY STA Houston TX			77002	ZIP		
GENERAL AND WELL LOCATION	WELL LOCATIO (FROM GI	PS)	DI TITUDE NGITUDE	36 -107	MINUTES 45 59	3.2 34.4	4 N	* ACCURACY REQUIRED: ONE TENTH OF A SECOND     * DATUM REQUIRED: WGS 84						
1. GEN	1	ON RELATI	NG WELL LOCATION TO Wnship 29 Range 1	WNSHJIP, RANGE) WH	IERE AVA	ILABLE								
Į i	LICENSE NO		NAME OF LICENSED	DRILLER	Shawn Cain				NAME OF WELL DRILLING COMPANY  Cascade Drilling					
	DRILLING S 4/20		DRILLING ENDED 4/2022	DEPTH OF COM	PLETED WELL (FT) 55		BORE HO	LE DEPTH (FT) 56	H (FT) DEPTH WATER FIRST ENCOUNTERED (FT) 41					
NO	COMPLETE	D WELL IS:	ARTESIAN	DRY HOLE	SHALLOW	(UNCO	NFINED)		STATIC WATER LEVEL IN COMPLETED WELL (FT)  Dry					
ATI(	DRILLING F	LUID:	AIR	MUD	ADDITIVES	S – SPEC	CIFY:							
JKM	DRILLING N	IETHOD:	ROTARY	HAMMER	HAMMER CABLE TOOL OTHER - S			R = SPECIFY: HSA						
SING INFO	DEPTH (feet bgl) FROM TO		BORE HOLE DIAM (inches)	(include ea	CASING MATERIAL AND/OR GRADE (include each casing string, and note sections of screen)		CON	ASING NECTION TYPE	CASING INSIDE DIAM. (inches)	THI	NG WALL CKNESS nches)	SLOT SIZE (inches)		
Š	0	56	8		PVC Blank 0-35			ling diameter) h Thread	2.375		.154	100		
2. DRILLING & CASING INFORMATION				Sch 40 I	PVC Screen 35-55'		Flus	h Thread	2.375		.154	.010		
_														
AL	DEPTH FROM	(feet bgl)	BORE HOLE DIAM. (inches)	1	T ANNULAR SEA EL PACK SIZE-R				AMOUNT (cubic feet)		METHO PLACEN			
ER	0	1.5	8		Conci	rete			2.5		Pou	r		
MA	1.5	30	8		Cement/Bent	tonite G	irout		13		Tremie P	ımped		
AK	30								1.5		Pou			
3. ANNULAR MATERIAL	33	56	8		20/40 \$	Sand			15.5		Pou	r		
	L OSE INTER E NO.	NAL USE			POD NO.			WR-20	) WELL RECORD	& LOG ('	Version 06/3	0/17)		
	ATION				FOD NO.		-	WELL TAG II			PAGE	1 OF 2		
								WELL IAGII	J NU.		IAGE	. 0. 2		

DEPTH (feet bgl)

THICKNESS

**ESTIMATED** 

YIELD FOR WATER-

WATER BEARING?

	FROM	ТО	(feet)	(attach supplemental sheets to fully describe a	all units)	(YES/NO)	BEARING ZONES (gpm)
	0	47	47	Silty Sands with clays		✓ Y N	
	47	56	9	Cemented Sand Stone		Y VN	
						Y N	
_00						Y N	
						Y N	
برا						Y N	
WEL						Y N	
LOG OF WELL						Y N	
500						Y N	
1018						Y N	
007						Y N	
SEO						Y N	
4. HYDROGEOLOGIC						Y N	
HAD						Y N	
4.						Y N	
						Y N	
						Y N	
						Y N	
						Y N	
						Y N	
						Y N	
	METHOD L	ISED TO ES	TIMATE YIELD	OF WATER-BEARING STRATA:		TOTAL ESTIMATED	
	PUM	P A	IR LIFT 🔽	BAILER OTHER - SPECIFY:		WELL YIELD (gpm)	0.00
NO	WELL TES			ACH A COPY OF DATA COLLECTED DURING WELL T ME, AND A TABLE SHOWING DISCHARGE AND DRAV			
ERVISION	MISCELLA	NEOUS INF	ORMATION:				
PER							
GSUP							
RIG							
M TEST;	PRINT NAM	лЕ(S) OF DF	RILL RIG SUPER	RVISOR(S) THAT PROVIDED ONSITE SUPERVISION OF	F WELL CONS	STRUCTION OTHER 1	HAN LICENSEE:
∠	Brendon Re	millard					
7:35:23	<u> </u>						
7.3				TIES THAT, TO THE BEST OF HIS OR HER KNOWLEDG DESCRIBED HOLE AND THAT HE OR SHE WILL FILE T			
TUT	AND THE P	PERMIT HO	LDER WITHIN 3	0 DAYS AFTER COMPLETION OF WELL DRILLING:			
3/27/2023 7 SIGNATURE		21	1	Shawn Cain		5/20/2022	
. 3/ 6. SI		8/h-	<u>_'</u>	Shawn Calif		3/20/2022	-
OCD:		SIGNATI	URE OF DRILLE	R / PRINT SIGNEE NAME		DATE	7,050
	OR OSE INTER	NAL USE			WR-20 WEI	L RECORD & LOG (\	ersion 06/30/2017)
FII	LE NO.			POD NO.	TRN NO.		
Received by	CATION			WELL	TAG ID NO.		PAGE 2 OF 2

COLOR AND TYPE OF MATERIAL ENCOUNTERED -

INCLUDE WATER-BEARING CAVITIES OR FRACTURE ZONES

#### **Drilling Log**



#### Monitoring Well MW-11

Page: 1 of 2 **COMMENTS** Project Fogelson 4-1 Owner El Paso CGP Company, LLC 0-5' hydro-excavated. Project Number 193709201 Location San Juan County, New Mexico Surface Elev. <u>5778.88 ft</u> North <u>2092676.962</u> East 2676310.163 10/30/22 Top of Casing <u>5782.08 ft</u> Water Level Initial <u>√</u> 5723.35 Static **▼** 5724.75 Hole Depth 56.6 ft Screen: Diameter 2 in Length 25.0 ft Type/Size PVC/0.01 in Hole Diameter 8.25 in Casing: Diameter 2 in Length 34.7 ft Type PVC Drill Co. Cascade Drilling Drilling Method Hollow Stem Auger Sand Pack 10/20 Silica sand Driller Brendon Remillard Driller Reg. # WD-1664 Log By Rob Malcomson Start Date 10/4/2022 Completion Date 10/6/2022 Checked By S. Varsa Bentonite Chips Bentonite Granules Grout Bentonite Pellets Sand Pack PP Sand Pack Description Recovery Graphic Log uscs Depth (ft) PID (ppm) (Color, Moisture, Texture, Structure, Odor) Geologic Descriptions are Based on the USCS. 0 0-5' hydroexcavated. (Sily, clay and sand, tan-brown-gray). NM SM 0% 5 0.0 Sand, silty, tan-brown, loose. SM 0.0 Clay, silty, brown-gray, dry, hard, some caliche. 0.0 100% 0.0 0.0 10 0.0 CL 0.1 0.0 100% 0.0 0.0 Sand, silty, dry, dense, fine-grained. SM 15 0.0 Sand, silty, gray-brown, dry, becoming loose with depth, fine-grained, some caliche. 0.0 0.0 SM 100% 0.0 Drilling Log 2017 FOGELSON 4-1 LOGS.GPJ MWH IA.GDT 12/8/22 0.0 20 0.3 Sand, silty, with dry, very stiff, thin, clay zones at 21.5', 22.5' and 23'; tan-brown-gray, dry, loose to dense, fine-grained. 0.0 0.0 SM 100% 0.0 0.0 25 0.0 SP Sand, tan, dry, loose, fine-grained, well-sorted. 0.1 Sand, silty, brown-gray, dry, loose becoming very dense with depth, fine-grained. 0.0 60% NR No recovery. NR 30 Continued Next Page

#### **Drilling Log**



Monitoring Well MW-11

Page: 2 of 2

Project Fogelson 4-1 Owner El Paso CGP Company, LLC Location San Juan County, New Mexico Project Number 193709201 Well Completion Recovery Graphic Log Depth (ft) PID (ppm) uscs Description (Color, Moisture, Texture, Structure, Odor) Geologic Descriptions are Based on the USCS. Continued 30 Sand, silty, clayey, gray-brown, dry, loose to medium dense, fine-grained. 0.0 SM 0.1 80% Sand, silty to silt, sandy; tan-brown, dry, medium dense, fine grained, 0.0 SM some caliche. NR No recovery. 35 0.0 (Same as above) Sand, silty to silt, sandy; tan-brown, dry, medium dense, SM fine grained, some caliche. 0.0 Sand, silty, gray-brown, dry, dense, fine-grained, some caliche. 0.0 SM 90% 0.0 0.1 Sand, tan, dense, fine to medum-grained, dark orange layer and coal at SW /W-11 @ 40 0.4 40-41' Sand, silty, tan-gray-brown, dry, loose to medium dense, fine to SM 0.0 medium-grained, trace fine gravel in lower portion. 0.0 Sandstone, orange and gray, dry, dense, weakly to moderately cemented. 100% Sandstone, tan-gray, blue-gray banding from 43.8-44.1', dry, dense, 0.1 weakly to moderately cemented, fine-grained, some coarse gravel. 0.0 45 0.0 Sandstone, yellow-tan-brown, moist, moderately cemented, fine-grained, thinly bedded. 0.0 0.1 Sandstone, silty, gray-brown, moist, hard, weakly cemented, fine-grained, 100% 0.0 some embedded fine to coarse gravel. Sandstone, tan, dry, dense, weakly cemented, fine-grained. 0.1 Sandstone, gray, dry, dense, weakly cemented, fine-grained, massive. 50 0.0 Sandstone, medium gray, moist, weakly to moderately cemented, fine-grained, thinly bedded. 0.0 0.0 100% 0.0 Sandstone, silty, gray becoming light gray with depth, moist, fine-grained, massive. 0.0 55 0.0 Sandstone, silty, light gray, dry to slightly moist, weakly to moderately 100% cemented, fine to medium-grained, thinly bedded. 0.0 Drilling Log 2017 FOGELSON 4-1 LOGS.GPJ MWH IA.GDT 12/8/22 End of boring = 56'. Well set at 56.5'. 60 65 70



L	57-11	ER NAME(S)	Fogelson 4-1	MW-11		PHONE (OPTI	SJ- 4237				
		The second second	Company, LL	C (Contact: Joseph Wile	ey)	713-420-3475					
		ER MAILING / Louisian	ADDRESS na Street Roor	m 1445B		Houston TX 77002					
	WELL LOCATIO (FROM G	LATE	TUDE 20926	GREES MINUTES SE 576.96 Northing 10.16 Easting	CONDS N	A D C TO A DECUMPED WES SA					
F	DESCRIPTI			STREET ADDRESS AND COMMON LAN	DMADE DIS	PERECTION TO	WARRIED BANGE WH	FRE AVAILA	BLE		
			4, Section 4,		DMARKS - FLS	sa (sec non, ro	wasible, karasi, wa				
Ī	LICENSE NO	)	NAME OF LICENSED	DRILLER			NAME OF WELL DR	ILLING COM	PANY		
1	WD-16	64	Brendon	Per: Nord			(64.4	00:11			
	DRILLING S	TARTED	DRILLING ENDED	DEPTH OF COMPLETED WELL (FT)	BORE HO	LE DEPTH (FT)	DEPTH WATER FIRS	T ENCOUNT	ERED (FT	)	
	10-	6-22	10-6-22	55.8	56		55				
	COMPLETE	D WELL IS:	ARTESIAN	DRY HOLE SHALLOW (UI	NCONFINED)		STATIC WATER LEV	EL IN COMP	LETED W	ELL (FT)	
1	DRILLING F	LUID.	AIR	MUD ADDITIVES -	SPECIFY						
	DRILLING N	METHOD:	ROTARY	☐ HAMMER ☐ CABLE TOOL	70 отне	R - SPECIFY:	tollow ster	auger			
	DEPTH (feet bgl) BORE HOLE FROM TO DIAM (inches)		DIAM	CASING MATERIAL AND/OR GRADE (include each casing string, and note sections of screen)	CON	ASING NECTION TYPE ding diameter)	CASING INSIDE DIAM (inches)	CASING THICK (incl	NESS	SLO SIZI (inche	
	0	25.8	8	PVC Riser		Thread	2 inch	Sch 40		N/A	
	25.8	55.8	8	PVC Serven		Thread	2 inch	Sch 4		0.01	
	DEPTH FROM	(feet bgl)	BORE HOLE DIAM. (inches)	LIST ANNULAR SEAL GRAVEL PACK SIZE-RAI		· · · · · · · · · · · · · · · · · · ·		200000		DD OF MENT	
-		2	8	Concrete Comple	44.	- 4.1.0°	ATTIVIT HOME	11			
-	2	20	9	(was / Grown	M: Y	-		7	and !	rour	
	20.	22.8	8	Benjanik chi	05			14	and f	2	
	22.8	55.8	8	Sard Filter Pa	ek			1	and f	our-	
Ī		2314	- EA 11	Ser FILIN IS				- 1	SHOP I	JW	
			1					_			

FOR OSE INTERNAL USE

FILE NO.

POD NO.

WR-20 WELL RECORD & LOG (Version 04/30/19)
TRN NO.

	DEPTH	feet bgl)		COLOR AND TYPE OF MATERIA	L ENCOUNTERED -	WA	LEB	ESTIMATED YIELD FOR
	FROM	то	THICKNESS (feet)	INCLUDE WATER-BEARING CAVITIE (attach supplemental sheets to full	S OR FRACTURE ZONES ly describe all units)	BEAR (YES	ING?	WATER- BEARING ZONES (gpr
	0	45	45	Silt/Sands Comment Sand Stone		Y	0	
	45	55.8	10.8	Commented Sand stars		0	N	0.5
				John Mark		Y	N	
						Y	N	
						Y	N	
1						Y	N	
WE						Y	N	
5						Y	N	
200						Y	N	
1		1		11		Y	N	
4. HYDROGEOLOGIC LOC OF WELL						Y	N	
SEC						Y	N	
UKO				1		Y	N	
						Y	N	
7		-1				Y	N	
						Y	N	
		1				Y	N	
						Y	N	
						Y	N	
		1				Y	N	
						Y	N	
	METHOD X PUN			OF WATER-BEARING STRATA:  BAILER OTHER - SPECIFY:	1	TAL ESTIN		0.5
	WELL TE	TEST	RESULTS - ATT	ACH A COPY OF DATA COLLECTED DURI	NG WELL TESTING, INCLUE	ING DISC	HARGE N	METHOD,
SIO		SIA		ME, AND A TABLE SHOWING DISCHARGE	AND DRAWDOWN OVER T	HE TESTIN	IG PERIO	D.
RIG SUPERVISION			FORMATION: p well vault v	vith 3 protective bollards all pai	nted yellow, Locking	well ca	o	
5. 1E51; KI	0.0.00	ме(s) ог п on Remi	The state of the state of	VISOR(S) THAT PROVIDED ONSITE SUPE	RVISION OF WELL CONSTR	UCTION O	THER TH	AN LICENSE
0. SIGNALORE	RECORD	OF THE ABO	OVE DESCRIBED	AT TO THE BEST OF MY KNOWLEDGE WELL. I ALSO CERTIFY THAT THE WELL WITH THE PERMIT HOLDER WITHIN 30 D	. TAG, IF REQUIRED, HAS BI	EEN INSTA	LLED AN	ND THAT TH
316	//		20	Brenden Penillard		11-30	-22	
1		SIGNAT	TURE OF DRILLE				DATE	
:01	OSE INTE	RNAL USE			WR-20 WELL	RECORD &	LOG (Ve	ersion 04/30/20
	E NO.	and the same		POD NO.	TRN NO.		123	11 2 11 201 20

FILE NO.

### **Drilling Log**



#### Soil Boring SB-12

**SB-12** Page: 1 of 2

Project	Owner El Paso CGP Company, LLC Project Number 193709201  Description  Owner El Paso CGP Company, LLC Project Number 193709201  Description  COMMENTS 0-5' hydro-excavated. Depth to water measurement from monitoring well MW-9, located near SB-12.  COMMENTS 0-5' hydro-excavated. Depth to water measurement from monitoring well MW-9, located near SB-12.												
Depth (ft)	(mdd)	% Recovery	Blow Count Recovery	Graphic	nscs	(Color, Moisture, Texture, Structure, Odor) Geologic Descriptions are Based on the USCS.							
- 0 -   	NM	0%			SM	0-5' hydroexcavated. (Sand and silt, tan-brown, dry, loose).							
- 5 -   - 10 -	0.0 0.1 0.0 0.0 0.0	100%			SM	Sand, silty, gray-brown, dry, loose, fine-grained.							
	0.0 0.1 0.1 0.0	100%			SM	Sand, silty, tan-gray, dry, loose to weakly cemented, fine to medium-grained, trace caliche.							
- 15 -  	0.0 0.0 0.1 0.0	100%			SM	Sand, silty, tan-gray, dry, dense to weakly cemented,  Weathered sandstone, some loose/weakly cemented layers, fine to medium-grained.							
_ 20 _	- 0.0 - 0.1 - 0.1		-		SM	Sand, silty, tan-gray, loose, fine-grained.  Weathered sandstone, silty, tan-gray, dry, weakly cemented becoming moderate to							
-	NR	70%				strong with depth, medium-grained.							
-	NR	SB-12 @				No recovery.							
25 –	1.8	25- 26'				Weathered sandstone, gray, dry, moderately to strongly cemented, medium-grained, thinly bedded.							
	0.1 0.0 0.1	100%				Weathered sandstone, slightly clayey in lower portion, brown from 27-28.5' and then dark orange-brown, dry to slightly moist, dense but weakly cemented becoming stronger with depth, coarser-grained with depth.							
- 30 -						Continued Next Page							

#### **Drilling Log**



Soil Boring SB-12

Page: 2 of 2

Project Fogelson 4-1 Owner El Paso CGP Company, LLC Location San Juan County, New Mexico Project Number 193709201 Recovery Graphic Log uscs Depth (ft) PID (ppm) Description (Color, Moisture, Texture, Structure, Odor) Geologic Descriptions are Based on the USCS. Continued 30 Weathered sandstone, silty, orange-brown, moist (perched), loose, moderately 0.5 cemented, medium-grained. Weathered sandstone, tan-brown-gray, dry, dense, weakly cemented, fine to 4.8 coarse-grained. 100% 0.2 Weathered shale, tan-gray-orange-brown, dry, hard. SB-12 @ Weathered shale, clayey, gray-brown, dry, hard, trace embedded pebbles 32-33' 0.1 SM Sand, silty, brown to tan, dry, very dense, weakly cemented. 35 1.2 Weathered sandstone, tan, dry, weakly to strongly cemented, thinly bedded, trace coal fragments. 0.0 0.0 100% 0.0 Weathered shale, clayey, gray-brown, dry, hard. 0.0 Sandstone, silty, dry, dense, weakly to moderately cemented, fine-grained, 40 0.3 Sandstone, yellow-brown, dry, moderately cemented, fine to medium-grained, thinly bedded. 0.1 Sandstone, dark orange-brown, dry, fine to medium-grained. 0.2 100% SB-12 @ 42-43' 0.4 Shale, dark brown. 0.1 Sandstone, orange-brown, dry, very dense, moderately cemented, fine-grained. 45 End of boring = 44'. 50 55 Drilling Log 2017 FOGELSON 4-1 LOGS.GPJ MWH IA.GDT 12/8/22 60 65 70

## **APPENDIX C**

Stantec \_\_\_\_\_



## PLUGGING RECORD



NOTE: A Well Plugging Plan of Operations shall be approved by the State Engineer prior to plugging - 19.27.4 NMAC

I. GEN	ERAL / WELL OWNE	RSHIP:				
State En	gineer Well Number:	MW-12 (POD 12)	(NMC	SE File No. SJ	-4237)	
Well ow	ner: El Paso CGP Comp	any, LLC; Attn: Josej	oh Wile	ey	Phone No.: 7	713-420-3475
Mailing	address: 1001 Louisiana	Street, Room 956I				
City: Ho	ouston		State:	TX		Zip code: 7702
II. WE	LL PLUGGING INFO	RMATION:				
1)	Name of well drilling co	ompany that plugged v	well: _	Cascade Drilli	ng LP	
2)	New Mexico Well Drill	er License No.: WD-	1664		Ex	piration Date: <u>01-3</u> 1-23
3)	Well plugging activities	were supervised by the	ne follo	wing well drille	er(s)/rig superviso	or(s): <u>Brendon Remillard</u>
4)	Date well plugging bega	nn: 10/5/2022		Date well p	lugging conclude	ed: <u>10/5/2022</u>
5)	Well Location:					
6)	Depth of well confirmed by the following manner	Northing: 2 Easting: 2 d at initiation of plugg r: Measurin	267635 ing as:	1.23 (ft.) (SPC :	zone NM W-3003	8) el (bgl),
7)	Static water level measu					
8)	Date well plugging plan	of operations was app	proved	by the State En	gineer: 9/15/202	2
9)						If not, please describe hadditional pages as needed):
During	drilling of MW-12 (PO)	D 12), auger refusal v	was en	countered befo	re reaching the p	lanned total depth; therefore,
no well	was installed, and the b	orehole drilled for M	W-12	(POD 12) was	plugged.	
				<del></del>		
W						

10) Log of Plugging Activities - Label vertical scale with depths, and indicate separate plugging intervals with horizontal lines as necessary to illustrate material or methodology changes. Attach additional pages if necessary.

#### For each interval plugged, describe within the following columns:

Depth (ft bgl)	Plugging <u>Material Used</u> (include any additives used)	Volume of <u>Material Placed</u> (gallons)	Theoretical Volume of Borehole/ Casing (gallons)	Placement  Method (tremie pipe, other)	Comments ("casing perforated first", "open annular space also plugged", etc.)
-	Portland Cement grout with 5% bentonite powder additive.	75 Gallons		Gravity from surface	Permitted well installation borehole plugged due to auger refusal short of proposed total depth.
-					
-					
-					
_					
-					
_					
-					
_	I	MULTIPLY E cubic feet x 7.4	3Y AND OBTAIN BOS = gallons		

#### III. SIGNATURE:

I, Brand , say that I am familiar with the rules of the Office of the State Engineer pertaining to the plugging of wells and that each and all of the statements in this Plugging Record and attachments are true to the best of my knowledge and belief.

Signature of Well Driller

12-16-22 Date

Version: September 8, 2009

## **APPENDIX D**

**Stant** 

BAS	SING	505-632-8936	loomfield, NM 87413 or 505-334-3013		PERMIT: N Waste Docu	M -001-0005 ument, Form C	7	
DATE	-00	3/22/22	s per Day	DEL.	TKT#.			
GENERATO	R: EI	Pago CGP Com. LLC	Α.	BILL	o: El	Pago	CGP	Comilli
HAULING C	:0. Oil	Conservation Divis	ion	DRIVE	R: S	Can	Clary	
ORDERED	BY:	Jue W		CODE		ii (Vairie)		
WASTE DE	SCRIPTION	Exempt Oilfield Waste	Produced Wat	er Drillin	ng/Comple	tion Fluids		
STATE:	DRIM [	CO AZ UT TREA	TMENT/DISPOSAL N	METHODS:	<b>EVAPOR</b>	ATION MIN	JECTION TRI	EATING PLANT
NO.	TRUCK	LOCATION(S)	VOLUME	COST	H2S	COST	TOTAL	TIME
1		James F. Bell #1E/Ficlds A	#7A	70			.70	
2		STATEGASCOM N# 1/KZ7L	.007L				122MA	R22 6:1
3		Fogelson 4-1/Kn. 4ht#1						
4		GCU 124E/Mily Fel #1	A					
5	,	Covada Mesu #2						
		the Resource Conservation and Recovery Act (RCRA) s: RCRA Exempt: Oil field wastes generated from oil a					ulatory determi	
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MANIFEST # 72505

POINT OF ORIGIN 7090 SOM

TRANSPORTER KILEM

DATE 04.20-2 30B # 14073-0060 PHONE: (505) 632-0615 • 5796 U.S. HIGHWAY 64 • FARMINGTON, NEW MEXICO 87401

	=. (000) 002 0010 ·	3730	0.3. HIGHWAT 64	A 1 VI MAIII A	DATE 0 20 20 000 # 1 10 13 1 1 1						
LOAD			COMPLETE DESCRIP	TION OF SH		TRANSPORTING COMPANY					
NO.	DESTINATION		MATERIAL	GRID	BYETS.	BBLS	DRUMS	TKT#	TRK#	TIME	DRIVER SIGNATURE
1	BF		1490 ROF		Dr. 1		1		16013	0945	SES
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											48
RESULT	S		LANDFARM A		. () 1	1		NOTE	5		
281	CHLORIDE TEST	١	EMPLOYEE	roll	1 KM	Mi	on	-			
	CHLORIDE TEST		☐ Soil w/ Debris ☐ A			<u> </u>					
	CHLORIDE TEST		By signing as the o	iriver/transp	orter, I certif	y the mater	ial hauled fi	rom the above	location has n	ot been added	to or tampered with.
Pass	PAINT FILTER TEST	ı	certify the material into the load. Landi								s been added or mixed cordingly.

