

2017 ANNUAL GROUNDWATER REPORT

Lateral O-21 Line Drip
NMOCD Case#: 3RP-213-0
Meter Code: LD151
T30N, R9W, Sec12, Unit O

SITE DETAILS

Site Location: Latitude: 36.818600 N, Longitude: -107.730400 W
Land Type: Federal
Operator: Enterprise

SITE BACKGROUND

Environmental Remediation activities at the Lateral O-21 Line Drip (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 (EPCGP's) program methods. Currently, the Site is operated by Enterprise and is active. Enterprise operates one additional pipeline in the area, and BP operates two other pipelines in the area.

The Site is located on Federal land. An initial site assessment was completed in January 1995, and an excavation to a depth of approximately 12 feet below ground surface (bgs), was completed in January 1995. Several site investigations were conducted from 1995 to 2000. Monitoring wells were installed in 1995 (MW-1) and 2000 (MW-2 and MW-3). Monitoring wells MW-2 and MW-3 had been historically dry from 2009 to 2016, therefore they were plugged and abandoned in 2017. Monitoring wells MW-2R, MW-3R, MW-4, MW-5, and MW-6 were installed in 2017. Free product recovery has been periodically conducted at the Site, but no free product has been observed at the site since 2015. Currently, groundwater sampling is conducted on a semi-annual basis.

MONITORING WELL INSTALLATION ACTIVITIES

In March and April 2017, new monitoring well locations were staked and surveyed for permitting and utility locating purposes. The monitoring well advancement and installation activities were completed in accordance with the Monitoring Well Installation Work Plan, submitted on March 15, 2017. NMOCD was notified of start of the monitoring well installation activities on March 15, 2017.

Five new wells (MW-2R, MW-3R, MW-4, MW-5 and MW-6) were completed in March and April 2017, to further characterize the extent of the dissolved-phase hydrocarbons at the Site. Soil boring SB-1 was also advanced in the vicinity of the former pit to evaluate soil concentrations at the location. Additionally, MW-2 and MW-3 were plugged and abandoned in accordance to Subsection C of 19.27.4.30 of the New Mexico Administrative Code and the conditions outlined in the New Mexico Office of the State Engineer approved Plugging Plan. Ground surface and casing elevations of the new monitoring wells were surveyed in April 2017 by a licensed surveyor using state plane coordinates.

2017 ANNUAL GROUNDWATER REPORT

Lateral O-21 Line Drip
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Meter Code: LD151
T30N, R9W, Sec12, Unit O

Monitoring wells were constructed of 2-inch-diameter, Schedule 40 polyvinyl chloride (PVC), with 0.010-inch, continuous, factory-slotted PVC screen. Well screen was installed from 25 feet bgs to 50 feet bgs and bisects the field-observed water table. A 3-foot seal of bentonite chips was placed above the sandpack and hydrated, and the remaining annular space filled with bentonite grout. The monitoring wells were completed as stick-up wells with locking protective casings and a concrete pad. Four protective bollards were installed around each new monitoring well. Borehole logs and well construction diagrams are provided in Appendix A.

During advancement of each monitoring well and soil boring, the soil sample interval exhibiting the highest photoionization detector (PID) reading above the field-interpreted water table was collected and placed in a 4-ounce jar for laboratory analysis. Additional soil samples were retained at the SB-1 locations to quantify petroleum hydrocarbon concentrations at additional intervals. The retained sample jars were stored in an ice-filled cooler and shipped under standard chain-of-custody protocols to TestAmerica Laboratories, Inc. in Pensacola, Florida (TestAmerica). 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, total petroleum hydrocarbons (TPH), gasoline range organics, diesel range organics, and motor oil range organics using EPA Method 8015B; and chloride according to EPA Method 300. The soil sample analytical report is provided in Appendix B.

Monitoring well development was performed using a well swab and down-hole pump until visibly clear groundwater was observed. Development and decontamination water was containerized and transported to Basin Disposal, Inc. in Bloomfield, NM for disposal. Soil drums were staged on site for later disposal at Envirotech, Inc. (Envirotech), located south of Bloomfield, NM. Disposal documentation is contained in Appendix C.

GROUNDWATER SAMPLING ACTIVITIES

Pursuant to the Remediation Plan, Stantec provided field work notifications via email to the NMOCD on May 30, 2017 and November 6, 2017, prior to initiating groundwater sampling activities at the Site. Copies of the 2017 NMOCD notifications are provided in Appendix D. On June 9 and November 12, 2017, water levels were gauged at MW-1, MW-2R, MW-3R, MW-4, MW-5, and MW-6. Groundwater samples were collected from each well that did not contain free product using HydraSleeve™ (HydraSleeve) no-purge groundwater sampling devices. The HydraSleeves were set during the previous sampling event approximately 0.5 foot above termination depth. The HydraSleeves were set using a suspension tether and stainless steel weights to collect a sample from the screened interval.

Groundwater samples were placed into laboratory-supplied sample containers, packed on ice, and shipped under standard chain-of-custody protocols to TestAmerica Laboratories, Inc. in Pensacola, Florida where they were analyzed for BTEX. As requested by the NMOCD on November 13, 2017, BTEX constituents were analyzed using United States

2017 ANNUAL GROUNDWATER REPORT

Lateral O-21 Line Drip
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T30N, R9W, Sec12, Unit O

Environmental Protection Agency (EPA) Method 8260 during the November sampling event. Based on elevated TPH concentrations in soil at this location, monitoring well MW-5 was also sampled and analyzed for selected semi-volatile organic compounds by method 8270C during the November sampling event. The unused sample water is combined in a waste container and taken to Basin Disposal, Inc. for disposal. Waste disposal documentation is included as Appendix C.

SUMMARY TABLES

Historic analytical and water level data are summarized in Table 1 and Table 2, respectively. Soil analytical results are summarized in Table 3.

SITE MAPS

Groundwater analytical maps (Figures 1 and 3) and groundwater elevation contour maps (Figures 2 and 4) summarize the results of the 2017 groundwater sampling and gauging events. The soil analytical results are depicted on Figure 5.

ANALYTICAL LAB REPORTS

The soil and groundwater analytical lab reports are included as Appendices B and E, respectively.

GROUNDWATER RESULTS

- The groundwater flow direction at the Site is generally, radially towards MW-1 and to the south-east (see Figures 2 and 4).
- Concentrations of benzene were not detected in the Site monitoring wells sampled in 2017.
- Concentrations of toluene were not detected in the Site monitoring wells sampled in 2017.
- Concentrations of ethylbenzene were not detected in the Site monitoring wells sampled in 2017.
- Concentrations of total xylenes were not detected in the Site monitoring wells sampled in 2017.
- Concentrations of naphthalene, methylnaphthalenes, and benzo(a)pyrene were not detected in the groundwater sample collected from MW-5.

SOIL RESULTS

- Soil samples were collected from the borings for monitoring wells MW-2R,

2017 ANNUAL GROUNDWATER REPORT

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MW-3R, MW-4 through MW-6, and SB-1. Concentrations did not exceed the respective NMOCD 2013 Pit Rule Guidance criteria for any of the BTEX constituents.

- TPH exceeded the 2013 Pit Rule Guidance (100 mg/kg) at MW-5, with a concentration of 319 mg/kg. All other samples were non-detect or below criteria for TPH.
- Chloride was detected in MW-5 at a concentration of 88 mg/kg, which is below the 2013 Pit Rule Guidance (600 mg/kg). Chloride was not detected in each of the other soil samples submitted for analysis.

PLANNED FUTURE ACTIVITIES

Based on 2017 sampling results, groundwater monitoring events will be conducted on a quarterly basis through the third calendar quarter of 2018 to move the site towards regulatory closure. Groundwater samples will be collected from monitoring wells and analyzed for BTEX constituents using EPA Method 8260. Due to the historical presence of free product at these locations, monitoring wells MW-1 and MW-3R will also be sampled for PAHs during the first calendar quarter of 2018.

One additional monitoring well will be installed and sampled to the southeast of former monitoring well MW-3 to confirm the delineation of hydrocarbons in groundwater in this direction. A work plan to complete the monitoring well installation activities was submitted under separate cover for NMOCD approval.

The activities completed in 2018 and their results will be summarized in the 2018 Annual Report.

