2022 ANNUAL GROUNDWATER REPORT

Sandoval GC A#1A
Incident Number: nAUTOfAB000635
Meter Code: 89620
T30N, R9W, Sec 35, Unit C

SITE DETAILS

Site Location: Latitude: 36.772101, Longitude: -107.753601
Land Type: Federal
Operator: Simcoe LLC

SITE BACKGROUND

Environmental Remediation activities at the Sandoval GC A#1A (Site) are 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 (EPCPG) program methods. Currently, the Site is operated by Simcoe LLC (Simcoe), and is active. According to NMOCD records, Simcoe assumed operation of the Site from BP America Production Company (BP), on February 28, 2020.

The Site is located on Federal land. An initial site assessment was completed in May 1994. Two excavations were completed at the Site, the first in September 1994, removing approximately 50 cubic yards (cy), and the second in July 1997, removing 504 cy. The total excavated depth is approximately 28 feet below ground surface (bgs). A monitoring well was installed in 1994 (MW-1). Additional borings were advanced around the former pit in 1995 and south of the pit in 1997 (PH-2). In October 2001, an oxygen release compound (ORC) nutrient injection was conducted. Soil boring SB-1 and monitoring wells MW-2 through MW-5 were installed in 2015. The location of the Site is depicted on Figure 1. A Site Plan map depicting the locations of monitoring wells and current and historical site features is provided as Figure 2. Currently, groundwater sampling is conducted on a semi-annual basis.

NMOCD records indicate that BP had a release at the Site as early as 2003. BP documented a release at a compressor discharge pit, subsequently excavated 50 cy of soil, land-farmed the excavated soil on site, and advanced confirmation soil boring BPBH-1. BP also excavated approximately 12 cy of discolored soil during closure of a 95 barrel below ground tank in October 2017. The NMOCD established Case number 3RP-1057 for the BP release(s) in 2018. Four monitoring wells (BPMW-1 through BPMW-4) were installed by BP from August to December 2011. Monitoring well BPMW-2 was documented as having 2.7 feet of light non-aqueous phase liquid (LNAPL) on November 8, 2017, although no groundwater sampling data from the BP wells are in NMOCD files. On April 13, 2018, the NMOCD approved a BP plan to install a soil vapor extraction (SVE) system. In October 2018, Stantec noted a skid-mounted SVE blower had been placed on the western portion of the Site and connected to BPMW-2. Information on the operation or performance of the SVE system has not been found in NMOCD files.

GROUNDWATER SAMPLING ACTIVITIES

Pursuant to the Remediation Plan, Stantec provided field work notifications via email to the 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 November 5, 2022, water levels were gauged at MW-1 through MW-5. No LNAPL was detected in EPCGP site monitoring wells during water level gauging in 2022. Monitoring

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well MW-3 was dry during the May and November sampling events, and no sample could be collected. Groundwater samples from MW-1, MW-2, MW-4, and MW-5 were collected using HydraSleeve™ (HydraSleeve) no-purge groundwater sampling devices. The HydraSleeves were set during the previous sampling event approximately 0.5 foot above the bottom of the monitoring well screen using a suspension tether and stainless-steel weights to collect a sample from the screened interval. A stainless-steel top weight was used in wells with minimal water column.

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

The unused sample water was containerized and transported to Envirotech, Inc. (Envirotech) south of Bloomfield, New Mexico for disposal. Waste disposal documentation is included as Appendix B.

SUMMARY TABLES

Historic groundwater analytical results and well gauging data are summarized in Tables 1 and 2, respectively.

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.

ANALYTICAL LAB REPORTS

The groundwater analytical lab reports are included as Appendix C.

GROUNDWATER RESULTS

- Groundwater elevations indicate the groundwater flow direction at the Site was generally to the southeast during 2022 (see Figure 4 and 6).
- LNAPL was not observed at the Site during the 2022 sampling events.
- Groundwater samples collected in 2022 from MW-2 exceeded the New Mexico Water Quality Control Commission (NMWQCC) standard (10 micrograms per liter [µg/L]) for benzene in groundwater. Benzene was either below the NMWQCC standard or was not detected in the samples collected from remaining site monitoring wells during 2022.
- Groundwater samples collected in 2022 from MW-2 exceeded the NMWQCC standard (750 µg/L) for toluene in groundwater. Toluene was either below the NMWQCC standard or was not detected in the remaining samples collected from site monitoring wells during 2022.
- Ethylbenzene was either below the NMWQCC standard (750 µg/L) or was not detected in

the groundwater samples collected from site monitoring wells during 2022.

- Groundwater samples collected in 2022 from MW-2 exceeded the NMWQCC standard (620 µg/L) for total xylenes in groundwater. Total xylenes were either below the NMWQCC standard or was not detected in the remaining samples collected from site monitoring wells during 2022.
- A field duplicate was collected from monitoring well MW-4 during the May and November 2022 sampling events. There were no significant differences in BTEX constituent concentrations between 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.

NO FURTHER ACTION REQUEST

EPCGP respectfully requests a response from NMOCD to the April 2019 Site Conceptual Model and No Further Action request (2019 SCM and NFA Request) submittal.

In addition to the information contained in the April 2019 SCM and NFA request, LNAPL is no longer present in monitoring well MW-2 since the BP-installed SVE system was installed at the BP well in 2018. Monitoring wells MW-1 and MW-3 have remained below applicable NMWQCC requirements since November 2017, and groundwater BTEX concentrations in MW-5 have decreased. Monitoring well MW-3 was dry during both sampling events in 2022. The absence of LNAPL in MW-2 and reduction of groundwater BTEX concentrations in MW-5 in conjunction with BP's SVE remediation efforts are further indications of the effect the BP release(s) had on hydrocarbon impacts in the EPCGP monitoring wells.

TABLES

TABLE 1 - GROUNDWATER ANALYTICAL RESULTS

Sandoval GC A #1A					
Location	Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)
NMWQCC Standards:		10	750	750	620
MW-1	05/30/95	5500	3980	579	4780
MW-1	04/12/96	10400	8960	925	10100
MW-1	07/26/96	8980	7980	1000	9430
MW-1	10/18/96	11050	9960	900	10700
MW-1	01/21/97	7700	7210	787	8430
MW-1	04/16/97	8900	8680	996	9250
MW-1	07/11/97	8240	7850	709	8230
MW-1	09/04/97	4420	2370	850	9660
MW-1	10/22/97	3460	39.6	714	7690
MW-1	01/06/98	3850	194	795	8570
MW-1	04/23/98	4330	406	783	7220
MW-1	04/19/99	4300	1260	629	7440
MW-1	04/13/00	2300	1500	590	5900
MW-1	05/30/01	2800	710	560	5200
MW-1	10/08/01	NS	NS	NS	NS
MW-1	05/16/02	3000	1500	440	5300
MW-1	05/21/03	3850	601	443	6360
MW-1	11/16/04	2490	30.9	346	2860
MW-1	11/08/05	338	8.5	80.1	757
MW-1	11/08/06	198	3.4	14.9	83.6
MW-1	11/29/07	441	3.8	52.2	72.2
MW-1	11/18/08	120	<2	17.9	8.3
MW-1	11/04/09	88.4	<1	14.8	4.3
MW-1	06/03/10	NS	NS	NS	NS
MW-1	11/09/10	54	<2	8.7	12.7
MW-1	11/16/11	31.3	<1	14.2	8.9
MW-1	06/08/13	0.27 J	<0.30	<0.20	<0.23
MW-1	09/09/13	0.36 J	<0.30	<0.20	<0.23
MW-1	12/12/13	0.31 J	<0.38	<0.20	<0.65
MW-1	04/02/14	1.1 J	1.7 J	<0.20	1.4 J
MW-1	10/23/14	3.3	<0.70	3.8	<1.6
MW-1	05/30/15	5.7	<5.0	5.3	6
MW-1	11/20/15	8.3	<5.0	5.2	14
MW-1	04/19/16	<2.0	<10	<2.0	<10
MW-1	10/16/16	3.2	<5.0	2	<5.0
MW-1	06/08/17	5.2	<5.0	2.4	7.9
MW-1	11/11/17	10	<1.0	<1.0	<10
MW-1	05/16/18	9.3	1.4	1.3	<10
MW-1	10/28/18	1.9	<1.0	3	<10
MW-1	05/22/19	<1.0	<1.0	<1.0	<10
MW-1	11/12/19	<1.0	<1.0	<1.0	<10

TABLE 1 - GROUNDWATER ANALYTICAL RESULTS

Sandoval GC A #1A					
Location	Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)
NMWQCC Standards:		10	750	750	620
MW-1	05/15/20	<1.0	<1.0	<1.0	<10
MW-1	11/13/20	<1.0	<1.0	<1.0	<10
MW-1	05/18/21	<1.0	<1.0	<1.0	<10
MW-1	11/15/21	<1.0	<1.0	<1.0	<10
DP-01(MW-1)*	11/15/21	<1.0	<1.0	<1.0	<10
MW-1	05/21/22	<1.0	<1.0	<1.0	<10
MW-1	11/05/22	<1.0	<1.0	<1.0	<10
MW-2	11/20/15	2400	3700	530	7400
MW-2[1]	04/19/16[1]	6600	8200	1200	16000
MW-2	10/16/16	NS	NS	NS	NS
MW-2	06/08/17	NS	NS	NS	NS
MW-2	11/11/17	3500	4300	940	12000
MW-2	05/16/18	4000	3700	820	12000
DP-01(MW-2)*	05/16/18	3700	3400	690	11000
MW-2	10/28/18	4600	4800	910	16000
DUP-01(MW-2)*	10/28/18	4700	4600	930	14000
MW-2	05/22/19	4700	3300	780	9600
MW-2	11/12/19	9500	5400	1000	13000
MW-2	05/15/20	7500	5200	1000	12000
MW-2	11/13/20	8800	4700	<100	11000
MW-2	05/18/21	4700	2500	300	6100
MW-2	11/15/21	3800	2100	510	6100
MW-2	05/21/22	4800	1400	<25	10000
MW-2	11/05/22	5700	1400	90	9600
MW-3	11/20/15	55	62	16	140
MW-3	04/19/16	1.6	<5.0	1.8	40
MW-3	10/16/16	<1.0	<5.0	<1.0	<5.0
MW-3	06/08/17	<1.0	<5.0	<1.0	<5.0
MW-3	11/11/17	23	27	2	18
MW-3	05/16/18	<1.0	<1.0	<1.0	<10
MW-3	10/28/18	<1.0	<1.0	<1.0	<10
MW-3	05/22/19	<1.0	<1.0	<1.0	<10
MW-3	11/12/19	<1.0	<1.0	<1.0	<10
MW-3	05/15/20	2.5	1.4	<1.0	<10
MW-3	11/13/20	NS	NS	NS	NS
MW-3	05/18/21	<1.0	<1.0	<1.0	<10
MW-3	11/15/21	NS	NS	NS	NS