**Generator Onsite Contact** Phone

Signatures required prior to distribution of the legal document.

White - Company Records / Billing

Yellow - Customer

Pink - LF Copy



MANIFEST # 73058 GENERATOR ZL Pasa

POINT OF ORIGIN Rio Vista Comp Station
TRANSPORTER Envirotech

PHONE: (505) 632-0615 • 5706 U.S. HIGHWAY 64 • FARMINGTON, NEW MEXICO 87401

PHONE									DATE (1) - 24 - 27 JOB # Sec Below				
LOAD		COMPLETE DESCRIPTION OF SHIPMENT							TRANSPO	RTING COMPA	NY		
NO.	DESTINATION		MATERIAL	GRID	YDS	BBLS	DRUMS	TKT#	TRK#	TIME	DRIVER SIGNATURE		
1	BF	1	iguia			3.			938	1445	MM		
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								1 Drui	u Blanco	North F	lare		
						1407	3-0060	1 Drum	NMG	w pits (	Plant Vare 15 sites)		
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	CHLORIDE TEST										to or tampered with. I		
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Generator Onsite Contact	<del> </del>	Phone
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Signatures required prior to distribution of the legal document.

DISTRIBUTION:

into the load. Landfarm employee signature is certification of the above material being received and placed accordingly.

Yellow - Customer

Pink - LF Copy

eleased to Imaging: 5/22/2023 11:48:46 AM



SPECIAL WASTE MANIFEST		Manifest Document No.		40		Page 1 of		
Generator's Name EIPASO CGP	Generator's Address	Tx 77002				hone No.		
Origin of Special Waste (Project or Spi CAMADA MESM # 2, Miles GCU # 124E, State GAS	Location): Feb # 1A , Knight # 1 com 4 # 1 , Johnston	Ficlos A # Fed #4, Joh	7A, instan	Fogelsu Fed #	~ 4-1 6A			
Transporter #1 Company Name	Address 5796 US HA	7 8 7 VO / Teleph	Telephone No. 605-632-0615					
Transporter #2 Company Name	Address	Teleph	one No					
Destination Facility Name/Site Address Enviroted UF # 2 43 ROAD 7175 Bloom field NM 87413	Facility ID (Permit) Number	Teleph						
	me of Special Waste	Conta No.	ainer(s)  Type	Total Quantity	Unit Wt/Vol			
Petroleun Contaminateo li	quid	1	B	100	941			
n Z								
RATO			1					
Z			#					
Add	tional Descriptions for Speci	al Waste Listed Al	oove.					
Special Handling Instructions:  GENERATOR'S CERTIFICATION: I hereby cer the special waste, and that such waste has been (Special Waste Requirements) in addition to any	managed, packaged, containerize other applicable federal, state or k	d and labeled in accord		th the requir	ements of 2			
Printed/Typed Name: Greg Crabbree As Agent	Signature:	60		Date:	1/3/2	<u>.                                    </u>		
Transporter 1 Acknowledgement of Receip Printed/Typed Name: Transporter 2 Acknowledgement of Receip Printed/Typed Name:	Signature:			Date:	/3/	62		
Discrepancy Indication Space:					_			
FACIL								
Discrepancy Indication Space.		as indicated upon thi	s manife	1100				
Printed Typed Name: ROO'1501	Signature:			Date	8.03	25.		



MANIFEST # 75742

GENERATOR <u>Kinder morgan</u>

POINT OF ORIGIN <u>Y-100</u>

TRANSPORTER <u>Envirotech</u> 0066

PHONE: (505) 632-0615 • 5796 U.S. HIGHWAY 64 • FARMINGTON,	NEW MEXICO 87401 DATE 16-6	5-22 JOB# 14073
1 11011L. (303) 002-0013 - 3730 0.0. That WAT 04 - 1 Athenia 1011,	NEW MEXICO 07401 DATE VO	<u> </u>

PHONE	<del>:: (505) 632-0615 • 5</del>	796 U.S. HIGHWAY 64	6 U.S. HIGHWAY 64 • FARMINGTON, NEW MEXICO 87401					10-6-a2	JOB # _	14015-0066		
LOAD		COMPLETE DESCRIF	TION OF SHIP	PMENT		_		TRANSPORTING COMPANY				
NO.	DESTINATION	MATERIAL	GRID	YDS	BBLS	DRUMS	TKT#	TRK#	TIME	DRIVER SIGNATURE		
)	LF-2	Cont Soil	I-34	3	2	_	_	984	4:50	Sastir Jouts		
									;			
	<del></del>			/3	12							
							······································	-				
							<del></del>			1		
									~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~			
				1			***************************************	<b>S</b>				
RESULT	S	LANDFARM		1/ 1	0	$\mathcal{D}$	NO NO	OTES	<del> </del>	•		
-294	CHLORIDE TEST	EMPLOYEE		rmle								
	CHLORIDE TEST	☐ Soil w/ Debris ☐ A	fter Hours/Wee	kend Receival	☐ Scrape C	out 🗆 Wash O	ut					
	CHLORIDE TEST									d to or tampered with.		

**Generator Onsite Contact** Signatures required prior to distribution of the legal document.

**PAINT FILTER TEST** 

DISTRIBUTION:

White - Company Records / Billing

into the load. Landfarm employee signature is certification of the above material being received and placed accordingly.

certify the material is from the above mentioned Generator/Point of Origin and that no additional material has been added or mixed

Yellow - Customer

Pink - LF Copy

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1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

#### State of New Mexico **Energy Minerals and Natural Resources**

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

Form C-138 Revised August 1, 2011

\*Surface Waste Management Facility Operator and Generator shall maintain and make this documentation available for Division inspection.

#### REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. Generator Name and Address:	Billing code for invoice:	
El Paso CGP Company L.L.C., 1001 Louisiana S	Street, Room 1445B, Houston, TX 77002	
2. Originating Site:	Action 1772, Tourish, 1717702	
Fogelson 4-1		
3. Location of Material (Street Address, City, Sta		
36° 45' 02.4" N, 107° 59' 29.6" W Nearest Inte	ersection: US-550 and Louisiana Street, Bloomfield, NM	
4. Source and Description of Waste:		
	ed property. As part of environmental investigation/remediation ac onitoring wells will be installed. Waste soil generated from these	
removed from the Site for disposal.	omorning wens will be instanced. Waste soil generated from these	activities will be
	Volume (to be entered by the operator at the end of the haul)	yd³ / bbls
5. GENERATOR CER'	TIFICATION STATEMENT OF WASTE STATUS authorized agent for El Paso CGP Company, LLC	
I. Control Joseph Whey , representative or	authorized agent for	do hereby
certify that according to the Resource Conservation at regulatory determination, the above described waste i	nd Recovery Act (RCRA) and the US Environmental Protection A s: (Check the appropriate classification)	gency's July 1988
	rom oil and gas exploration and production operations and are not Acceptance Frequency   Monthly   Weekly   Per Load	mixed with non-
characteristics established in RCRA regulations,	is non-hazardous that does not exceed the minimum standards for 40 CFR 261.21-261.24, or listed hazardous waste as defined in 40 tation is attached to demonstrate the above-described waste is non-	CFR, part 261,
☐ MSDS Information ☐ RCRA Hazardous Wast	e Analysis 🔲 Process Knowledge 🔲 Other (Provide descript	tion in Box 4)
GENERATOR 19.15.36.15 WASTE TE	ESTING CERTIFICATION STATEMENT FOR LANDFARM	/IS
I, Joseph July, representative for Generator Signature	El Paso CGP Company, LLC authorize Envi	
complete the required testing/sign the Generator Was	te Testing Certification.	
I,, representative for	or do hereby cer	rtify that
representative samples of the oil field waste have been have been found to conform to the specific requirements	n subjected to the paint filter test and tested for chloride content at ents applicable to landfarms pursuant to Section 15 of 19.15.36 NN rate the above-described waste conform to the requirements of Se	MAC. The results
6. Transporter: Envirotech, Inc.		
OCD Permitted Surface Waste Management Facility	ty	
Name and Facility Permit #: Envirotech Inc. Soil Remediation Fa	acility Permit # NM-01-0011	
Address of Facility: #43 Road 7175, South of Bloomfield NM		
Method of Treatment and/or Disposal:		
Evaporation Injection	Treating Plant 🛛 Landfarm 🔲 Landfill 🔲 Other	
Waste Acceptance Status:	<b>DENIED</b> (Must Be Maintained As F	Permanent Record)
PRINT NAME:	TITLE: DATE:	
SIGNATURE:	TELEPHONE NO.:	
Surface Waste Management Facility Authoriz	zed Agent	



# rvirotech BOL# 75 74 A CHLORIDE TESTING / PAINT FILTER TESTING

DATE 10-6-	12	TIME	4:50		Attach test strip here
CUSTOMER	Kind.	en morgal	1		9
SITE		1-100			ANTA
DRIVER	Aus	tin Fou	ta		
SAMPLE	Soil	Straight	With Dirt		a a
CHLORIDE TEST	-294	mg/Kg			
ACCEPTED	YES		NO		6
PAINT FILTER TEST	Time started	4:50	Time completed	5:00	
PASS	YES		NO		
SAMPLER/ANALYST		Luly			

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



MANIFEST # 76385	
GENERATOR EUPOSO	
POINT OF ORIGIN See Mortes	
TRANSPORTER EN VIVOTECH	

									77700				
PHONE	: (505) 632-0615 • 5	5796 U.S. HIGHWAY 64 •	FARMING	STON, NEV	V MEXICO	87401	DATE //	·07-2	_ # OBلــــــــــــــــــــــــــــــــــــ	14073-0	060		
LOAD	COMPLETE DESCRIPTION OF SHIPMENT							TRANSPORTING COMPANY					
NO.	DESTINATION	MATERIAL	GRID	YDS	BBLS	DRUMS	TKT#	TRK#	TIME	DRIVER SIG	NATURE		
	BF	Con't liguid				1	01154	937	0845	ANGU	MS		
						/1	·						
			· · · · · · · · · · · · · · · · · · ·								<u>D</u>		
RESULT	S CHLORIDE TEST	LANDFARM EMPLOYEE	a	K		Pr	NOTES	see F	Hach Pit.	ment	-		
	CHLORIDE TEST	☐ Soil w/ Debris ☐ Afte					Out C -	-138	Vit -	Sites			
Pass	CHLORIDE TEST PAINT FILTER TEST	By signing as the dri certify the material is into the load. Landfar	s from the	above ment	ioned Gen	erator/Point	rom the above it of Origin and the	location has n at no additior	ot been added nai materiai ha	d to or tampe s been added	red with.		
	or Onsite Contact	Into the load. Landrai	m employe	ee signature	is certifica	ition of the a	idove materiai d		and placed ac				
		listribution of the legal docur	ment. D	ISTRIBUTION:	White - Con	npany Records /	Billing Yellow - Cu	ustomer Pink - L	F Copy	BAN JUAN PR	INTING 2021 407-3		

Generator Onsite Contact	P	hone	



# rvirotech BOL# 76385 CHLORIDE TESTING / PAINT FILTER TESTING

DATE 11-7-2	Z	. т	TIME	8:45 A	n	Attach test strip here
CUSTOMER	Kinder	Morgan	1			d
SITE	Pit	Sites				B
DRIVER	A.M.	1550	,			9
SAMPLE	Soil	Straight	/	With Dirt		8-
CHLORIDE TEST	-291	mg/Kg				6
ACCEPTED	YES	_/		NO _		5.
PAINT FILTER TEST	Time started	8:47		Time completed		3-
PASS	YES			NO _		2
SAMPLER/ANALYST	(	JR				_1_

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



SPECIAL WASTE MANIFEST	Manifest Docu	ment No.	11	54	P	age 1 of
Generator's Name	Generator's Address	COOM 95 HOWSTOR	561, 1,TX		or's Telepho	
Origin of Special Waste (Project or Sp STRB PIT + PlanT SITES	Il Location):					
Transporter #1 Company Name Enul Forecta	Address 5796 US HWY 64, FARMINGTON, NA	A STATE OF THE PARTY OF THE PAR	632	-0615		
Transporter #2 Company Name	Address	Telepho	ne No.			
Destination Facility Name/Site Address Environteu Landfarm 2	Facility ID (Permit) Number	Telephone No. 505-632-0615				
Type and Proper Na	nme of Special Waste	Contair No.	ner(s)	Total Quantity	Unit Wt/Vol	
WATER AND DRIP		140.	Гуре	4	70GAL	THE STATE OF
				= 1/1	150	
				F 77 32	lane.	
ne special waste, and that such waste has been	tify that the contents of this shipment are fully and n managed, packaged, containerized and labeled of other applicable federal, state or local regulation	in accorda	y descr nce wit	ibed above h the requir	by type and p ements of 20.9	roper nam 9.8 NMAC
Printed/Typed Name: Sean RC (191	y Signature A Class			Date	11/7/20	22
ransporter 1 Acknowledgement of Receiptinted/Typed Name:   ロードリー・ロード   ロードリー・ロード   Transporter 2 Acknowledgement of Receipting	Signature: Hillen inc	Sir		Date	11/7/-	2072
rinted/Typed Name:	Signature:			Date		
Discrepancy Indication Space:						
Facility Owner or Operator: I hereby acknowle	dge receipt of the special waste as indicated	pon this	manife	st, except a	as noted abov	e in the
Printed/Typed Name:	Signature			Date	11-07.2	5

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
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1220 S. St. Francis Dr., Santa Fe, NM 87505

## State of New Mexico Energy Minerals and Natural Resources

Form C-138 Revised August 1, 2011

Oil Conservation Division 1220 South St. Francis Dr. Santa Fc, NM 87505 \*Surface Waste Management Facility Operator and Generator shall maintain and make this documentation available for Division inspection.

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

REQUEST FOR AFFROVAL TO ACCEPT SULID WAS IE	
1. Generator Name and Address:  El Paso CGP Company L.L.C., 1001 Louisiana Street, Room 1445B, Houston, TX 77002	
<ol> <li>Originating Site:         Johnston Federal #4, Johnston Federal #6A, Sandoval GC A#1A, Canada Mesa #2, K-27 LD072, Standard Oil Com #1, Khight #1 Gallegos Canyon Unit #124E, GCU Com A #142E, Fields A#7A, State Gas Com N #1, Fogelson 4-1, Lat L 40, and James F. Bell #1E.     </li> </ol>	,
3. Location of Material (Street Address, City, State or ULSTR): Unit N, Sec. 27, T31N, R09W; Unit F, Sec. 35, T31N, R09W; Unit C, Sec. 35, T30N, R09W; Unit I, Sec. 24, T24N, R06W; Unit Sec. 5, T25N, R06W; Unit N, Sec. 36, T29N, R09W, Unit A, Sec. 5, T30N, R13W; Unit N, Sec. 35, T28N, R12W; Unit G, Sec. 20, R29N, R12W; Unit E, Sec. 34, T32N, R11W; Unit H, Sec. 16, T31N, R12W; Unit P, Sec. 4, T29N, R11W; Unit H, Sec. 13, T28N R04W; and Unit P, Sec. 10, T30N, R13W, respectively.	5.
<ol> <li>Source and Description of Waste:         Historic releases occurred on the above-referenced property. As part of environmental investigation activities, monitoring wells w be sampled, and purged liquids will be removed from the Site.</li> <li>Estimated Volume1yd³ / bbls Known Volume (to be entered by the operator at the end of the haul) yd³ / b</li> </ol>	
GENERATOR CERTIFICATION STATEMENT OF WASTE STATUS.  I, One Dissept Wiley representative or authorized agent for El Paso CGP Company, LLC do hereby COMPANY NAME  COMPANY NAME certify that according to the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 19 regulatory determination, the above described waste is: (Check the appropriate classification)	
RCRA Exempt: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non exempt waste.  Operator Use Only: Waste Acceptance Frequency   Monthly   Weekly   Per Load	)-
RCRA Non-Exempt: Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous characteristics established in RCRA regulations, 40 CFR 261.21-261.24, or listed hazardous waste as defined in 40 CFR, part 261, subpart D, as amended. The following documentation is attached to demonstrate the above-described waste is non-hazardous. (Characteristics)	-
☐ MSDS Information ☐ RCRA Hazardous Waste Analysis ☐ Process Knowledge ☐ Other (Provide description in Box 4)	
GENERATOR 19.15.36.15 WASTE TESTING CERTIFICATION STATEMENT FOR LANDFARMS  I, Dog Tue Joseph Wiley, representative for El Paso CGP Company, LLC : authorize Envirotech to Generator Signature complete the required testing/sign the Generator Waste Testing Certification.	
I	
19.15.36 NMAC.	
6. Transporter: Envirotech, Inc.	
OCD Permitted Surface Waste Management Facility .	
Name and Facility Permit #: Envirotech Inc. Soil Remediation Facility Permit # NM-01-0011	
Address of Facility: #43 Road 7175, South of Bloomfield NM	
Method of Treatment and/or Disposal:	
☐ Evaporation ☐ Injection ☐ Treating Plant ☒ Landfarm · ☐ Landfill ☐ Other	
Waste Acceptance Status:  APPROVED DENIED (Must Be Maintained As Permanent Recor	d)
PRINT NAME: DATE:	•
SIGNATURE: TELEPHONE NO.:	-
MANUAL OKEN	

## **APPENDIX E**

**Stante** 

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MANIFEST # 72505
GENERATOR EL POIS O

POINT OF ORIGIN 7098 SOM	4-9	_
TRANSPORTER RILLS 14	, , ,	

DATE 04.20-2 30B # 14073-1060 PHONE: (505) 632-0615 • 5796 U.S. HIGHWAY 64 • FARMINGTON, NEW MEXICO 87401

	COMPLETE DESCRIPTI	COMPLETE DESCRIPTION OF SHIPMENT						TRANSPORTING COMPANY				
DESTINATION	MATERIAL	GRID	MXDS.	BBLS	DRUMS	TK	T#	TRK#	TIME	DRIVER SIGNATURE		
BF	1:02 4.002		1		(	_		16013	0945	SES		
BF	woshout		5					16013	0945			
	/ /		6									
	,											
									SCI	NNED		
	LANDFARM A		()	1 .			NOTES					
CHLORIDE TEST	EMPLOYEE C	oul	IKAI	Ind	on	_						
CHLORIDE TEST												
CHLORIDE TEST												
	BF BF	BF  CUNT SOIL  WOSHOUT  WOSHOU	BF  CU-14-SO, 1  WOSHOUT  WOSH	BF  WOShout  BF  BF  WOShout  BF  BF  BF  BF  BF  BF  BF  BF  BF  B	BF  WOShout  BF  WOShout  G  LANDFARM  EMPLOYEE  CHLORIDE TEST  CHLORIDE TEST  CHLORIDE TEST  CHLORIDE TEST  By signing as the driver/transporter, I certify the mater	BF WOShout 5  BF WOShout 5  CHLORIDETEST   LANDFARM EMPLOYEE   Soil w/ Debris   After Hours/Weekend Receival   Scrape Out   Wash CHLORIDETEST   By signing as the driver/transporter, I certify the material hauled fr	BF  WOShout  BF  WOShout  G  LANDFARM  EMPLOYEE  CHLORIDE TEST  Soil w/ Debris	BF  WOShout  BF  WOShout  GHLORIDETEST  CHLORIDETEST  CHLORIDETEST  CHLORIDETEST  CHLORIDETEST  CHLORIDETEST  By signing as the driver/transporter, I certify the material hauled from the above is	BF  WOShout  BF  WOShout  BY  IGO13  IGO13	BF		

en added or mixecingly.

Passed to the second of the secon 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.

White - Company Records / Billing

Yellow - Customer

Pink - LF Copy



MANIFEST # 72587
GENERATOR ELPASO (Kender Mangan)
POINT OF ORIGIN FOR PISON 4-1
TRANSPORTER Envirotech

					THANSPORTER CITITION COTT									
PHONE	: (505) 632-0615 •	J.S. HIGHWAY 64	87401	DATE 04-25-22 JOB # 14073-0060										
LOAD				COMPLETE DESCRIPTION OF SHIPMENT						TRANSPORTING COMPANY				
NO.	DESTINATION		MATERIAL	GRID	YDS	BBLS	DRUMS	TKT#	TRK#	TIME	DRIVER SIGNATURE			
1	LF2-5	C	on't Soir	m34		3		01129	959	1220	Da memors			
				/		3		,	, ,					
											n n====			
									0					
RESULT	S		LANDFARM					NOTES						
(28)	CHLORIDE TEST	1	EMPLOYEE (	EMPLOYEE COMPALemse										
	CHLORIDE TEST		☐ Soil w/ Debris ☐ Aft											
<b></b>	CHLORIDE TEST		By signing as the di	river/trańspo is from the s	rter, I certif	y the mater	rial hauled f erator/Point	rom the above of Origin and the	location has n nat no addition	ot been added	to or tampered with. Is been added or mixed			
tass	PAINT FILTER TEST	<b>                                     </b>	into the load. Landfa											

Generator Onsite Contact	Phone	



MANIFEST # 75742  GENERATOR Kinder Morgan
POINT OF ORIGIN 4-100
TRANSPORTER Envirotech

HONE	: (505) 632-0615 •		<del></del>			W MEXICO	87401	DATE 10-6-11 JOB # 14073-0066			
LOAD			COMPLETE DESCRIP			T	,		TRANSPORTING COMPANY		
NO.	DESTINATION		MATERIAL	GRID	YDS	BBLS	DRUMS	TKT#	TRK#	TIME	DRIVER SIGNATU
)	LF-2	(	ont Soil	I-34	3	2	_		984	4:50	Sustin For
	***************************************				13	12					
									6		
					1						PW
RESULTS	S CHLORIDE TEST	1	LANDFARM EMPLOYEE	9	Kml	e	D	NO.	TES		
	CHLORIDE TEST		☐ Soil w/ Debris ☐ A	fter Hours/Wee	kend Receiva	ıl □ Scrape C	out 🗆 Wash C	ut			
	CHLORIDE TEST		By signing as the								
ASS	PAINT FILTER TEST	1	certify the material into the load. Land								
`ono==+-	or Onsite Contact								Phor	20	
	,,,,,	diatrib	tion of the legal de-	aumant -							
iyrialur	res required prior to (	ມວແນນ	uon oi ine legal doi	Junient. Di	ISTRIBUTION:	ANDIG - COM	pany Records / B	oming tenow	- Customer Pink -	LF Сору	

	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	
) <sup>BKL</sup>	PAINT FILTER TEST	 certify the material is from the above mentioned Generator/Point of Origin into the load. Landfarm employee signature is certification of the above ma	

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District I
1625 N. French Dr., Hobbs, NM 88240
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District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

#### State of New Mexico Energy Minerals and Natural Resources

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505 Form C-138
Revised August 1, 2011

\*Surface Waste Management Facility Operator
and Generator shall maintain and make this
documentation available for Division inspection.