TABLES

TABLE 1 – GROUNDWATER ANALYTICAL RESULTS

TABLE 2 – GROUNDWATER ELEVATION RESULTS

TABLE 3 – SOIL ANALYTICAL RESULTS

TABLE 1 - GROUNDWATER ANALYTICAL REPORT

LAT O-21 Line Drip					
Location	Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)
NMWQCC Standards:		10	750	750	620
MW-1	11/06/95	935	2700	168	1890
MW-1	11/12/96	741	1620	99	1100
MW-1	02/11/97	202	313	15.6	230
MW-1	05/08/97	1050	1220	50.8	764
MW-1	08/05/97	99.5	179	8.42	160
MW-1	11/04/97	1370	3040	174	2530
MW-1	02/03/98	3000	3600	138	2180
MW-1	05/07/98	5380	7500	247	3500
MW-1	05/18/99	4860	6810	183	3450
MW-1	05/26/00	620	900	49	580
MW-1	06/18/01	1400	2000	37	2500
MW-1	06/04/02	270	170	12	1900
MW-1	06/18/03	137	<10	<10	1730
MW-1	06/23/04	59.9	11.8	23.8	44.1
MW-1	04/18/05	66.6	9.3	21.5	56.5
MW-1	10/22/05	8.9	1.4	5.6	9.1
MW-1	01/19/06	37.6	3.6	17.4	42
MW-1	04/24/06	81.4	24.5	21.8	152
MW-1	10/24/06	9.4	1.7	2.3	8.2
MW-1	01/19/07	28.7	5.5	7.3	19.8
MW-1	04/24/07	104	82.1	41	244
MW-1	10/25/07	3.8	4	4.4	8.8
MW-1	04/21/08	11.6	1.6 J	5.7	15.1
MW-1	07/23/08	11.2	1.4	3.2	9.3
MW-1	10/08/08	7.6	0.61 J	1.6 J	5.8 J
MW-1	01/07/09	3.1	<1	1	2.6
MW-1	04/06/09	6	2.2	1.6	6.2
MW-1	07/27/09	6.8	0.86 J	1.6	4.8
MW-1	06/06/13	<0.42	<0.90	69	1000
MW-1	10/13/16	<1.0	<5.0	<1.0	<5.0
MW-1	06/09/17	<1.0	<5.0	<1.0	<5.0
MW-1	11/12/17	<1.0	<1.0	<1.0	<10

TABLE 1 - GROUNDWATER ANALYTICAL REPORT

LAT O-21 Line Drip					
Location	Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)
MW-2	08/30/00	1.3	<0.5	<0.5	9.5
MW-2	06/18/01	<0.5	<0.5	<0.5	2
MW-2	06/04/02	<0.5	<0.5	<0.5	<1
MW-2	06/18/03	<1	<1	<1	<3
MW-2	06/23/04	<0.5	<0.5	<0.5	<1
MW-2	01/07/09	<1	<1	<1	<2
MW-2	07/27/09	<1	<1	<1	<2
MW-2	Well abandoned 3/31/2017				
MW-2R	06/09/17	<1.0	<5.0	<1.0	<5.0
MW-2R	11/12/17	<1.0	<1.0	<1.0	<10
MW-3	08/30/00	190	20	37	460
MW-3	06/18/01	34	4.7	68	130
MW-3	06/04/02	5.7	0.52	19	30
MW-3	06/18/03	<50	<50	540	6490
MW-3	06/23/04	3.3	28.9	34	48.4
MW-3	04/18/05	<1	<1	5.3	<2
MW-3	10/22/05	<1	<1	<1	1.1
MW-3	01/19/06	<1	<1	<1	<2
MW-3	04/24/06	<1	<1	<1	<2
MW-3	10/24/06	<1	<1	<1	1.2 J
MW-3	01/19/07	<1	<1	<1	<2
MW-3	04/24/07	<1	<1	<1	<2
MW-3	10/25/07	<1	<1	<1	<2
MW-3	04/21/08	<2	<2	<2	<6
MW-3	07/23/08	<1	<1	<1	2.3
MW-3	10/08/08	<2	<2	<2	<6
MW-3	01/07/09	<1	<1	0.44 J	2.2
MW-3	MW-3 abandoned on 3/31/2017				
MW-3R	06/09/17	<1.0	<5.0	<1.0	<5.0
MW-3R	11/12/17	<1.0	<1.0	<1.0	<10

TABLE 1 - GROUNDWATER ANALYTICAL REPORT

LAT O-21 Line Drip					
Location	Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)
MW-4	06/09/17	<1.0	<5.0	<1.0	<5.0
MW-4	11/12/17	<1.0	<1.0	<1.0	<10
MW-5	06/09/17	<1.0	<5.0	<1.0	<5.0
MW-5	11/12/17	<1.0	<1.0	<1.0	<10
MW-6	06/09/17	<1.0	<5.0	<1.0	<5.0
MW-6	11/12/17	<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.

"J" = Result is less than the reporting limit but greater than or equal to the method detection limit and the result is an approximate value.

"<" = analyte was not detected at the indicated reporting limit (some historic data were reported at the detection limit).

TABLE 1 - GROUNDWATER PAH ANALYTICAL RESULTS

Lat 0-21						
Location	Date	1-Methylnaphthalene (µg/L)	2-Methylnaphthalene (µg/L)	Naphthalenes (µg/L)	Total Naphthalenes (µg/L)	Benzo(a)pyrene (µg/L)
NMWQCC		-	-	-	30	0.7
MW-5	11/12/17	BRL	BRL	BRL	BRL	BRL

Notes:

µg/L = micrograms per liter

NMWQCC = New Mexico Water Quality Control Commission (NMWQCC)

"-" NMWQCC Standard is not established

"BRL" = analyte was not detected at the indicated reporting limit.

"PAH" = Polycyclic aromatic hydrocarbons

TABLE 2 - GROUNDWATER ELEVATION RESULTS

LAT O-21 Line Drip						
Location	Date	TOC	Depth to Water (ft.)	Depth to LNAPL (ft.)	LNAPL Thickness (ft.)	GW Elevation (ft.)
MW-1	11/06/95	5816.10	34.45	NR		5781.65
MW-1	11/12/96	5816.10	34.75	NR		5781.35
MW-1	02/11/97	5816.10	33.82	NR		5782.28
MW-1	05/08/97	5816.10	33.54	NR		5782.56
MW-1	08/05/97	5816.10	34.20	NR		5781.90
MW-1	11/04/97	5816.10	35.42	NR		5780.68
MW-1	02/03/98	5816.10	35.08	NR		5781.02
MW-1	05/07/98	5816.10	34.83	NR		5781.27
MW-1	05/18/99	5816.10	34.64	NR		5781.46
MW-1	05/26/00	5816.10	34.76	NR		5781.34
MW-1	06/18/01	5816.10	35.60	NR		5780.50
MW-1	06/04/02	5816.10	35.98	NR		5780.12
MW-1	09/10/02	5816.10	37.15	36.85	0.30	5779.18
MW-1	12/30/02	5816.10	36.39	36.08	0.31	5779.94
MW-1	03/27/03	5816.10	35.96	ND		5780.14
MW-1	06/18/03	5816.10	36.26	ND		5779.84
MW-1	09/16/03	5816.10	37.06	ND		5779.04
MW-1	12/17/03	5816.10	36.72	ND		5779.38
MW-1	03/16/04	5816.10	36.22	ND		5779.88
MW-1	06/22/04	5816.10	36.38	ND		5779.72
MW-1	06/23/04	5816.10	36.38	ND		5779.72
MW-1	09/21/04	5816.10	37.43	ND		5778.67
MW-1	12/21/04	5816.10	36.98	ND		5779.12
MW-1	04/18/05	5816.10	35.93	ND		5780.17
MW-1	10/22/05	5816.10	36.99	ND		5779.11
MW-1	01/19/06	5816.10	36.18	ND		5779.92
MW-1	04/24/06	5816.10	35.71	ND		5780.39
MW-1	10/24/06	5816.10	36.81	ND		5779.29
MW-1	01/19/07	5816.10	36.14	ND		5779.96
MW-1	04/24/07	5816.10	35.73	ND		5780.37
MW-1	05/29/07	5816.10	36.90	ND		5779.20
MW-1	10/25/07	5816.10	37.39	ND		5778.71
MW-1	04/21/08	5816.10	35.97	ND		5780.13
MW-1	07/23/08	5816.10	36.55	ND		5779.55
MW-1	10/08/08	5816.10	36.88	ND		5779.22
MW-1	01/07/09	5816.10	36.52	ND		5779.58
MW-1	04/06/09	5816.10	36.03	ND		5780.07
MW-1	07/27/09	5816.10	36.83	ND		5779.27
MW-1	06/06/13	5816.10	39.98	39.91	0.07	5776.17
MW-1	09/09/13	5816.10	40.04	39.77	0.27	5776.26
MW-1	12/12/13	5816.10	39.39	39.32	0.07	5776.76