TABLE 1 - GROUNDWATER ANALYTICAL RESULTS

Sandoval GC A #1A					
Location	Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)
NMWQCC Standards:		10	750	750	620
MW-3	05/21/22	NS	NS	NS	NS
MW-3	11/05/22	NS	NS	NS	NS
MW-4	11/23/15	490	<10	4	140
MW-4[1]	04/19/16[1]	3.2	<5.0	<1.0	10
MW-4	10/16/16	22	<5.0	<1.0	9.6
MW-4	06/08/17	33	<5.0	<1.0	<5.0
MW-4	11/11/17	7	<1.0	<1.0	<10
MW-4	05/16/18	1.1	<1.0	<1.0	<10
MW-4	10/28/18	14	<1.0	<1.0	<10
MW-4	05/22/19	34	<1.0	<1.0	<10
DUP-1(MW-4)*	05/22/19	47	<1.0	<1.0	<10
MW-4	11/12/19	17	<1.0	<1.0	<10
DUP-1(MW-4)*	11/12/19	16	<1.0	<1.0	<10
MW-4	05/15/20	41	<1.0	<1.0	<10
MW-4	11/13/20	4.1	<1.0	<1.0	<10
DUP-1(MW-4)*	11/13/20	3.6	<1.0	<1.0	<10
MW-4	05/18/21	14	<1.0	<1.0	<10
DUP-1(MW-4)*	05/18/21	13	<1.0	<1.0	<10
MW-4	11/15/21	2.7	<1.0	<1.0	<10
MW-4	05/21/22	<1.0	<1.0	<1.0	<10
DUP-1(MW-4)*	05/21/22	<1.0	<1.0	<1.0	<10
MW-4	11/05/22	<1.0	<1.0	<1.0	<10
DUP-1(MW-4)*	11/05/22	<1.0	<1.0	<1.0	<10
MW-5	11/23/15	7500	17000	590	7100
MW-5	04/19/16	5800	1600	680	6100
MW-5	10/16/16	4700	6700	1000	10000
MW-5	06/08/17	4800	6000	1600	16000
MW-5	11/11/17	3800	4300	1100	11000
MW-5	05/16/18	4100	2800	850	9100
MW-5	10/28/18	2800	1700	590	6900
MW-5	05/22/19	470	<10	<10	880
MW-5	11/12/19	58	<1.0	<1.0	<10
MW-5	05/15/20	110	<1.0	<1.0	<10
DUP-01(MW-5)*	05/15/20	130	1.3	<1.0	<10
MW-5	05/18/21	5.5	<1.0	<1.0	<10
MW-5	11/15/21	3.3	<1.0	<1.0	<10
MW-5	05/21/22	<1.0	<1.0	<1.0	<10
MW-5	11/05/22	2.5	<1.0	<1.0	<10

"µg/L" = micrograms per liter
Results highlighted yellow exceed their respective New Mexico Water Quality Control Commission (NMWQCC) standards.
"J" = Result is less than the reporting limit but greater than or equal to the method detection limit and the result in an approximate value.
"<" = analyte was not detected at the indicated reporting limit (some historic data were reported at the detection limit).
"NS" = Monitoring well not sampled
[1] = The groundwater sample analytical results for MW-2 and MW-4 were switched for this sampling event, as discussed in the 2016 Annual Groundwater Report for this Site.
*Field Duplicate results presented immediately below primary sample result.

TABLE 2 - GROUNDWATER ELEVATION RESULTS

Sandoval GC A #1A						
Location	Date	TOC	Depth to LNAPL (ft.)	Depth to Water (ft.)	LNAPL Thickness (ft.)	GW Elevation (ft.)
MW-1	05/30/95	5716.63	NR	34.49		5682.14
MW-1	04/12/96	5716.63	NR	35.39		5681.24
MW-1	07/26/96	5716.63	NR	35.61		5681.02
MW-1	10/18/96	5716.63	NR	35.79		5680.84
MW-1	01/21/97	5716.63	NR	35.80		5680.83
MW-1	04/16/97	5716.63	NR	35.99		5680.64
MW-1	07/11/97	5716.63	NR	36.05		5680.58
MW-1	09/04/97	5716.63	NR	35.18		5681.45
MW-1	10/22/97	5716.63	NR	35.14		5681.49
MW-1	01/06/98	5716.63	NR	35.10		5681.53
MW-1	04/23/98	5716.63	NR	35.15		5681.48
MW-1	04/19/99	5716.63	NR	35.10		5681.53
MW-1	04/13/00	5716.63	NR	34.70		5681.93
MW-1	05/30/01	5716.63	NR	34.97		5681.66
MW-1	10/08/01	5716.63	NR	35.19		5681.44
MW-1	05/16/02	5716.63	NR	35.11		5681.52
MW-1	05/21/03	5716.63	ND	35.26		5681.37
MW-1	11/16/04	5716.63	ND	34.84		5681.79
MW-1	11/08/05	5716.63	ND	33.87		5682.76
MW-1	11/08/06	5716.63	ND	34.02		5682.61
MW-1	11/29/07	5716.63	ND	33.29		5683.34
MW-1	11/18/08	5716.63	ND	33.41		5683.22
MW-1	11/04/09	5716.63	ND	33.64		5682.99
MW-1	06/03/10	5716.63	ND	33.46		5683.17
MW-1	11/09/10	5716.63	ND	32.94		5683.69
MW-1	11/16/11	5716.63	ND	33.28		5683.35
MW-1	06/08/13	5716.63	ND	33.67		5682.96
MW-1	09/09/13	5716.63	ND	33.78		5682.85
MW-1	12/12/13	5716.63	ND	33.80		5682.83
MW-1	04/02/14	5716.63	ND	33.85		5682.78
MW-1	10/23/14	5716.63	ND	34.04		5682.59
MW-1	05/30/15	5716.63	ND	34.19		5682.44
MW-1	11/20/15	5716.63	ND	34.33		5682.30
MW-1	04/19/16	5716.63	ND	34.52		5682.11
MW-1	10/16/16	5716.63	ND	34.17		5682.46
MW-1	06/08/17	5716.63	ND	34.71		5681.92
MW-1	11/11/17	5716.63	ND	34.27		5682.36
MW-1	05/16/18	5716.63	ND	34.21		5682.42
MW-1	10/28/18	5716.63	ND	34.44		5682.19
MW-1	05/22/19	5716.63	ND	34.65		5681.98
MW-1	11/12/19	5716.63	ND	34.75		5681.88
MW-1	05/15/20	5716.63	ND	34.92		5681.71

TABLE 2 - GROUNDWATER ELEVATION RESULTS

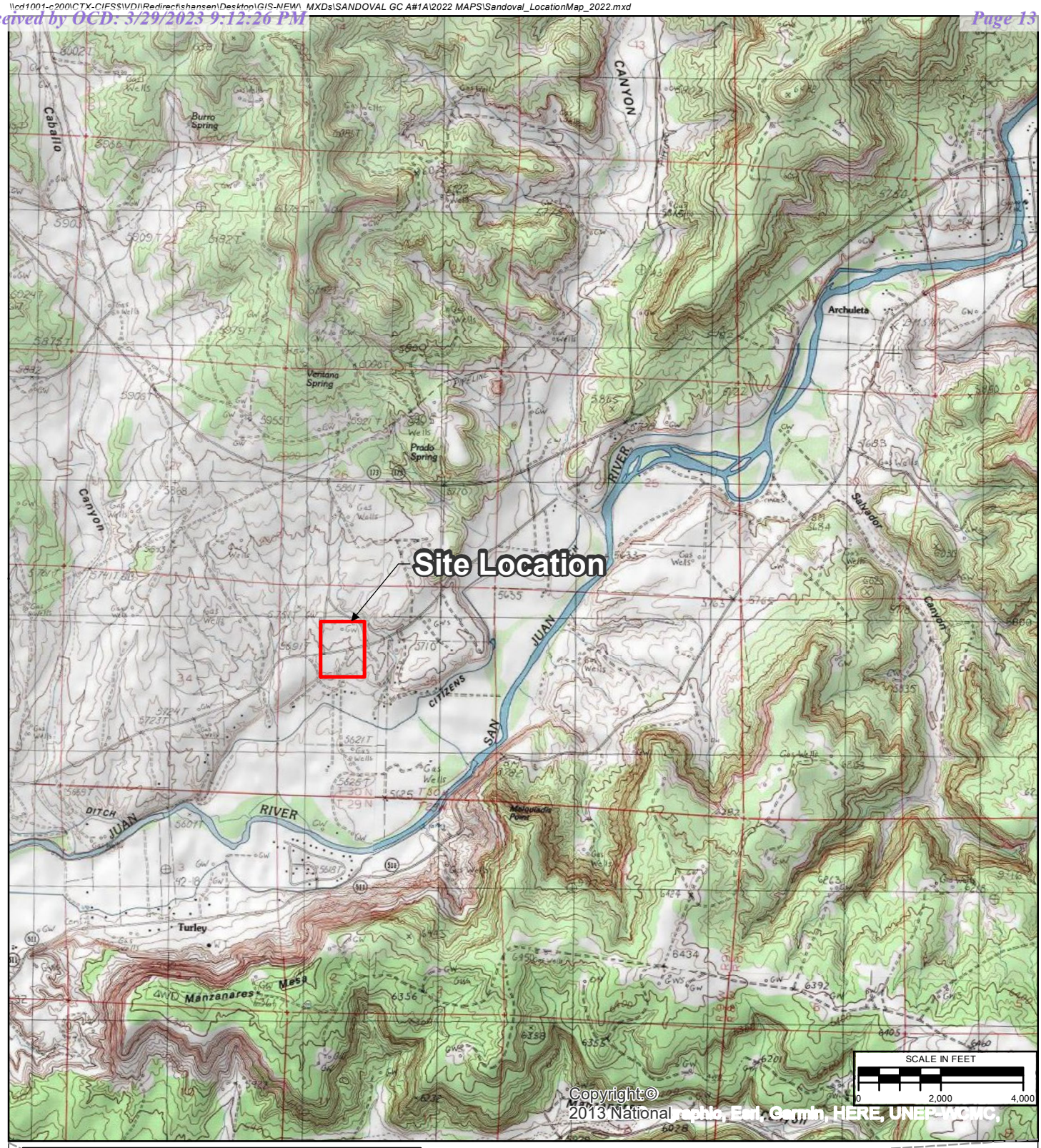
Sandoval GC A #1A						
Location	Date	TOC	Depth to LNAPL (ft.)	Depth to Water (ft.)	LNAPL Thickness (ft.)	GW Elevation (ft.)
MW-1	11/13/20	5716.63	ND	35.11		5681.52
MW-1	05/18/21	5716.63	ND	35.25		5681.38
MW-1	11/15/21	5716.63	ND	35.39		5681.24
MW-1	05/21/22	5716.63	ND	35.46		5681.17
MW-1	11/05/22	5716.63	ND	35.58		5681.05
MW-2	11/20/15	5717.56	ND	35.29		5682.27
MW-2	04/19/16	5717.56	ND	35.49		5682.07
MW-2	10/16/16	5717.56	35.60	36.03	0.43	5681.85
MW-2	06/08/17	5717.56	35.50	36.25	0.75	5681.87
MW-2	11/11/17	5717.56	ND	35.19		5682.37
MW-2	05/16/18	5717.56	ND	35.14		5682.42
MW-2	10/28/18	5717.56	ND	35.35		5682.21
MW-2	05/22/19	5717.56	ND	35.59		5681.97
MW-2	11/12/19	5717.56	ND	35.72		5681.84
MW-2	05/15/20	5717.56	ND	35.88		5681.68
MW-2	11/13/20	5717.56	ND	36.05		5681.51
MW-2	05/18/21	5717.56	ND	36.18		5681.38
MW-2	11/15/21	5717.56	ND	36.30		5681.26
MW-2	05/21/22	5717.56	ND	36.39		5681.17
MW-2	11/05/22	5717.56	ND	36.48		5681.08
MW-3	11/20/15	5718.73	ND	37.16		5681.57
MW-3	04/19/16	5718.73	ND	42.25		5676.48
MW-3	10/16/16	5718.73	ND	44.19		5674.54
MW-3	06/08/17	5718.73	ND	44.87		5673.86
MW-3	11/11/17	5718.73	ND	43.82		5674.91
MW-3	05/16/18	5718.73	ND	44.50		5674.23
MW-3	10/28/18	5718.73	ND	45.47		5673.26
MW-3	05/22/19	5718.73	ND	44.62		5674.11
MW-3	11/12/19	5718.73	ND	46.55		5672.18
MW-3	05/15/20	5718.73	ND	46.12		5672.61
MW-3	11/13/20	5718.73	ND	46.31		5672.42
MW-3	05/18/21	5718.73	ND	46.12		5672.61
MW-3	11/15/21	5718.73	ND	46.59		5672.14
MW-3	05/21/22	5718.73	ND	DRY		NA
MW-3	11/05/22	5718.73	ND	DRY		NA
MW-4	11/20/15	NR	NR	NR		NR
MW-4	11/23/15	5718.15	ND	44.93		5673.22