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1 C	enerator Name and Add	PASS:	VIII 10 1	Billing code for invoice:	ROLE.
1. 6	enerator Name and Add	1 635.		Dilling code for invoice.	
		L.C., 1001 Louisiana Street, R	oom 1445B, Ho	uston, TX 77002	
	Originating Site: Togelson 4-1				
		eet Address, City, State or U			
		9.6" W Nearest Intersection	: US-550 and I	ouisiana Street, Bloomfield, 1	NM
H cl	learance activities will be emoved from the Site for o	on the above-referenced prope conducted, and two monitorin lisposal.	g wells will be	nstalled. Waste soil generated	d from these activities will be
		(yd³) bbls Known Volum			
5.	/ -/ Joseph Wile	GENERATOR CERTIFICA	ATION STATE	MENT OF WASTE STATU	!S
I. Lor	the my Joseph whe	y, representative or authori	ized agent for _	El Faso COF Company, LLC	do hereby
		source Conservation and Reco pove described waste is: (Chec			Protection Agency's July 1988
1 -		eld wastes generated from oil tor Use Only: Waste Accepta			s and are not mixed with non- Per Load
S	haracteristics established	in RCRA regulations, 40 CFR	261.21-261.24	or listed hazardous waste as o	tandards for waste hazardous by defined in 40 CFR, part 261, waste is non-hazardous. (Check
□ м	SDS Information   R	CRA Hazardous Waste Analy	sis 🔲 Proces	Knowledge 🔲 Other (Prov	vide description in Box 4)
	GENERATOR 19	.15.36.15 WASTE TESTING	CERTIFICA	TION STATEMENT FOR L	ANDFARMS
100	// //	, representative forEl P			thorize Envirotech to
	Generator Signature				
comp	lete the required testing/si	gn the Generator Waste Testin	ng Certification		,
I.		, representative for		d	lo hereby certify that
repres	sentative samples of the o	il field waste have been subject	cted to the paint	filter test and tested for chlori	de content and that the samples
of the	been found to conform to e representative samples at 6.36 NMAC.	the specific requirements appire attached to demonstrate the	licable to landfa above-describe	rms pursuant to Section 15 of I waste conform to the require	19.15.36 NMAC. The results ements of Section 15 of
	ansporter: rotech, Inc.				
OCD I	Permitted Surface Waste	: Management Facility			
Namo	e and Facility Permit #: Envirote	ech Inc. Soil Remediation Facility I	Permit # NM-01-00	i	
Addr	ress of Facility: #43 Road 7175,	South of Bloomfield NM			
Meth	nod of Treatment and/or Disposa	l:			
	☐ Evaporation	☐ Injection ☐ Treating	Plant 🛛 La	ndfarm 🔲 Landfill 🔲	Other
Waste	Acceptance Status:	•			
W asic	. Acceptance Status.	☐ APPROVED		☐ <b>DENIED</b> (Must Be Mai	intained As Permanent Record)
PRINT	Г NAME:		TITLE:		DATE:
	ATUDE.	•	TELEP	HONE NO.:	
SIGINA	Surface Waste M	anagement Facility Authorized Agent		secretarian section and the	The state of the s



# rvirotech BOL# 75 74 A CHLORIDE TESTING / PAINT FILTER TESTING

DATE 10-6-	12	TIME	4:50	Attach test strip here
CUSTOMER	Kind.	en morgan		. 9
SITE	_ 4	1-100		A
DRIVER	Aus	tin Fow	<del>la</del>	B
SAMPLE	Soil	Straight	With Dirt	
CHLORIDE TEST	-294	mg/Kg		
ACCEPTED	YES		NO	6
PAINT FILTER TEST	Time started	4:50	Time completed 5:00	) 4
PASS	YES		NO	
SAMPLER/ANALYST		Lull		

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

POINT OF ORIGIN FOLK 41

								TRAN	ISPORTER 121	ur	1/1-02			
IONE	: (505) 632-0615 • 5	796 U.S. HIGH	WAY 64	• FARMING	STON, NE	W MEXICO	87401	DATE	10/04/22	JOB # _	14073-0066			
DAD	•		COMPLETE DESCRIPTION OF SHIPMENT TRANSPORTING COMPANY											
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ນ	PAINT FILTER TEST	into the	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.											
	or Onsite Contact					,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			Pho					
	res required prior to d				DISTRIBUTION:	White - Cor	npany Records /	Billing <b>Ye</b> ll	low - Customer Pink -	LF Copy				
	· ·										SAN JUAN PRINTING 2021 407-			



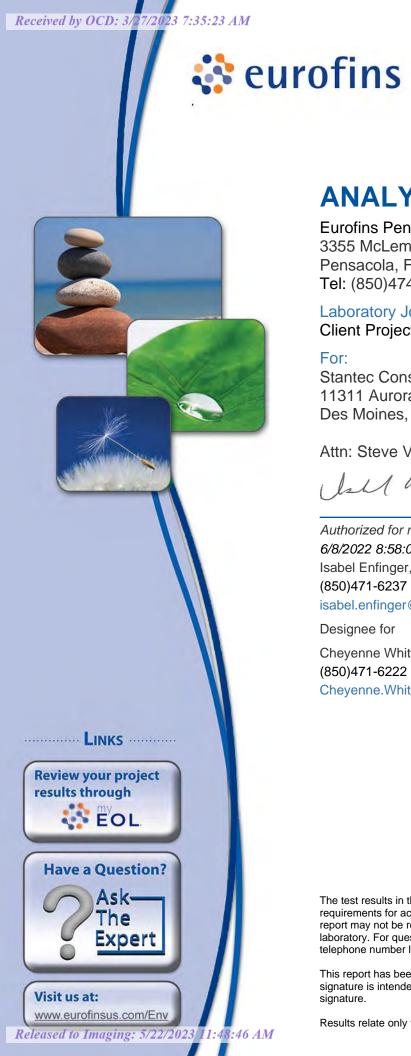
BOL# 2567)

## CHLORIDE TESTING / PAINT FILTER TESTING

	,			
DATE 10/04	122	TIME	10:50	Attach test strip her
CUSTOMER	KINDEL MO!	RGAN		
SITE	FOGELSC	W 4-1		2
DRIVER	V. 60/2002			T A B
SAMPLE	Soil Straig	ght V	With Dirt	
CHLORIDE TEST	380 n	ng/Kg		8
ACCEPTED	YES/	_	NO	
PAINT FILTER TEST	Time started 10	50	Time completed	00
PASS	YES / V		NO	
SAMPLER/ANALYST	10 mile	584	/	2
5796 US Hwy 64, Farmington, NI	M 87401   Ph (505) 632-06	0 315 Fr (800) 362-1879	Fx (505) 632-1865 info@en	virotech-inc.com envirotech

## **APPENDIX F**

Sta Sta



## **Environment Testing America**

### **ANALYTICAL REPORT**

Eurofins Pensacola 3355 McLemore Drive Pensacola, FL 32514 Tel: (850)474-1001

Laboratory Job ID: 400-220395-1

Client Project/Site: Fogelson 4-1 Com #14.00

Stantec Consulting Services Inc 11311 Aurora Avenue Des Moines, Iowa 50322-7904

Attn: Steve Varsa

Ish my

Authorized for release by: 6/8/2022 8:58:03 AM Isabel Enfinger, Project Manager I (850)471-6237

isabel.enfinger@et.eurofinsus.com

Designee for

Cheyenne Whitmire, Project Manager II (850)471-6222

Cheyenne.Whitmire@et.eurofinsus.com

The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten

Results relate only to the items tested and the sample(s) as received by the laboratory.

Laboratory Job ID: 400-220395-1

Client: Stantec Consulting Services Inc Project/Site: Fogelson 4-1 Com #14.00

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## **Case Narrative**

Client: Stantec Consulting Services Inc Project/Site: Fogelson 4-1 Com #14.00

Job ID: 400-220395-1

Job ID: 400-220395-1

**Laboratory: Eurofins Pensacola** 

Narrative

Job Narrative 400-220395-1

#### Comments

No additional comments.

## Receipt

The samples were received on 5/24/2022 9:02 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 2.1° C.

#### **GC/MS VOA**

Method 8260C: Surrogate recovery for the following sample was outside the upper control limit: MW-8 (400-220395-4). This sample did not contain any target analytes; therefore, re-extraction and/or re-analysis was not performed.

Method 8260C: Surrogate recovery for the following samples were outside control limits: MW-7 (400-220395-3) and DUP-01 (400-220395-8). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8260C: The following sample was diluted to bring the concentration of target analytes within the calibration range: MW-10 (400-220395-6). 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: Fogelson 4-1 Com #14.00 Job ID: 400-220395-1

Client Sample ID: MW-4 Lab Sample ID: 400-220395-1

No Detections.

Client Sample ID: MW-6 Lab Sample ID: 400-220395-2

No Detections.

Client Sample ID: MW-7 Lab Sample ID: 400-220395-3

Analyte	Result Qualifier	RL	Unit	Dil Fac D Metho	d Prep Type
Benzene	5.1	1.0	ug/L	1 8260C	Total/NA
Ethylbenzene	1.9	1.0	ug/L	1 8260C	Total/NA

Client Sample ID: MW-8 Lab Sample ID: 400-220395-4

No Detections.

Client Sample ID: MW-9 Lab Sample ID: 400-220395-5

No Detections.

Client Sample ID: MW-10 Lab Sample ID: 400-220395-6

Analyte	Result Qualifier	RL	Unit	Dil Fac	D Method	Prep Type
Benzene	69	10	ug/L		8260C	Total/NA
Toluene	11	10	ug/L	10	8260C	Total/NA
Ethylbenzene	880	10	ug/L	10	8260C	Total/NA
Xylenes, Total	3100	100	ug/L	10	8260C	Total/NA

Client Sample ID: TRIP BLANK

Lab Sample ID: 400-220395-7

No Detections.

Client Sample ID: DUP-01 Lab Sample ID: 400-220395-8

Analyte	Result Qualifier	RL	Unit	Dil Fac D	Method	Prep Type
Benzene	4.6	1.0	ug/L		8260C	Total/NA
Ethylbenzene	1.3	1.0	ug/L	1	8260C	Total/NA

This Detection Summary does not include radiochemical test results.

# **Method Summary**

Client: Stantec Consulting Services Inc Project/Site: Fogelson 4-1 Com #14.00 Job ID: 400-220395-1

MethodMethod DescriptionProtocolLaboratory8260CVolatile Organic Compounds by GC/MSSW846TAL PEN5030BPurge and TrapSW846TAL PEN

### **Protocol References:**

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

### **Laboratory References:**

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

# **Sample Summary**

Client: Stantec Consulting Services Inc Project/Site: Fogelson 4-1 Com #14.00 Job ID: 400-220395-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-220395-1	MW-4	Water	05/21/22 14:50	05/24/22 09:02
400-220395-2	MW-6	Water	05/21/22 15:10	05/24/22 09:02
400-220395-3	MW-7	Water	05/21/22 15:20	05/24/22 09:02
400-220395-4	MW-8	Water	05/21/22 15:40	05/24/22 09:02
400-220395-5	MW-9	Water	05/21/22 15:50	05/24/22 09:02
400-220395-6	MW-10	Water	05/21/22 16:00	05/24/22 09:02
400-220395-7	TRIP BLANK	Water	05/21/22 14:20	05/24/22 09:02
400-220395-8	DUP-01	Water	05/21/22 16:20	05/24/22 09:02

2

3

-4

6

10

11

13

Client: Stantec Consulting Services Inc

Job ID: 400-220395-1

Project/Site: Fogelson 4-1 Com #14.00

Lab Sample ID: 400-220395-1

**Matrix: Water** 

Date Collected: 05/21/22 14:50 Date Received: 05/24/22 09:02

Client Sample ID: MW-4

Method: 8260C - Volatile	Method: 8260C - Volatile Organic Compounds by GC/MS										
Analyte	Result Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac				
Benzene	<1.0	1.0	ug/L			05/27/22 17:42	1				
Toluene	<1.0	1.0	ug/L			05/27/22 17:42	1				
Ethylbenzene	<1.0	1.0	ug/L			05/27/22 17:42	1				
Xylenes, Total	<10	10	ug/L			05/27/22 17:42	1				
Surrogate	%Recovery Qualifier	Limits			Prepared	Analyzed	Dil Fac				
4-Bromofluorobenzene	116	72 - 119				05/27/22 17:42	1				
Dibromofluoromethane	107	75 - 126				05/27/22 17:42	1				
Toluene-d8 (Surr)	97	64 - 132				05/27/22 17:42	1				

Client: Stantec Consulting Services Inc Project/Site: Fogelson 4-1 Com #14.00 Job ID: 400-220395-1

Client Sample ID: MW-6

Lab Sample ID: 400-220395-2

Matrix: Water

Date Collected: 05/21/22 15:10 Date Received: 05/24/22 09:02

Method: 8260C - Volatile	Organic Compou	nds by G	C/MS					
Analyte	Result (	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0	ug/L			05/27/22 18:07	1
Toluene	<1.0		1.0	ug/L			05/27/22 18:07	1
Ethylbenzene	<1.0		1.0	ug/L			05/27/22 18:07	1
Xylenes, Total	<10		10	ug/L			05/27/22 18:07	1
Surrogate	%Recovery (	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	114		72 - 119				05/27/22 18:07	1
Dibromofluoromethane	106		75 - 126				05/27/22 18:07	1
Toluene-d8 (Surr)	97		64 - 132				05/27/22 18:07	1

9

10

12

Client: Stantec Consulting Services Inc Project/Site: Fogelson 4-1 Com #14.00 Job ID: 400-220395-1

Client Sample ID: MW-7

Lab Sample ID: 400-220395-3

Matrix: Water

Date Collected: 05/21/22 15:20 Date Received: 05/24/22 09:02

Method: 8260C - Volatile	Organic Compo	unds by G	C/MS					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	5.1		1.0	ug/L			05/27/22 18:33	1
Toluene	<1.0		1.0	ug/L			05/27/22 18:33	1
Ethylbenzene	1.9		1.0	ug/L			05/27/22 18:33	1
Xylenes, Total	<10		10	ug/L			05/27/22 18:33	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	121	S1+	72 - 119				05/27/22 18:33	1
Dibromofluoromethane	104		75 - 126				05/27/22 18:33	1
Toluene-d8 (Surr)	97		64 - 132				05/27/22 18:33	1

6

8

9

11

13

Client: Stantec Consulting Services Inc Project/Site: Fogelson 4-1 Com #14.00 Job ID: 400-220395-1

Client Sample ID: MW-8

Lab Sample II

Lab Sample ID: 400-220395-4 Matrix: Water

05/27/22 18:59

Date Collected: 05/21/22 15:40 Date Received: 05/24/22 09:02

Toluene-d8 (Surr)

Method: 8260C - Volatile	Organic Compou	unds by G	C/MS					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0	ug/L			05/27/22 18:59	1
Toluene	<1.0		1.0	ug/L			05/27/22 18:59	1
Ethylbenzene	<1.0		1.0	ug/L			05/27/22 18:59	1
Xylenes, Total	<10		10	ug/L			05/27/22 18:59	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	120	S1+	72 - 119				05/27/22 18:59	1
Dibromofluoromethane	106		75 - 126				05/27/22 18:59	1

64 - 132

96

6

8

9

10

12

1 /

Client: Stantec Consulting Services Inc

Job ID: 400-220395-1

Project/Site: Fogelson 4-1 Com #14.00

Lab Sample ID: 400-220395-5

**Matrix: Water** 

Date Collected: 05/21/22 15:50 Date Received: 05/24/22 09:02

**Client Sample ID: MW-9** 

Method: 8260C - Volatile	Organic Compounds b	y GC/MS					
Analyte	Result Qualific	er RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0	1.0	ug/L			05/27/22 19:25	1
Toluene	<1.0	1.0	ug/L			05/27/22 19:25	1
Ethylbenzene	<1.0	1.0	ug/L			05/27/22 19:25	1
Xylenes, Total	<10	10	ug/L			05/27/22 19:25	1
Surrogate	%Recovery Qualific	er Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	116	72 - 119				05/27/22 19:25	1
Dibromofluoromethane	107	75 - 126				05/27/22 19:25	1
Toluene-d8 (Surr)	97	64 - 132				05/27/22 19:25	1

Client: Stantec Consulting Services Inc

Job ID: 400-220395-1

Project/Site: Fogelson 4-1 Com #14.00

Lab Sample ID: 400-220395-6

**Matrix: Water** 

**Client Sample ID: MW-10** Date Collected: 05/21/22 16:00 Date Received: 05/24/22 09:02

Method: 8260C - Volatile	<b>Organic Compo</b>	unds by G	C/MS					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	69		10	ug/L			05/28/22 12:40	10
Toluene	11		10	ug/L			05/28/22 12:40	10
Ethylbenzene	880		10	ug/L			05/28/22 12:40	10
Xylenes, Total	3100		100	ug/L			05/28/22 12:40	10
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene			72 - 119				05/28/22 12:40	10
Dibromofluoromethane	101		75 - 126				05/28/22 12:40	10
Toluene-d8 (Surr)	104		64 - 132				05/28/22 12:40	10

Client: Stantec Consulting Services Inc

Job ID: 400-220395-1

Project/Site: Fogelson 4-1 Com #14.00 **Client Sample ID: TRIP BLANK** 

Date Collected: 05/21/22 14:20

Date Received: 05/24/22 09:02

Lab Sample ID: 400-220395-7

**Matrix: Water** 

Analyte	Result Q	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0	ug/L			05/27/22 16:23	1
Toluene	<1.0		1.0	ug/L			05/27/22 16:23	1
Ethylbenzene	<1.0		1.0	ug/L			05/27/22 16:23	1
Xylenes, Total	<10		10	ug/L			05/27/22 16:23	1
Surrogate	%Recovery Q	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	113		72 - 119				05/27/22 16:23	1
Dibromofluoromethane	104		75 - 126				05/27/22 16:23	1
Toluene-d8 (Surr)	97		64 - 132				05/27/22 16:23	1

Client: Stantec Consulting Services Inc

Job ID: 400-220395-1

Project/Site: Fogelson 4-1 Com #14.00

Lab Sample ID: 400-220395-8

**Matrix: Water** 

Date Collected: 05/21/22 16:20 Date Received: 05/24/22 09:02

**Client Sample ID: DUP-01** 

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	4.6		1.0	ug/L			05/27/22 19:51	1
Toluene	<1.0		1.0	ug/L			05/27/22 19:51	1
Ethylbenzene	1.3		1.0	ug/L			05/27/22 19:51	1
Xylenes, Total	<10		10	ug/L			05/27/22 19:51	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	121	S1+	72 - 119				05/27/22 19:51	1
Dibromofluoromethane	105		75 - 126				05/27/22 19:51	1
Toluene-d8 (Surr)	98		64 - 132				05/27/22 19:51	1

# **Definitions/Glossary**

Client: Stantec Consulting Services Inc

Project/Site: Fogelson 4-1 Com #14.00

Job ID: 400-220395-1

## **Qualifiers**

## **GC/MS VOA**

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

Listed under the D column to designate that the result is reported on a dry weight basi

%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

Job ID: 400-220395-1

Client: Stantec Consulting Services Inc Project/Site: Fogelson 4-1 Com #14.00

Lab Sample ID: 400-220395-1

**Matrix: Water** 

**Matrix: Water** 

Client Sample ID: MW-4 Date Collected: 05/21/22 14:50

Date Received: 05/24/22 09:02

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	579208	05/27/22 17:42	BEP	TAL PEN
	Instrument	ID: CH TAN								

**Client Sample ID: MW-6** Lab Sample ID: 400-220395-2 **Matrix: Water** 

Date Collected: 05/21/22 15:10 Date Received: 05/24/22 09:02

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	579208	05/27/22 18:07	BEP	TAL PEN
	Inetrumer	STID: CH TAN								

Client Sample ID: MW-7 Lab Sample ID: 400-220395-3

Date Collected: 05/21/22 15:20 Date Received: 05/24/22 09:02

Batch Batch Dil Initial Final Batch Prepared Number Method Amount or Analyzed **Prep Type** Type Run **Factor** Amount Analyst Lab TAL PEN Total/NA Analysis 8260C 5 mL 5 mL 579208 05/27/22 18:33 BEP Instrument ID: CH TAN

**Client Sample ID: MW-8** Lab Sample ID: 400-220395-4 Date Collected: 05/21/22 15:40 **Matrix: Water** 

Date Received: 05/24/22 09:02

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	579208		. , ,	TAL PEN
	Instrumer	nt ID: CH TAN								

Lab Sample ID: 400-220395-5 Client Sample ID: MW-9

Date Collected: 05/21/22 15:50 Date Received: 05/24/22 09:02

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	579208	05/27/22 19:25	BEP	TAL PEN
	Instrumer	TID: CH TAN								

Client Sample ID: MW-10 Lab Sample ID: 400-220395-6 **Matrix: Water** 

Date Collected: 05/21/22 16:00 Date Received: 05/24/22 09:02

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		10	5 mL	5 mL	579326	05/28/22 12:40	BPO	TAL PEN
	Instrumer	nt ID: CH TAN								

**Eurofins Pensacola** 

**Matrix: Water** 

Client: Stantec Consulting Services Inc Project/Site: Fogelson 4-1 Com #14.00

Job ID: 400-220395-1

**Client Sample ID: TRIP BLANK** 

Lab Sample ID: 400-220395-7 Date Collected: 05/21/22 14:20

**Matrix: Water** 

Date Received: 05/24/22 09:02

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	579208	05/27/22 16:23	BEP	TAL PEN
	Instrumen	tID: CH TAN								

**Client Sample ID: DUP-01** Lab Sample ID: 400-220395-8 Date Collected: 05/21/22 16:20

**Matrix: Water** 

Date Received: 05/24/22 09:02

Batch Batch Dil Initial Final Batch Prepared Method **Prep Type** Type Factor **Amount Amount** Number or Analyzed Run Analyst Lab Total/NA Analysis 8260C 5 mL 579208 05/27/22 19:51 BEP TAL PEN

**Laboratory References:** 

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

Instrument ID: CH\_TAN

# **QC Association Summary**

Client: Stantec Consulting Services Inc Project/Site: Fogelson 4-1 Com #14.00 Job ID: 400-220395-1

## **GC/MS VOA**

## **Analysis Batch: 579208**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-220395-1	MW-4	Total/NA	Water	8260C	
400-220395-2	MW-6	Total/NA	Water	8260C	
400-220395-3	MW-7	Total/NA	Water	8260C	
400-220395-4	MW-8	Total/NA	Water	8260C	
400-220395-5	MW-9	Total/NA	Water	8260C	
400-220395-7	TRIP BLANK	Total/NA	Water	8260C	
400-220395-8	DUP-01	Total/NA	Water	8260C	
MB 400-579208/27	Method Blank	Total/NA	Water	8260C	
LCS 400-579208/1002	Lab Control Sample	Total/NA	Water	8260C	
400-220101-A-6 MS	Matrix Spike	Total/NA	Water	8260C	
400-220101-A-6 MSD	Matrix Spike Duplicate	Total/NA	Water	8260C	

## Analysis Batch: 579326

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-220395-6	MW-10	Total/NA	Water	8260C	
MB 400-579326/5	Method Blank	Total/NA	Water	8260C	
LCS 400-579326/1002	2 Lab Control Sample	Total/NA	Water	8260C	
400-220307-A-4 MS	Matrix Spike	Total/NA	Water	8260C	
400-220307-A-4 MSD	Matrix Spike Duplicate	Total/NA	Water	8260C	

Eurofins Pensacola

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Client: Stantec Consulting Services Inc Project/Site: Fogelson 4-1 Com #14.00

Job ID: 400-220395-1

# Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 400-579208/27

**Matrix: Water** 

Analyte Benzene Toluene Ethylbenzene Xylenes, Total

**Analysis Batch: 579208** 

Client	Sample	ID: I	Metho	od Blani	K
	Pr	ep T	ype:	Total/N/	4

МВ	MB						
Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
<1.0		1.0	ug/L			05/27/22 13:38	1
<1.0		1.0	ug/L			05/27/22 13:38	1
<1.0		1.0	ug/L			05/27/22 13:38	1
<10		10	ug/L			05/27/22 13:38	1

	MB	MB					
Surrogate	%Recovery	Qualifier	Limits	Pi	repared	Analyzed	Dil Fac
4-Bromofluorobenzene	115		72 - 119			05/27/22 13:38	1
Dibromofluoromethane	105		75 - 126			05/27/22 13:38	1
Toluene-d8 (Surr)	97		64 - 132			05/27/22 13:38	1

Lab Sample ID: LCS 400-579208/1002

**Matrix: Water** 

Analysis Batch: 579208

**Client Sample ID: Lab Control Sample** 

Prep Type: Total/NA

Spike LCS LCS %Rec Analyte Added Result Qualifier Unit D %Rec Limits Benzene 50.0 90 70 - 130 44.9 ug/L Toluene 50.0 44.8 90 70 - 130 ug/L Ethylbenzene 50.0 44.2 ug/L 88 70 - 130 Xylenes, Total 100 86.9 ug/L 70 - 130