TABLE 2 - GROUNDWATER ELEVATION RESULTS

LAT O-21 Line Drip						
Location	Date	TOC	Depth to Water (ft.)	Depth to LNAPL (ft.)	LNAPL Thickness (ft.)	GW Elevation (ft.)
MW-1	04/02/14	5816.10	39.01	38.99	0.02	5777.11
MW-1	10/23/14	5816.10	40.09	40.07	0.02	5776.03
MW-1	05/30/15	5816.10	39.49	39.48	0.01	5776.62
MW-1	11/19/15	5816.10	39.86	39.85	0.01	5776.25
MW-1	04/16/16	5816.10	39.40	ND		5776.70
MW-1	10/13/16	5816.10	40.54	ND		5775.56
MW-1	06/09/17	5816.10	39.86	ND		5776.24
MW-1	11/12/17	5816.10	40.99	ND		5775.11

TABLE 2 - GROUNDWATER ELEVATION RESULTS

LAT O-21 Line Drip						
Location	Date	TOC	Depth to Water (ft.)	Depth to LNAPL (ft.)	LNAPL Thickness (ft.)	GW Elevation (ft.)
MW-2	08/30/00	5813.91	33.62	NR		5780.29
MW-2	06/18/01	5813.91	33.16	NR		5780.75
MW-2	06/04/02	5813.91	33.42	NR		5780.49
MW-2	09/10/02	5813.91	41.48	NR		5772.43
MW-2	12/30/02	5813.91	33.91	NR		5780.00
MW-2	03/27/03	5813.91	33.45	ND		5780.46
MW-2	06/18/03	5813.91	33.80	ND		5780.11
MW-2	06/18/03	5813.91	34.61	ND		5779.30
MW-2	09/16/03	5813.91	34.23	ND		5779.68
MW-2	12/17/03	5813.91	33.70	ND		5780.21
MW-2	03/16/04	5813.91	33.92	ND		5779.99
MW-2	06/22/04	5813.91	33.92	ND		5779.99
MW-2	06/23/04	5813.91	34.99	ND		5778.92
MW-2	09/21/04	5813.91	34.49	ND		5779.42
MW-2	12/21/04	5813.91	33.40	ND		5780.51
MW-2	04/18/05	5813.91	34.49	ND		5779.42
MW-2	10/22/05	5813.91	33.68	ND		5780.23
MW-2	01/19/06	5813.91	33.21	ND		5780.70
MW-2	04/24/06	5813.91	34.31	ND		5779.60
MW-2	10/24/06	5813.91	33.66	ND		5780.25
MW-2	01/18/07	5813.91	32.70	ND		5781.21
MW-2	04/24/07	5813.91	33.44	ND		5780.47
MW-2	05/29/07	5813.91	34.78	ND		5779.13
MW-2	10/25/07	5813.91	33.45	ND		5780.46
MW-2	04/21/08	5813.91	34.10	ND		5779.81
MW-2	07/23/08	5813.91	34.45	ND		5779.46
MW-2	10/08/08	5813.91	34.03	ND		5779.88
MW-2	01/07/09	5813.91	33.53	ND		5780.38
MW-2	07/27/09	5813.91	34.42	ND		5779.49
MW-2	06/06/13	5813.91	DRY	ND		DRY
MW-2	09/09/13	5813.91	DRY	ND		DRY
MW-2	12/12/13	5813.91	DRY	ND		DRY
MW-2	04/02/14	5813.91	DRY	ND		DRY
MW-2	10/23/14	5813.91	DRY	ND		DRY
MW-2	05/30/15	5813.91	DRY	ND		DRY
MW-2	11/19/15	5813.91	DRY	ND		DRY
MW-2	04/16/16	5813.91	DRY	ND		DRY
MW-2	10/13/16	5813.91	DRY	ND		DRY
MW-2	Well abandoned 3/31/2017					
MW-2R	06/09/17	5814.65	37.80	ND		5776.85
MW-2R	11/12/17	5814.65	38.94	ND		5775.71

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LAT O-21 Line Drip						
Location	Date	TOC	Depth to Water (ft.)	Depth to LNAPL (ft.)	LNAPL Thickness (ft.)	GW Elevation (ft.)
MW-3	08/30/00	5814.64	34.56	NR		5780.08
MW-3	06/18/01	5814.64	34.14	NR		5780.50
MW-3	06/04/02	5814.64	34.42	NR		5780.22
MW-3	09/10/02	5814.64	35.92	35.29	0.64	5779.20
MW-3	12/30/02	5814.64	34.97	34.42	0.55	5780.08
MW-3	03/27/03	5814.64	34.49	ND		5780.15
MW-3	06/18/03	5814.64	34.80	ND		5779.84
MW-3	09/16/03	5814.64	35.64	35.62	0.02	5779.02
MW-3	12/17/03	5814.64	35.24	ND		5779.40
MW-3	03/16/04	5814.64	34.75	ND		5779.89
MW-3	06/22/04	5814.64	34.95	ND		5779.69
MW-3	06/23/04	5814.64	34.95	ND		5779.69
MW-3	09/21/04	5814.64	35.95	ND		5778.69
MW-3	12/21/04	5814.64	35.51	ND		5779.13
MW-3	04/18/05	5814.64	34.48	ND		5780.16
MW-3	10/22/05	5814.64	35.52	ND		5779.12
MW-3	01/19/06	5814.64	34.71	ND		5779.93
MW-3	04/24/06	5814.64	34.23	ND		5780.41
MW-3	10/24/06	5814.64	35.33	ND		5779.31
MW-3	01/19/07	5814.64	34.66	ND		5779.98
MW-3	04/24/07	5814.64	33.25	ND		5781.39
MW-3	05/29/07	5814.64	34.42	ND		5780.22
MW-3	10/25/07	5814.64	35.88	ND		5778.76
MW-3	04/21/08	5814.64	34.50	ND		5780.14
MW-3	07/23/08	5814.64	35.06	ND		5779.58
MW-3	10/08/08	5814.64	35.41	ND		5779.23
MW-3	01/07/09	5814.64	35.05	ND		5779.59
MW-3	04/06/09	5814.64	34.53	ND		5780.11
MW-3	07/27/09	5814.64	DRY	ND		DRY
MW-3	06/06/13	5814.64	DRY	ND		DRY
MW-3	09/09/13	5814.64	DRY	ND		DRY
MW-3	12/12/13	5814.64	DRY	ND		DRY
MW-3	04/02/14	5814.64	DRY	ND		DRY
MW-3	10/23/14	5814.64	DRY	ND		DRY
MW-3	05/30/15	5814.64	DRY	ND		DRY
MW-3	11/19/15	5814.64	DRY	ND		DRY
MW-3	04/16/16	5814.64	DRY	ND		DRY
MW-3	10/13/16	5814.64	DRY	ND		DRY
MW-3	MW-3 abandoned on 3/31/2017					
MW-3R	06/09/17	5814.63	38.20	ND		5776.43
MW-3R	11/12/17	5814.63	39.32	ND		5775.31

TABLE 2 - GROUNDWATER ELEVATION RESULTS

LAT O-21 Line Drip						
Location	Date	TOC	Depth to Water (ft.)	Depth to LNAPL (ft.)	LNAPL Thickness (ft.)	GW Elevation (ft.)
MW-4	06/09/17	5815.79	39.19	ND		5776.60
MW-4	11/12/17	5815.79	40.33	ND		5775.46
MW-5	06/09/17	5816.58	40.01	ND		5776.57
MW-5	11/12/17	5816.58	41.15	ND		5775.43
MW-6	06/09/17	5816.17	39.68	ND		5776.49
MW-6	11/12/17	5816.17	40.76	ND		5775.41

Notes:

"ft" = feet

"TOC" = Top of casing

"LNAPL" = Light non-aqueous phase liquid

"ND" = LNAPL not detected

"NR" = LNAPL not recorded

TABLE 3 - SOIL ANALYTICAL RESULTS

LAT O-21 Line Drip											
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-2R (33-34)	03/31/17	BRL	BRL	BRL	BRL	BRL	BRL	6.3	BRL	6.3	BRL
MW-3R (34-35)	03/31/17	BRL	BRL	BRL	BRL	BRL	BRL	9.3	BRL	9.3	BRL
MW-4 (34-35)	04/01/17	BRL	BRL	BRL	BRL	BRL	BRL	6.3	BRL	6.3	BRL
MW-5 (30-31)	04/01/17	BRL	1.2	0.5	2.4	4.1	210	100	8.5	319	88
MW-6 (34-35)	04/05/17	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL
SB-1 (30-31)	04/06/17	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL
SB-1 (34-35)	04/06/17	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 groundwaters≤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