TABLE 2 - GROUNDWATER ELEVATION RESULTS

Sandoval GC A #1A						
Location	Date	TOC	Depth to LNAPL (ft.)	Depth to Water (ft.)	LNAPL Thickness (ft.)	GW Elevation (ft.)
MW-4	04/19/16	5718.15	ND	44.84		5673.31
MW-4	10/16/16	5718.15	ND	45.02		5673.13
MW-4	06/08/17	5718.15	ND	45.18		5672.97
MW-4	11/11/17	5718.15	ND	45.18		5672.97
MW-4	05/16/18	5718.15	ND	45.16		5672.99
MW-4	10/28/18	5718.15	ND	45.48		5672.67
MW-4	05/22/19	5718.15	ND	45.07		5673.08
MW-4	11/12/19	5718.15	ND	45.64		5672.51
MW-4	05/15/20	5718.15	ND	45.46		5672.69
MW-4	11/13/20	5718.15	ND	45.67		5672.48
MW-4	05/18/21	5718.15	ND	45.63		5672.52
MW-4	11/15/21	5718.15	ND	46.16		5671.99
MW-4	05/21/22	5718.15	ND	45.92		5672.23
MW-4	11/05/22	5718.15	ND	46.03		5672.12
MW-5	11/20/15	5714.35	ND	Dry		Dry
MW-5	11/23/15	5714.35	ND	41.16		5673.19
MW-5	04/19/16	5714.35	ND	41.15		5673.20
MW-5	10/16/16	5714.35	ND	42.25		5672.10
MW-5	06/08/17	5714.35	ND	41.38		5672.97
MW-5	11/11/17	5714.35	ND	41.36		5672.99
MW-5	05/16/18	5714.35	ND	41.35		5673.00
MW-5	10/28/18	5714.35	ND	41.68		5672.67
MW-5	05/22/19	5714.35	ND	41.27		5673.08
MW-5	11/12/19	5714.35	ND	41.79		5672.56
MW-5	05/15/20	5714.35	ND	41.64		5672.71
MW-5	05/18/21	5714.35	ND	41.81		5672.54
MW-5	11/15/21	5714.35	ND	42.28		5672.07
MW-5	05/21/22	5714.35	ND	42.11		5672.24
MW-5	11/05/22	5714.35	ND	42.16		5672.19

Notes:
"ft" = feet
"TOC" = Top of casing
"LNAPL" = Light non-aqueous phase liquid
"Dry" = Water not detected "ND" = LNAPL not detected
"NR" = LNAPL not recorded
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-planetary-sciences/gas-condensate)

FIGURES



REVISION	DATE	DESIGN BY	DRAWN BY	REVIEWED BY
	2023-02-14	SAH	SAH	SRV

TITLE
SITE LOCATION

Stantec

PROJECT
SANDOVAL GC A#1A
SAN JUAN RIVER BASIN
SAN JUAN COUNTY, NEW MEXICO

FIGURE
1

\\Us0389-ppfss01\shared_projects\193710238\07_historical\SJRB GENERAL\GIS-NEW_MXDs\SANDOVAL GC A#1A\2020 MAPS\Sandoval_SITEMAP_2020.mxd

FORMER BP SOIL LANDFARM (2003-2005)
BPMW-1
FORMER SEPARATOR TANK CLOSED 10/2003
MW-3
FORMER BERM
FORMER EPC PIT - EXCAVATED APPROXIMATELY 28 FEET DEEP
MW-2
SB-1
MW-1
MW-4
BPBH-1
BPMW-2
BERM
SEPARATOR
BP/SIMCO REMEDIATION SYSTEM
FORMER COMPRESSOR PIT CLOSED 10/2003
MW-5
FORMER 95 BBL BELOW-GRADE TANK REMOVED 10/2012
METER HOUSE
TANK
COMPRESSOR
BPMW-4
FIBERGLASS LINE
SOIL EXCAVATION (10/2017)
TANK
BPMW-3
ELECTRIC BOXES
FORMER PRODUCTION TANK (CLOSED 10/2003)
PH-2 (DRY - REFUSAL AT 38' BGS)
WELLHEAD
SMA BENCHMARK
ELEV. 5716.38'
NAD 83 NAVD 88
STATE PLANE COORDINATE SYSTEM
NEW MEXICO WEST
100' FORMER BP BLOW PIT (CLOSED 10/2003)
AERIAL IMAGERY FROM GOOGLE EARTH, DATED 10/5/2016

LEGEND:

- 6508 — APPROXIMATE GROUND SURFACE CONTOUR AND ELEVATION, FEET
- ACCESS ROAD
- FORMER PIT
- GAS — NATURAL GAS LINE
- OVHD — OVERHEAD ELECTRIC LINE
- MONITORING WELL
- SOIL BORING
- BP/SIMCO MONITORING WELL
- OTHER SOIL BORING
- SMA BENCHMARK
- RIG ANCHOR

N

SCALE IN FEET
0 30 60

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

TITLE:

SITE PLAN

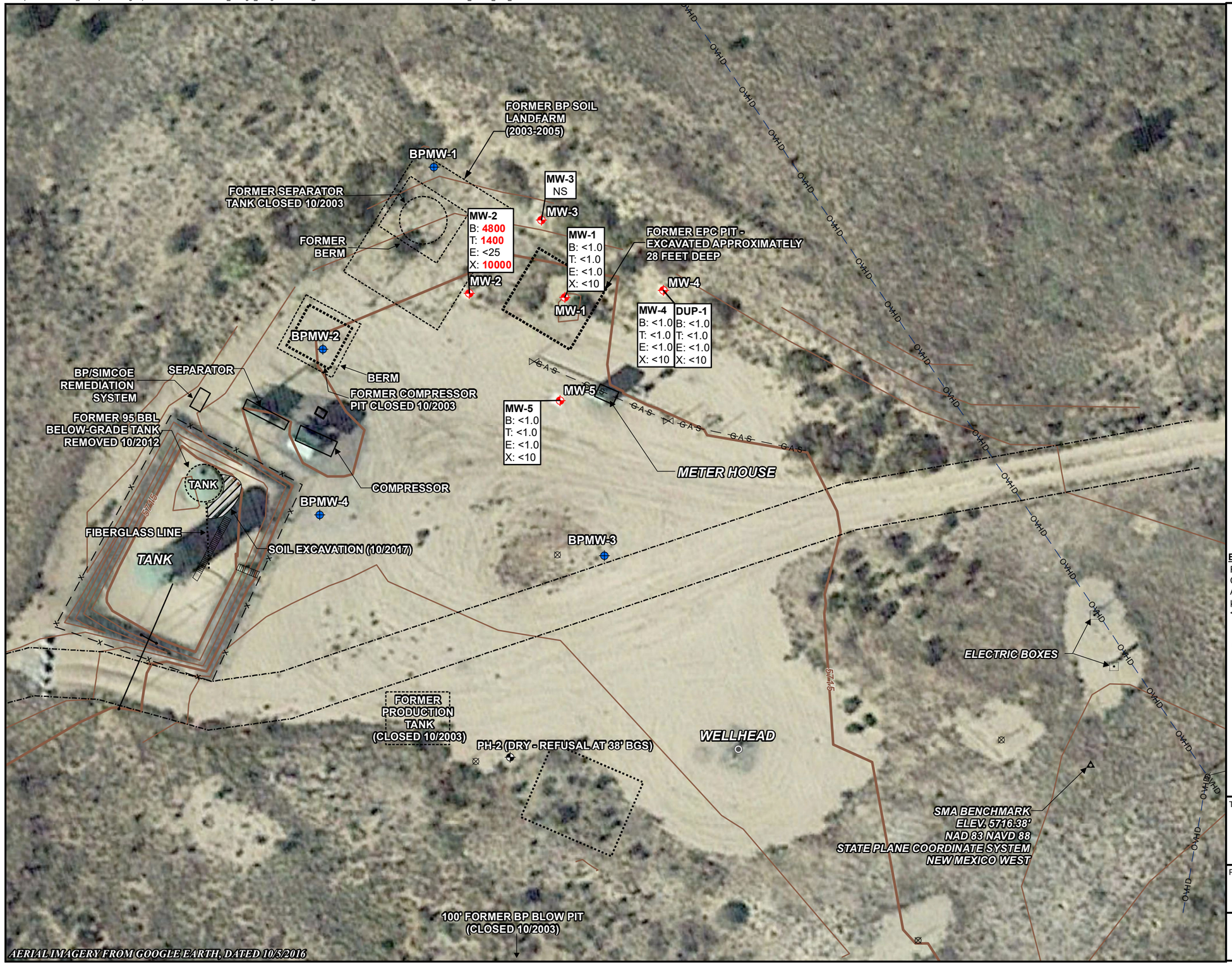
PROJECT:

SANDOVAL GC A#1A
SAN JUAN RIVER BASIN
SAN JUAN COUNTY, NEW MEXICO

Stantec

Figure No.: **2**

\\Corp.ads\data\Virtual_Workspace\workgroup\1937\Active\193700102\03_data\gis_cad\gis\GIS-NEW_MXDs\SANDOVAL GC A#1A\2022 MAPS\Sandoval_GARM_2SA_2022.mxd