LCS LCS %Recovery Qualifier Surrogate Limits 4-Bromofluorobenzene 118 72 - 119 110 75 - 126 Dibromofluoromethane Toluene-d8 (Surr) 97 64 - 132

Lab Sample ID: 400-220101-A-6 MS

**Matrix: Water** 

**Analysis Batch: 579208** 

**Client Sample ID: Matrix Spike** Prep Type: Total/NA

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	140		50.0	190		ug/L		101	56 - 142	
Toluene	5.3		50.0	57.5		ug/L		104	65 - 130	
Ethylbenzene	<1.0		50.0	51.8		ug/L		102	58 - 131	
Xylenes, Total	<10		100	105		ug/L		102	59 - 130	

MS MS	
%Recovery Qualify	ier Limits
117	72 - 119
103	75 - 126
98	64 - 132
	%Recovery Qualifi

Lab Sample ID: 400-220101-A-6 MSD

**Matrix: Water** 

**Analysis Batch: 579208** 

**Client Sample ID: Matrix Spike Duplicate** Prep Type: Total/NA

	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	140		50.0	189		ug/L		100	56 - 142	0	30
Toluene	5.3		50.0	57.0		ug/L		103	65 - 130	1	30
Ethylbenzene	<1.0		50.0	51.3		ug/L		101	58 - 131	1	30

**Eurofins Pensacola** 

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# **QC Sample Results**

Client: Stantec Consulting Services Inc Project/Site: Fogelson 4-1 Com #14.00

Job ID: 400-220395-1

Prep Type: Total/NA

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued) **Client Sample ID: Matrix Spike Duplicate** 

Lab Sample ID: 400-220101-A-6 MSD

**Matrix: Water** 

Analysis Batch: 579208

7 manyolo Zatom 0. 0200	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Xylenes, Total	<10		100	103		ug/L		100	59 - 130	2	30

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene			72 - 119
Dibromofluoromethane	104		75 - 126
Toluene-d8 (Surr)	98		64 - 132

**Client Sample ID: Method Blank** 

**Client Sample ID: Lab Control Sample** 

**Client Sample ID: Matrix Spike** 

Prep Type: Total/NA

Prep Type: Total/NA

Prep Type: Total/NA

Analysis Batch: 579326

**Matrix: Water** 

Lab Sample ID: MB 400-579326/5

	MB	MR						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0	ug/L			05/28/22 11:34	1
Toluene	<1.0		1.0	ug/L			05/28/22 11:34	1
Ethylbenzene	<1.0		1.0	ug/L			05/28/22 11:34	1
Xylenes, Total	<10		10	ug/L			05/28/22 11:34	1

	MB	MB				
Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	111	·	72 - 119		05/28/22 11:34	1
Dibromofluoromethane	106		75 - 126		05/28/22 11:34	1
Toluene-d8 (Surr)	98		64 - 132		05/28/22 11:34	1

Lab Sample ID: LCS 400-579326/1002

**Matrix: Water** 

**Analysis Batch: 579326** 

	Spike	LCS	LCS				%Rec
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits
Benzene	50.0	48.5		ug/L		97	70 - 130
Toluene	50.0	46.4		ug/L		93	70 - 130
Ethylbenzene	50.0	46.1		ug/L		92	70 - 130
Xylenes, Total	100	90.8		ug/L		91	70 - 130

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene	116		72 - 119
Dibromofluoromethane	107		75 - 126
Toluene-d8 (Surr)	97		64 - 132

Lab Sample ID: 400-220307-A-4 MS

**Matrix: Water** 

Analysis Batch: 579326

7 maryoro Datom or cozo	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	<1.0		50.0	50.5		ug/L		101	56 - 142	 _
Toluene	<1.0		50.0	47.1		ug/L		94	65 - 130	
Ethylbenzene	<1.0		50.0	44.4		ug/L		89	58 - 131	
Xylenes, Total	<10		100	86.9		ug/L		87	59 - 130	

# **QC Sample Results**

Client: Stantec Consulting Services Inc Job ID: 400-220395-1 Project/Site: Fogelson 4-1 Com #14.00

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

Lab Sample ID: 400-220307-A-4 MS

**Matrix: Water** 

**Analysis Batch: 579326** 

Client Sample ID: Matrix Spike

Prep Type: Total/NA

MS MS %Recovery Qualifier Surrogate Limits 4-Bromofluorobenzene 117 72 - 119 Dibromofluoromethane 105 75 - 126 64 - 132 Toluene-d8 (Surr) 98

Lab Sample ID: 400-220307-A-4 MSD

**Matrix: Water** 

Analysis Batch: 579326

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	<1.0		50.0	54.0		ug/L		108	56 - 142	7	30
Toluene	<1.0		50.0	51.6		ug/L		103	65 - 130	9	30
Ethylbenzene	<1.0		50.0	47.6		ug/L		95	58 - 131	7	30
Xylenes, Total	<10		100	94.0		ug/L		94	59 - 130	8	30

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene	116		72 - 119
Dibromofluoromethane	102		75 - 126
Toluene-d8 (Surr)	100		64 - 132

eurofins Ervironnent Testing

Chain of Custody Record

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

Ver: 06/08/2021

Cliont Information	Compiei.		Lab PM:	Corrier Teaching	
Client Contact:	Jarah bardult Se	let Seancland	Whitmire, Cheyenne R	(c)	COC No:
Steve Varsa	Phone: 261 2239		E-Mail:	State of Origin:	400-111401-37671.1 Page:
Company:	- 22 - 12 - 10	PWSID:	Cheyenne. Whitmire@et.eurofinsus.com		Page 1 of 1
Stantec Consulting Services Inc Address:			Analysis Requested	duested	Job #:
11311 Aurora Avenue	Due Date Requested:				Preservation Codes:
City: Des Moines	TAT Requested (days):				
	- Soe ART				
IA, 50322-7904	oliance Project: A Yes	∆ No			
	Po #: WD1040037				E - NaHSO4 Q - Na2SO3 F - MeOH R - Na2S2O3
Email: Steve.varsa@stantec.com	WO#:				H - Ascorbic Acid T - TSP Dodecahydrate
	Project #:			\$.	
Fogelson 4-1 Com #14.00	40005479			19UIE	K - EDTA W - pH 4-5 L - EDA Z - other (specify)
Fogelson	SSOW#:		097	Contract	
		-	S beset	nber of	
Sample Identification	Sample Date Time		90C - B	muM le	
	Sample Date	G=grab)   BT=TB3U6, A=Alr) Preservation Code:	13 × 82	901	Special Instructions/Note:
5-MW Pa	S/21/202/145/	S water			
9~ \( \text{VI \text{VI \text{Q}}} \)	5/21/2022 1510	G Water			
L- MW 22	7	G Water			
8-MW 2					
1 3 2 - 3 W	1 .			1	
mal-10				400-220395 CUC	
700/2007		+	c		
Supply Supply	1	Water			
プロゲーロー	5/21/2022 1620	<b>€</b> Water	ď		
		Water			
		Water			
		Water			
Non-Hazard Continuation  Non-Hazard Planmable Skin Irritant Poison B	Unknown	Radiological	ee mak p	assessed if samples are retaine	ed longer than 1 month)
Deliverable Requested: I, II, III, IV, Other (specify)		100000000000000000000000000000000000000	Special Instructions/QC Regulrements	✓ Disposal By Lab — Archi ments:	Archive For Months
Empty Kit Relinquished by:	Date:			. 1	
Relinguished by:	7	, accomo	ا ي	Method of Shipment:	
Reijzduished by:	5/23/2027 V	1215 Strote		Date/Time: ケール/シ	Company Company
Reinquished by:		Сомрану	Received by:	Date/Time:	
A shall along shorters	Date/ Lime:	Company	Received by:	Date/Time:	Company
Southern Indect: Custody Seal No.:  A Yes A No			Cooler Temperature(s) °C and Other Remarks:	emarks: 2.1°C 189	
22					Ver. 06/08/2021

## **Login Sample Receipt Checklist**

Client: Stantec Consulting Services Inc Job Number: 400-220395-1

Login Number: 220395 List Source: Eurofins Pensacola

List Number: 1

Creator: Whitley, Adrian

Question	Answer	Comment
Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>N/A</td> <td></td>	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	2.1°C IR9
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: Fogelson 4-1 Com #14.00

Job ID: 400-220395-1

# **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	<b>Expiration Date</b>
Alabama	State	40150	06-30-22
ANAB	ISO/IEC 17025	L2471	02-23-23
Arkansas DEQ	State	88-0689	09-01-22
California	State	2510	06-30-22
Florida	NELAP	E81010	06-30-22
Georgia	State	E81010(FL)	06-30-22
Illinois	NELAP	200041	10-09-22
Kansas	NELAP	E-10253	10-31-22
Kentucky (UST)	State	53	06-30-22
Kentucky (WW)	State	KY98030	12-31-22
Louisiana	NELAP	30976	06-30-22
Louisiana (DW)	State	LA017	12-31-22
Maryland	State	233	09-30-22
Massachusetts	State	M-FL094	06-30-22
Michigan	State	9912	06-30-22
North Carolina (WW/SW)	State	314	12-31-22
Oklahoma	NELAP	9810	08-31-22
Pennsylvania	NELAP	68-00467	01-31-23
South Carolina	State	96026	06-30-22
Tennessee	State	TN02907	06-30-22
Texas	NELAP	T104704286	09-30-22
US Fish & Wildlife	US Federal Programs	058448	07-31-22
USDA	US Federal Programs	P330-21-00056	05-17-24
Virginia	NELAP	460166	06-14-22
West Virginia DEP	State	136	05-31-22

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**Environment Testing** 

# **ANALYTICAL REPORT**

# PREPARED FOR

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

Generated 11/16/2022 10:07:04 AM

# **JOB DESCRIPTION**

Fogelson 4-1 Com #14.00

# **JOB NUMBER**

400-228125-1

Eurofins Pensacola 3355 McLemore Drive Pensacola FL32514



Laboratory Job ID: 400-228125-1

Client: Stantec Consulting Services Inc Project/Site: Fogelson 4-1 Com #14.00

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## **Case Narrative**

Client: Stantec Consulting Services Inc Project/Site: Fogelson 4-1 Com #14.00 Job ID: 400-228125-1

Job ID: 400-228125-1

**Laboratory: Eurofins Pensacola** 

Narrative

Job Narrative 400-228125-1

### **Comments**

No additional comments.

#### Receipt

The samples were received on 11/1/2022 9:09 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 0.7° C.

#### **GC/MS VOA**

Method 8260C: The following sample was diluted to bring the concentration of target analytes within the calibration range: MW-10 (400-228125-9). 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.

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Eurofins Pensacola 11/16/2022

Job ID: 400-228125-1

Client: Stantec Consulting Services Inc Project/Site: Fogelson 4-1 Com #14.00

Client Sample ID: TB-01 Lab Sample ID: 400-228125-1

No Detections.

Client Sample ID: DUP-01 Lab Sample ID: 400-228125-2

	Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
	Benzene	9.2		1.0	ug/L	1	_	8260C	Total/NA
l	Ethylbenzene	2.9		1.0	ug/L	1		8260C	Total/NA

Client Sample ID: MW-1R Lab Sample ID: 400-228125-3

No Detections.

Client Sample ID: MW-4 Lab Sample ID: 400-228125-4

No Detections.

Client Sample ID: MW-6 Lab Sample ID: 400-228125-5

No Detections.

Client Sample ID: MW-7 Lab Sample ID: 400-228125-6

Analyte	Result Qualifier	RL	Unit	Dil Fac	D Method	Prep Type
Benzene	9.0	1.0	ug/L	1	8260C	Total/NA
Ethylbenzene	2.1	1.0	ug/L	1	8260C	Total/NA

Client Sample ID: MW-8 Lab Sample ID: 400-228125-7

No Detections.

Client Sample ID: MW-9 Lab Sample ID: 400-228125-8

No Detections.

Client Sample ID: MW-10 Lab Sample ID: 400-228125-9

Analyte	Result Qualifier	RL	Unit	Dil Fac D	Method	Prep Type
Benzene	54	5.0	ug/L		8260C	Total/NA
Ethylbenzene	1000	5.0	ug/L	5	8260C	Total/NA
Xylenes, Total - DL	2100	100	ug/L	10	8260C	Total/NA

Client Sample ID: MW-11 Lab Sample ID: 400-228125-10

No Detections.

This Detection Summary does not include radiochemical test results.

# **Method Summary**

Client: Stantec Consulting Services Inc Project/Site: Fogelson 4-1 Com #14.00

Job ID: 400-228125-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	EET PEN
5030B	Purge and Trap	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: Fogelson 4-1 Com #14.00 Job ID: 400-228125-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-228125-1	TB-01	Water	10/30/22 13:00	11/01/22 09:09
400-228125-2	DUP-01	Water	10/30/22 14:15	11/01/22 09:09
400-228125-3	MW-1R	Water	10/30/22 13:30	11/01/22 09:09
400-228125-4	MW-4	Water	10/30/22 13:38	11/01/22 09:09
400-228125-5	MW-6	Water	10/30/22 13:46	11/01/22 09:09
400-228125-6	MW-7	Water	10/30/22 13:13	11/01/22 09:09
400-228125-7	MW-8	Water	10/30/22 13:55	11/01/22 09:09
400-228125-8	MW-9	Water	10/30/22 14:05	11/01/22 09:09
400-228125-9	MW-10	Water	10/30/22 14:18	11/01/22 09:09
400-228125-10	MW-11	Water	10/30/22 14:25	11/01/22 09:09

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Client: Stantec Consulting Services Inc Project/Site: Fogelson 4-1 Com #14.00 Job ID: 400-228125-1

Client Sample ID: TB-01

Lab Sample ID: 400-228125-1

Matrix: Water

Date Collected: 10/30/22 13:00 Date Received: 11/01/22 09:09

	/olatile Organic	Compound	ds by GC/MS					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0	ug/L			11/04/22 08:58	1
Toluene	<1.0		1.0	ug/L			11/04/22 08:58	1
Ethylbenzene	<1.0		1.0	ug/L			11/04/22 08:58	1
Xylenes, Total	<10		10	ug/L			11/04/22 08:58	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	95		72 - 119				11/04/22 08:58	1
Dibromofluoromethane	106		75 - 126				11/04/22 08:58	1
Toluene-d8 (Surr)	100		64 - 132				11/04/22 08:58	1

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Client: Stantec Consulting Services Inc

Job ID: 400-228125-1

Project/Site: Fogelson 4-1 Com #14.00

Lab Sample ID: 400-228125-2

**Matrix: Water** 

**Client Sample ID: DUP-01** Date Collected: 10/30/22 14:15 Date Received: 11/01/22 09:09

Method: SW846 8260C - V	/olatile Organic (	Compound	ds by GC/MS					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	9.2		1.0	ug/L			11/04/22 13:06	1
Toluene	<1.0		1.0	ug/L			11/04/22 13:06	1
Ethylbenzene	2.9		1.0	ug/L			11/04/22 13:06	1
Xylenes, Total	<10		10	ug/L			11/04/22 13:06	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	97		72 - 119				11/04/22 13:06	1
Dibromofluoromethane	104		75 - 126				11/04/22 13:06	1
Toluene-d8 (Surr)	101		64 - 132				11/04/22 13:06	1

Client: Stantec Consulting Services Inc Project/Site: Fogelson 4-1 Com #14.00 Job ID: 400-228125-1

Client Sample ID: MW-1R

Lab Sample ID: 400-228125-3

Matrix: Water

Date Collected: 10/30/22 13:30 Date Received: 11/01/22 09:09

Method: SW846 8260C -	Volatile Organic Co	ompound	Is by GC/MS					
Analyte	Result C	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0	ug/L			11/04/22 13:32	1
Toluene	<1.0		1.0	ug/L			11/04/22 13:32	1
Ethylbenzene	<1.0		1.0	ug/L			11/04/22 13:32	1
Xylenes, Total	<10		10	ug/L			11/04/22 13:32	1
Surrogate	%Recovery G	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	100		72 - 119		•		11/04/22 13:32	1
Dibromofluoromethane	102		75 - 126				11/04/22 13:32	1
Toluene-d8 (Surr)	98		64 - 132				11/04/22 13:32	1

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Client: Stantec Consulting Services Inc Project/Site: Fogelson 4-1 Com #14.00 Job ID: 400-228125-1

Lab Sample ID: 400-228125-4

**Matrix: Water** 

Date Collected: 10/30/22 13:38 Date Received: 11/01/22 09:09

Client Sample ID: MW-4

Method: SW846 8260C -	<b>Volatile Organic Co</b>	ompound	ds by GC/MS					
Analyte	Result C	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0	ug/L			11/04/22 13:58	1
Toluene	<1.0		1.0	ug/L			11/04/22 13:58	1
Ethylbenzene	<1.0		1.0	ug/L			11/04/22 13:58	1
Xylenes, Total	<10		10	ug/L			11/04/22 13:58	1
Surrogate	%Recovery G	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	100		72 - 119				11/04/22 13:58	1
Dibromofluoromethane	105		75 - 126				11/04/22 13:58	1
Toluene-d8 (Surr)	101		64 - 132				11/04/22 13:58	1

Client: Stantec Consulting Services Inc Project/Site: Fogelson 4-1 Com #14.00 Job ID: 400-228125-1

Client Sample ID: MW-6

Lab Sample ID: 400-228125-5

**Matrix: Water** 

Date Collected: 10/30/22 13:46 Date Received: 11/01/22 09:09

Method: SW846 8260C -	<b>Volatile Organic C</b>	Compound	ds by GC/MS					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0	ug/L			11/04/22 15:17	1
Toluene	<1.0		1.0	ug/L			11/04/22 15:17	1
Ethylbenzene	<1.0		1.0	ug/L			11/04/22 15:17	1
Xylenes, Total	<10		10	ug/L			11/04/22 15:17	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	95		72 - 119				11/04/22 15:17	1
Dibromofluoromethane	103		75 - 126				11/04/22 15:17	1
Toluene-d8 (Surr)	101		64 - 132				11/04/22 15:17	1

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Client: Stantec Consulting Services Inc

Job ID: 400-228125-1

Project/Site: Fogelson 4-1 Com #14.00

Lab Sample ID: 400-228125-6

**Matrix: Water** 

Date Collected: 10/30/22 13:13 Date Received: 11/01/22 09:09

**Client Sample ID: MW-7** 

Method: SW846 8260C -	Volatile Organic C	Compound	ds by GC/MS					
Analyte	Result (	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	9.0		1.0	ug/L			11/04/22 14:24	1
Toluene	<1.0		1.0	ug/L			11/04/22 14:24	1
Ethylbenzene	2.1		1.0	ug/L			11/04/22 14:24	1
Xylenes, Total	<10		10	ug/L			11/04/22 14:24	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	96		72 - 119				11/04/22 14:24	1
Dibromofluoromethane	102		75 - 126				11/04/22 14:24	1
Toluene-d8 (Surr)	101		64 - 132				11/04/22 14:24	1

Client: Stantec Consulting Services Inc Project/Site: Fogelson 4-1 Com #14.00 Job ID: 400-228125-1

**Client Sample ID: MW-8** 

Lab Sample ID: 400-228125-7

**Matrix: Water** 

Date Collected: 10/30/22 13:55 Date Received: 11/01/22 09:09

Method: SW846 8260C -	Volatile Organic Com	pounds by GC/MS					
Analyte	Result Qual	lifier RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0	1.0	ug/L			11/04/22 14:50	1
Toluene	<1.0	1.0	ug/L			11/04/22 14:50	1
Ethylbenzene	<1.0	1.0	ug/L			11/04/22 14:50	1
Xylenes, Total	<10	10	ug/L			11/04/22 14:50	1
Surrogate	%Recovery Qual	lifier Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	100	72 - 119				11/04/22 14:50	1
Dibromofluoromethane	101	75 - 126				11/04/22 14:50	1
Toluene-d8 (Surr)	102	64 - 132				11/04/22 14:50	1

## **Client Sample Results**

Client: Stantec Consulting Services Inc Project/Site: Fogelson 4-1 Com #14.00 Job ID: 400-228125-1

Client Sample ID: MW-9

Lab Sample ID: 400-228125-8

Matrix: Water

Date Collected: 10/30/22 14:05 Date Received: 11/01/22 09:09

Method: SW846 8260C -	<b>Volatile Organic</b>	Compound	ds by GC/MS					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0	ug/L			11/04/22 15:43	1
Toluene	<1.0		1.0	ug/L			11/04/22 15:43	1
Ethylbenzene	<1.0		1.0	ug/L			11/04/22 15:43	1
Xylenes, Total	<10		10	ug/L			11/04/22 15:43	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	96		72 - 119				11/04/22 15:43	1
Dibromofluoromethane	104		75 - 126				11/04/22 15:43	1
Toluene-d8 (Surr)	101		64 - 132				11/04/22 15:43	1

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## **Client Sample Results**

Client: Stantec Consulting Services Inc Project/Site: Fogelson 4-1 Com #14.00

Date Collected: 10/30/22 14:18

Date Received: 11/01/22 09:09

Job ID: 400-228125-1

**Client Sample ID: MW-10** 

Lab Sample ID: 400-228125-9

**Matrix: Water** 

Analyte	Result C	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	54		5.0	ug/L			11/04/22 10:36	5
Toluene	<5.0		5.0	ug/L			11/04/22 10:36	5
Ethylbenzene	1000		5.0	ug/L			11/04/22 10:36	5
Surrogate	%Recovery G	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	98		72 - 119				11/04/22 10:36	5
Dibromofluoromethane	103		75 - 126				11/04/22 10:36	5
Toluene-d8 (Surr)	105		64 - 132				11/04/22 10:36	5

Method: SW846 8260C -	<b>Volatile Organic</b>	Compound	ds by GC/MS - I	DL				
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Xylenes, Total	2100		100	ug/L			11/04/22 17:53	10
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4.5 %								
4-Bromofluorobenzene	96		72 - 119				11/04/22 17:53	10
4-Bromofluorobenzene Dibromofluoromethane	96 101		72 - 119 75 - 126				11/04/22 17:53 11/04/22 17:53	10 10

## **Client Sample Results**

Client: Stantec Consulting Services Inc

Job ID: 400-228125-1

Project/Site: Fogelson 4-1 Com #14.00

Lab Sample ID: 400-228125-10

**Matrix: Water** 

Date Collected: 10/30/22 14:25 Date Received: 11/01/22 09:09

**Client Sample ID: MW-11** 

Method: SW846 8260C - \	Volatile Organic C	ompound	ds by GC/MS					
Analyte	Result (	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0	ug/L			11/04/22 16:09	1
Toluene	<1.0		1.0	ug/L			11/04/22 16:09	1
Ethylbenzene	<1.0		1.0	ug/L			11/04/22 16:09	1
Xylenes, Total	<10		10	ug/L			11/04/22 16:09	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	95		72 - 119				11/04/22 16:09	1
Dibromofluoromethane	101		75 - 126				11/04/22 16:09	1
Toluene-d8 (Surr)	102		64 - 132				11/04/22 16:09	1

## **Definitions/Glossary**

Client: Stantec Consulting Services Inc Job ID: 400-228125-1 Project/Site: Fogelson 4-1 Com #14.00

#### Glossary

MDA

Ciossaiy	
Abbreviation	These commonly used abbreviations may or may not be present in this report.
n	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"

MDC Minimum Detectable Concentration (Radiochemistry) MDL Method Detection Limit ML Minimum Level (Dioxin) Most Probable Number MPN Method Quantitation Limit MQL

NC Not Calculated

ND Not Detected at the reporting limit (or MDL or EDL if shown)

Minimum Detectable Activity (Radiochemistry)

Negative / Absent NEG POS Positive / Present

PQL **Practical Quantitation Limit** 

**PRES** Presumptive QC **Quality Control** 

Relative Error Ratio (Radiochemistry) RER

RL Reporting Limit or Requested Limit (Radiochemistry)

Relative Percent Difference, a measure of the relative difference between two points RPD

**TEF** Toxicity Equivalent Factor (Dioxin) Toxicity Equivalent Quotient (Dioxin) **TEQ** 

**TNTC** Too Numerous To Count

## Client: Stantec Consulting Services Inc Project/Site: Fogelson 4-1 Com #14.00

**Client Sample ID: TB-01** Data Callacted: 10/30/22 12:00 Lab Sample ID: 400-228125-1 **Matrix: Water** 

Date	Collected.	10/30/22 13.00
Date	Received:	11/01/22 09:09

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	599175	11/04/22 08:58	WPD	EET PEN
	Instrument	ID: CH CONAN								

Client Sample ID: DUP-01

Date Collected: 10/30/22 14:15 Date Received: 11/01/22 09:09

Lab	Samp	)ie il	): 4U	<b>U-228</b>	125-2	
				Matrix	· Water	

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	599175	11/04/22 13:06	WPD	EET PEN
	Instrumen	t ID: CH CONAN								

Client Sample ID: MW-1R Lab Sample ID: 400-228125-3

Date Collected: 10/30/22 13:30 Date Received: 11/01/22 09:09

**Matrix: Water** 

**Matrix: Water** 

**Matrix: Water** 

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C	· ———	1	5 mL	5 mL	599175	11/04/22 13:32	WPD	EET PEN
	Instrument	ID: CH_CONAN								

Client Sample ID: MW-4 Lab Sample ID: 400-228125-4

Date Collected: 10/30/22 13:38 Date Received: 11/01/22 09:09

**Matrix: Water** 

Batch Batch Dil Initial Final Batch Prepared **Prep Type** Method Amount Amount Number or Analyzed Type Run **Factor** Analyst Lab 11/04/22 13:58 WPD Total/NA 599175 Analysis 8260C 5 mL 5 mL EET PEN Instrument ID: CH CONAN

Client Sample ID: MW-6 Lab Sample ID: 400-228125-5

Date Collected: 10/30/22 13:46 Date Received: 11/01/22 09:09

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	599175	11/04/22 15:17	WPD	EET PEN

Client Sample ID: MW-7 Lab Sample ID: 400-228125-6

Date Collected: 10/30/22 13:13 Date Received: 11/01/22 09:09

Instrument ID: CH\_CONAN

- -	Batch	Batch	5	Dil	Initial	Final	Batch	Prepared	A 1 4	1 -1-
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	599175	11/04/22 14:24	WPD	EET PEN
	Instrumer	nt ID: CH CONAN								

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Client: Stantec Consulting Services Inc Project/Site: Fogelson 4-1 Com #14.00

Lab Sample ID: 400-228125-7

Matrix: Water

**Matrix: Water** 

Job ID: 400-228125-1

Client Sample ID: MW-8 Date Collected: 10/30/22 13:55 Date Received: 11/01/22 09:09

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	599175	11/04/22 14:50	WPD	EET PEN
	Instrument	ID: CH CONAN								

Client Sample ID: MW-9

Date Collected: 10/30/22 14:05

Lab Sample ID: 400-228125-8

Matrix: Water

Date Collected: 10/30/22 14:05 Date Received: 11/01/22 09:09

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	599175	11/04/22 15:43	WPD	EET PEN
	Instrumen	TID. CH CONAN	N.							