FIGURES

FIGURE 1: JUNE 9, 2017 GROUNDWATER ANALYTICAL RESULTS MAP

FIGURE 2: JUNE 9, 2017 GROUNDWATER ELEVATION MAP

FIGURE 3: NOVEMBER 12, 2017 GROUNDWATER ANALYTICAL RESULTS
MAP

FIGURE 4: NOVEMBER 12, 2017 GROUNDWATER ELEVATION MAP

FIGURE 5: SOIL ANALYTICAL RESULTS



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

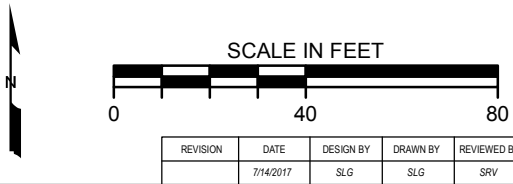
LEGEND:

- 5816 APPROXIMATE GROUND SURFACE CONTOUR AND ELEVATION, FEET
- O—O— OVERHEAD ELECTRIC LINE
- G—G— NATURAL GAS LINE
- W—W— WATER LINE
- MONITORING WELL
- SOIL BORING
- ABANDONED MONITORING WELL
- ▲ SMA BENCHMARK

EXPLANATION OF ANALYTES AND APPLICABLE STANDARDS:

RESULTS IN **BOLDFACE** TYPE INDICATE CONCENTRATION IN EXCESS OF THE STANDARD FOR THAT ANALYTE.
NS = NOT SAMPLED
µg/L = MICROGRAMS PER LITER
<1 = 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

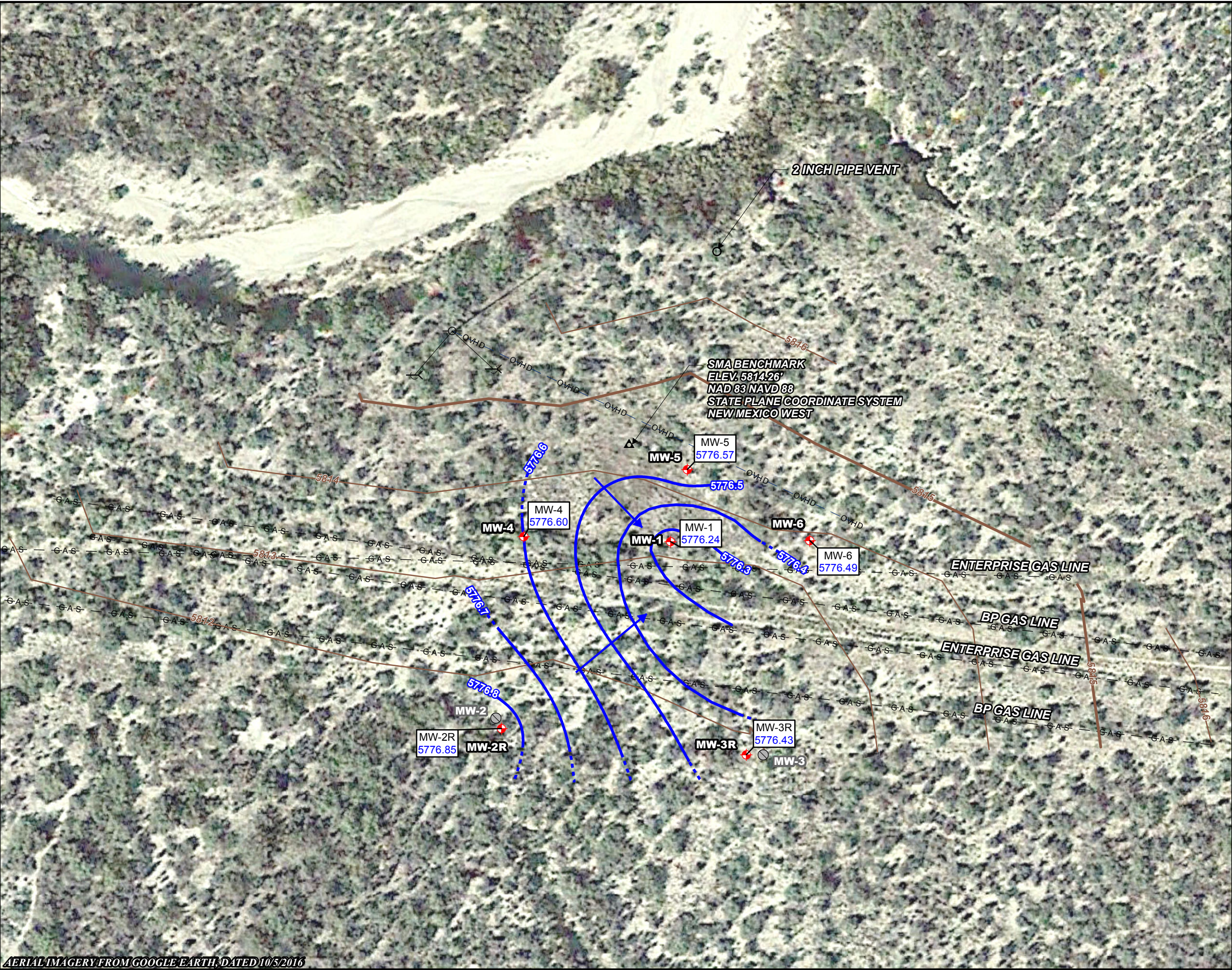


TITLE:
**GROUNDWATER ANALYTICAL RESULTS
JUNE 9, 2017**

PROJECT: **LAT 0-21
SAN JUAN RIVER BASIN
SAN JUAN COUNTY, NEW MEXICO**



Figure No.:
1



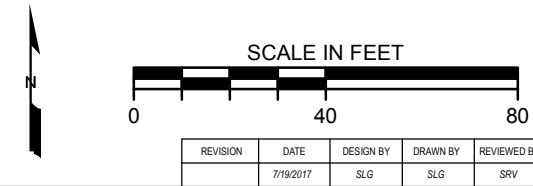
AERIAL IMAGERY FROM GOOGLE EARTH, DATED 10/5/2016

LEGEND:

- APPROXIMATE GROUND SURFACE CONTOUR AND ELEVATION, FEET
- OVERHEAD ELECTRIC LINE
- NATURAL GAS LINE
- WATER LINE
- MONITORING WELL
- ABANDONED MONITORING WELL
- SMA BENCHMARK

NOTES:

- GROUNDWATER ELEVATION (CORRECTED FOR PRODUCT THICKNESS WHEN PRESENT) FEET ABOVE MEAN SEA LEVEL
- CORRECTED WATER LEVEL ELEVATION CONTOUR DASHED WHERE INFERRED (FEET ABOVE MEAN SEA LEVEL)
- DIRECTION OF APPARENT GROUNDWATER FLOW



TITLE:
**GROUNDWATER ELEVATION MAP
JUNE 9, 2017**

PROJECT: **LAT 0-21
SAN JUAN RIVER BASIN
SAN JUAN COUNTY, NEW MEXICO**



Figure No.:

2



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

LEGEND:

- 5816 APPROXIMATE GROUND SURFACE CONTOUR AND ELEVATION, FEET
- O—O— OVERHEAD ELECTRIC LINE
- G—G— NATURAL GAS LINE
- W—W— WATER LINE
- MONITORING WELL
- SOIL BORING
- ABANDONED MONITORING WELL
- ▲ SMA BENCHMARK

EXPLANATION OF ANALYTES AND APPLICABLE STANDARDS:

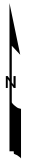
RESULTS IN **BOLDFACE** TYPE INDICATE CONCENTRATION IN EXCESS OF THE STANDARD FOR THAT ANALYTE.