LEGEND:

- 6508 — APPROXIMATE GROUND SURFACE CONTOUR AND ELEVATION, FEET
- ACCESS ROAD
- FORMER PIT
- GAS — NATURAL GAS LINE
- OVHD — OVERHEAD ELECTRIC LINE
- MONITORING WELL
- BP/SIMCOE MONITORING WELL
- SMA BENCHMARK
- RIG ANCHOR
- NS — NOT SAMPLED (INSUFFICIENT AMOUNT OF WATER)

EXPLANATION OF ANALYTES AND APPLICABLE STANDARDS

RESULTS IN **BOLDFACE/RED** TYPE INDICATE CONCENTRATION IN EXCESS OF THE STANDARD FOR THAT ANALYTE.
µg/L = MICROGRAMS PER LITER
<10 = BELOW REPORTING LIMIT

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

N

SCALE IN FEET
0 30 60

REVISION	DATE	DESIGN BY	DRAWN BY	REVIEWED BY
	2022-07-13	SAH	SAH	SRV

TITLE:

GROUNDWATER ANALYTICAL RESULTS MAY 21, 2022

PROJECT: **SANDOVAL GC A#1A**
SAN JUAN RIVER BASIN
SAN JUAN COUNTY, NEW MEXICO

Stantec

Figure No.: **3**

\\cd1001-c200\CTX-CIFSS\VDI\Redirect\shansen\Desktop\GIS-NEW_MXDs\SANDOVAL GC A#1A\2022 MAPS\Sandoval_GECM_2SA_2022.mxd

FORMER BP SOIL LANDFARM (2003-2005)

BPMW-1

MW-3 DRY

MW-3

FORMER SEPARATOR TANK CLOSED 10/2003

FORMER BERM

FORMER EPC PIT - EXCAVATED APPROXIMATELY 28 FEET DEEP

MW-1 5681.17

MW-1

FORMER COMPRESSOR PIT CLOSED 10/2003

MW-2

MW-2 5681.17

MW-4

MW-4 5672.23

BPBH-1

BPMW-2

5679

BERM

BP/CIMCO REMEDIATION SYSTEM

SEPARATOR

MW-5

MW-5 5672.24

FORMER 95 BBL BELOW-GRADE TANK REMOVED 10/2012

5678

5674

METER HOUSE

TANK

COMPRESSOR

5745

BPMW-4

FIBERGLASS LINE

SOIL EXCAVATION (10/2017)

BPMW-3

TANK

ELECTRIC BOXES

FORMER PRODUCTION TANK (CLOSED 10/2003)

PH-2 (DRY - REFUSAL AT 38' BGS)

WELLHEAD

SMA BENCHMARK
ELEV. 5716.38'
NAD 83 NAVD 88
STATE PLANE COORDINATE SYSTEM
NEW MEXICO WEST

100' FORMER BP BLOW PIT (CLOSED 10/2003)

AERIAL IMAGERY FROM GOOGLE EARTH, DATED 10/5/2016

LEGEND:

- 6508 — APPROXIMATE GROUND SURFACE CONTOUR AND ELEVATION, FEET
- ACCESS ROAD
- FORMER PIT
- GAS — NATURAL GAS LINE
- OVHD — OVERHEAD ELECTRIC LINE
- MONITORING WELL
- BP/CIMCO MONITORING WELL
- SMA BENCHMARK
- RIG ANCHOR

NOTES:

5672.23 GROUNDWATER ELEVATION IN FEET ABOVE MEAN SEA LEVEL

5675 WATER LEVEL ELEVATION CONTOUR DASHED WHERE INFERRED (FEET ABOVE MEAN SEA LEVEL).

DIRECTION OF APPARENT GROUNDWATER FLOW

N

SCALE IN FEET

0 30 60

REVISION	DATE	DESIGN BY	DRAWN BY	REVIEWED BY
	2023-01-04	SAH	SAH	SRV

TITLE:

GROUNDWATER ELEVATION MAP
MAY 21, 2022

PROJECT:

SANDOVAL GC A#1A
SAN JUAN RIVER BASIN
SAN JUAN COUNTY, NEW MEXICO

Stantec

Figure No.: 4

\\cd1001-c200\CTX-CIFSS\VDI\Redirect\shansen\Desktop\GIS-NEW_MXDs\SANDOVAL GC A#1A\2022 MAPS\Sandoval_GARM_2SA_2022.mxd

LEGEND:

- 6508 — APPROXIMATE GROUND SURFACE CONTOUR AND ELEVATION, FEET
- ACCESS ROAD
- FORMER PIT
- GAS — NATURAL GAS LINE
- OVHD — OVERHEAD ELECTRIC LINE
- MONITORING WELL
- BP/SIMCOE MONITORING WELL
- SMA BENCHMARK
- RIG ANCHOR
- NS — NOT SAMPLED (INSUFFICIENT AMOUNT OF WATER)

EXPLANATION OF ANALYTES AND APPLICABLE STANDARDS

RESULTS IN **BOLDFACE/RED** TYPE INDICATE CONCENTRATION IN EXCESS OF THE STANDARD FOR THAT ANALYTE.
µg/L = MICROGRAMS PER LITER
<10 = BELOW REPORTING LIMIT

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

N

SCALE IN FEET
0 30 60

REVISION	DATE	DESIGN BY	DRAWN BY	REVIEWED BY
	2023-02-01	SAH	SAH	SRV

TITLE:

GROUNDWATER ANALYTICAL RESULTS NOVEMBER 5, 2022

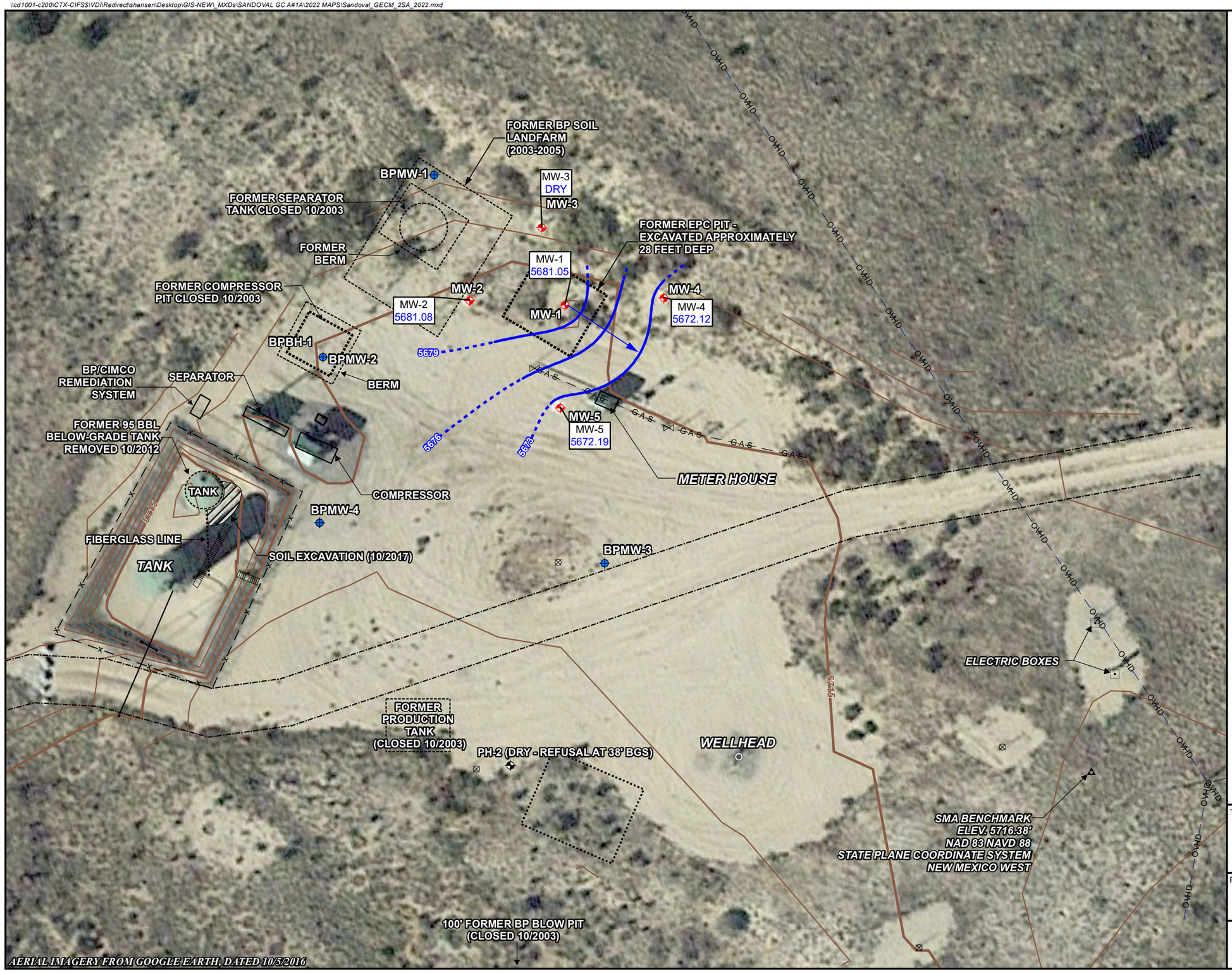
PROJECT:

SANDOVAL GC A#1A
SAN JUAN RIVER BASIN
SAN JUAN COUNTY, NEW MEXICO

Stantec

Figure No.: **5**

\\cd1001-c200\CTX-CIFSS\VDI\Redirect\shansen\Desktop\GIS-NEW_MXDs\SANDOVAL GC A#1A\2022 MAPS\Sandoval_GECM_2SA_2022.mxd



LEGEND:

- 6508 — APPROXIMATE GROUND SURFACE CONTOUR AND ELEVATION, FEET
- ACCESS ROAD
- FORMER PIT
- GAS — NATURAL GAS LINE
- OVHD — OVERHEAD ELECTRIC LINE
- MONITORING WELL
- BP/CIMCO MONITORING WELL
- SMA BENCHMARK
- RIG ANCHOR

NOTES:

5672.12 GROUNDWATER ELEVATION IN FEET ABOVE MEAN SEA LEVEL

5675 WATER LEVEL ELEVATION CONTOUR DASHED WHERE INFERRED (FEET ABOVE MEAN SEA LEVEL).

DIRECTION OF APPARENT GROUNDWATER FLOW

N

SCALE IN FEET

0 30 60

REVISION	DATE	DESIGN BY	DRAWN BY	REVIEWED BY
	2023-01-04	SAH	SAH	SRV

TITLE:

GROUNDWATER ELEVATION MAP
NOVEMBER 5, 2022

PROJECT:

SANDOVAL GC A#1A
SAN JUAN RIVER BASIN
SAN JUAN COUNTY, NEW MEXICO

Stantec

Figure No.: 6

APPENDICES

APPENDIX A – NMOCD NOTIFICATION OF SITE ACTIVITIES

APPENDIX B – WASTEWATER DISPOSAL DOCUMENTATION

APPENDIX C – GROUNDWATER SAMPLING ANALYTICAL REPORTS

APPENDIX A

From: Varsa, Steve
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

From: Varsa, Steve
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

envirotech

Bill of Lading

MANIFEST # 73058
GENERATOR El Paso
POINT OF ORIGIN Rio Vista Comp Station
TRANSPORTER Envirotech
DATE 05-24-22 JOB # See Below

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

LOAD NO.	COMPLETE DESCRIPTION OF SHIPMENT						TRANSPORTING COMPANY			
	DESTINATION	MATERIAL	GRID	YDS	BBLS	DRUMS	TKT#	TRK#	TIME	DRIVER SIGNATURE
1	BF	liquid			3. / 3			938	1445	
					14073-0059 (CCLC)		1 Drum	San Juan River Plant		
							1 Drum	Blanco North Flare		
					14073-0060		1 Drum	NM GW Pits (15 sites)		

RESULTS		
315	CHLORIDE TEST	1
	CHLORIDE TEST	
	CHLORIDE TEST	
PASS	PAINT FILTER TEST	1

LANDFARM EMPLOYEE Cory Robinson BLM

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

NOTES

SCANNED

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

Generator Onsite Contact _____ Phone _____

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

SAN JUAN PRINTING 2021 407-3

envirotech

Bill of Lading

MANIFEST # 76385
GENERATOR El Paso
POINT OF ORIGIN See notes
TRANSPORTER Envirotech
DATE 11-07-22 JOB # 14073-0060

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

LOAD NO.	COMPLETE DESCRIPTION OF SHIPMENT						TRANSPORTING COMPANY			
	DESTINATION	MATERIAL	GRID	YDS	BBLS	DRUMS	TKT#	TRK#	TIME	DRIVER SIGNATURE
1	BF	Cont Liquid				1	01154	937	0845	Andrew Mass
						1				
									SCANNED	

RESULTS			LANDFARM EMPLOYEE	NOTES
-291	CHLORIDE TEST	1		See Attachment
	CHLORIDE TEST		☐ Soil w/ Debris ☐ After Hours/Weekend Receival ☐ Scrape Out ☐ Wash Out	C-138 Pit Sites
	CHLORIDE TEST			
Pass	PAINT FILTER TEST	1		

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

Generator Onsite Contact _____ Phone _____

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

SAN JUAN PRINTING 2021 407-3

envirotech

BOL# 76385

CHLORIDE TESTING / PAINT FILTER TESTING

DATE 11-7-22 TIME 8:45 Am

CUSTOMER Kinder Morgan

SITE Pit Sites

DRIVER A. Musso

SAMPLE Soil Straight ✓ With Dirt _____

CHLORIDE TEST -291 mg/Kg

ACCEPTED YES ✓ NO _____

PAINT FILTER TEST Time started 8:47 Time completed _____

PASS YES _____ NO _____

SAMPLER/ANALYST CR

Attach test strip here

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

envirotech

SPECIAL WASTE MANIFEST

Manifest Document No. **SW - 01154**

Page 1 of

GENERATOR

Generator's Name	Generator's Address	Generator's Telephone No.
KINDER MORGAN	1001 LOUISIANA ~~BLVD~~ STREET, ROOM 9561, HOUSTON, TX	~~505~~ 713-420-3475

Origin of Special Waste (Project or Spill Location): SJRB PIT & PLANT SITES

Transporter #1 Company Name	Address	Telephone No.
ENVIROTECH	5796 US HWY 64, FARMINGTON, NM	505-632-0615
Transporter #2 Company Name	Address	Telephone No.
Destination Facility Name/Site Address	Facility ID (Permit) Number	Telephone No.
ENVIROTECH LANDFARM 2	NM01-0011	505-632-0615

Type and Proper Name of Special Waste	Container(s) No.	Container(s) Type	Total Quantity	Unit Wt/Vol
WATER AND DRIP	1	L	4	70GAL

Additional Descriptions for Special Waste Listed Above:

Special Handling Instructions:

GENERATOR'S CERTIFICATION: I hereby certify that the contents of this shipment are fully and accurately described above by type and proper name of the special waste, and that such waste has been managed, packaged, containerized and labeled in accordance with the requirements of 20.9.8 NMAC (Special Waste Requirements) in addition to any other applicable federal, state or local regulations.

Printed/Typed Name:	Signature:	Date:
Sean R Clary	Sean R Clary	11/7/2022

TRANSPORTER

Transporter 1 Acknowledgement of Receipt of Special Waste

Printed/Typed Name:	Signature:	Date:
Andrew Musso	Andrew Musso	11/7/2022

Transporter 2 Acknowledgement of Receipt of Special Waste

Printed/Typed Name:	Signature:	Date:

FACILITY

Discrepancy Indication Space:

Facility Owner or Operator: ***I hereby acknowledge receipt of the special waste as indicated upon this manifest, except as noted above in the Discrepancy Indication Space.***

Printed/Typed Name:	Signature:	Date:
Gary Robinson	Gary Robinson	11-07-22

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

State of New Mexico
Energy Minerals and Natural Resources

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 Street, Room 1445B, Houston, TX 77002

2. **Originating Site:**
Johnston Federal #4, Johnston Federal #6A, Sandoval GC A#1A, Canada Mesa #2, K-27 LD072, Standard Oil Com #1, Knight #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.

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 E, 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. 25, 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.

4. **Source and Description of Waste:**
Historic releases occurred on the above-referenced property. As part of environmental investigation activities, monitoring wells will be sampled, and purged liquids will be removed from the Site.
Estimated Volume _____ 1 ___ yd^3 / bbls Known Volume (to be entered by the operator at the end of the haul) _____ yd^3 / bbls

5. **GENERATOR CERTIFICATION STATEMENT OF WASTE STATUS**

I, Joseph Wiley, representative or authorized agent for El Paso CGP Company, LLC do hereby
PRINT & SIGN NAME COMPANY NAME
certify that according to the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988 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 by 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. (Check the appropriate items)

☐ 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, 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, _____, representative for _____ do hereby certify that representative samples of the oil field waste have been subjected to the paint filter test and tested for chloride content and that the samples have been found to conform to the specific requirements applicable to landfarms pursuant to Section 15 of 19.15.36 NMAC. The results of the representative samples are attached to demonstrate the above-described waste conform to the requirements of Section 15 of 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 Record)

PRINT NAME: _____ TITLE: _____ DATE: _____

SIGNATURE: _____ TELEPHONE NO.: _____

APPENDIX C

eurofins | Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 400-220393-1
Client Project/Site: Sandoval
Revision: 1

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

Attn: Steve Varsa

Authorized for release by:
6/24/2022 11:10:23 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

Client: Stantec Consulting Services Inc
Project/Site: Sandoval

Laboratory Job ID: 400-220393-1

Table of Contents

Case Narrative

Client: Stantec Consulting Services Inc
Project/Site: Sandoval

Job ID: 400-220393-1

Job ID: 400-220393-1

Laboratory: Eurofins Pensacola

Narrative

Job Narrative
400-220393-1

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 2.1º C.

Revision
The samples for this project were stored and shipped with samples collected from the Fogelson #4-1 site (project 400-220395), which included a trip blank. The trip blank results from 400-222395 are applicable to the samples collected for this project site (No Detections).

GC/MS VOA
Method 8260C: The following sample was diluted to bring the concentration of target analytes within the calibration range: MW-2 (400-220393-2). 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: Sandoval

Job ID: 400-220393-1

Client Sample ID: MW-1 Lab Sample ID: 400-220393-1

No Detections.

Client Sample ID: MW-2 Lab Sample ID: 400-220393-2

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Benzene	4800		25		ug/L	25		8260C	Total/NA
Toluene	1400		25		ug/L	25		8260C	Total/NA
Xylenes, Total - DL	10000		500		ug/L	50		8260C	Total/NA

Client Sample ID: MW-5 Lab Sample ID: 400-220393-3

No Detections.

Client Sample ID: MW-4 Lab Sample ID: 400-220393-4

No Detections.

Client Sample ID: DUP-01 Lab Sample ID: 400-220393-5

No Detections.

This Detection Summary does not include radiochemical test results.

Method Summary

Client: Stantec Consulting Services Inc
Project/Site: Sandoval

Job ID: 400-220393-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL PEN
5030B	Purge and Trap	SW846	TAL 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: Sandoval

Job ID: 400-220393-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-220393-1	MW-1	Water	05/21/22 17:25	05/24/22 09:02
400-220393-2	MW-2	Water	05/21/22 17:20	05/24/22 09:02
400-220393-3	MW-5	Water	05/21/22 17:10	05/24/22 09:02
400-220393-4	MW-4	Water	05/21/22 17:05	05/24/22 09:02
400-220393-5	DUP-01	Water	05/21/22 18:00	05/24/22 09:02

Client Sample Results

Client: Stantec Consulting Services Inc
Project/Site: Sandoval

Job ID: 400-220393-1

Client Sample ID: MW-1
Date Collected: 05/21/22 17:25
Date Received: 05/24/22 09:02

Lab Sample ID: 400-220393-1
Matrix: Water

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 12:41	1
Toluene	<1.0		1.0		ug/L			05/27/22 12:41	1
Ethylbenzene	<1.0		1.0		ug/L			05/27/22 12:41	1
Xylenes, Total	<10		10		ug/L			05/27/22 12:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*91*		*72 - 119*		*05/27/22 12:41*	*1*
Dibromofluoromethane	*109*		*75 - 126*		*05/27/22 12:41*	*1*
Toluene-d8 (Surr)	*92*		*64 - 132*		*05/27/22 12:41*	*1*

Client Sample Results

Client: Stantec Consulting Services Inc
Project/Site: Sandoval

Job ID: 400-220393-1

Client Sample ID: MW-2
Date Collected: 05/21/22 17:20
Date Received: 05/24/22 09:02

Lab Sample ID: 400-220393-2
Matrix: Water

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**4800**		25		ug/L			05/27/22 15:38	25
Toluene	**1400**		25		ug/L			05/27/22 15:38	25
Ethylbenzene	<25		25		ug/L			05/27/22 15:38	25

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*92*		*72 - 119*		*05/27/22 15:38*	*25*
Dibromofluoromethane	*109*		*75 - 126*		*05/27/22 15:38*	*25*
Toluene-d8 (Surr)	*89*		*64 - 132*		*05/27/22 15:38*	*25*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Xylenes, Total	**10000**		500		ug/L			05/28/22 14:00	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*91*		*72 - 119*		*05/28/22 14:00*	*50*
Dibromofluoromethane	*110*		*75 - 126*		*05/28/22 14:00*	*50*
Toluene-d8 (Surr)	*92*		*64 - 132*		*05/28/22 14:00*	*50*