Client Sample ID: MW-10 Lab Sample ID: 400-228125-9

Date Collected: 10/30/22 14:18 Date Received: 11/01/22 09:09

Prep Type Total/NA	Batch Type Analysis Instrumer	Batch Method 8260C ti ID: CH_CONA	Run N	Factor 5	Initial Amount 5 mL	Final Amount 5 mL	Batch Number 599175	Prepared or Analyzed 11/04/22 10:36	Analyst WPD	Lab EET PEN
Total/NA	Analysis Instrumer	8260C at ID: CH_CONA	DL	10	5 mL	5 mL	599175	11/04/22 17:53	WPD	EET PEN

Client Sample ID: MW-11

Date Collected: 10/30/22 14:25

Lab Sample ID: 400-228125-10

Matrix: Water

Date Collected: 10/30/22 14:25 Date Received: 11/01/22 09:09

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	599175	11/04/22 16:09	WPD	EET PEN
	Inetrumer	TID. CH CONAN								

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: Fogelson 4-1 Com #14.00 Job ID: 400-228125-1

## **GC/MS VOA**

#### **Analysis Batch: 599175**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-228125-1	TB-01	Total/NA	Water	8260C	
400-228125-2	DUP-01	Total/NA	Water	8260C	
400-228125-3	MW-1R	Total/NA	Water	8260C	
400-228125-4	MW-4	Total/NA	Water	8260C	
400-228125-5	MW-6	Total/NA	Water	8260C	
400-228125-6	MW-7	Total/NA	Water	8260C	
400-228125-7	MW-8	Total/NA	Water	8260C	
400-228125-8	MW-9	Total/NA	Water	8260C	
400-228125-9	MW-10	Total/NA	Water	8260C	
400-228125-9 - DL	MW-10	Total/NA	Water	8260C	
400-228125-10	MW-11	Total/NA	Water	8260C	
MB 400-599175/5	Method Blank	Total/NA	Water	8260C	
LCS 400-599175/1003	Lab Control Sample	Total/NA	Water	8260C	
400-227727-B-3 MS	Matrix Spike	Total/NA	Water	8260C	
400-227727-B-3 MSD	Matrix Spike Duplicate	Total/NA	Water	8260C	

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Client: Stantec Consulting Services Inc Project/Site: Fogelson 4-1 Com #14.00

Job ID: 400-228125-1

### Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 400-599175/5

**Matrix: Water** 

**Analysis Batch: 599175** 

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

MB MB Result Qualifier RL Unit D Dil Fac Analyte Prepared Analyzed Benzene <1.0 1.0 ug/L 11/04/22 08:34 Toluene <1.0 1.0 ug/L 11/04/22 08:34 Ethylbenzene <1.0 1.0 ug/L 11/04/22 08:34 10 ug/L 11/04/22 08:34 Xylenes, Total <10

MB MB Qualifier Dil Fac Limits Prepared Surrogate %Recovery Analyzed 4-Bromofluorobenzene 96 72 - 11911/04/22 08:34 102 75 - 126 Dibromofluoromethane 11/04/22 08:34 Toluene-d8 (Surr) 99 64 - 132 11/04/22 08:34

Lab Sample ID: LCS 400-599175/1003

**Matrix: Water** 

**Analysis Batch: 599175** 

**Client Sample ID: Lab Control Sample** 

Prep Type: Total/NA

Spike LCS LCS %Rec Analyte Added Result Qualifier Unit D %Rec Limits 50.0 Benzene 47.6 ug/L 95 70 - 130 50.0 Toluene 46.0 ug/L 92 70 - 130 50.0 48.2 96 70 - 130 Ethylbenzene ug/L 100 95.2 95 70 - 130 Xylenes, Total ug/L

LCS LCS %Recovery Limits Surrogate Qualifier 72 - 119 4-Bromofluorobenzene 101 102 Dibromofluoromethane 75 - 126 Toluene-d8 (Surr) 98 64 - 132

Lab Sample ID: 400-227727-B-3 MS

**Matrix: Water** 

**Analysis Batch: 599175** 

**Client Sample ID: Matrix Spike** Prep Type: Total/NA

Sample Sample Spike MS MS %Rec Result Qualifier Result Qualifier Unit %Rec Analyte Added D Limits Benzene <1.0 50.0 41.4 ug/L 83 56 - 142 ug/L Toluene <1.0 50.0 40.8 82 65 - 130Ethylbenzene <1.0 50.0 42.0 ug/L 84 58 - 131 Xylenes, Total <10 100 84.3 ug/L 59 - 130

MS MS %Recovery Qualifier Surrogate Limits 4-Bromofluorobenzene 103 72 - 119 Dibromofluoromethane 99 75 - 126 Toluene-d8 (Surr) 97 64 - 132

Lab Sample ID: 400-227727-B-3 MSD

**Matrix: Water** 

**Analysis Batch: 599175** 

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

•	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	<1.0		50.0	49.7		ug/L		99	56 - 142	18	30
Toluene	<1.0		50.0	47.6		ug/L		95	65 - 130	15	30
Ethylbenzene	<1.0		50.0	51.4		ug/L		103	58 - 131	20	30

Eurofins Pensacola

Page 21 of 26

Client: Stantec Consulting Services Inc Job ID: 400-228125-1

Project/Site: Fogelson 4-1 Com #14.00

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

Lab Sample ID: 400-227727-B-3 MSD

**Matrix: Water** 

**Analysis Batch: 599175** 

MSD MSD RPD Spike %Rec Sample Sample Analyte **Result Qualifier** Added Result Qualifier Unit %Rec Limits RPD 100 103 Xylenes, Total <10 ug/L 103 59 - 130 20 30

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene	99		72 - 119
Dibromofluoromethane	100		75 - 126
Toluene-d8 (Surr)	99		64 - 132

**Client Sample ID: Matrix Spike Duplicate** 

Prep Type: Total/NA

Limit

<b>Eurofins Pensacola</b> 3355 McLemore Drive Pensacola, FL 32514 Phone: 850-474-1001 Fax: 850-478-2671		Chain c	in of Custody Record	ody R	ecord				e e	🛟 eurofins	
Client Information	Sampler: S.C.C.			Lab Pl Whitr	nire, Cheyenne	R	Carrier Tracking No(s):	ng No(s):	COC No.	COC No: 400-114529-37671	
Client Contact: Steve Varsa	Phone: (1) 3	3000	1327	E-Mail Chey	enne.Whitmire	E-Mail: Cheyenne.Whitmire@et.eurofinsus.com	State of Origin:	23	Page: Page 1 of	1 of 2	
Company: Stantec Consulting Services Inc			PWSID:			Analysis	Analysis Requested		Job #:		
Address: 11311 Aurora Avenue	Due Date Requested:	ij							Preser	ß	: 1 - Hexane
City. Des Moines	TAT Requested (days):	ıys):							C-Zn	B - NaOH C - Zn Acetate	N - None O - AsNaO2 P - Na2O4S
State, z.p.: IA, 50322-7904	Compliance Project:	∆ Yes	∆ No						E-Nat		2 - Na2SO3 2 - Na2S2O3
Phone:	PO #: WD1040037				(0		Ä		G-Am H-Aso	ъ	- TSP Dodecahydrate
Email: steve.varsa@stantec.com	WO#: ERG-STN-10-07-22-SAH-03	7-22-SAH-03			(on		400-228125 COC				- Acetone - MCAA V - pH 4-5
Project Name: Fogelson 4-1 Com #14.00 SemiAnnual	Project #: 40005479				ez ot		77 67 67 67 67 67 67 67 67 67 67 67 67 6	<u> </u>	K-EDTA		- Trizma - other (specify)
Site: Fragelyen 4-1	SSOW#:				560 SD (Y				of coi		
STN-03			-	Matrix	MSM i				nmber		
Sample Identification	Sample Date	Sample	Type (C=comp, G=crah)	(W=water, S=solid, O=waste/oil,	- 161d Fil 260C - 1 260C - 1				ıM leso	Special Inch	.otoN/stoitoi
			100	tion Code:	s V					special IIIst	Special instructions/Note.
TB-E1	12/26/01	1300	S	Water	- 7 +				7	TOP Dlank	14
DUP CI	22/06/01	717	C	Water	11				30		
1115-112	10/20/22	1330	5	Water	1 - 3				3		
7///	12/2/01	1336	S	Water	7				W		
MW-6	10/20/22	13,16	5	Water	- 5 -				on.		
4-20	22/06/01	1315	5	Water	- 3				ന		
NW-CO	12/30/25	1355	5	Water	1 - 3	*			8		
1111 - 9	130/22	1405	S	Water	+3:				) (°C		
21 - 27 /	10/30/22	د <u>د</u> .	5	Water	- 3 -				, nn		
7-3-5	10/30/21	1475	5	Water	13-				- 3		
				Water							
Possible Hazard Identification	☐ Poison B ☐ Unknown		Radiological		Sample Dis	Sample Disposal ( A fee may be assessed if samples are retained longer than 1 month)  Return To Client  Mon	y be assessed if san	samples are r	<b>etained Iong</b>   Archive For	ger than 1 m	onth) Months
, III, IV, Other (specify)					Special Inst	Special Instructions/QC Requirements:	rements:				
Empty Kit Relinquished by:		Date:			Time:		Method	Method of Shipment:			
Relinquished by: $\int_{\mathcal{M}}\mathcal{M}$	Date/Time: 73 / / 7	) / 2	00 90	Company	Received by:	by:	Me	Date/Time:	<b>%</b>	des .	Company
Relinquished by:	Date/Time:		S	Company	Received by:	p): , ((1)	7	Date/Time:		0	Company
Relinquished by:	Date/Time:		රි	Company	Received by:	by:		Date/Time:	(	0	Company
Custody Seals Intact: Custody Seal No.:					Cooler Te	Cooler Temperature(s) °C and Other Remarks:		0.7°C	7 RV		
					-						Ver: 06/08/2021

## **Login Sample Receipt Checklist**

Client: Stantec Consulting Services Inc Job Number: 400-228125-1

Login Number: 228125 List Source: Eurofins Pensacola

List Number: 1

Creator: Roberts, Alexis J

Question	Answer	Comment
Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>N/A</td> <td></td>	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	0.7°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").	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: Fogelson 4-1 Com #14.00

Job ID: 400-228125-1

## **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	<b>Expiration Date</b>
Alabama	State	40150	06-30-23
ANAB	ISO/IEC 17025	L2471	02-23-23
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
Kentucky (WW)	State	KY98030	12-31-22
Louisiana (All)	NELAP	30976	06-30-23
Louisiana (DW)	State	LA017	12-31-22
Maryland	State	233	09-30-23
Michigan	State	9912	06-30-23
North Carolina (WW/SW)	State	314	12-31-22
Oklahoma	NELAP	9810	08-31-23
Pennsylvania	NELAP	68-00467	01-31-23
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
Virginia	NELAP	460166	06-14-23
West Virginia DEP	State	136	03-31-23

Eurofins Pensacola

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## **Eurofins Pensacola**

#### **Job Notes**

The test results in this report meet all NELAP requirements for accredited parameters, unless otherwise noted, and relate only to the referenced samples. Pursuant to NELAP, this report may not be reproduced, except in full, without written approval from the laboratory. For questions please contact the Project Manager at the e-mail address listed on this page, or the telephone number at the bottom of the page. Eurofins Environment Testing Southeast LLC, Pensacola Certifications and Approvals: Alabama (40150), Arizona (AZ0710), Arkansas (88-0689), Florida (E81010), Illinois (200041), Iowa (367), Kansas (E-10253), Kentucky UST (53), Louisiana (30748), Maryland (233), Massachusetts (M-FL094), Michigan (9912), New Hampshire (250510), New Jersey (FL006), North Carolina (314), Oklahoma (9810), Pennsylvania (68-00467), Rhode Island (LAO00307), South Carolina (96026), Tennessee (TN02907), Texas (T104704286-10-2), Virginia (00008), Washington (C2043), West Virginia (136), USDA Foreign Soil Permit (P330-08-00006).

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**

Authorized for release by

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# **APPENDIX G**

Stant

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Released to Imaging: 5/22/2023 11:48:46 AM

**Environment Testing America** 

## **ANALYTICAL REPORT**

Eurofins Pensacola 3355 McLemore Drive Pensacola, FL 32514 Tel: (850)474-1001

Laboratory Job ID: 400-218854-1

Laboratory Sample Delivery Group: EPCGP

Client Project/Site: Folgelson #4-1

Revision: 1

#### For:

Stantec Consulting Services Inc 11311 Aurora Avenue Des Moines, Iowa 50322-7904

Attn: Steve Varsa

Ish my

Authorized for release by: 6/22/2022 9:24:29 AM Isabel Enfinger, Project Manager I (850)471-6237

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The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten

Results relate only to the items tested and the sample(s) as received by the laboratory.

Client: Stantec Consulting Services Inc Project/Site: Folgelson #4-1

Laboratory Job ID: 400-218854-1 SDG: EPCGP

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#### Case Narrative

Client: Stantec Consulting Services Inc

Project/Site: Folgelson #4-1

Job ID: 400-218854-1

SDG: EPCGP

Job ID: 400-218854-1

**Laboratory: Eurofins Pensacola** 

Narrative

Job Narrative 400-218854-1

#### Receipt

The sample was received on 4/22/2022 9:04 AM. Unless otherwise noted below, the sample arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 3.8° C.

#### GC Semi VOA

Method 8015B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 400-575607 and analytical batch 400-575887 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 8015B: Due to the high concentration of Diesel Range Organics [C10-C28], the matrix spike / matrix spike duplicate (MS/MSD) for preparation batch 400-577949 and analytical batch 400-578148 could not be evaluated for accuracy and precision. The associated laboratory control sample (LCS) met acceptance criteria.

Method 8015B: The following sample was re-prepared outside of preparation holding time due to n-Decanoic Acid (Surr) surrogate failure: MW10 (39-40 FT.) (400-218854-1).

Method 8015B: n-Decanoic Acid (Surr) surrogate recovery for the following samples were outside control limits: MW10 (39-40 FT.) (400-218854-1) and (LCS 400-575607/2-A). Re-extraction and/or re-analysis was performed outside of holding time with acceptable results. Both sets of data have been reported.

Method 8015B: The surrogate recovery for the blank associated with preparation batch 400-575607 and analytical batch 400-576126 was outside the upper control limits.

Method 8015B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 400-575607 and analytical batch 400-576126 were outside control limits.

Method 8015B: o-Terphenyl surrogate recovery for the following sample was outside control limits: (400-218854-A-1-C MS).

Method 8015B: The following sample was diluted to bring the concentration of target analytes within the calibration range: (400-219988-A-1-C). Elevated reporting limits (RLs) are provided.

#### Organic Prep

Method 3546: The following samples formed a large precipitate during the concentration procedure: MW10 (39-40 FT.) (400-218854-1), (400-218854-A-1 MS) and (400-218854-A-1 MSD)

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

## **Detection Summary**

Client: Stantec Consulting Services Inc

Project/Site: Folgelson #4-1

Job ID: 400-218854-1

SDG: EPCGP

## Client Sample ID: MW10 (39-40 FT.)

## Lab Sample ID: 400-218854-1

Analyte	Result Q	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Gasoline Range Organics	0.30		0.11	mg/Kg	1	₩	8015B	Total/NA
(GRO)-C6-C10								
Diesel Range Organics (DRO)	57 F	1	5.4	mg/Kg	1	☼	8015B	Total/NA
Diesel Range Organics (DRO)	64 F	1	8.5	mg/Kg	1.56	₩	8015B	Total/NA
Oil Range Organics (ORO)	8.4		5.4	mg/Kg	1	₩	8015B	Total/NA
Diesel Range Organics (DRO) - RE	18 H	I	11	mg/Kg	1	₩	8015B	Total/NA
Chloride	34		22	mg/Kg	1	☼	300.0	Soluble

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This Detection Summary does not include radiochemical test results.

## **Method Summary**

Client: Stantec Consulting Services Inc

Project/Site: Folgelson #4-1

Job ID: 400-218854-1

SDG: EPCGP

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL PEN
8015B	Gasoline Range Organics - (GC)	SW846	TAL PEN
8015B	Diesel Range Organics (DRO) (GC)	SW846	TAL PEN
300.0	Anions, Ion Chromatography	MCAWW	TAL PEN
Moisture	Percent Moisture	EPA	TAL PEN
3546	Microwave Extraction	SW846	TAL PEN
5035	Closed System Purge and Trap	SW846	TAL PEN
DI Leach	Deionized Water Leaching Procedure	ASTM	TAL PEN

#### **Protocol References:**

ASTM = ASTM International

EPA = US Environmental Protection Agency

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

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

#### **Laboratory References:**

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

## **Sample Summary**

Client: Stantec Consulting Services Inc Project/Site: Folgelson #4-1

Job ID: 400-218854-1

SDG: EPCGP

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-218854-1	MW10 (39-40 FT.)	Solid	04/20/22 10:55	04/22/22 09:04

Client: Stantec Consulting Services Inc

Project/Site: Folgelson #4-1

Job ID: 400-218854-1

SDG: EPCGP

Client Sample ID: MW10 (39-40 FT.)

Date Collected: 04/20/22 10:55 Date Received: 04/22/22 09:04 Lab Sample ID: 400-218854-1

**Matrix: Solid** 

Percent Solids: 90.6

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Benzene	<0.0056		0.0056	mg/Kg	<u></u>	04/26/22 12:43	04/26/22 23:49	
Ethylbenzene	< 0.0056		0.0056	mg/Kg	☼	04/26/22 12:43	04/26/22 23:49	
Toluene	< 0.0056		0.0056	mg/Kg	☼	04/26/22 12:43	04/26/22 23:49	
Xylenes, Total	<0.011		0.011	mg/Kg	₩	04/26/22 12:43	04/26/22 23:49	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil F
4-Bromofluorobenzene	106		67 - 130			04/26/22 12:43	04/26/22 23:49	
Dibromofluoromethane	101		77 - 127			04/26/22 12:43	04/26/22 23:49	
Toluene-d8 (Surr)	95		76 - 127			04/26/22 12:43	04/26/22 23:49	
Method: 8015B - Gasoline Ra								
Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Gasoline Range Organics (GRO)-C6-C10	0.30		0.11	mg/Kg	₩	04/22/22 10:42	04/22/22 14:27	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil F
a,a,a-Trifluorotoluene (fid)	101		65 - 125			04/22/22 10:42	04/22/22 14:27	
Method: 8015B - Diesel Rang	ge Organics (	DRO) (GC	)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil F
Diesel Range Organics (DRO)	57	F1	5.4	mg/Kg	<del>-</del>	04/28/22 08:43	04/30/22 00:29	
Diesel Range Organics (DRO)	64	F1	8.5	mg/Kg	≎	04/28/22 08:43	05/03/22 11:11	1.
Oil Range Organics (ORO)	8.4		5.4	mg/Kg	☼	04/28/22 08:43	04/30/22 00:29	
Oil Range Organics (ORO)	<8.5		8.5	mg/Kg	₩	04/28/22 08:43	05/03/22 11:11	1.
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil F
o-Terphenyl	47		27 - 150			04/28/22 08:43	04/30/22 00:29	
o-Terphenyl	44		27 - 150			04/28/22 08:43	05/03/22 11:11	1.
n-Decanoic Acid (Surr)	153	S1+	0 - 1			04/28/22 08:43	05/03/22 11:11	1.
Method: 8015B - Diesel Ranç			•		_			
Analyte		Qualifier	RL	Unit	_ <u>D</u>	Prepared	Analyzed	Dil F
Diesel Range Organics (DRO)	18		11	mg/Kg	<u> </u>		05/19/22 16:32	
Oil Range Organics (ORO)	<11	Н	11	mg/Kg	☼	05/18/22 14:13	05/19/22 16:32	
Surrogate	%Recovery	Qualifier	Limits			Prepared 05/10/20 11/10	Analyzed	Dil F
o-Terphenyl	44		27 - 150			05/18/22 14:13		
n-Decanoic Acid (Surr)	0		0 - 1			05/18/22 14:13	05/19/22 16:32	
Method: 300.0 - Anions, Ion					_			
Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil F
Chloride	34		22	mg/Kg	₩		04/28/22 15:05	

## **Definitions/Glossary**

Client: Stantec Consulting Services Inc Job ID: 400-218854-1

Project/Site: Folgelson #4-1 SDG: EPCGP

#### **Qualifiers**

Qualifier

#### **GC Semi VOA**

**Qualifier Description** F1 MS and/or MSD recovery exceeds control limits.

Н Sample was prepped or analyzed beyond the specified holding time

S1-Surrogate recovery exceeds control limits, low biased. S1+ Surrogate recovery exceeds control limits, high biased.

### **Glossary**

Abbreviation	These commonly	y used abbreviations may	y or may not	be present in this repor
ADDIGVICTION	THESE COMMISSION	y useu abbievialions ma	y or may not	be present in this repor

¤ 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 Contains No Free Liquid **CNF** 

DER Duplicate Error Ratio (normalized absolute difference)

Dil Fac **Dilution Factor** 

Detection Limit (DoD/DOE) DL

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)

Method Detection Limit MDL 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 Positive / Present POS

Practical Quantitation Limit PQL

**PRES** Presumptive QC **Quality Control** 

RER Relative Error Ratio (Radiochemistry)

Reporting Limit or Requested Limit (Radiochemistry) RL

**RPD** Relative Percent Difference, a measure of the relative difference between two points

**TEF** Toxicity Equivalent Factor (Dioxin) Toxicity Equivalent Quotient (Dioxin) TFO

**TNTC** Too Numerous To Count

#### **Lab Chronicle**

Client: Stantec Consulting Services Inc

Project/Site: Folgelson #4-1

SDG: EPCGP

Job ID: 400-218854-1

Client Sample ID: MW10 (39-40 FT.)