NS = NOT SAMPLED

µg/L = MICROGRAMS PER LITER

<1 = 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
Bap = Benzo(a)pyrene	0.7 µg/L



REVISION	DATE	DESIGN BY	DRAWN BY	REVIEWED BY
	12/8/2017	SLG	SLG	SRV

TITLE:

**GROUNDWATER ANALYTICAL RESULTS
NOVEMBER 12, 2017**

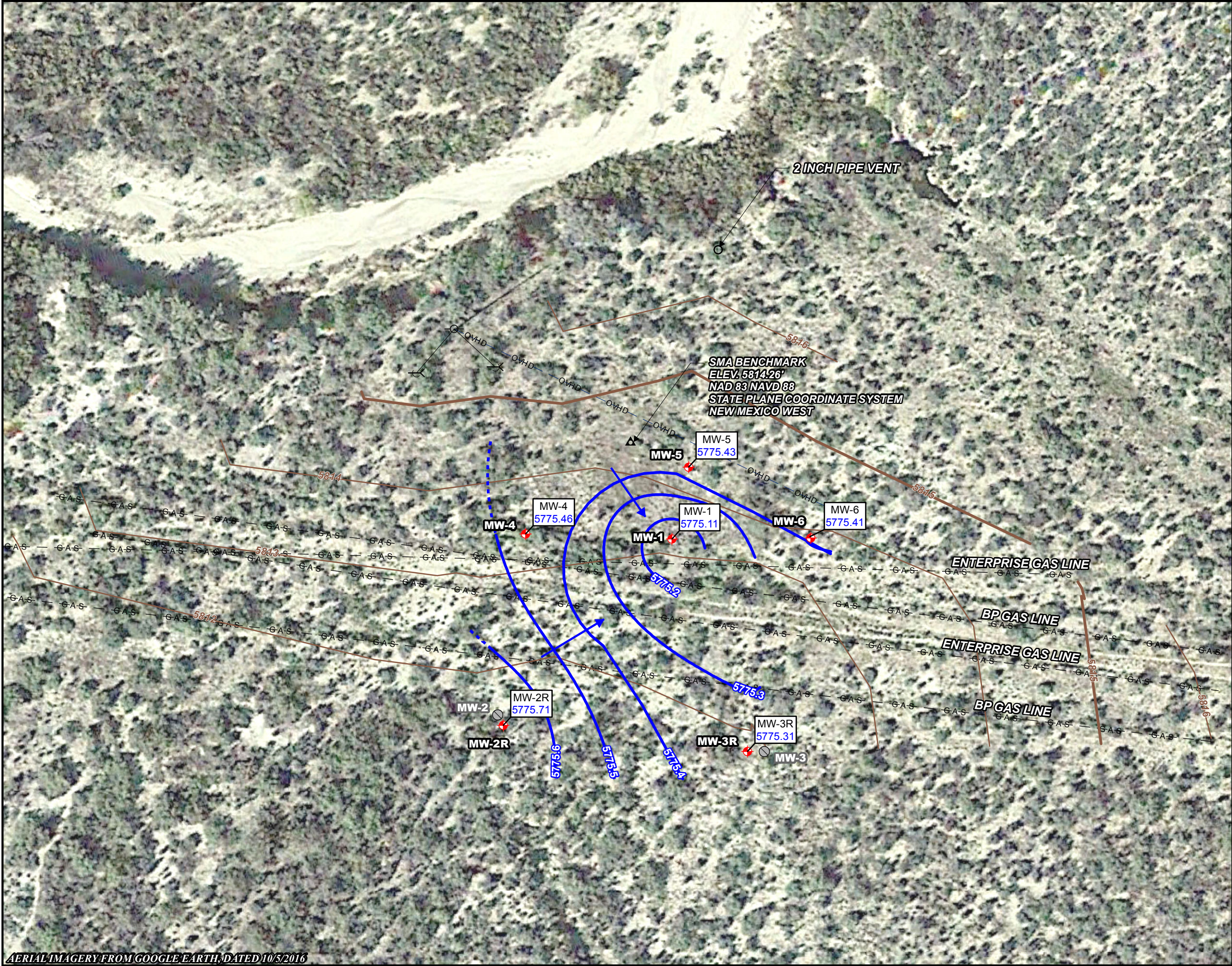
PROJECT:

**LAT 0-21
SAN JUAN RIVER BASIN
SAN JUAN COUNTY, NEW MEXICO**



Figure No.:

3

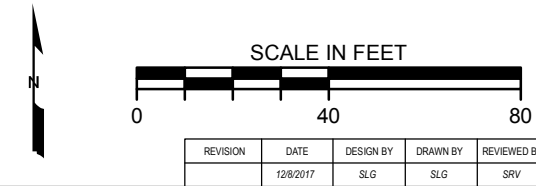


LEGEND:

- 5816 APPROXIMATE GROUND SURFACE CONTOUR AND ELEVATION, FEET
- O—O— OVERHEAD ELECTRIC LINE
- G—G— NATURAL GAS LINE
- W—W— WATER LINE
- MONITORING WELL
- ABANDONED MONITORING WELL
- ▲ SMA BENCHMARK

NOTES:

- GROUNDWATER ELEVATION (CORRECTED FOR PRODUCT THICKNESS WHEN PRESENT) FEET ABOVE MEAN SEA LEVEL
- 5962.23
- CORRECTED WATER LEVEL ELEVATION CONTOUR DASHED WHERE INFERRED (FEET ABOVE MEAN SEA LEVEL)
- 5962.4
- DIRECTION OF APPARENT GROUNDWATER FLOW



TITLE:
**GROUNDWATER ELEVATION MAP
NOVEMBER 12, 2017**

PROJECT: **LAT 0-21
SAN JUAN RIVER BASIN
SAN JUAN COUNTY, NEW MEXICO**



Figure No.:

4



SB-1
30-31 ft. bgs
B: BRL
BTEX: BRL
TPH: BRL
Cl: BRL

34-35 ft. bgs
B: BRL
BTEX: BRL
TPH: BRL
Cl: BRL

MW-4
34-35 ft. bgs
B: BRL
BTEX: BRL
TPH: 6.3
Cl: BRL

MW-2
NS

MW-2R

MW-2R
33-34 ft. bgs
B: BRL
BTEX: BRL
TPH: 6.3
Cl: BRL

MW-1
NS

MW-3R
34-35 ft. bgs
B: BRL
BTEX: BRL
TPH: 9.3
Cl: BRL

MW-3
NS

MW-6

MW-5
30-31 ft. bgs
B: BRL
BTEX: 4.2
TPH: 319
Cl: 88

MW-6
34-35 ft. bgs
B: BRL
BTEX: BRL
TPH: BRL
Cl: BRL

LEGEND:

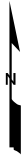
- 5816 APPROXIMATE GROUND SURFACE CONTOUR AND ELEVATION, FEET
- OVHD— OVERHEAD ELECTRIC LINE
- GAS— NATURAL GAS LINE
- W— WATER LINE
- MONITORING WELL
- SOIL BORING
- ABANDONED MONITORING WELL
- ▲ SMA BENCHMARK

NOTES:
MW-2R AND MW-3R SAMPLES COLLECTED 3/31/2017; MW-4 AND MW-5 SAMPLES COLLECTED 4/1/2017; MW-6 SAMPLES COLLECTED 4/5/2017; SB-1 SAMPLES COLLECTED 4/6/2017.

UTILITY LOCATIONS ARE APPROXIMATE.
ft. bgs = FEET BELOW GROUND SURFACE
NS = NOT SAMPLED

EXPLANATION OF ANALYTES AND APPLICABLE STANDARDS:
RESULTS IN **BOLDFACE** TYPE INDICATE CONCENTRATION IN EXCESS OF APPLICABLE NEW MEXICO OIL CONSERVATION DIVISION SOIL CRITERIA FOR THAT ANALYTE.
mg/kg = MILLIGRAM/KILOGRAM
BRL = BELOW REPORTING LIMITS

ANALYTE	NMOC D STANDARDS
B = Benzene	10 mg/kg
BTEX = Benzene, toluene, ethylbenzene, xylenes	50 mg/kg
TPH = Total Petroleum Hydrocarbons	100 mg/kg
Cl = Chloride	600 mg/kg



REVISION	DATE	DESIGN BY	DRAWN BY	REVIEWED BY
	4/27/2017	SLG	SLG	SRV

TITLE:
SOIL ANALYTICAL RESULTS

PROJECT: **LAT 0-21
SAN JUAN RIVER BASIN
SAN JUAN COUNTY, NEW MEXICO**



Figure No.:
5

APPENDICES

APPENDIX A – BOREHOLE AND WELL CONSTRUCTION LOGS

APPENDIX B – SOIL SAMPLING ANALYTICAL REPORTS

APPENDIX C – WASTE DISPOSAL DOCUMENTATION

APPENDIX D – NMOCD NOTIFICATIONS OF SITE ACTIVITIES

APPENDIX E – JUNE 9, 2017 GROUNDWATER SAMPLING ANALYTICAL REPORT
NOVEMBER 12, 2017 GROUNDWATER SAMPLING ANALYTICAL
REPORT

APPENDIX A

**MWH**now
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Drilling Log

Monitoring Well

MW-2R

Page: 1 of 2

Project Lat O-21 Line Drip Owner El Paso CGP Company, LLC
 Location San Juan County, New Mexico Project Number 203720280
 Surface Elev. 5811.70 ft North 36.81853 East -107.731275
 Top of Casing 5814.65 ft Water Level Initial 5780.15 03/30/17 00:00 Static 5776.69 04/06/17 00:00
 Hole Depth 51.0ft Screen: Diameter 2 in Length 25.0 ft Type/Size PVC/0.01 in
 Hole Diameter 8.25 in Casing: Diameter 2 in Length 27.5 ft Type PVC
 Drill Co. Cascade Drilling Drilling Method Hollow Stem Auger Sand Pack 10/20 Silica sand
 Driller Matt Cain Driller Reg. # WD-1210 Log By Brad Barton
 Start Date 3/30/2017 Completion Date 4/6/2017 Checked By S. Varsa

COMMENTS

Surface is dirt with minor vegetation.