Client Sample Results

Client: Stantec Consulting Services Inc
Project/Site: Sandoval

Job ID: 400-220393-1

Client Sample ID: MW-5

Date Collected: 05/21/22 17:10
Date Received: 05/24/22 09:02

Lab Sample ID: 400-220393-3

Matrix: Water

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 17:17	1
Toluene	<1.0		1.0		ug/L			05/27/22 17:17	1
Ethylbenzene	<1.0		1.0		ug/L			05/27/22 17:17	1
Xylenes, Total	<10		10		ug/L			05/27/22 17:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*93*		*72 - 119*		*05/27/22 17:17*	*1*
Dibromofluoromethane	*104*		*75 - 126*		*05/27/22 17:17*	*1*
Toluene-d8 (Surr)	*93*		*64 - 132*		*05/27/22 17:17*	*1*

Client Sample Results

Client: Stantec Consulting Services Inc
Project/Site: Sandoval

Job ID: 400-220393-1

Client Sample ID: MW-4
Date Collected: 05/21/22 17:05
Date Received: 05/24/22 09:02

Lab Sample ID: 400-220393-4
Matrix: Water

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	*93*		*72 - 119*		*05/27/22 17:42*	*1*
Dibromofluoromethane	*106*		*75 - 126*		*05/27/22 17:42*	*1*
Toluene-d8 (Surr)	*91*		*64 - 132*		*05/27/22 17:42*	*1*

Client Sample Results

Client: Stantec Consulting Services Inc
Project/Site: Sandoval

Job ID: 400-220393-1

Client Sample ID: DUP-01
Date Collected: 05/21/22 18:00
Date Received: 05/24/22 09:02

Lab Sample ID: 400-220393-5
Matrix: Water

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 18:06	1
Toluene	<1.0		1.0		ug/L			05/27/22 18:06	1
Ethylbenzene	<1.0		1.0		ug/L			05/27/22 18:06	1
Xylenes, Total	<10		10		ug/L			05/27/22 18:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*92*		*72 - 119*		*05/27/22 18:06*	*1*
Dibromofluoromethane	*107*		*75 - 126*		*05/27/22 18:06*	*1*
Toluene-d8 (Surr)	*92*		*64 - 132*		*05/27/22 18:06*	*1*

Definitions/Glossary

Client: Stantec Consulting Services Inc
Project/Site: Sandoval

Job ID: 400-220393-1

Glossary

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

Lab Chronicle

Client: Stantec Consulting Services Inc
Project/Site: Sandoval

Job ID: 400-220393-1

Client Sample ID: MW-1
Date Collected: 05/21/22 17:25
Date Received: 05/24/22 09:02

Lab Sample ID: 400-220393-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	579175	05/27/22 12:41	WPD	TAL PEN
	Instrument ID: CH_CONAN									

Client Sample ID: MW-2
Date Collected: 05/21/22 17:20
Date Received: 05/24/22 09:02

Lab Sample ID: 400-220393-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		25	5 mL	5 mL	579175	05/27/22 15:38	WPD	TAL PEN
	Instrument ID: CH_CONAN									
Total/NA	Analysis	8260C	DL	50	5 mL	5 mL	579318	05/28/22 14:00	BPO	TAL PEN
	Instrument ID: CH_CONAN									

Client Sample ID: MW-5
Date Collected: 05/21/22 17:10
Date Received: 05/24/22 09:02

Lab Sample ID: 400-220393-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	579175	05/27/22 17:17	WPD	TAL PEN
	Instrument ID: CH_CONAN									

Client Sample ID: MW-4
Date Collected: 05/21/22 17:05
Date Received: 05/24/22 09:02

Lab Sample ID: 400-220393-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	579175	05/27/22 17:42	WPD	TAL PEN
	Instrument ID: CH_CONAN									

Client Sample ID: DUP-01
Date Collected: 05/21/22 18:00
Date Received: 05/24/22 09:02

Lab Sample ID: 400-220393-5
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	579175	05/27/22 18:06	WPD	TAL PEN
	Instrument ID: CH_CONAN									

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: Sandoval

Job ID: 400-220393-1

GC/MS VOA

Analysis Batch: 579175

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-220393-1	MW-1	Total/NA	Water	8260C	
400-220393-2	MW-2	Total/NA	Water	8260C	
400-220393-3	MW-5	Total/NA	Water	8260C	
400-220393-4	MW-4	Total/NA	Water	8260C	
400-220393-5	DUP-01	Total/NA	Water	8260C	
MB 400-579175/4	Method Blank	Total/NA	Water	8260C	
LCS 400-579175/1002	Lab Control Sample	Total/NA	Water	8260C	
400-220393-1 MS	MW-1	Total/NA	Water	8260C	
400-220393-1 MSD	MW-1	Total/NA	Water	8260C	

Analysis Batch: 579318

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-220393-2 - DL	MW-2	Total/NA	Water	8260C	
MB 400-579318/4	Method Blank	Total/NA	Water	8260C	
LCS 400-579318/1002	Lab Control Sample	Total/NA	Water	8260C	
400-220180-A-4 MS	Matrix Spike	Total/NA	Water	8260C	
400-220180-A-4 MSD	Matrix Spike Duplicate	Total/NA	Water	8260C	

QC Sample Results

Client: Stantec Consulting Services Inc
Project/Site: Sandoval

Job ID: 400-220393-1

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

Lab Sample ID: MB 400-579175/4
Matrix: Water
Analysis Batch: 579175

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

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0		ug/L			05/27/22 12:16	1
Toluene	<1.0		1.0		ug/L			05/27/22 12:16	1
Ethylbenzene	<1.0		1.0		ug/L			05/27/22 12:16	1
Xylenes, Total	<10		10		ug/L			05/27/22 12:16	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*90*		*72 - 119*		*05/27/22 12:16*	*1*
Dibromofluoromethane	*107*		*75 - 126*		*05/27/22 12:16*	*1*
Toluene-d8 (Surr)	*93*		*64 - 132*		*05/27/22 12:16*	*1*

Lab Sample ID: LCS 400-579175/1002
Matrix: Water
Analysis Batch: 579175

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			50.0	45.2		ug/L		90	70 - 130		
Toluene			50.0	45.8		ug/L		92	70 - 130		
Ethylbenzene			50.0	45.9		ug/L		92	70 - 130		
Xylenes, Total			100	93.0		ug/L		93	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*98*		*72 - 119*
Dibromofluoromethane	*100*		*75 - 126*
Toluene-d8 (Surr)	*93*		*64 - 132*

Lab Sample ID: 400-220393-1 MS
Matrix: Water
Analysis Batch: 579175

Client Sample ID: MW-1
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene	<1.0		50.0	40.0		ug/L		80	56 - 142		
Toluene	<1.0		50.0	40.8		ug/L		82	65 - 130		
Ethylbenzene	<1.0		50.0	40.5		ug/L		81	58 - 131		
Xylenes, Total	<10		100	81.8		ug/L		82	59 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene	*96*		*72 - 119*
Dibromofluoromethane	*102*		*75 - 126*
Toluene-d8 (Surr)	*93*		*64 - 132*

Lab Sample ID: 400-220393-1 MSD
Matrix: Water
Analysis Batch: 579175

Client Sample ID: MW-1
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<1.0		50.0	45.2		ug/L		90	56 - 142	12	30
Toluene	<1.0		50.0	46.0		ug/L		92	65 - 130	12	30
Ethylbenzene	<1.0		50.0	46.1		ug/L		92	58 - 131	13	30

QC Sample Results

Client: Stantec Consulting Services Inc
Project/Site: Sandoval

Job ID: 400-220393-1

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

Lab Sample ID: 400-220393-1 MSD
Matrix: Water
Analysis Batch: 579175

Client Sample ID: MW-1
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Xylenes, Total	<10		100	93.0		ug/L		93	59 - 130	13	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene	*97*		*72 - 119*
Dibromofluoromethane	*100*		*75 - 126*
Toluene-d8 (Surr)	*93*		*64 - 132*

Lab Sample ID: MB 400-579318/4
Matrix: Water
Analysis Batch: 579318

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

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Xylenes, Total	<10		10		ug/L			05/28/22 08:15	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*91*		*72 - 119*		*05/28/22 08:15*	*1*
Dibromofluoromethane	*108*		*75 - 126*		*05/28/22 08:15*	*1*
Toluene-d8 (Surr)	*93*		*64 - 132*		*05/28/22 08:15*	*1*

Lab Sample ID: LCS 400-579318/1002
Matrix: Water
Analysis Batch: 579318

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Xylenes, Total			100	84.0		ug/L		84	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*92*		*72 - 119*
Dibromofluoromethane	*104*		*75 - 126*
Toluene-d8 (Surr)	*91*		*64 - 132*

Lab Sample ID: 400-220180-A-4 MS
Matrix: Water
Analysis Batch: 579318

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Xylenes, Total	<10		100	85.1		ug/L		85	59 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene	*94*		*72 - 119*
Dibromofluoromethane	*104*		*75 - 126*
Toluene-d8 (Surr)	*90*		*64 - 132*

QC Sample Results

Client: Stantec Consulting Services Inc
Project/Site: Sandoval

Job ID: 400-220393-1

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

Lab Sample ID: 400-220180-A-4 MSD
Matrix: Water
Analysis Batch: 579318

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Xylenes, Total	<10		100	86.9		ug/L		87	59 - 130	2	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene	*95*		*72 - 119*
Dibromofluoromethane	*103*		*75 - 126*
Toluene-d8 (Surr)	*92*		*64 - 132*

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

Chain of Custody Record

eurofins | Environment Testing America

Client Information	Sampler: Seurah Gardner / Sean Clary	Lab PM: Whitmire, Cheyenne R	Carrier Tracking No(s):	COC No: 400-111407-37667.2
Client Contact: Steve Varsa	Phone: (303) 291 2239	E-Mail: Cheyenne.Whitmire@et.eurofinsus.com	State of Origin:	Page: Page 1 of 1
Company: Stantec Consulting Services Inc	PWSID:			Job #:
Address: 11311 Aurora Avenue	Due Date Requested:			
City: Des Moines	TAT Requested (days): See ART			
State, Zip: IA, 50322-7904	Compliance Project: Δ Yes Δ No			
Phone:	PO #: WD1040021			
Email: steve.varsa@stantec.com	WO #: ERG-STN-05-06-22-SAH-15			
Project Name: ~~State Gas Sep NM 00~~ Sandoval	Project #: 40005479			
Site: Sandoval	SSOW#:			

Analysis Requested

Preservation Codes:

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

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD	8260C - (MOD) BTEX 8260	8260C - (MOD) BTEX 8260 (unpreserved)	Total Number of containers	Special Instructions/Note:
			Preservation Code:				A	N		
MW-1	5/21/2022	1725	G	Water				3		
MW-2	5/21/2022	1720	G	Water				3		
MW-5	5/21/2022	1710	G	Water				3		
MW-4	5/21/2022	1705	G	Water				2		
DUP-01	5/24/2022	1800	G	Water				1		
				Water						
				Water						
				Water						
				Water						
				Water						
				Water						

400-220393 COC

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

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

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

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:
Relinquished by: Seurah Gardner	Date/Time: 5/23/2022 1215	Company: Stantec	Received by: MD
Relinquished by:	Date/Time:	Company	Received by:
Relinquished by:	Date/Time:	Company	Received by:

Date/Time:	Company
5/24/22 0902	EGTS
Date/Time:	Company
Date/Time:	Company

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

Cooler Temperature(s) °C and Other Remarks: 2.1°C IR9

Ver: 06/08/2021

Login Sample Receipt Checklist

Client: Stantec Consulting Services Inc Job Number: 400-220393-1

Login Number: 220393 **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.	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 IR
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: Sandoval

Job ID: 400-220393-1

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	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

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

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

Generated 11/18/2022 2:38:09 PM

JOB DESCRIPTION

Sandoval GC A #1A

JOB NUMBER

400-228573-1

Eurofins Pensacola
3355 McLemore Drive
Pensacola FL 32514

my EOL

Client: Stantec Consulting Services Inc
Project/Site: Sandoval GC A #1A

Laboratory Job ID: 400-228573-1

Table of Contents

Case Narrative

Client: Stantec Consulting Services Inc
Project/Site: Sandoval GC A #1A

Job ID: 400-228573-1

Job ID: 400-228573-1

Laboratory: Eurofins Pensacola

Narrative

Job Narrative
400-228573-1

Comments
No additional comments.