Client Sample ID: MW10 (39-40 FT.)

Date Collected: 04/20/22 10:55 Date Received: 04/22/22 09:04

Date Collected: 04/20/22 10:55

Lab Sample ID: 400-218854-1

**Matrix: Solid** 

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			575291	04/26/22 09:10	AW	TAL PEN
	Instrument	ID: NOEQUIP								

Lab Sample ID: 400-218854-1

**Matrix: Solid** 

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.95 g	5.00 g	575371	04/26/22 12:43	BEP	TAL PEN
Total/NA	Analysis Instrumer	8260B at ID: CH_TAN		1	5 mL	5 mL	575350	04/26/22 23:49	BEP	TAL PEN
Total/NA	Prep	5035			5.08 g	5.00 g	574888	04/22/22 10:42	NTH	TAL PEN
Total/NA	Analysis Instrumer	8015B at ID: CH_RITA		1	5 mL	5 mL	574890	04/22/22 14:27	NTH	TAL PEN
Total/NA	Prep	3546			15.24 g	1 mL	575607	04/28/22 08:43	BKL	TAL PEN
Total/NA	Analysis Instrumer	8015B at ID: Eva		1			575887	04/30/22 00:29	CJ	TAL PEN
Total/NA	Prep	3546			15.24 g	1 mL	575607	04/28/22 08:43	BKL	TAL PEN
Total/NA	Analysis Instrumer	8015B at ID: WALLE		1.56			576126	05/03/22 11:11	JAW	TAL PEN
Total/NA	Prep	3546	RE		15.20 g	2 mL	577949	05/18/22 14:13	NGB	TAL PEN
Total/NA	Analysis Instrumer	8015B at ID: WALLE	RE	1			578170	05/19/22 16:32	JAW	TAL PEN
Soluble	Leach	DI Leach			2.515 g	50 mL	575302	04/26/22 09:43	JAS	TAL PEN
Soluble	Analysis Instrumer	300.0 at ID: Stitch		1	-		575647	04/28/22 15:05	JAS	TAL PEN

#### Laboratory References:

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

## **QC Association Summary**

Client: Stantec Consulting Services Inc

Project/Site: Folgelson #4-1

Job ID: 400-218854-1

SDG: EPCGP

## **GC/MS VOA**

#### Analysis Batch: 575350

<b>Lab Sample ID</b> 400-218854-1	Client Sample ID MW10 (39-40 FT.)	Prep Type Total/NA	Matrix Solid	Method 8260B	Prep Batch 575371
MB 400-575371/2-A	Method Blank	Total/NA	Solid	8260B	575371
LCS 400-575371/1-A	Lab Control Sample	Total/NA	Solid	8260B	575371
400-218886-B-29-D MS	Matrix Spike	Total/NA	Solid	8260B	575371
400-218886-C-29-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8260B	575371

#### **Prep Batch: 575371**

Lab Sample ID 400-218854-1	Client Sample ID MW10 (39-40 FT.)	Prep Type Total/NA	Matrix Solid	Method 5035	Prep Batch
MB 400-575371/2-A	Method Blank	Total/NA	Solid	5035	
LCS 400-575371/1-A	Lab Control Sample	Total/NA	Solid	5035	
400-218886-B-29-D MS	Matrix Spike	Total/NA	Solid	5035	
400-218886-C-29-C MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

## **GC VOA**

#### **Prep Batch: 574888**

Lab Sample ID 400-218854-1	Client Sample ID MW10 (39-40 FT.)	Prep Type Total/NA	Matrix Solid	Method 5035	Prep Batch
MB 400-574888/2-A	Method Blank	Total/NA	Solid	5035	
LCS 400-574888/1-A	Lab Control Sample	Total/NA	Solid	5035	
400-218818-A-1-B MS	Matrix Spike	Total/NA	Solid	5035	
400-218818-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

#### Analysis Batch: 574890

Lab Sample ID 400-218854-1	Client Sample ID  MW10 (39-40 FT.)	Prep Type Total/NA	Matrix Solid	Method 8015B	Prep Batch 574888
MB 400-574888/2-A	Method Blank	Total/NA	Solid	8015B	574888
LCS 400-574888/1-A	Lab Control Sample	Total/NA	Solid	8015B	574888
400-218818-A-1-B MS	Matrix Spike	Total/NA	Solid	8015B	574888
400-218818-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B	574888

## **GC Semi VOA**

#### **Prep Batch: 575607**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-218854-1	MW10 (39-40 FT.)	Total/NA	Solid	3546	
MB 400-575607/1-A	Method Blank	Total/NA	Solid	3546	
LCS 400-575607/2-A	Lab Control Sample	Total/NA	Solid	3546	
400-218854-1 MS	MW10 (39-40 FT.)	Total/NA	Solid	3546	
400-218854-1 MSD	MW10 (39-40 FT.)	Total/NA	Solid	3546	

#### Analysis Batch: 575887

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-218854-1	MW10 (39-40 FT.)	Total/NA	Solid	8015B	575607
MB 400-575607/1-A	Method Blank	Total/NA	Solid	8015B	575607
LCS 400-575607/2-A	Lab Control Sample	Total/NA	Solid	8015B	575607
400-218854-1 MS	MW10 (39-40 FT.)	Total/NA	Solid	8015B	575607
400-218854-1 MSD	MW10 (39-40 FT.)	Total/NA	Solid	8015B	575607

## **QC Association Summary**

Client: Stantec Consulting Services Inc

Project/Site: Folgelson #4-1

Job ID: 400-218854-1 SDG: EPCGP

#### **GC Semi VOA**

#### **Analysis Batch: 576126**

Lab Sample ID 400-218854-1	Client Sample ID MW10 (39-40 FT.)	Prep Type Total/NA	Matrix Solid	Method 8015B	Prep Batch 575607
MB 400-575607/1-A	Method Blank	Total/NA	Solid	8015B	575607
LCS 400-575607/2-A	Lab Control Sample	Total/NA	Solid	8015B	575607
400-218854-1 MS	MW10 (39-40 FT.)	Total/NA	Solid	8015B	575607
400-218854-1 MSD	MW10 (39-40 FT.)	Total/NA	Solid	8015B	575607

#### **Prep Batch: 577949**

<b>Lab Sample ID</b> 400-218854-1 - RE	Client Sample ID MW10 (39-40 FT.)	Prep Type Total/NA	Matrix Solid	Method 3546	Prep Batch
MB 400-577949/20-A	Method Blank	Total/NA	Solid	3546	
LCS 400-577949/2-A	Lab Control Sample	Total/NA	Solid	3546	

#### **Analysis Batch: 578170**

<b>Lab Sample ID</b> 400-218854-1 - RE	Client Sample ID MW10 (39-40 FT.)	Prep Type Total/NA	Matrix Solid	Method 8015B	Prep Batch 577949
MB 400-577949/20-A	Method Blank	Total/NA	Solid	8015B	577949
LCS 400-577949/2-A	Lab Control Sample	Total/NA	Solid	8015B	577949

#### **HPLC/IC**

#### Leach Batch: 575302

Lab Sample ID 400-218854-1	Client Sample ID MW10 (39-40 FT.)	Prep Type Soluble	Matrix Solid	Method DI Leach	Prep Batch
MB 400-575302/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 400-575302/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 400-575302/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
400-218622-B-1-E MS	Matrix Spike	Soluble	Solid	DI Leach	
400-218622-B-1-F MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

#### **Analysis Batch: 575647**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-218854-1	MW10 (39-40 FT.)	Soluble	Solid	300.0	575302
MB 400-575302/1-A	Method Blank	Soluble	Solid	300.0	575302
LCS 400-575302/2-A	Lab Control Sample	Soluble	Solid	300.0	575302
LCSD 400-575302/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	575302
400-218622-B-1-E MS	Matrix Spike	Soluble	Solid	300.0	575302
400-218622-B-1-F MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	575302

## **General Chemistry**

#### **Analysis Batch: 575291**

Lab Sample II	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-218854-1	MW10 (39-40 FT.)	Total/NA	Solid	Moisture	
400-218854-1	DU MW10 (39-40 FT.)	Total/NA	Solid	Moisture	

Client: Stantec Consulting Services Inc

Project/Site: Folgelson #4-1

Job ID: 400-218854-1

SDG: EPCGP

### Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 400-575371/2-A

**Matrix: Solid** 

Analysis Batch: 575350

**Client Sample ID: Method Blank** 

Prep Type: Total/NA

**Prep Batch: 575371** 

	INIB	INIR						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0050		0.0050	mg/Kg	_	04/26/22 12:43	04/26/22 14:45	1
Ethylbenzene	<0.0050		0.0050	mg/Kg		04/26/22 12:43	04/26/22 14:45	1
Toluene	< 0.0050		0.0050	mg/Kg		04/26/22 12:43	04/26/22 14:45	1
Xylenes, Total	<0.010		0.010	mg/Kg		04/26/22 12:43	04/26/22 14:45	1

MB MB

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	104		67 - 130	04/26/22 12:43	04/26/22 14:45	1
Dibromofluoromethane	99		77 - 127	04/26/22 12:43	04/26/22 14:45	1
Toluene-d8 (Surr)	96		76 - 127	04/26/22 12:43	04/26/22 14:45	1

Lab Sample ID: LCS 400-575371/1-A **Client Sample ID: Lab Control Sample** 

**Matrix: Solid** 

**Analysis Batch: 575350** 

**Prep Type: Total/NA Prep Batch: 575371** 

%Rec

Spike LCS LCS Analyte Added Result Qualifier Unit D %Rec Limits Benzene 0.0500 0.0503 65 - 130 mg/Kg 101 Ethylbenzene 0.0500 0.0488 70 - 130 mg/Kg 98 Toluene 0.0500 0.0493 mg/Kg 99 70 - 130 Xylenes, Total 0.100 0.0965 mg/Kg 70 - 130

LCS LCS

Surrogate	%Recovery Qualifie	r Limits
4-Bromofluorobenzene	109	67 - 130
Dibromofluoromethane	101	77 - 127
Toluene-d8 (Surr)	97	76 - 127

Lab Sample ID: 400-218886-B-29-D MS

**Matrix: Solid** 

**Analysis Batch: 575350** 

**Client Sample ID: Matrix Spike** Prep Type: Total/NA

**Prep Batch: 575371** 

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	<0.0049		0.0506	0.0423		mg/Kg	☼	81	38 - 131	
Ethylbenzene	<0.0049		0.0506	0.0366		mg/Kg	☼	72	35 - 130	
Toluene	<0.0049		0.0506	0.0390		mg/Kg	☼	77	42 - 130	
Xylenes, Total	<0.0097		0.101	0.0716		mg/Kg	₽	71	35 - 130	

MS MS

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene	105		67 - 130
Dibromofluoromethane	100		77 - 127
Toluene-d8 (Surr)	95		76 - 127

Lab Sample ID: 400-218886-C-29-C MSD

**Matrix: Solid** 

Analysis Batch: 575350

Client	Sample	ID:	Matrix	Snika	<b>Duplicate</b>
Cilent	Samble	IU.	ıvıatı ix	SUIKE	Dublicate

Prep Type: Total/NA

**Prep Batch: 575371** 

	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	<0.0049		0.0513	0.0540		mg/Kg	— <u></u>	102	38 - 131	24	36
Ethylbenzene	< 0.0049		0.0513	0.0464		mg/Kg	₽	91	35 - 130	24	46
Toluene	< 0.0049		0.0513	0.0495		mg/Kg	₩	97	42 - 130	24	37

Eurofins Pensacola

Page 12 of 19

Client: Stantec Consulting Services Inc

Project/Site: Folgelson #4-1

Job ID: 400-218854-1

**Client Sample ID: Lab Control Sample** 

SDG: EPCGP

### Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 400-218886-C-29-C MSD Client Sample ID: Matrix Spike Duplicate **Matrix: Solid** Prep Type: Total/NA **Analysis Batch: 575350 Prep Batch: 575371** MSD MSD %Rec **RPD** Sample Sample Spike Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits RPD Limit 24 39

Xylenes, Total	<0.0097		0.103	0.0911	mg/Kg	<u></u>	89	35 - 130
	MSD	MSD						
Surrogate	%Recovery	Qualifier	Limits					
4-Bromofluorobenzene	106		67 - 130					
Dibromofluoromethane	100		77 - 127					

76 - 127

#### Method: 8015B - Gasoline Range Organics - (GC)

95

Lab Sample ID: MB 400-574888/2-A **Client Sample ID: Method Blank Matrix: Solid** Prep Type: Total/NA **Analysis Batch: 574890 Prep Batch: 574888** MB MB Analyte Result Qualifier RL Unit Prepared Analyzed Dil Fac Gasoline Range Organics < 0.10 0.10 mg/Kg 04/22/22 10:42 04/22/22 17:49 (GRO)-C6-C10

MB MB Surrogate %Recovery Qualifier Limits Prepared Analyzed Dil Fac a,a,a-Trifluorotoluene (fid) 98 65 - 125 04/22/22 10:42 04/22/22 17:49

Lab Sample ID: LCS 400-574888/1-A **Matrix: Solid** 

Dibromofluoromethane Toluene-d8 (Surr)

Prep Type: Total/NA **Analysis Batch: 574890 Prep Batch: 574888** LCS LCS Spike %Rec

Added Result Qualifier Limits Analyte Unit D %Rec 1.00 0.918 mg/Kg 92 62 - 141 Gasoline Range Organics (GRO)-C6-C10

LCS LCS Surrogate %Recovery Qualifier Limits a,a,a-Trifluorotoluene (fid) 97 65 - 125

Lab Sample ID: 400-218818-A-1-B MS **Client Sample ID: Matrix Spike** 

**Matrix: Solid Prep Type: Total/NA Analysis Batch: 574890** Prep Batch: 574888

Spike MS MS %Rec Sample Sample Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits Gasoline Range Organics 1.5 1.04 2.73 mg/Kg 120 10 - 150

(GRO)-C6-C10

MS MS Surrogate %Recovery Qualifier Limits a,a,a-Trifluorotoluene (fid) 112 65 - 125

Lab Sample ID: 400-218818-A-1-C MSD **Client Sample ID: Matrix Spike Duplicate** 

**Matrix: Solid** Prep Type: Total/NA Analysis Batch: 574890 Prep Batch: 574888

MSD MSD %Rec **RPD** Sample Sample Spike Result Qualifier Added Result Qualifier Limits RPD Limit Analyte Unit %Rec 1.5 1.06 2.27 74 10 - 150 18 32 Gasoline Range Organics mg/Kg

(GRO)-C6-C10

Client: Stantec Consulting Services Inc

Project/Site: Folgelson #4-1

Job ID: 400-218854-1

SDG: EPCGP

## Method: 8015B - Gasoline Range Organics - (GC) (Continued)

MSD	MSD

Surrogate %Recovery Qualifier Limits a,a,a-Trifluorotoluene (fid) 110 65 - 125

Method: 8015B - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 400-575607/1-A

**Matrix: Solid** 

**Analysis Batch: 575887** 

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

**Prep Batch: 575607** 

Dil Fac

MB MB Analyte Result Qualifier RL Unit Prepared Analyzed Diesel Range Organics (DRO) <5.0 5.0 mg/Kg 04/28/22 08:43 04/29/22 23:12 Oil Range Organics (ORO) < 5.0 5.0 mg/Kg 04/28/22 08:43 04/29/22 23:12

MB MB

Surrogate %Recovery Qualifier Limits o-Terphenyl 91 27 - 150

Prepared Analyzed Dil Fac 

Client Sample ID: Method Blank Lab Sample ID: MB 400-575607/1-A

**Matrix: Solid** 

**Analysis Batch: 576126** 

Prep Type: Total/NA

**Prep Batch: 575607** 

MB MB Analyte Result Qualifier RL Unit Prepared Analyzed Dil Fac Diesel Range Organics (DRO) 8.6 04/28/22 08:43 05/03/22 10:08 <8.6 mg/Kg 1.72 Oil Range Organics (ORO) <8.6 8.6 mg/Kg 04/28/22 08:43 05/03/22 10:08 1.72

MB MB

Qualifier Limits Dil Fac Surrogate %Recovery Prepared Analyzed 27 - 150 04/28/22 08:43 05/03/22 10:08 1.72 o-Terphenyl 73 n-Decanoic Acid (Surr) 133 S1+ 04/28/22 08:43 05/03/22 10:08 0-1 1.72

LCS LCS

LCS LCS

Lab Sample ID: LCS 400-575607/2-A

**Matrix: Solid** 

**Analysis Batch: 575887** 

**Client Sample ID: Lab Control Sample** 

Prep Type: Total/NA **Prep Batch: 575607** 

%Rec

Spike Analyte Added Result Qualifier Unit %Rec Limits Diesel Range Organics (DRO) 274 242 mg/Kg 88 38 - 116

LCS LCS

Surrogate %Recovery Qualifier Limits 27 - 150 o-Terphenyl 86

Lab Sample ID: LCS 400-575607/2-A

**Matrix: Solid** 

**Analysis Batch: 576126** 

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

**Prep Batch: 575607** 

%Rec

Analyte Added Result Qualifier Unit %Rec Limits Diesel Range Organics (DRO) 274 210 mg/Kg 77 38 - 116

Spike

LCS LCS

Surrogate %Recovery Qualifier Limits o-Terphenyl 27 - 150 74 110 S1+ n-Decanoic Acid (Surr) 0 - 1

Client: Stantec Consulting Services Inc

Project/Site: Folgelson #4-1

Job ID: 400-218854-1

SDG: EPCGP

## Method: 8015B - Diesel Range Organics (DRO) (GC) (Continued)

Sample Sample

57 F1

MS MS

64 F1

MS MS

S1-

**%Recovery Qualifier** 

23

n

Sample Sample

57 F1

Result Qualifier

28

Qualifier

%Recovery

Result Qualifier

Lab Sample ID: 400-218854-1 MS Client Sample ID: MW10 (39-40 FT.)

Spike

Added

Limits

27 - 150

301

**Matrix: Solid** 

Analyte

Surrogate

o-Terphenyl

**Analysis Batch: 575887** 

Diesel Range Organics (DRO)

Prep Type: Total/NA **Prep Batch: 575607** 

%Rec

Limits

62 - 150

22

%Rec

Lab Sample ID: 400-218854-1 MS

**Matrix: Solid** 

Analysis Batch: 576126

Diesel Range Organics (DRO)

88.8 F1

MSD MSD

137 F1

MSD MSD

89.3 F1

Result Qualifier

Result Qualifier

MS MS

123 F1

Result Qualifier

Unit

mg/Kg

mg/Kg

Unit

mg/Kg

Unit

mg/Kg

D

D

%Rec

8

%Rec

D

Prep Type: Total/NA **Prep Batch: 575607** 

Sample Sample Spike MS MS Analyte Result Qualifier Added Result Qualifier Unit D %Rec

301

Limits

0-1

27 - 150

Spike

Added

Spike

Added

302

302

%Rec

Limits 8 62 - 150

Client Sample ID: MW10 (39-40 FT.)

Lab Sample ID: 400-218854-1 MSD

**Matrix: Solid** 

Analyte

Surrogate

o-Terphenyl

n-Decanoic Acid (Surr)

Surrogate

o-Terphenyl

**Analysis Batch: 575887** 

Diesel Range Organics (DRO)

Client Sample ID: MW10 (39-40 FT.)

Prep Type: Total/NA

**Prep Batch: 575607** 

%Rec **RPD** 

RPD

Limits Limit

11 30

62 - 150 26

MSD MSD %Recovery Qualifier

36

Limits 27 - 150

Lab Sample ID: 400-218854-1 MSD

**Matrix: Solid** 

Analysis Batch: 576126

Diesel Range Organics (DRO)

Client Sample ID: MW10 (39-40 FT.)

Prep Type: Total/NA

**Prep Batch: 575607** 

%Rec **RPD** 

Limits RPD Limit 62 - 150 n

64 F1 MSD MSD

Sample Sample Result Qualifier

%Recovery Surrogate Qualifier Limits o-Terphenyl 31 27 - 150 0 0 - 1 n-Decanoic Acid (Surr)

Lab Sample ID: MB 400-577949/20-A

**Matrix: Solid** 

Surrogate

o-Terphenyl

**Analysis Batch: 578170** 

Oil Range Organics (ORO)

**Client Sample ID: Method Blank** 

Prep Type: Total/NA

Prep Batch: 577949

Analyte Result Qualifier Diesel Range Organics (DRO) <10

MB MB

<10

Unit Prepared Analyzed Dil Fac 05/18/22 14:14 05/19/22 15:44 mg/Kg 05/18/22 14:14 05/19/22 15:44 mg/Kg

MB MB

Qualifier %Recovery Limits 27 - 150 90

Prepared

Analyzed 05/18/22 14:14 05/19/22 15:44

Dil Fac

**Eurofins Pensacola** 

RL

10

Client: Stantec Consulting Services Inc

Project/Site: Folgelson #4-1

Job ID: 400-218854-1

SDG: EPCGP

Method: 8015B - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: MB 400-577949/20-A

**Matrix: Solid** 

**Analysis Batch: 578170** 

**Client Sample ID: Method Blank** 

Prep Type: Total/NA

**Prep Batch: 577949** 

MB MB

%Recovery Qualifier Limits Surrogate Prepared n-Decanoic Acid (Surr) 0 0-1

Spike

Added

267

LCS LCS

198

Dil Fac Analyzed 05/18/22 14:14 05/19/22 15:44

Lab Sample ID: LCS 400-577949/2-A

**Matrix: Solid** 

Analyte

**Analysis Batch: 578170** 

Diesel Range Organics (DRO)

Client Sample ID: Lab Control Sample

Prep Type: Total/NA **Prep Batch: 577949** 

%Rec Limits

Result Qualifier Unit %Rec 38 - 116 mg/Kg 74

LCS LCS

Surrogate %Recovery Qualifier Limits 27 - 150 o-Terphenyl 82 n-Decanoic Acid (Surr) 0 0-1

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 400-575302/1-A

**Matrix: Solid** 

**Analysis Batch: 575647** 

**Client Sample ID: Method Blank** 

**Client Sample ID: Lab Control Sample** 

Client Sample ID: Lab Control Sample Dup

**Client Sample ID: Matrix Spike Duplicate** 

**Prep Type: Soluble** 

**Prep Type: Soluble** 

**Prep Type: Soluble** 

MB MB

Result Qualifier

RL Unit **Analyte** Prepared Analyzed Dil Fac Chloride <20 20 mg/Kg 04/28/22 10:30

Lab Sample ID: LCS 400-575302/2-A

**Matrix: Solid** 

**Analysis Batch: 575647** 

Spike LCS LCS %Rec Analyte Added Result Qualifier Unit %Rec Limits Chloride 99.7 99.8 mg/Kg 100 80 - 120

Lab Sample ID: LCSD 400-575302/3-A

**Matrix: Solid** 

Analysis Batch: 575647

%Rec **RPD** Analyte Added Result Qualifier Unit %Rec Limits RPD Limit Chloride 100 100 100 80 - 120 mg/Kg

**Matrix: Solid** 

**Client Sample ID: Matrix Spike** 

**Prep Type: Soluble** 

**Prep Type: Soluble** 

Sample Sample Spike MS MS %Rec Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits Chloride 123 80 - 120 <25 139 mg/Kg 103

**Matrix: Solid** 

Sample Sample Spike MSD MSD %Rec **RPD** Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits RPD Limit D

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Spike LCSD LCSD

Lab Sample ID: 400-218622-B-1-E MS

**Analysis Batch: 575647** 

Environment Testing

🔅 eurofins

Chain of Custody Record

Phone (850) 474-1001 Phone (850) 478-2671

FL 32514

Pensacola,

**Eurofins Pensacola** 

3355 McLemore Drive

Special Instructions/Note: 19370884 Q - Na2SO3 R - Na2S2O3 Sample Disposal ( A fee may be assessed if samples are retained longer than 1 month)