Bentonite Grout Bentonite Granules Grout Portland Cement Sand Pack Sand Pack

Depth (ft)	PID (ppm)	% Recovery	Blow Count Recovery	Graphic Log	USCS	Description (Color, Moisture, Texture, Structure, Odor) Geologic Descriptions are Based on the USCS.	Well Completion
0	0.0					Sand, silty, brown to light brown, loose, dry, fine sand, no hydrocarbon odor. (0-7.5' cleared with a hydro-vac).	
5	0.0	100%			SM		
10	0.0	100%			SP	Sand, poorly graded, light brown, loose, dry, fine sand, minor cementation, subangular, no hydrocarbon odor, sand compacted in sampler.	
15	0.0	100%					
20	0.0	100%			SM	Sand, silty, light brown, loose to medium dense, dry, fine sand, minor cementation at 21', no hydrocarbon odor, sand compacted in sampler.	
25	0.0	100%			SP	Sand, poorly graded, light brown, loose, dry to water at 34.5', fine sand to some medium-grained sand below 35', minor cementation, subangular, mottling at 31', no hydrocarbon odor, sand compacted in sampler. (5' split spoon was driven 7' from 44-51').	
30	0.0						

Drilling Log 2017 LAT O-21 LINE DRIP LOGS.GPJ MWH I.A.GDT 5/10/17

Continued Next Page

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Drilling Log

Monitoring Well

MW-2R

Page: 2 of 2

Project Lat O-21 Line DripOwner El Paso CGP Company, LLCLocation San Juan County, New MexicoProject Number 203720280

Depth (ft)	PID (ppm)	% Recovery	Blow Count Recovery	Graphic Log	USCS	Description (Color, Moisture, Texture, Structure, Odor) Geologic Descriptions are Based on the USCS.	Well Completion
30						<i>Continued</i>	
33							
34							
35							
40							
45							
50							
55							
60							
65							
70							

Drilling Log 2017 LAT O-21 LINE DRIP LOGS.GPJ MWH I.A.GDT 5/10/17

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Drilling Log

Monitoring Well

MW-3R

Page: 1 of 2

Project Lat O-21 Line Drip Owner El Paso CGP Company, LLC
 Location San Juan County, New Mexico Project Number 203720280
 Surface Elev. 5812.02 ft North 36.8185 East -107.730929
 Top of Casing 5814.63 ft Water Level Initial 5779.63 03/30/17 00:00 Static 5776.32 04/06/17 00:00
 Hole Depth 50.5ft Screen: Diameter 2 in Length 25.0 ft Type/Size PVC/0.01 in
 Hole Diameter 8.25 in Casing: Diameter 2 in Length 28.0 ft Type PVC
 Drill Co. Cascade Drilling Drilling Method Hollow Stem Auger Sand Pack 10/20 Silica sand
 Driller Matt Cain Driller Reg. # WD-1210 Log By Brad Barton
 Start Date 3/30/2017 Completion Date 4/6/2017 Checked By S. Varsa

COMMENTS

Surface is dirt with minor vegetation.

Bentonite Grout Bentonite Granules Grout Portland Cement Sand Pack Sand Pack

Depth (ft)	PID (ppm)	% Recovery	Blow Count Recovery	Graphic Log	USCS	Description (Color, Moisture, Texture, Structure, Odor) Geologic Descriptions are Based on the USCS.	Well Completion
0	0.0					Sand, silty, brown to light brown, loose, dry, fine sand, no cementation, very minor clay content, no hydrocarbon odor. (0-8' cleared with a hydro-vac).	
5	0.0				SM		
10	0.0	100%			SP	Sand, poorly graded, light brown, loose, dry, fine sand, no cementation, no hydrocarbon odor.	
15	0.0	100%			SW	Sand, well graded, light brown, dry, fine to medium sand, minor cementation, subangular, no hydrocarbon odor, sand compacted in sampler.	
20	0.0	100%			SM	Sand, silty, light yellowish-brown (5/4 10YR), loose, dry, very fine sand, minor cementation, no hydrocarbon odor, sand compacted in sampler.	
25	0.0	100%			SP	Sand, poorly graded, light brown, loose, dry to water at 35', fine sand to some medium sand at 36', minor cementation, mottling at 32-35', no hydrocarbon odor, sand compacted in sampler. Driller reported flowing sand from 35-40'.	
30	0.0	100%					

Drilling Log 2017 LAT O-21 LINE DRIP LOGS.GPJ MWH I.A.GDT 5/10/17

Continued Next Page

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Drilling Log

Monitoring Well

MW-3R

Page: 2 of 2

Project Lat O-21 Line DripOwner El Paso CGP Company, LLCLocation San Juan County, New MexicoProject Number 203720280

Depth (ft)	PID (ppm)	% Recovery	Blow Count Recovery	Graphic Log	USCS	Description (Color, Moisture, Texture, Structure, Odor) Geologic Descriptions are Based on the USCS.	Well Completion
30						<i>Continued</i>	
35		100% MW3R 34- 35'			SP		
40		100%					
45		100%			CL	Clay with fine sand, brown to dark gray at 48.5', soft to medium stiff, moist to wet, no hydrocarbon odor, clay compacted in sampler.	
50		100%			SP	Sand, poorly graded, dark gray, loose, wet, fine to medium sand, no hydrocarbon odor, sand compacted in sampler. End of boring = 50.5'.	
55							
60							
65							
70							

Drilling Log 2017 LAT O-21 LINE DRIP LOGS.GPJ MWH I.A.GDT 5/10/17



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Stantec

Drilling Log

Monitoring Well

MW-4

Page: 1 of 2

Project Lat O-21 Line Drip Owner El Paso CGP Company, LLC
 Location San Juan County, New Mexico Project Number 203720280
 Surface Elev. 5813.34 ft North 36.818748 East -107.731243
 Top of Casing 5815.79 ft Water Level Initial 5780.79 03/30/17 00:00 Static 5776.52 04/06/17 00:00
 Hole Depth 50.0ft Screen: Diameter 2 in Length 25.0 ft Type/Size PVC/0.01 in
 Hole Diameter 8.25 in Casing: Diameter 2 in Length 27.5 ft Type PVC
 Drill Co. Cascade Drilling Drilling Method Hollow Stem Auger Sand Pack 10/20 Silica sand
 Driller Matt Cain Driller Reg. # WD-1210 Log By Brad Barton
 Start Date 3/30/2017 Completion Date 4/6/2017 Checked By S. Varsa

COMMENTS
 Surface is dirt with minor vegetation. Well is approximately 15' from Enterprise gas line.