Receipt
The samples were received on 11/8/2022 9:32 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 0.0º C.

GC/MS VOA
Method 8260C: The following sample was diluted to bring the concentration of target analytes within the calibration range: MW-2 (400-228573-4). 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: Sandoval GC A #1A

Job ID: 400-228573-1

Client Sample ID: TB-01 Lab Sample ID: 400-228573-1

No Detections.

Client Sample ID: DUP-01 Lab Sample ID: 400-228573-2

No Detections.

Client Sample ID: MW-1 Lab Sample ID: 400-228573-3

No Detections.

Client Sample ID: MW-2 Lab Sample ID: 400-228573-4

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Benzene	5700		50		ug/L	50		8260C	Total/NA
Toluene	1400		50		ug/L	50		8260C	Total/NA
Ethylbenzene	90		50		ug/L	50		8260C	Total/NA
Xylenes, Total	9600		500		ug/L	50		8260C	Total/NA

Client Sample ID: MW-4 Lab Sample ID: 400-228573-5

No Detections.

Client Sample ID: MW-5 Lab Sample ID: 400-228573-6

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Benzene	2.5		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: Sandoval GC A #1A

Job ID: 400-228573-1

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: Sandoval GC A #1A

Job ID: 400-228573-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-228573-1	TB-01	Water	11/05/22 18:20	11/08/22 09:32
400-228573-2	DUP-01	Water	11/05/22 12:00	11/08/22 09:32
400-228573-3	MW-1	Water	11/05/22 18:40	11/08/22 09:32
400-228573-4	MW-2	Water	11/05/22 18:52	11/08/22 09:32
400-228573-5	MW-4	Water	11/05/22 18:30	11/08/22 09:32
400-228573-6	MW-5	Water	11/05/22 19:00	11/08/22 09:32

Client Sample Results

Client: Stantec Consulting Services Inc
Project/Site: Sandoval GC A #1A

Job ID: 400-228573-1

Client Sample ID: TB-01

Date Collected: 11/05/22 18:20
Date Received: 11/08/22 09:32

Lab Sample ID: 400-228573-1

Matrix: Water

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0		ug/L			11/16/22 19:42	1
Toluene	<1.0		1.0		ug/L			11/16/22 19:42	1
Ethylbenzene	<1.0		1.0		ug/L			11/16/22 19:42	1
Xylenes, Total	<10		10		ug/L			11/16/22 19:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*98*		*72 - 119*		*11/16/22 19:42*	*1*
Dibromofluoromethane	*99*		*75 - 126*		*11/16/22 19:42*	*1*
Toluene-d8 (Surr)	*97*		*64 - 132*		*11/16/22 19:42*	*1*

Client Sample Results

Client: Stantec Consulting Services Inc
Project/Site: Sandoval GC A #1A

Job ID: 400-228573-1

Client Sample ID: DUP-01

Date Collected: 11/05/22 12:00
Date Received: 11/08/22 09:32

Lab Sample ID: 400-228573-2

Matrix: Water

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0		ug/L			11/17/22 01:59	1
Toluene	<1.0		1.0		ug/L			11/17/22 01:59	1
Ethylbenzene	<1.0		1.0		ug/L			11/17/22 01:59	1
Xylenes, Total	<10		10		ug/L			11/17/22 01:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*98*		*72 - 119*		*11/17/22 01:59*	*1*
Dibromofluoromethane	*105*		*75 - 126*		*11/17/22 01:59*	*1*
Toluene-d8 (Surr)	*95*		*64 - 132*		*11/17/22 01:59*	*1*

Client Sample Results

Client: Stantec Consulting Services Inc
Project/Site: Sandoval GC A #1A

Job ID: 400-228573-1

Client Sample ID: MW-1

Date Collected: 11/05/22 18:40
Date Received: 11/08/22 09:32

Lab Sample ID: 400-228573-3

Matrix: Water

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0		ug/L			11/10/22 19:29	1
Toluene	<1.0		1.0		ug/L			11/10/22 19:29	1
Ethylbenzene	<1.0		1.0		ug/L			11/10/22 19:29	1
Xylenes, Total	<10		10		ug/L			11/10/22 19:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*98*		*72 - 119*		*11/10/22 19:29*	*1*
Dibromofluoromethane	*99*		*75 - 126*		*11/10/22 19:29*	*1*
Toluene-d8 (Surr)	*98*		*64 - 132*		*11/10/22 19:29*	*1*

Client Sample Results

Client: Stantec Consulting Services Inc
Project/Site: Sandoval GC A #1A

Job ID: 400-228573-1

Client Sample ID: MW-2

Date Collected: 11/05/22 18:52
Date Received: 11/08/22 09:32

Lab Sample ID: 400-228573-4

Matrix: Water

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**5700**		50		ug/L			11/11/22 14:44	50
Toluene	**1400**		50		ug/L			11/11/22 14:44	50
Ethylbenzene	**90**		50		ug/L			11/11/22 14:44	50
Xylenes, Total	**9600**		500		ug/L			11/11/22 14:44	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*98*		*72 - 119*		*11/11/22 14:44*	*50*
Dibromofluoromethane	*98*		*75 - 126*		*11/11/22 14:44*	*50*
Toluene-d8 (Surr)	*99*		*64 - 132*		*11/11/22 14:44*	*50*

Client Sample Results

Client: Stantec Consulting Services Inc
Project/Site: Sandoval GC A #1A

Job ID: 400-228573-1

Client Sample ID: MW-4

Date Collected: 11/05/22 18:30
Date Received: 11/08/22 09:32

Lab Sample ID: 400-228573-5

Matrix: Water

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0		ug/L			11/17/22 02:24	1
Toluene	<1.0		1.0		ug/L			11/17/22 02:24	1
Ethylbenzene	<1.0		1.0		ug/L			11/17/22 02:24	1
Xylenes, Total	<10		10		ug/L			11/17/22 02:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*99*		*72 - 119*		*11/17/22 02:24*	*1*
Dibromofluoromethane	*105*		*75 - 126*		*11/17/22 02:24*	*1*
Toluene-d8 (Surr)	*96*		*64 - 132*		*11/17/22 02:24*	*1*

Client Sample Results

Client: Stantec Consulting Services Inc
Project/Site: Sandoval GC A #1A

Job ID: 400-228573-1

Client Sample ID: MW-5

Date Collected: 11/05/22 19:00
Date Received: 11/08/22 09:32

Lab Sample ID: 400-228573-6

Matrix: Water

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**2.5**		1.0		ug/L			11/11/22 13:03	1
Toluene	<1.0		1.0		ug/L			11/11/22 13:03	1
Ethylbenzene	<1.0		1.0		ug/L			11/11/22 13:03	1
Xylenes, Total	<10		10		ug/L			11/11/22 13:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*99*		*72 - 119*		*11/11/22 13:03*	*1*
Dibromofluoromethane	*103*		*75 - 126*		*11/11/22 13:03*	*1*
Toluene-d8 (Surr)	*96*		*64 - 132*		*11/11/22 13:03*	*1*

Definitions/Glossary

Client: Stantec Consulting Services Inc
Project/Site: Sandoval GC A #1A

Job ID: 400-228573-1

Glossary

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

Lab Chronicle

Client: Stantec Consulting Services Inc
Project/Site: Sandoval GC A #1A

Job ID: 400-228573-1

Client Sample ID: TB-01
Date Collected: 11/05/22 18:20
Date Received: 11/08/22 09:32

Lab Sample ID: 400-228573-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	601034	11/16/22 19:42	BPO	EET PEN
	Instrument ID: CH_LARS									

Client Sample ID: DUP-01
Date Collected: 11/05/22 12:00
Date Received: 11/08/22 09:32

Lab Sample ID: 400-228573-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	601034	11/17/22 01:59	BPO	EET PEN
	Instrument ID: CH_LARS									

Client Sample ID: MW-1
Date Collected: 11/05/22 18:40
Date Received: 11/08/22 09:32

Lab Sample ID: 400-228573-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	600019	11/10/22 19:29	BPO	EET PEN
	Instrument ID: CH_LARS									

Client Sample ID: MW-2
Date Collected: 11/05/22 18:52
Date Received: 11/08/22 09:32

Lab Sample ID: 400-228573-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		50	5 mL	5 mL	600211	11/11/22 14:44	AGW	EET PEN
	Instrument ID: CH_LARS									

Client Sample ID: MW-4
Date Collected: 11/05/22 18:30
Date Received: 11/08/22 09:32

Lab Sample ID: 400-228573-5
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	601034	11/17/22 02:24	BPO	EET PEN
	Instrument ID: CH_LARS									

Client Sample ID: MW-5
Date Collected: 11/05/22 19:00
Date Received: 11/08/22 09:32

Lab Sample ID: 400-228573-6
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	600211	11/11/22 13:03	AGW	EET PEN
	Instrument ID: CH_LARS									

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: Sandoval GC A #1A

Job ID: 400-228573-1

GC/MS VOA

Analysis Batch: 600019

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-228573-3	MW-1	Total/NA	Water	8260C	
MB 400-600019/4	Method Blank	Total/NA	Water	8260C	
LCS 400-600019/1002	Lab Control Sample	Total/NA	Water	8260C	
400-228567-A-3 MS	Matrix Spike	Total/NA	Water	8260C	
400-228567-A-3 MSD	Matrix Spike Duplicate	Total/NA	Water	8260C	

Analysis Batch: 600211

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-228573-4	MW-2	Total/NA	Water	8260C	
400-228573-6	MW-5	Total/NA	Water	8260C	
MB 400-600211/4	Method Blank	Total/NA	Water	8260C	
LCS 400-600211/1002	Lab Control Sample	Total/NA	Water	8260C	
400-228573-6 MS	MW-5	Total/NA	Water	8260C	
400-228573-6 MSD	MW-5	Total/NA	Water	8260C	