Return To Client Disposal By Lab Archive For Mont COC No. 400-110418-38777.1 Preservation Codes 1400 A - HCL B - NaOH C - Zn Acetate Page: Page 1 of 1 D - Nitnc Acid E - NaHSO4 - MeOH Archive For Total Number of containers Date/Fime: (22) XX Method of Shipment 400-218854 COC State of Origin: Analysis Requested Cooler Temperature(s) °C and Other Remarks: Special Instructions/QC Requirements: Lab PM:
Whitmire, Cheyenne R
E-Mait
Cheyenne.Whitmire@et.eurofinsus.com IZEOC - BLEX X 1015B\_DRO - DRO, ORO Received by Received by Received by 1015B\_GRO - GRO 2608 - BTEX (ON JO Startc. Startc. Field Filtered Sample (Yes or No.) 1 Water Preservation Code Solid Solid (Wewater, Sesolid, Oewaste/oil BT=Tissue A=Alr) Company And Malomson Radiological 1019 Type (C=comp, Sample G=grab) Q 1400 TAT Requested (days): ompliance Project: A Yes A No 1055 Sample Date/Time: 4/21/22 251 Date Unknown Due Date Requested: 72/02/2 515 Sample Date PO#: WD801911 WO# Project #: 40005479 SSOW#: Date/Time: Poison B Skin Irritant Jelivərable Requested: I, II, III, IV, Other (specify) EPCGP -40 Pt. Ban Custody Seal No. 515-251-1020 Flammable Possible Hazard Identification Stantec Consulting Services Inc mpty Kit Relinquished by steve.varsa@stantec.com Custody Seals Intact: Client Information Sample Identification 11311 Aurora Avenue State, Zip IA, 50322-7904 MWID Project Name: Fogelson #4-1 inquished by: elinquished by: Steve Varsa Des Moines inquished by

## **Login Sample Receipt Checklist**

Client: Stantec Consulting Services Inc

Job Number: 400-218854-1

SDG Number: EPCGP

Login Number: 218854 List Source: Eurofins Pensacola

List Number: 1

Creator: Perez, Trina M

Question	Answer	Comment
Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>N/A</td> <td></td>	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	3.8°C IR-10
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
s 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	

Released to Imaging: 5/22/2023 11:48:46 AM

## **Accreditation/Certification Summary**

Client: Stantec Consulting Services Inc
Project/Site: Folgelson #4-1

SDG: EPCGP

## **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	06-30-22
ANAB	ISO/IEC 17025	L2471	02-23-23
Arkansas DEQ	State	88-0689	09-01-22
California	State	2510	06-30-22
Florida	NELAP	E81010	06-30-22
Georgia	State	E81010(FL)	06-30-22
Illinois	NELAP	200041	10-09-22
Kansas	NELAP	E-10253	10-31-22
Kentucky (UST)	State	53	06-30-22
Kentucky (WW)	State	KY98030	12-31-22
Louisiana	NELAP	30976	06-30-22
Louisiana (DW)	State	LA017	12-31-22
Maryland	State	233	09-30-22
Massachusetts	State	M-FL094	06-30-22
Michigan	State	9912	06-30-22
North Carolina (WW/SW)	State	314	12-31-22
Oklahoma	NELAP	9810	08-31-22
Pennsylvania	NELAP	68-00467	01-31-23
South Carolina	State	96026	06-30-22
Tennessee	State	TN02907	06-30-22
Texas	NELAP	T104704286	09-30-22
US Fish & Wildlife	US Federal Programs	058448	07-31-22
USDA	US Federal Programs	P330-21-00056	05-17-24
Virginia	NELAP	460166	06-14-22
West Virginia DEP	State	136	05-31-22

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**Environment Testing America** 

## **ANALYTICAL REPORT**

Eurofins Pensacola 3355 McLemore Drive Pensacola, FL 32514 Tel: (850)474-1001

Laboratory Job ID: 400-226993-1 Client Project/Site: Fogelson #4

For:

Stantec Consulting Services Inc 11311 Aurora Avenue Des Moines, Iowa 50322-7904

Attn: Steve Varsa

Ish my

Authorized for release by: 10/18/2022 10:51:39 AM Isabel Enfinger, Project Manager I (850)471-6237

isabel.enfinger@et.eurofinsus.com

Designee for

Cheyenne Whitmire, Project Manager II (850)471-6222

Cheyenne.Whitmire@et.eurofinsus.com

The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten

Results relate only to the items tested and the sample(s) as received by the laboratory.

Laboratory Job ID: 400-226993-1

Client: Stantec Consulting Services Inc Project/Site: Fogelson #4

## **Table of Contents**

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#### Case Narrative

Client: Stantec Consulting Services Inc

Project/Site: Fogelson #4

Job ID: 400-226993-1

Job ID: 400-226993-1

**Laboratory: Eurofins Pensacola** 

**Narrative** 

Job Narrative 400-226993-1

#### Comments

No additional comments.

#### Receipt

The samples were received on 10/7/2022 9:24 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 3.1° C.

#### GC/MS VOA

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

#### HPLC/IC

Method 300.0: The following continuing calibration blanks (CCB) contained Chloride above the method detection limit. This targ analyte concentration was less than half the reporting limit (1/2RL); therefore, re-extraction and re-analysis of samples was not

(CCB 400-596045/16), (CCB 400-596045/28), (CCB 400-596045/40) and (CCB 400-596045/52)

Method 300.0: The following continuing calibration verification (CCV) was analyzed past its expiration date by four hours. Since target analytes have recovered within limits, the data have been reported.

(CCV 400-596045/51)

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

#### **GC VOA**

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

#### GC Semi VOA

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

#### **Organic Prep**

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

#### VOA Prep

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

#### Lab Admin

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

No Detections.

Client: Stantec Consulting Services Inc
Project/Site: Fogelson #4

Client Sample ID: SB12 25-26'

No Detections.

Client Sample ID: SB12 32-33'

No Detections.

Client Sample ID: SB12 42-43'

No Detections.

Client Sample ID: SB12 42-43'

Lab Sample ID: 400-226993-3

No Detections.

Client Sample ID: SB11/MW11 40-41'

Lab Sample ID: 400-226993-4

This Detection Summary does not include radiochemical test results.

# **Method Summary**

Client: Stantec Consulting Services Inc

Project/Site: Fogelson #4

Job ID: 400-226993-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	EET PEN
8015D	Gasoline Range Organics (GRO) (GC)	SW846	EET PEN
8015D	Diesel Range Organics (DRO) (GC)	SW846	EET PEN
300.0	Anions, Ion Chromatography	MCAWW	EET PEN
Moisture	Percent Moisture	EPA	EET PEN
3546	Microwave Extraction	SW846	EET PEN
5035	Closed System Purge and Trap	SW846	EET PEN
DI Leach	Deionized Water Leaching Procedure	ASTM	EET PEN

### **Protocol References:**

ASTM = ASTM International

EPA = US Environmental Protection Agency

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

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

Eurofins Pensacola

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# **Sample Summary**

Client: Stantec Consulting Services Inc

Project/Site: Fogelson #4

Job ID: 400-226993-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-226993-1	SB12 25-26'	Solid	10/04/22 12:40	10/07/22 09:24
400-226993-2	SB12 32-33'	Solid	10/04/22 13:50	10/07/22 09:24
400-226993-3	SB12 42-43'	Solid	10/05/22 08:55	10/07/22 09:24
400-226993-4	SB11/MW11 40-41'	Solid	10/05/22 12:35	10/07/22 09:24

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9

44

12

13

# **Client Sample Results**

Client: Stantec Consulting Services Inc

Project/Site: Fogelson #4

Job ID: 400-226993-1

Client Sample ID: SB12 25-26'	Lab Sample ID: 400-226993-1
Date Collected: 10/04/22 12:40	Matrix: Solid
Date Received: 10/07/22 09:24	Percent Solids: 91.8

		_						
Method: SW846 8260C - Vola Analyte	_	Compoun Qualifier	ds by GC/MS RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0055		0.0055	mg/Kg	— <u></u>	10/12/22 08:40	10/12/22 11:32	1
Toluene	<0.0055		0.0055	mg/Kg	₩	10/12/22 08:40	10/12/22 11:32	1
Ethylbenzene	<0.0055		0.0055	mg/Kg	₩	10/12/22 08:40	10/12/22 11:32	1
Xylenes, Total	<0.011		0.011	mg/Kg	₩	10/12/22 08:40	10/12/22 11:32	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	99		67 - 130			10/12/22 08:40	10/12/22 11:32	1
Dibromofluoromethane	101		77 - 127			10/12/22 08:40	10/12/22 11:32	1
Toluene-d8 (Surr)	99		76 - 127			10/12/22 08:40	10/12/22 11:32	1
 Method: SW846 8015D - Gas	coline Range	Organics	(GRO) (GC)					
Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)	<0.11		0.11	mg/Kg	<u></u>	10/14/22 13:01	10/14/22 15:20	1
C6C10								
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid)	92		65 - 125			10/14/22 13:01	10/14/22 15:20	1
	sel Range Or	ganics (DF	RO) (GC)					
Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (DRO)	<5.3		5.3	mg/Kg	— <u></u>	10/11/22 08:45	10/11/22 19:24	1
Oil Range Organics (ORO)	<5.3		5.3	mg/Kg	₩	10/11/22 08:45	10/11/22 19:24	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
o-Terphenyl	66		27 - 150			10/11/22 08:45	10/11/22 19:24	1
 Method: MCAWW 300.0 - An	ions Ion Chr	omatograj	nhy - Soluble					
Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<del>&lt;22</del>		22	mg/Kg	— <u>=</u>		10/12/22 23:02	1
JJ.	`~			9,9	~~		. 5, 12,22 25.02	•

# **Client Sample Results**

Client: Stantec Consulting Services Inc

Project/Site: Fogelson #4

Lab Sample ID: 400-226993-2

Client Sample ID: SB12 32-33' Date Collected: 10/04/22 13:50 Date Received: 10/07/22 09:24

**Matrix: Solid** 

Job ID: 400-226993-1

Percent Solids: 95.3

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0051		0.0051	mg/Kg	— <u></u>	10/12/22 08:40	10/12/22 14:56	1
Toluene	< 0.0051		0.0051	mg/Kg	₩	10/12/22 08:40	10/12/22 14:56	1
Ethylbenzene	< 0.0051		0.0051	mg/Kg	₩	10/12/22 08:40	10/12/22 14:56	1
Xylenes, Total	<0.010		0.010	mg/Kg	☼	10/12/22 08:40	10/12/22 14:56	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	101		67 - 130			10/12/22 08:40	10/12/22 14:56	1
Dibromofluoromethane	99		77 - 127			10/12/22 08:40	10/12/22 14:56	1
Toluene-d8 (Surr)	99		76 - 127			10/12/22 08:40	10/12/22 14:56	1
Method: SW846 8015D - Gas	soline Range	Organics (	GRO) (GC)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) C6C10	<0.096		0.096	mg/Kg	— <u> </u>	10/14/22 13:01	10/14/22 19:30	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	D'/ E
Juiroyale	/orvecovery	a a a a a a a a a a a a a a a a a a a	Liiiito			Frepareu	Allalyzeu	Dil Fac
a,a,a-Trifluorotoluene (fid)	93	<del>Quantor</del>	65 - 125			10/14/22 13:01	10/14/22 19:30	DII Fac
	93	<u> </u>	65 - 125					DII Fac
a,a,a-Trifluorotoluene (fid)  Method: SW846 8015D - Die	93 sel Range Or	<u> </u>	65 - 125	Unit	D			1
a,a,a-Trifluorotoluene (fid) Method: SW846 8015D - Die Analyte	93 sel Range Or	ganics (DF	65 - 125 RO) (GC)	Unit mg/Kg	<u>D</u>	10/14/22 13:01	10/14/22 19:30	1
a,a,a-Trifluorotoluene (fid)  Method: SW846 8015D - Die Analyte  Diesel Range Organics (DRO)	93 sel Range Or Result	ganics (DF	65 - 125 RO) (GC) RL			10/14/22 13:01  Prepared	10/14/22 19:30 Analyzed	1
a,a,a-Trifluorotoluene (fid)	93 sel Range Or Result <5.2	ganics (DF Qualifier	65 - 125 RO) (GC) RL 5.2	mg/Kg	<u></u>	10/14/22 13:01  Prepared 10/11/22 08:45	10/14/22 19:30  Analyzed 10/11/22 19:41	Dil Fac
a,a,a-Trifluorotoluene (fid)  Method: SW846 8015D - Die Analyte Diesel Range Organics (DRO) Oil Range Organics (ORO)  Surrogate	93 sel Range Or Result <5.2 <5.2	ganics (DF Qualifier	65 - 125 RO) (GC)  RL  5.2  5.2	mg/Kg	<u></u>	Prepared 10/11/22 08:45 10/11/22 08:45	Analyzed 10/11/22 19:41 10/11/22 19:41	Dil Fac
a,a,a-Trifluorotoluene (fid)  Method: SW846 8015D - Die Analyte Diesel Range Organics (DRO) Oil Range Organics (ORO)  Surrogate o-Terphenyl	93 sel Range Or Result <5.2 <5.2 <5.2 <83	ganics (DR Qualifier	65 - 125  RO) (GC)  RL  5.2  5.2  Limits  27 - 150	mg/Kg	<u></u>	Prepared 10/11/22 08:45 10/11/22 08:45 Prepared	Analyzed 10/11/22 19:41 10/11/22 19:41 Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid)  Method: SW846 8015D - Die Analyte Diesel Range Organics (DRO) Oil Range Organics (ORO)	93    Sel Range Or   Result   <5.2   <5.2   <5.2	ganics (DR Qualifier	65 - 125  RO) (GC)  RL  5.2  5.2  Limits  27 - 150	mg/Kg	<u></u>	Prepared 10/11/22 08:45 10/11/22 08:45 Prepared	Analyzed 10/11/22 19:41 10/11/22 19:41 Analyzed	Dil Fac

# **Client Sample Results**

Client: Stantec Consulting Services Inc

Client Sample ID: SB12 42-43'

Date Collected: 10/05/22 08:55

Date Received: 10/07/22 09:24

Project/Site: Fogelson #4

Lab Sample ID: 400-226993-3

**Matrix: Solid** Percent Solids: 91.0

Job ID: 400-226993-1

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0054		0.0054	mg/Kg	— <u></u>	10/12/22 08:40	10/12/22 15:21	1
Toluene	< 0.0054		0.0054	mg/Kg	☼	10/12/22 08:40	10/12/22 15:21	1
Ethylbenzene	<0.0054		0.0054	mg/Kg	☼	10/12/22 08:40	10/12/22 15:21	1
Xylenes, Total	<0.011		0.011	mg/Kg	₩	10/12/22 08:40	10/12/22 15:21	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene	99		67 - 130			10/12/22 08:40	10/12/22 15:21	
Dibromofluoromethane	100		77 - 127			10/12/22 08:40	10/12/22 15:21	-
Toluene-d8 (Surr)	98		76 - 127			10/12/22 08:40	10/12/22 15:21	
- Method: SW846 8015D - Gas	soline Range	Organics (	GRO) (GC)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Gasoline Range Organics (GRO) C6C10	<0.11		0.11	mg/Kg	— <u>~</u>	10/14/22 13:01	10/14/22 20:01	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fa
a,a,a-Trifluorotoluene (fid)	94		65 - 125			10/14/22 13:01	10/14/22 20:01	
Method: SW846 8015D - Die:	sel Range Or	ganics (DF	RO) (GC)					
Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Diesel Range Organics (DRO)	<5.4		5.4	mg/Kg	<u></u>	10/11/22 08:45	10/11/22 20:14	
Oil Range Organics (ORO)	<5.4		5.4	mg/Kg	₩	10/11/22 08:45	10/11/22 20:14	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fa
o-Terphenyl	68		27 - 150			10/11/22 08:45	10/11/22 20:14	
Method: MCAWW 300.0 - An	ions, Ion Chr	omatograp	ohy - Soluble					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Chloride	<22		22	mg/Kg			10/13/22 00:25	

Job ID: 400-226993-1

# **Client Sample Results**

Client: Stantec Consulting Services Inc

Project/Site: Fogelson #4

Client Sample ID: SB11/MW11 40-41' Lab Sample ID: 400-226993-4

Date Collected: 10/05/22 12:35 **Matrix: Solid** 

Date Received: 10/07/22 09:24 Percent Solids: 94.7

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Benzene	<0.0053		0.0053	mg/Kg	<u></u>	10/12/22 08:40	10/12/22 15:46	
Toluene	< 0.0053		0.0053	mg/Kg	₩	10/12/22 08:40	10/12/22 15:46	
Ethylbenzene	< 0.0053		0.0053	mg/Kg	₩	10/12/22 08:40	10/12/22 15:46	
Kylenes, Total	<0.011		0.011	mg/Kg	₩	10/12/22 08:40	10/12/22 15:46	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fa
1-Bromofluorobenzene	100		67 - 130			10/12/22 08:40	10/12/22 15:46	
Dibromofluoromethane	101		77 - 127			10/12/22 08:40	10/12/22 15:46	
Toluene-d8 (Surr)	98		76 - 127			10/12/22 08:40	10/12/22 15:46	
Method: SW846 8015D - Gas Analyte	Result	Organics ( Qualifier	RL	Unit	_ <u>D</u>	Prepared 10/14/22 13:01	Analyzed	Dil Fa
Analyte Gasoline Range Organics (GRO) C6C10	<0.10	Qualifier	<b>RL</b> 0.10	Unit mg/Kg	<u>D</u>	10/14/22 13:01	10/14/22 20:33	Dil Fa
Analyte Gasoline Range Organics (GRO)	Result	Qualifier	RL					
Analyte Gasoline Range Organics (GRO) C6C10 Surrogate a,a,a-Trifluorotoluene (fid) Method: SW846 8015D - Dies	Result <0.10  %Recovery 93  sel Range Organization	Qualifier  Qualifier	RL 0.10  Limits 65 - 125  RO) (GC) RL			Prepared 10/14/22 13:01 Prepared 10/14/22 13:01 Prepared	10/14/22 20:33  Analyzed 10/14/22 20:33  Analyzed	Dil Fa
Analyte Gasoline Range Organics (GRO) C6C10 Surrogate a,a,a-Trifluorotoluene (fid) Method: SW846 8015D - Dies	Result <0.10  %Recovery 93  sel Range Ore	Qualifier  Qualifier  ganics (DF	RL 0.10  Limits 65 - 125  RO) (GC)	mg/Kg	— <u>-</u>	Prepared 10/14/22 13:01	10/14/22 20:33 Analyzed 10/14/22 20:33	Dil Fa
Analyte Gasoline Range Organics (GRO) C6C10 Surrogate a,a,a-Trifluorotoluene (fid) Method: SW846 8015D - Dies	Result <0.10  %Recovery 93  sel Range Organization	Qualifier  Qualifier  ganics (DF	RL 0.10  Limits 65 - 125  RO) (GC) RL	mg/Kg		Prepared 10/14/22 13:01 Prepared 10/14/22 13:01 Prepared	10/14/22 20:33  Analyzed 10/14/22 20:33  Analyzed	Dil Fa
Analyte Gasoline Range Organics (GRO) C6C10 Surrogate a,a,a-Trifluorotoluene (fid) Method: SW846 8015D - Dies Analyte Diesel Range Organics (DRO)	Result <0.10  %Recovery 93  sel Range Organisation Result <5.2	Qualifier  Qualifier  ganics (DR Qualifier	RL 0.10  Limits 65 - 125  RO) (GC) RL 5.2	mg/Kg  Wnit mg/Kg		Prepared 10/14/22 13:01  Prepared 10/14/22 13:01  Prepared 10/11/22 08:45	Analyzed 10/14/22 20:33  Analyzed 10/14/22 20:33  Analyzed 10/11/22 20:31	Dil Fa

₩ 21 10/13/22 00:46 Chloride <21 mg/Kg

## **Definitions/Glossary**

Client: Stantec Consulting Services Inc Job ID: 400-226993-1

Project/Site: Fogelson #4

## **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** Detection Limit (DoD/DOE) DL 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

MI Minimum Level (Dioxin) Most Probable Number MPN MQL Method Quantitation Limit

NC Not Calculated

Not Detected at the reporting limit (or MDL or EDL if shown) ND

NEG Negative / Absent POS Positive / Present

**PQL Practical Quantitation Limit** 

**PRES** Presumptive **Quality Control** 0C

**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

Client: Stantec Consulting Services Inc

Project/Site: Fogelson #4

Lab Sample ID: 400-226993-1

Lab Sample ID. 400-220993-1

Matrix: Solid

Job ID: 400-226993-1

Client Sample ID: SB12 25-26'
Date Collected: 10/04/22 12:40

Date Received: 10/07/22 09:24

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			595807	10/11/22 11:28	WJM	EET PEN
	Instrumen	TID: NOFOLIIP								

Client Sample ID: SB12 25-26'

Lab Sample ID: 400-226993-1

Date Collected: 10/04/22 12:40

Date Received: 10/07/22 09:24

Matrix: Solid
Percent Solids: 91.8

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5.00 g	596006	10/12/22 08:40	BPO	EET PEN
Total/NA	Analysis	8260C		1	5 mL	5 mL	595944	10/12/22 11:32	BPO	EET PEN
	Instrumen	t ID: CH_LARS								
Total/NA	Prep	5035			5.07 g	5.00 g	596406	10/14/22 13:01	SAB	EET PEN
Total/NA	Analysis	8015D		1	5 mL	5 mL	596373	10/14/22 15:20	SAB	EET PEN
	Instrumen	t ID: CH_JOAN								
Total/NA	Prep	3546			15.50 g	1 mL	595808	10/11/22 08:45	LH	EET PEN
Total/NA	Analysis	8015D		1	1 mL	1 mL	595896	10/11/22 19:24	RS	EET PEN
	Instrumen	t ID: Eva								
Soluble	Leach	DI Leach			2.492 g	50 mL	595864	10/11/22 13:25	JAS	EET PEN
Soluble	Analysis	300.0		1	10 mL	10 mL	596045	10/12/22 23:02	JAS	EET PEN
	Instrumen	t ID: IC2								

Client Sample ID: SB12 32-33'

Lab Sample ID: 400-226993-2

Date Collected: 10/04/22 13:50 Matrix: Solid

Date Received: 10/07/22 09:24

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			595807	10/11/22 11:28	WJM	EET PEN
	Instrumer	at ID: NOFOLIP								

Client Sample ID: SB12 32-33' Lab Sample ID: 400-226993-2

Date Collected: 10/04/22 13:50

Date Received: 10/07/22 09:24

Matrix: Solid
Percent Solids: 95.3

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.13 g	5.00 g	596006	10/12/22 08:40	BPO	EET PEN
Total/NA	Analysis Instrumen	8260C t ID: CH_LARS		1	5 mL	5 mL	595944	10/12/22 14:56	ВРО	EET PEN
Total/NA	Prep	5035			5.45 g	5.00 g	596406	10/14/22 13:01	SAB	EET PEN
Total/NA	Analysis Instrumen	8015D t ID: CH_JOAN		1	5 mL	5 mL	596373	10/14/22 19:30	SAB	EET PEN
Total/NA	Prep	3546			15.15 g	1 mL	595808	10/11/22 08:45	LH	EET PEN
Total/NA	Analysis Instrumen	8015D t ID: Eva		1	1 mL	1 mL	595896	10/11/22 19:41	RS	EET PEN
Soluble	Leach	DI Leach			2.489 g	50 mL	595864	10/11/22 13:25	JAS	EET PEN
Soluble	Analysis Instrumen	300.0 t ID: IC2		1	10 mL	10 mL	596045	10/12/22 23:23	JAS	EET PEN

Client: Stantec Consulting Services Inc Project/Site: Fogelson #4

Client Sample ID: SB12 42-43'

Date Collected: 10/05/22 08:55 Date Received: 10/07/22 09:24

Lab Sample ID: 400-226993-3

**Matrix: Solid** 

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			595807	10/11/22 11:28	WJM	EET PEN
	Inetrument	ID: NOFOLID								

Client Sample ID: SB12 42-43'