Bentonite Grout Bentonite Granules Grout Portland Cement Sand Pack Sand Pack

Depth (ft)	PID (ppm)	% Recovery	Blow Count Recovery	Graphic Log	USCS	Description (Color, Moisture, Texture, Structure, Odor) Geologic Descriptions are Based on the USCS.	Well Completion
0	0.0					Sand, silty, brown to light brown, loose, fine sand, no cementation, no hydrocarbon odor. (0-8' cleared with a hydro-vac).	
5	0.0	100%			SM		
10	0.0	100%			SP	Sand, poorly graded, light brown, loose, dry, fine sand, minor cementation, subangular, no hydrocarbon odor, sand compacted in sampler.	
15	0.0	100%			SW	Sand, well graded, light brown, loose, dry, fine to medium sand, no cementation, subangular to angular, no hydrocarbon odor, sand compacted in sampler.	
20	0.0	100%				Sand, silty, light brown, loose, dry, fine sand, no cementation, no hydrocarbon odor, sand compacted in sampler.	
25	0.0	100%			SM		
30	0.0	100%					

Continued Next Page

Drilling Log 2017 LAT O-21 LINE DRIP LOGS.GPJ MWH I.A.GDT 5/10/17



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Stantec

Drilling Log

Monitoring Well

MW-4

Page: 2 of 2

Project Lat O-21 Line Drip

Owner El Paso CGP Company, LLC

Location San Juan County, New Mexico

Project Number 203720280

Depth (ft)	PID (ppm)	% Recovery	Blow Count Recovery	Graphic Log	USCS	Description (Color, Moisture, Texture, Structure, Odor) Geologic Descriptions are Based on the USCS.	Well Completion
30	0.0					<i>Continued</i>	
35	0.0	100% MW4 34- 35'			SP	Sand, poorly graded, light brown, loose, dry to water at 35', fine sand, large gravel in cutting shoe, no hydrocarbon odor, sand compacted in sampler. Driller reported hard drilling from 35-36'.	
40	0.0	100%			SW	Sand, well graded, light brown, loose, wet, subangular to angular, no hydrocarbon odor, sand compacted in sampler.	
45	0.0	100%			CL	Clay with fine sand, medium brown, soft to medium stiff, wet, no hydrocarbon odor.	
50	0.0	100%				End of boring = 50'.	
55							
60							
65							
70							

Drilling Log 2017 LAT O-21 LINE DRIP LOGS.GPJ MWH I.A.GDT 5/10/17



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Drilling Log

Monitoring Well

MW-5

Page: 1 of 2

Project Lat O-21 Line Drip Owner El Paso CGP Company, LLC
 Location San Juan County, New Mexico Project Number 203720280
 Surface Elev. 5814.07 ft North 36.818824 East -107.731012
 Top of Casing 5816.58 ft Water Level Initial 5782.58 03/30/17 00:00 Static 5776.48 04/06/17 00:00
 Hole Depth 50.0ft Screen: Diameter 2 in Length 25.0 ft Type/Size PVC/0.01 in
 Hole Diameter 8.25 in Casing: Diameter 2 in Length 27.5 ft Type PVC
 Drill Co. Cascade Drilling Drilling Method Hollow Stem Auger Sand Pack 10/20 Silica sand
 Driller Matt Cain Driller Reg. # WD-1210 Log By Brad Barton
 Start Date 3/30/2017 Completion Date 4/6/2017 Checked By S. Varsa

COMMENTS
 Surface is dirt with minor vegetation.

Bentonite Grout Bentonite Granules Grout Portland Cement Sand Pack Sand Pack

Depth (ft)	PID (ppm)	% Recovery	Blow Count Recovery	Graphic Log	USCS	Description (Color, Moisture, Texture, Structure, Odor) Geologic Descriptions are Based on the USCS.	Well Completion
0						Sand, silty, brown to light brown, loose, dry, fine sand, minor cementation, no hydrocarbon odor. (0-8' cleared with a hydro-vac).	
5					SM		
10					SP	Sand, poorly graded, light brown, loose, fine sand, no hydrocarbon odor, sand compacted in sampler.	
15					SW	Sand, well graded, loose, dry, minor cementation, subangular to angular, no hydrocarbon odor, sand compacted in sampler.	
20						Sand, silty, light brown to brown, very slightly moist, fine sand, very slight hydrocarbon odor at 23.5' and moderate odor at 25.5', sand compacted in sampler.	
25					SM		
30							

Drilling Log 2017 LAT O-21 LINE DRIP LOGS.GPJ MWH I.A.GDT 5/10/17

Continued Next Page

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Drilling Log

Monitoring Well

MW-5

Page: 2 of 2

Project Lat O-21 Line DripOwner El Paso CGP Company, LLCLocation San Juan County, New MexicoProject Number 203720280

Depth (ft)	PID (ppm)	% Recovery	Blow Count Recovery	Graphic Log	USCS	Description (Color, Moisture, Texture, Structure, Odor) Geologic Descriptions are Based on the USCS.	Well Completion
30	1363	30-31'				<i>Continued</i>	
70.6					SM		
49.3							
13.6		100%			SP	Sand, poorly graded, light to dark gray to black with depth, loose, slightly moist to water at 34', strong hydrocarbon odor, sand compacted in sampler.	
42.8							
12.9							
10.7					CL	Clay with sand, gray to brown, wet, slight hydrocarbon odor, clay compacted in sampler.	
3.6							
0.7		100%			SW	Sand, well graded, brown, loose, wet, no hydrocarbon odor, sand compacted in sampler.	
0.0							
40						Clay with fine sand, brown, soft to medium stiff, wet, no hydrocarbon odor, clay compacted in sampler. (5' split spoon was driven 6' feet from 44-50').	
0.0							
0.0		100%			CL		
0.0							
45							
0.0							
0.0							
0.0							
0.0					SP	Sand, poorly graded, loose, wet, subangular to angular, no hydrocarbon odor, sand compacted in sampler.	
0.0		100%					
50						End of boring = 50'.	
55							
60							
65							
70							

Drilling Log 2017 LAT O-21 LINE DRIP LOGS.GPJ MWH I.A.GDT 5/10/17



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Drilling Log

Monitoring Well

MW-6

Page: 1 of 2

Project Lat O-21 Line Drip Owner El Paso CGP Company, LLC
 Location San Juan County, New Mexico Project Number 203720280
 Surface Elev. 5813.59 ft North 36.818743 East -107.730839
 Top of Casing 5816.17 ft Water Level Initial 5781.17 03/30/17 00:00 Static 5776.37 04/06/17 00:00
 Hole Depth 51.0ft Screen: Diameter 2 in Length 25.0 ft Type/Size PVC/0.01 in
 Hole Diameter 8.25 in Casing: Diameter 2 in Length 27.5 ft Type PVC
 Drill Co. Cascade Drilling Drilling Method Hollow Stem Auger Sand Pack 10/20 Silica sand
 Driller Matt Cain Driller Reg. # WD-1210 Log By Brad Barton
 Start Date 3/30/2017 Completion Date 4/6/2017 Checked By S. Varsa

COMMENTS
 Surface is dirt with minor vegetation.

Bentonite Grout Bentonite Granules Grout Portland Cement Sand Pack Sand Pack

Depth (ft)	PID (ppm)	% Recovery	Blow Count Recovery	Graphic Log	USCS	Description (Color, Moisture, Texture, Structure, Odor) Geologic Descriptions are Based on the USCS.	Well Completion
0	0.0					Sand, silty, brown to light brown, loose, dry, minor cementation, no hydrocarbon odor, sand compacted in sampler. (0-8' cleared with a hydro-vac).	
5	0.0	100%			SM		
10	0.0	100%					
15	0.0	100%				Sand, poorly graded, light brown, loose, dry to water at 35', becomes coarser grained with depth, minor cementation increasing at 32', mottled at 32', no hydrocarbon odor, sand compacted in sampler.	
20	0.0	100%			SP		
25	0.0	100%					
30	0.0	100%					

Drilling Log 2017 LAT O-21 LINE DRIP LOGS.GPJ MWH I.A.GDT 5/10/17

Continued Next Page



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Drilling Log

Monitoring Well

MW-6

Page: 2 of 2

Project Lat O-21 Line Drip

Owner El Paso CGP Company, LLC

Location San Juan County, New Mexico

Project Number 203720280

Depth (ft)	PID (ppm)	% Recovery	Blow Count Recovery	Graphic Log	USCS	Description (Color, Moisture, Texture, Structure, Odor) Geologic Descriptions are Based on the USCS.	Well Completion
30						<i>Continued</i>	
35		100% MW6 34- 35'			SP		
					SW	Sand, well graded, brown, loose, wet, no hydrocarbon odor, sand compacted in sampler.	
					SM	Sand, silty with minor clay, brown, loose to medium dense, wet, no hydrocarbon odor, sand compacted in sampler.	
40		100%			CL	Clay with fine sand, brown, soft to medium stiff, wet, no hydrocarbon odor, clay compacted in sampler. (5' split spoon was driven 6' from 45-51').	
45		100%			CL		
50		83%			SP	Sand, poorly graded, loose, wet, minor clay content, no cementation, no hydrocarbon odor, sand compacted in sampler.	
						End of boring = 51'.	
55							
60							
65							
70							

Drilling Log 2017 LAT O-21 LINE DRIP LOGS.GPJ MWH I.A.GDT 5/10/17



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Drilling Log

Soil Boring

SB-1

Page: 1 of 2

Project Lat O-21 Line Drip Owner El Paso CGP Company, LLC
 Location San Juan County, New Mexico Project Number 203720280
 Surface Elev. 5813.78 ft North 36.818766 East -107.731035
 Top of Casing NA Water Level Initial 03/30/17 00:00 Static NA
 Hole Depth 40.0ft Screen: Diameter NA Length NA Type/Size NA
 Hole Diameter 8.25 in Casing: Diameter NA Length NA Type NA
 Drill Co. Cascade Drilling Drilling Method Hollow Stem Auger Sand Pack NA
 Driller Matt Cain Driller Reg. # Log By Brad Barton
 Start Date 3/30/2017 Completion Date 4/6/2017 Checked By

COMMENTS

Surface is dirt with minor vegetation. Well is approximately 17' from Enterprise gas line.