Analysis Batch: 601034

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-228573-1	TB-01	Total/NA	Water	8260C	
400-228573-2	DUP-01	Total/NA	Water	8260C	
400-228573-5	MW-4	Total/NA	Water	8260C	
MB 400-601034/4	Method Blank	Total/NA	Water	8260C	
LCS 400-601034/1002	Lab Control Sample	Total/NA	Water	8260C	
400-228854-A-9 MS	Matrix Spike	Total/NA	Water	8260C	
400-228854-A-9 MSD	Matrix Spike Duplicate	Total/NA	Water	8260C	

QC Sample Results

Client: Stantec Consulting Services Inc
Project/Site: Sandoval GC A #1A

Job ID: 400-228573-1

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

Lab Sample ID: MB 400-600019/4
Matrix: Water
Analysis Batch: 600019

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

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0		ug/L			11/10/22 11:30	1
Toluene	<1.0		1.0		ug/L			11/10/22 11:30	1
Ethylbenzene	<1.0		1.0		ug/L			11/10/22 11:30	1
Xylenes, Total	<10		10		ug/L			11/10/22 11:30	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*100*		*72 - 119*		*11/10/22 11:30*	*1*
Dibromofluoromethane	*101*		*75 - 126*		*11/10/22 11:30*	*1*
Toluene-d8 (Surr)	*98*		*64 - 132*		*11/10/22 11:30*	*1*

Lab Sample ID: LCS 400-600019/1002
Matrix: Water
Analysis Batch: 600019

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			50.0	51.3		ug/L		103	70 - 130		
Toluene			50.0	50.0		ug/L		100	70 - 130		
Ethylbenzene			50.0	49.5		ug/L		99	70 - 130		
Xylenes, Total			100	96.9		ug/L		97	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*88*		*72 - 119*
Dibromofluoromethane	*96*		*75 - 126*
Toluene-d8 (Surr)	*95*		*64 - 132*

Lab Sample ID: 400-228567-A-3 MS
Matrix: Water
Analysis Batch: 600019

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene	<1.0		50.0	51.9		ug/L		104	56 - 142		
Toluene	<1.0		50.0	47.6		ug/L		95	65 - 130		
Ethylbenzene	<1.0		50.0	40.7		ug/L		81	58 - 131		
Xylenes, Total	<10		100	82.1		ug/L		82	59 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene	*88*		*72 - 119*
Dibromofluoromethane	*95*		*75 - 126*
Toluene-d8 (Surr)	*97*		*64 - 132*

Lab Sample ID: 400-228567-A-3 MSD
Matrix: Water
Analysis Batch: 600019

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<1.0		50.0	51.7		ug/L		103	56 - 142	0	30
Toluene	<1.0		50.0	45.5		ug/L		91	65 - 130	4	30
Ethylbenzene	<1.0		50.0	38.1		ug/L		76	58 - 131	7	30

QC Sample Results

Client: Stantec Consulting Services Inc
Project/Site: Sandoval GC A #1A

Job ID: 400-228573-1

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

Lab Sample ID: 400-228567-A-3 MSD
Matrix: Water
Analysis Batch: 600019

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Xylenes, Total	<10		100	75.8		ug/L		76	59 - 130	8	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene	*94*		*72 - 119*
Dibromofluoromethane	*95*		*75 - 126*
Toluene-d8 (Surr)	*99*		*64 - 132*

Lab Sample ID: MB 400-600211/4
Matrix: Water
Analysis Batch: 600211

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

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0		ug/L			11/11/22 10:31	1
Toluene	<1.0		1.0		ug/L			11/11/22 10:31	1
Ethylbenzene	<1.0		1.0		ug/L			11/11/22 10:31	1
Xylenes, Total	<10		10		ug/L			11/11/22 10:31	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*98*		*72 - 119*		*11/11/22 10:31*	*1*
Dibromofluoromethane	*100*		*75 - 126*		*11/11/22 10:31*	*1*
Toluene-d8 (Surr)	*97*		*64 - 132*		*11/11/22 10:31*	*1*

Lab Sample ID: LCS 400-600211/1002
Matrix: Water
Analysis Batch: 600211

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			50.0	53.0		ug/L		106	70 - 130		
Toluene			50.0	51.3		ug/L		103	70 - 130		
Ethylbenzene			50.0	50.4		ug/L		101	70 - 130		
Xylenes, Total			100	98.4		ug/L		98	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*89*		*72 - 119*
Dibromofluoromethane	*97*		*75 - 126*
Toluene-d8 (Surr)	*96*		*64 - 132*

Lab Sample ID: 400-228573-6 MS
Matrix: Water
Analysis Batch: 600211

Client Sample ID: MW-5
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene	2.5		50.0	58.2		ug/L		111	56 - 142		
Toluene	<1.0		50.0	54.3		ug/L		109	65 - 130		
Ethylbenzene	<1.0		50.0	52.4		ug/L		105	58 - 131		
Xylenes, Total	<10		100	104		ug/L		104	59 - 130		

QC Sample Results

Client: Stantec Consulting Services Inc
Project/Site: Sandoval GC A #1A

Job ID: 400-228573-1

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

Lab Sample ID: 400-228573-6 MS
Matrix: Water
Analysis Batch: 600211

Client Sample ID: MW-5
Prep Type: Total/NA

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene	90		72 - 119
Dibromofluoromethane	98		75 - 126
Toluene-d8 (Surr)	96		64 - 132

Lab Sample ID: 400-228573-6 MSD
Matrix: Water
Analysis Batch: 600211

Client Sample ID: MW-5
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	2.5		50.0	58.4		ug/L		112	56 - 142	0	30
Toluene	<1.0		50.0	51.8		ug/L		104	65 - 130	5	30
Ethylbenzene	<1.0		50.0	49.1		ug/L		98	58 - 131	6	30
Xylenes, Total	<10		100	97.6		ug/L		98	59 - 130	6	30

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene	93		72 - 119
Dibromofluoromethane	96		75 - 126
Toluene-d8 (Surr)	97		64 - 132

Lab Sample ID: MB 400-601034/4
Matrix: Water
Analysis Batch: 601034

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

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0		ug/L			11/16/22 17:37	1
Toluene	<1.0		1.0		ug/L			11/16/22 17:37	1
Ethylbenzene	<1.0		1.0		ug/L			11/16/22 17:37	1
Xylenes, Total	<10		10		ug/L			11/16/22 17:37	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	97		72 - 119		11/16/22 17:37	1
Dibromofluoromethane	103		75 - 126		11/16/22 17:37	1
Toluene-d8 (Surr)	97		64 - 132		11/16/22 17:37	1

Lab Sample ID: LCS 400-601034/1002
Matrix: Water
Analysis Batch: 601034

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			50.0	53.5		ug/L		107	70 - 130		
Toluene			50.0	51.5		ug/L		103	70 - 130		
Ethylbenzene			50.0	51.2		ug/L		102	70 - 130		
Xylenes, Total			100	101		ug/L		101	70 - 130		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene	86		72 - 119
Dibromofluoromethane	99		75 - 126

QC Sample Results

Client: Stantec Consulting Services Inc
Project/Site: Sandoval GC A #1A

Job ID: 400-228573-1

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

Lab Sample ID: LCS 400-601034/1002
Matrix: Water
Analysis Batch: 601034

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

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Toluene-d8 (Surr)	95		64 - 132

Lab Sample ID: 400-228854-A-9 MS
Matrix: Water
Analysis Batch: 601034

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<1.0		50.0	54.6		ug/L		108	56 - 142
Toluene	<1.0		50.0	51.5		ug/L		103	65 - 130
Ethylbenzene	<1.0		50.0	47.6		ug/L		95	58 - 131
Xylenes, Total	<10		100	96.3		ug/L		96	59 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene	86		72 - 119
Dibromofluoromethane	96		75 - 126
Toluene-d8 (Surr)	97		64 - 132

Lab Sample ID: 400-228854-A-9 MSD
Matrix: Water
Analysis Batch: 601034

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<1.0		50.0	55.9		ug/L		111	56 - 142	2	30
Toluene	<1.0		50.0	54.4		ug/L		109	65 - 130	5	30
Ethylbenzene	<1.0		50.0	52.6		ug/L		105	58 - 131	10	30
Xylenes, Total	<10		100	107		ug/L		107	59 - 130	10	30

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene	89		72 - 119
Dibromofluoromethane	95		75 - 126
Toluene-d8 (Surr)	97		64 - 132

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

Chain of Custody Record

eurofins Environment Testing

Client Information	Sampler: SLC	Lab PM: Whitmire, Cheyenne R	Carrier Tracking No(s):	COC No: 400-114517-37675.3
Client Contact: Steve Varsa	Phone: 913 980 0281	E-Mail: Cheyenne.Whitmire@et.eurofinsus.com	State of Origin: NM	Page: Page ~~3 of 3~~ 1 of 1
Company: Stantec Consulting Services Inc	PWSID:			Job #:
Address: 11311 Aurora Avenue	Due Date Requested:			
City: Des Moines	TAT Requested (days): STD			
State, Zip: IA, 50322-7904	Compliance Project: Δ Yes Δ No			
Phone:	PO #: WD1040031			
Email: steve.varsa@stantec.com	WO #: ERG-STN-10-07-22-SAH-07			
Project Name: ~~Johnston Fed #4.00 SemiA~~ Sandoval GCT	Project #: 40005479			
Site: —	SSOW#:			

Analysis Requested

400-228573 COC

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

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260C - BTEX 8260	8260C - BTEX 8260	Total Number of containers	Special Instructions/Note:
STN-13			Preservation Code:				A	N		
TB-01	11/5/2022	1820	G	Water	—	—	1		1	
DUP-01	11/5/2022	—	G	Water	—	—	1		1	
MW-1	11/5/2022	1840	G	water	—	—		3	3	
MW-2	11/5/2022	1852	G	water	—	—		3	3	
MW-4	11/5/2022	1830	G	water	—	—	2		2	
MW-5	11/5/2022	1900	G	water	—	—	3		3	
—										

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

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

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

Special Instructions/QC Requirements:

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

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Sam R Clay	11/7/2022 1200	STN			
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time: 11-8-22 9:32	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 0.0 IR

Ver: 06/08/2021

Login Sample Receipt Checklist

Client: Stantec Consulting Services Inc Job Number: 400-228573-1

Login Number: 228573 **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.	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	0.0°C IR-8
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Accreditation/Certification Summary

Client: Stantec Consulting Services Inc
Job ID: 400-228573-1
Project/Site: Sandoval GC A #1A

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	10-31-23
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

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).

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Authorization

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11/18/2022 2:38:09 PM

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

CONDITIONS

Action 202115

CONDITIONS

Operator:	OGRID:
El Paso Natural Gas Company, L.L.C 1001 Louisiana Street Houston, TX 77002	7046
	Action Number: 202115
	Action Type: [UF-GWA] Ground Water Abatement (GROUND WATER ABATEMENT)

CONDITIONS

Created By	Condition	Condition Date
michael.buchanan	2022 ANNUAL GROUNDWATER REPORT Sandoval GC A#1A Incident Number: nAUTOfAB000635 has been accepted as part of the record. Further information for RFI is currently pending.	5/16/2024