Date Collected: 10/05/22 08:55 Date Received: 10/07/22 09:24

Lab Sample ID: 400-226993-3

**Matrix: Solid** Percent Solids: 91.0

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5.00 g	596006	10/12/22 08:40	BPO	EET PEN
Total/NA	Analysis	8260C		1	5 mL	5 mL	595944	10/12/22 15:21	BPO	EET PEN
	Instrumen	t ID: CH_LARS								
Total/NA	Prep	5035			5.14 g	5.00 g	596406	10/14/22 13:01	SAB	EET PEN
Total/NA	Analysis	8015D		1	5 mL	5 mL	596373	10/14/22 20:01	SAB	EET PEN
	Instrumen	t ID: CH_JOAN								
Total/NA	Prep	3546			15.16 g	1 mL	595808	10/11/22 08:45	LH	EET PEN
Total/NA	Analysis	8015D		1	1 mL	1 mL	595896	10/11/22 20:14	RS	EET PEN
	Instrumen	t ID: Eva								
Soluble	Leach	DI Leach			2.488 g	50 mL	595864	10/11/22 13:25	JAS	EET PEN
Soluble	Analysis	300.0		1	10 mL	10 mL	596045	10/13/22 00:25	JAS	EET PEN
	Instrumen	t ID: IC2								

Client Sample ID: SB11/MW11 40-41'

Date Collected: 10/05/22 12:35

Date Received: 10/07/22 09:24

_										
	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture					595807	10/11/22 11:28	WJM	EET PEN

Client Sample ID: SB11/MW11 40-41'

Instrument ID: NOEQUIP

Date Collected: 10/05/22 12:35

Date Received: 10/07/22 09:24

Lab Sample ID: 400-	-226993-4
M	atrix: Solid
Percent S	Solids: 94.7

Lab Sample ID: 400-226993-4

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5.00 g	596006	10/12/22 08:40	BPO	EET PEN
Total/NA	Analysis	8260C		1	5 mL	5 mL	595944	10/12/22 15:46	BPO	EET PEN
	Instrumen	t ID: CH_LARS								
Total/NA	Prep	5035			5.25 g	5.00 g	596406	10/14/22 13:01	SAB	EET PEN
Total/NA	Analysis	8015D		1	5 mL	5 mL	596373	10/14/22 20:33	SAB	EET PEN
	Instrumen	t ID: CH_JOAN								
Total/NA	Prep	3546			15.35 g	1 mL	595808	10/11/22 08:45	LH	EET PEN
Total/NA	Analysis	8015D		1	1 mL	1 mL	595896	10/11/22 20:31	RS	EET PEN
	Instrumen	t ID: Eva								
Soluble	Leach	DI Leach			2.522 g	50 mL	595864	10/11/22 13:25	JAS	EET PEN
Soluble	Analysis	300.0		1	10 mL	10 mL	596045	10/13/22 00:46	JAS	EET PEN
	Instrumen	t ID: IC2								

Eurofins Pensacola

**Matrix: Solid** 

## **Lab Chronicle**

Client: Stantec Consulting Services Inc

Project/Site: Fogelson #4

### **Laboratory References:**

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

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Job ID: 400-226993-1

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# **QC Association Summary**

Client: Stantec Consulting Services Inc

Project/Site: Fogelson #4

Job ID: 400-226993-1

## **GC/MS VOA**

## Analysis Batch: 595944

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-226993-1	SB12 25-26'	Total/NA	Solid	8260C	596006
400-226993-2	SB12 32-33'	Total/NA	Solid	8260C	596006
400-226993-3	SB12 42-43'	Total/NA	Solid	8260C	596006
400-226993-4	SB11/MW11 40-41'	Total/NA	Solid	8260C	596006
MB 400-596006/2-A	Method Blank	Total/NA	Solid	8260C	596006
LCS 400-596006/1-A	Lab Control Sample	Total/NA	Solid	8260C	596006
400-226993-1 MS	SB12 25-26'	Total/NA	Solid	8260C	596006
400-226993-1 MSD	SB12 25-26'	Total/NA	Solid	8260C	596006

## **Prep Batch: 596006**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-226993-1	SB12 25-26'	Total/NA	Solid	5035	<del></del>
400-226993-2	SB12 32-33'	Total/NA	Solid	5035	
400-226993-3	SB12 42-43'	Total/NA	Solid	5035	
400-226993-4	SB11/MW11 40-41'	Total/NA	Solid	5035	
MB 400-596006/2-A	Method Blank	Total/NA	Solid	5035	
LCS 400-596006/1-A	Lab Control Sample	Total/NA	Solid	5035	
400-226993-1 MS	SB12 25-26'	Total/NA	Solid	5035	
400-226993-1 MSD	SB12 25-26'	Total/NA	Solid	5035	

## **GC VOA**

## **Analysis Batch: 596373**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-226993-1	SB12 25-26'	Total/NA	Solid	8015D	596406
400-226993-2	SB12 32-33'	Total/NA	Solid	8015D	596406
400-226993-3	SB12 42-43'	Total/NA	Solid	8015D	596406
400-226993-4	SB11/MW11 40-41'	Total/NA	Solid	8015D	596406
MB 400-596406/2-A	Method Blank	Total/NA	Solid	8015D	596406
LCS 400-596406/1-A	Lab Control Sample	Total/NA	Solid	8015D	596406
400-226993-1 MS	SB12 25-26'	Total/NA	Solid	8015D	596406
400-226993-1 MSD	SB12 25-26'	Total/NA	Solid	8015D	596406

### **Prep Batch: 596406**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-226993-1	SB12 25-26'	Total/NA	Solid	5035	<u> </u>
400-226993-2	SB12 32-33'	Total/NA	Solid	5035	
400-226993-3	SB12 42-43'	Total/NA	Solid	5035	
400-226993-4	SB11/MW11 40-41'	Total/NA	Solid	5035	
MB 400-596406/2-A	Method Blank	Total/NA	Solid	5035	
LCS 400-596406/1-A	Lab Control Sample	Total/NA	Solid	5035	
400-226993-1 MS	SB12 25-26'	Total/NA	Solid	5035	
400-226993-1 MSD	SB12 25-26'	Total/NA	Solid	5035	

## **GC Semi VOA**

## **Prep Batch: 595808**

Lab Sample ID 400-226993-1	Client Sample ID SB12 25-26'	Prep Type Total/NA	Matrix Solid	Method 3546	Prep Batch
400-226993-2	SB12 32-33'	Total/NA	Solid	3546	
400-226993-3	SB12 42-43'	Total/NA	Solid	3546	
400-226993-4	SB11/MW11 40-41'	Total/NA	Solid	3546	

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10/18/2022

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# **QC Association Summary**

Client: Stantec Consulting Services Inc

Project/Site: Fogelson #4

Job ID: 400-226993-1

## GC Semi VOA (Continued)

## Prep Batch: 595808 (Continued)

<b>Lab Sample ID</b> MB 400-595808/1-A	Client Sample ID  Method Blank	Prep Type Total/NA	Matrix Solid	Method 3546	Prep Batch
LCS 400-595808/2-A	Lab Control Sample	Total/NA	Solid	3546	
400-227025-B-2-B MS	Matrix Spike	Total/NA	Solid	3546	
400-227025-B-2-C MSD	Matrix Spike Duplicate	Total/NA	Solid	3546	

## **Analysis Batch: 595896**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-226993-1	SB12 25-26'	Total/NA	Solid	8015D	595808
400-226993-2	SB12 32-33'	Total/NA	Solid	8015D	595808
400-226993-3	SB12 42-43'	Total/NA	Solid	8015D	595808
400-226993-4	SB11/MW11 40-41'	Total/NA	Solid	8015D	595808
MB 400-595808/1-A	Method Blank	Total/NA	Solid	8015D	595808
LCS 400-595808/2-A	Lab Control Sample	Total/NA	Solid	8015D	595808
400-227025-B-2-B MS	Matrix Spike	Total/NA	Solid	8015D	595808
400-227025-B-2-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015D	595808

### **HPLC/IC**

## Leach Batch: 595864

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-226993-1	SB12 25-26'	Soluble	Solid	DI Leach	
400-226993-2	SB12 32-33'	Soluble	Solid	DI Leach	
400-226993-3	SB12 42-43'	Soluble	Solid	DI Leach	
400-226993-4	SB11/MW11 40-41'	Soluble	Solid	DI Leach	
MB 400-595864/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 400-595864/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 400-595864/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

### **Analysis Batch: 596045**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-226993-1	SB12 25-26'	Soluble	Solid	300.0	595864
400-226993-2	SB12 32-33'	Soluble	Solid	300.0	595864
400-226993-3	SB12 42-43'	Soluble	Solid	300.0	595864
400-226993-4	SB11/MW11 40-41'	Soluble	Solid	300.0	595864
MB 400-595864/1-A	Method Blank	Soluble	Solid	300.0	595864
LCS 400-595864/2-A	Lab Control Sample	Soluble	Solid	300.0	595864
LCSD 400-595864/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	595864

## **General Chemistry**

## Analysis Batch: 595807

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-226993-1	SB12 25-26'	Total/NA	Solid	Moisture	
400-226993-2	SB12 32-33'	Total/NA	Solid	Moisture	
400-226993-3	SB12 42-43'	Total/NA	Solid	Moisture	
400-226993-4	SB11/MW11 40-41'	Total/NA	Solid	Moisture	
400-227025-D-5 DU	Duplicate	Total/NA	Solid	Moisture	

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Client: Stantec Consulting Services Inc

Project/Site: Fogelson #4

Job ID: 400-226993-1

## Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 400-596006/2-A

**Matrix: Solid** 

**Analysis Batch: 595944** 

**Client Sample ID: Method Blank** 

**Prep Type: Total/NA** 

**Prep Batch: 596006** 

	МВ	MB						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0050		0.0050	mg/Kg	_	10/12/22 08:40	10/12/22 10:41	1
Toluene	<0.0050		0.0050	mg/Kg		10/12/22 08:40	10/12/22 10:41	1
Ethylbenzene	<0.0050		0.0050	mg/Kg		10/12/22 08:40	10/12/22 10:41	1
Xylenes, Total	<0.010		0.010	mg/Kg		10/12/22 08:40	10/12/22 10:41	1

MB MB

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	100		67 - 130	10/12/22 08:40	10/12/22 10:41	1
Dibromofluoromethane	99		77 - 127	10/12/22 08:40	10/12/22 10:41	1
Toluene-d8 (Surr)	98		76 - 127	10/12/22 08:40	10/12/22 10:41	1

Lab Sample ID: LCS 400-596006/1-A

**Matrix: Solid** 

Analysis Batch: 595944

**Client Sample ID: Lab Control Sample** 

**Prep Type: Total/NA Prep Batch: 596006** 

	Spike	LUS	LUS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	0.0500	0.0481		mg/Kg		96	65 - 130	
Toluene	0.0500	0.0468		mg/Kg		94	70 - 130	
Ethylbenzene	0.0500	0.0461		mg/Kg		92	70 - 130	
Xylenes, Total	0.100	0.0913		mg/Kg		91	70 - 130	
m-Xylene & p-Xylene	0.0500	0.0453		mg/Kg		91	70 - 130	
o-Xylene	0.0500	0.0460		mg/Kg		92	70 - 130	

LCS LCS

Surrogate	%Recovery Qualifie	r Limits
4-Bromofluorobenzene	90	67 - 130
Dibromofluoromethane	96	77 - 127
Toluene-d8 (Surr)	97	76 - 127

Lab Sample ID: 400-226993-1 MS

**Matrix: Solid** 

Analysis Batch: 595944

Client Sample ID: SB12 25-26' **Prep Type: Total/NA** 

**Prep Batch: 596006** 

										-
	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	<0.0055		0.0546	0.0579		mg/Kg	<u></u>	106	38 - 131	_
Toluene	<0.0055		0.0546	0.0563		mg/Kg	☼	103	42 - 130	
Ethylbenzene	<0.0055		0.0546	0.0543		mg/Kg	₩	100	35 - 130	
Xylenes, Total	<0.011		0.109	0.109		mg/Kg	₽	100	35 - 130	
m-Xylene & p-Xylene	<0.0055		0.0546	0.0540		mg/Kg	₩	99	35 - 130	
o-Xylene	<0.0055		0.0546	0.0549		mg/Kg	☼	101	35 - 130	

MS MS

Surrogate	%Recovery Q	ualifier	Limits
4-Bromofluorobenzene	93		67 - 130
Dibromofluoromethane	95		77 - 127
Toluene-d8 (Surr)	97		76 - 127

Client: Stantec Consulting Services Inc Job ID: 400-226993-1

Project/Site: Fogelson #4

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

Lab Sample ID: 400-226993-1 MSD Client Sample ID: SB12 25-26'

**Matrix: Solid** 

Analysis Batch: 595944

Prep Type: Total/NA **Prep Batch: 596006** 

7 many one Datom Cooc											,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	<0.0055		0.0548	0.0503		mg/Kg	<u></u>	92	38 - 131	14	36
Toluene	<0.0055		0.0548	0.0481		mg/Kg	☼	88	42 - 130	16	37
Ethylbenzene	<0.0055		0.0548	0.0446		mg/Kg	☼	81	35 - 130	20	46
Xylenes, Total	<0.011		0.110	0.0873		mg/Kg	₽	80	35 - 130	22	39
m-Xylene & p-Xylene	<0.0055		0.0548	0.0433		mg/Kg	☼	79	35 - 130	22	42
o-Xylene	<0.0055		0.0548	0.0440		mg/Kg	☼	80	35 - 130	22	37

MSD MSD

Surrogate	%Recovery Qualifie	r Limits
4-Bromofluorobenzene	97	67 - 130
Dibromofluoromethane	96	77 - 127
Toluene-d8 (Surr)	98	76 - 127

Method: 8015D - Gasoline Range Organics (GRO) (GC)

Lab Sample ID: MB 400-596406/2-A Client Sample ID: Method Blank

**Matrix: Solid** 

**Analysis Batch: 596373** 

Prep Type: Total/NA

**Prep Batch: 596406** 

MB MB

Analyte	Result Quali	ifier RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)	<0.10	0.10	mg/Kg		10/14/22 13:01	10/14/22 14:18	1
C6C10							

MB MB

Surrogate	%Recovery	Qualifier	Limits	Prepared	Anaiyzea	DII Fac
a,a,a-Trifluorotoluene (fid)	94		65 - 125	10/14/22 13:01	10/14/22 14:18	1

Lab Sample ID: LCS 400-596406/1-A

**Matrix: Solid** 

Analysis Batch: 596373

		Client Sample ID: Lab Control Sample
		Prep Type: Total/NA
		Prep Batch: 596406
Spike	LCS LCS	%Rec

%Rec

Analyte Added Result Qualifier Unit D %Rec Limits Gasoline Range Organics (GRO) 1.00 0.907 mg/Kg 62 - 141

C6--C10

LCS LCS

Surrogate	%Recovery	Quaimer	Limits
a,a,a-Trifluorotoluene (fid)	110		65 - 125

Lab Sample ID: 400-226993-1 MS Client Sample ID: SB12 25-26'

**Matrix: Solid** 

**Analysis Batch: 596373** 

Prep Type: Total/NA Prep Batch: 596406

Sample Sample Spike MS MS %Rec Result Qualifier Added Analyte Result Qualifier Limits Unit %Rec 1.08 Gasoline Range Organics (GRO) <0.11 0.967 mg/Kg 90 10 - 150

C6--C10

MS MS

Surrogate %Recovery Qualifier Limits a,a,a-Trifluorotoluene (fid) 65 - 125 110

Client: Stantec Consulting Services Inc

Project/Site: Fogelson #4

Job ID: 400-226993-1

Method: 8015D - Gasoline Range Organics (GRO) (GC) (Continued)

Lab Sample ID: 400-226993-1 MSD Client Sample ID: SB12 25-26'

MSD MSD

0.917

Result Qualifier

Unit

Spike

Added

1.08

**Matrix: Solid** 

**Analysis Batch: 596373** 

Prep Type: Total/NA

Prep Batch: 596406 %Rec **RPD** %Rec Limits RPD Limit

Gasoline Range Organics (GRO) C6--C10

Analyte

MSD MSD

Sample Sample

< 0.11

Result Qualifier

%Recovery Surrogate Qualifier Limits 65 - 125 a,a,a-Trifluorotoluene (fid) 109

D mg/Kg 85 10 - 150 5 32

Method: 8015D - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 400-595808/1-A

**Matrix: Solid** 

**Analysis Batch: 595896** 

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

**Prep Batch: 595808** 

MB MB Analyte Result Qualifier RL Unit D Prepared Analyzed Dil Fac Diesel Range Organics (DRO) 5.0 < 5.0 mg/Kg 10/11/22 08:35 10/11/22 16:52 Oil Range Organics (ORO) <5.0 5.0 mg/Kg 10/11/22 16:52 10/11/22 08:35

MB MB

%Recovery Qualifier Limits Dil Fac Surrogate Prepared Analyzed o-Terphenyl 27 - 150 84 10/11/22 08:35 10/11/22 16:52

LCS LCS

MS MS

Lab Sample ID: LCS 400-595808/2-A

**Matrix: Solid Analysis Batch: 595896** 

**Client Sample ID: Lab Control Sample** 

Prep Type: Total/NA **Prep Batch: 595808** 

%Rec

Added %Rec Analyte Result Qualifier Unit D Limits Diesel Range Organics (DRO) 270 197 mg/Kg 73 38 - 116

Spike

LCS LCS

Surrogate %Recovery Qualifier Limits 27 - 150 o-Terphenyl 70

Lab Sample ID: 400-227025-B-2-B MS

**Matrix: Solid** 

**Analysis Batch: 595896** 

**Client Sample ID: Matrix Spike** 

**Prep Batch: 595808** 

%Rec

Spike Result Qualifier Added Result Qualifier Limits Analyte Unit D %Rec Diesel Range Organics (DRO) <6.2 326 88 288 mg/Kg

MS MS

Sample Sample

Surrogate %Recovery Qualifier Limits o-Terphenyl 78 27 - 150

Lab Sample ID: 400-227025-B-2-C MSD

**Matrix: Solid** 

**Analysis Batch: 595896** 

Client Sample ID: Matrix Spike Duplicate

**Prep Batch: 595808** 

MSD MSD Spike Sample Sample Result Qualifier Added Result Qualifier Limits Limit Unit D %Rec Diesel Range Organics (DRO) <6.2 321 278 87 62 - 150 30 mg/Kg

Eurofins Pensacola

Prep Type: Total/NA

62 - 150

Prep Type: Total/NA

%Rec **RPD** 

RL

20

Spike

Added

101

Client: Stantec Consulting Services Inc

Project/Site: Fogelson #4

Job ID: 400-226993-1

Method: 8015D - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: 400-227025-B-2-C MSD

**Matrix: Solid** 

Analysis Batch: 595896

**Client Sample ID: Matrix Spike Duplicate** 

Prep Type: Total/NA

**Client Sample ID: Method Blank** 

**Client Sample ID: Lab Control Sample** 

%Rec

Limits

80 - 120

Analyzed

10/12/22 18:30

**Prep Batch: 595808** 

**Prep Type: Soluble** 

**Prep Type: Soluble** 

**Prep Type: Soluble** 

MSD MSD

Surrogate %Recovery Qualifier Limits o-Terphenyl 82 27 - 150

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 400-595864/1-A

**Matrix: Solid** 

**Matrix: Solid** 

**Analysis Batch: 596045** 

MB MB

Analyte

Result Qualifier Chloride <20

Lab Sample ID: LCS 400-595864/2-A

**Analysis Batch: 596045** 

Analyte

Chloride

Lab Sample ID: LCSD 400-595864/3-A

**Matrix: Solid** 

**Analysis Batch: 596045** 

Spike **Analyte** Chloride

Added 101

98.5

98.6

LCS LCS

Result Qualifier

LCSD LCSD Result Qualifier

Unit

mg/Kg

Unit mg/Kg

Unit

mg/Kg

%Rec

D %Rec

**Prepared** 

98

98

Client Sample ID: Lab Control Sample Dup

Limits 80 - 120

%Rec

**RPD** Limit 15

**RPD** 

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Eurotins Pensacola					es eurofins
3355 McLemore Drive Pensacola, FL 32514 Phone: 850-474-1001 Fax: 850-478-2671		Chain of Custody Record	cord		America America
Client Information	Sampler Reh Malerns	20	Lab PM: Whitmire, Chevenne R	Carrier Tracking No(s):	COC No: 400-114344-39984.1
Clent Contact: Steve Varsa	N		E-Mail: Chevenne,Whitmire@et.eurofinsus.com	State of Origin: N M	Page: Page 1 of 1
Company: Stantec Consulting Services Inc	DWSID		Analysis Requested	nested	Job#: 193769201
Address: 11311 Aurora Avenue	Due Date Requested:				ğ
City: Des Moines	TAT Requested (days):	urd			B - NaOH C - Zn Acetate
State, Zip: IA, 50322-7904	Compliance Project: A Yes A No				D - Nitric Acid E - NaHSO4 E MoOH
Phone: 515 251 1019	PO#: See Project Notes	(6			G - Amchlor T - TSP Dodecahydrate H - Ascorbic Acid 11 Acataga
Email: steve.varsa@stantec.com	WO#:	or M			ا - ادe J - DI Water الاحتيار
Project Name: Fogelson 4-1 Soil FOCEP	Project #: 40005479	(表表	о О ОВО	əuietn	2000
Site:	SSOW#:	qms2	8D - СР ЬН DК	00 100	Other:
	Sample (C=c	Sample Matrix of Type (w=water, Essold, C=Comb.	т- Ояд-ая 1- Ов-ав- 1- Ояд-ая 2- Ояб-РМ-28 2- ВТЕХ 8	nedmuk le:	
Sample Identification		BT=Tissue, A=Air)	008 <sub>2</sub>	101	Special Instructions/Note:
25-20°	10/4/22 124C C	Servation coue.	2 ×		
Alm 17	1		\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	0	
1844 SB12 42-43'	10/5/22 0855 G	5	* * * * * * * * * * * * * * * * * * *	N	
5BIN/MWII 40-41"	10/5/22 1235 G	5 5	キャスメ	(N)	
Temp Blank		1			
	726	10			
			40	400-226993 COC	
Possible Hazard Identification  Non-Hazard Flammable Skin Irritant Poi	Poison B Unknown Radiological	logical	Sample Disposal (A fee may be assessed it samples are retained longer than Return To Client A Disposal By Lab	ssessed II sampres are retair	ned longer than 1 month) thive For Months
H			Special Instructions/QC Requirements	ıts:	
Empty Kit Relinquished by:	Date:	Ti	Time:	Method of Shipment:	
Relinquished by T. J. T.	Date/Time: 10/0/2/ 1/33	Company		Date/Time:   12	Company Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Ompany Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Сотрапу
Custody Seals Intact: Custody Seal No.:  A Yes A No			Cooler Temperature(s) °C and Other Remarks:	marks:	621 21 8
					Ver: 06/08/2021

# **Login Sample Receipt Checklist**

Client: Stantec Consulting Services Inc Job Number: 400-226993-1

Login Number: 226993 List Source: Eurofins Pensacola

List Number: 1

Creator: Whitley, Adrian

Question	Answer	Comment
Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>N/A</td> <td></td>	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	3.1°C IR9
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	

**Eurofins Pensacola** 

Released to Imaging: 5/22/2023 11:48:46 AM

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# **Accreditation/Certification Summary**

Client: Stantec Consulting Services Inc Job ID: 400-226993-1

Project/Site: Fogelson #4

## **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	02-23-23
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	10-31-22
Kentucky (UST)	State	53	06-30-23
Kentucky (WW)	State	KY98030	12-31-22
Louisiana (All)	NELAP	30976	06-30-23
Louisiana (DW)	State	LA017	12-31-22
Maryland	State	233	09-30-23
Michigan	State	9912	06-30-23
North Carolina (WW/SW)	State	314	12-31-22
Oklahoma	NELAP	9810	08-31-23
Pennsylvania	NELAP	68-00467	01-31-23
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
Virginia	NELAP	460166	06-14-23
West Virginia DEP	State	136	03-31-23

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

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

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

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

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

CONDITIONS

Action 200850

### **CONDITIONS**

Operator:	OGRID:
El Paso Natural Gas Company, L.L.C	7046
1001 Louisiana Street	Action Number:
Houston, TX 77002	200850
	Action Type:
	[UF-GWA] Ground Water Abatement (GROUND WATER ABATEMENT)

#### CONDITIONS

Created				
Ву		Date		
nvelez	Review of 2022 Annual Groundwater Report: Content satisfactory 1. Proceed with Planned Future Activities as stated in this report. 2. Submit next annual groundwater monitoring report no later than April 1, 2024.	5/22/2023		