Bentonite Grout Bentonite Granules Grout Portland Cement Sand Pack Sand Pack

Depth (ft)	PID (ppm)	% Recovery	Blow Count Recovery	Graphic Log	USCS	Description (Color, Moisture, Texture, Structure, Odor) Geologic Descriptions are Based on the USCS.
0						
0.0						
5					SM	Sand, silty, brown to light brown, dry, loose, minor cementation, no hydrocarbon odor. (0-8' cleared with a hydro-vac).
0.0						
10		100%			SP	Sand, poorly graded, light yellowish-brown, dry, loose, no cementation, no hydrocarbon odor, sand compacted in sampler.
0.0						
15		100%			SW	Sand, well graded, light brown, dry, loose to minor cementation at 18', subangular to angular, no hydrocarbon odor, sand compacted in sampler.
0.0						
20		100%				
0.0						
25		100%			SM	Sand, silty, light brown, dry, minor cementation, no hydrocarbon odor, sand compacted in sampler.
0.0						
30		100%				
0.0						
0.7						
3.1						

Drilling Log 2017 LAT O-21 LINE DRIP LOGS.GPJ MWH I.A.GDT 5/10/17

Continued Next Page



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Drilling Log

Soil Boring

SB-1

Page: 2 of 2

Project Lat O-21 Line Drip

Owner El Paso CGP Company, LLC

Location San Juan County, New Mexico

Project Number 203720280

Depth (ft)	PID (ppm)	% Recovery	Blow Count Recovery	Graphic Log	USCS	Description (Color, Moisture, Texture, Structure, Odor) Geologic Descriptions are Based on the USCS.
30	8.1					<i>Continued</i>
35	5.1					
	5.5					
	0.2					
	2.6	100%			SP	Sand, poorly graded, minor clay at 38.5', light brown to reddish-brown at 32', dry to slightly moist with depth, water at 39', no hydrocarbon odor, sand compacted in sampler.
	0.6	SB1				
	0.3	30-				
	0.1	31'				
	0.0					
40	0.0	100%				
45						End of boring = 40'.
50						
55						
60						
65						
70						

APPENDIX B

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

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

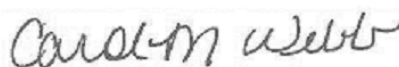
TestAmerica Job ID: 400-136048-1

Client Project/Site: El Paso CGP Company, LLC-Lat L O-21 Soil
Revision: 2

For:

Stantec Consulting Services Inc
1560 Broadway
Suite 1800
Denver, Colorado 80202

Attn: Ms. Sarah Gardner



Authorized for release by:
4/25/2017 8:24:29 AM

Carol Webb, Project Manager II
(850)471-6250
carol.webb@testamericainc.com

LINKS

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results through

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www.testamericainc.com

The test results in this report meet all 2003 NELAP and 2009 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 signature.

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

Table of Contents

Cover Page	1
Table of Contents	2
Definitions	3
Case Narrative	4
Detection Summary	5
Sample Summary	6
Client Sample Results	7
QC Association	11
QC Sample Results	14
Chronicle	20
Certification Summary	23
Method Summary	24
Chain of Custody	25
Receipt Checklists	26



Definitions/Glossary

Client: Stantec Consulting Services Inc
Project/Site: El Paso CGP Company, LLC-Lat L O-21 Soil

TestAmerica Job ID: 400-136048-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
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)

Case Narrative

Client: Stantec Consulting Services Inc
Project/Site: El Paso CGP Company, LLC-Lat L O-21 Soil

TestAmerica Job ID: 400-136048-1

Job ID: 400-136048-1

Laboratory: TestAmerica Pensacola

Narrative

Job Narrative 400-136048-1

Comments

No additional comments.

Receipt

The samples were received on 4/4/2017 4:21 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.3° C.

HPLC/IC

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

GC VOA

Method 8021B: The following sample was activated after the holding time had expired: TRIP BLANK (3/31/17) (400-136048-1). The sample was inadvertently missed at login.

No additional analytical or quality issues were noted, other than those described above or 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.

Detection Summary

Client: Stantec Consulting Services Inc
Project/Site: El Paso CGP Company, LLC-Lat L O-21 Soil

TestAmerica Job ID: 400-136048-1

Client Sample ID: MW-3R (34-35)

Lab Sample ID: 400-136048-2

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
C10-C28	9.3		5.0	mg/Kg	1	☼	8015B	Total/NA

Client Sample ID: MW-2R (33-34)

Lab Sample ID: 400-136048-3

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
C10-C28	6.3		5.2	mg/Kg	1	☼	8015B	Total/NA

Client Sample ID: MW-4 (34-35)

Lab Sample ID: 400-136048-4

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
C10-C28	6.3		5.1	mg/Kg	1	☼	8015B	Total/NA

Client Sample ID: MW-5 (30-31)

Lab Sample ID: 400-136048-5

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
C6-C10	210		6.2	mg/Kg	50	☼	8015B	Total/NA
Ethylbenzene	0.50		0.062	mg/Kg	50	☼	8021B	Total/NA
Toluene	1.2		0.31	mg/Kg	50	☼	8021B	Total/NA
Xylenes, Total	2.4		0.31	mg/Kg	50	☼	8021B	Total/NA
C10-C28 - RE	100		6.3	mg/Kg	1	☼	8015B	Total/NA
C28-C35 - RE	8.5		6.3	mg/Kg	1	☼	8015B	Total/NA
Chloride	88		25	mg/Kg	1	☼	300.0	Soluble

This Detection Summary does not include radiochemical test results.

TestAmerica Pensacola

Sample Summary

Client: Stantec Consulting Services Inc
Project/Site: El Paso CGP Company, LLC-Lat L O-21 Soil

TestAmerica Job ID: 400-136048-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-136048-2	MW-3R (34-35)	Solid	03/31/17 08:30	04/04/17 16:21
400-136048-3	MW-2R (33-34)	Solid	03/31/17 11:55	04/04/17 16:21
400-136048-4	MW-4 (34-35)	Solid	04/01/17 08:20	04/04/17 16:21
400-136048-5	MW-5 (30-31)	Solid	04/01/17 14:20	04/04/17 16:21

Client Sample Results

Client: Stantec Consulting Services Inc
Project/Site: El Paso CGP Company, LLC-Lat L O-21 Soil

TestAmerica Job ID: 400-136048-1

Client Sample ID: MW-3R (34-35)

Date Collected: 03/31/17 08:30

Date Received: 04/04/17 16:21

Lab Sample ID: 400-136048-2

Matrix: Solid

Percent Solids: 98.2

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C10	<0.094		0.094	mg/Kg	☼	04/11/17 10:30	04/11/17 13:35	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid)	104		65 - 125			04/11/17 10:30	04/11/17 13:35	1

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00094		0.00094	mg/Kg	☼	04/11/17 10:30	04/11/17 13:35	1
Ethylbenzene	<0.00094		0.00094	mg/Kg	☼	04/11/17 10:30	04/11/17 13:35	1
Toluene	<0.0047		0.0047	mg/Kg	☼	04/11/17 10:30	04/11/17 13:35	1
Xylenes, Total	<0.0047		0.0047	mg/Kg	☼	04/11/17 10:30	04/11/17 13:35	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (pid)	100		40 - 150			04/11/17 10:30	04/11/17 13:35	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
C10-C28	9.3		5.0	mg/Kg	☼	04/10/17 16:30	04/12/17 04:28	1
C28-C35	<5.0		5.0	mg/Kg	☼	04/10/17 16:30	04/12/17 04:28	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
o-Terphenyl	74		27 - 151			04/10/17 16:30	04/12/17 04:28	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<20		20	mg/Kg	☼		04/12/17 22:34	1

TestAmerica Pensacola

Client Sample Results

Client: Stantec Consulting Services Inc
Project/Site: El Paso CGP Company, LLC-Lat L O-21 Soil

TestAmerica Job ID: 400-136048-1

Client Sample ID: MW-2R (33-34)

Date Collected: 03/31/17 11:55

Date Received: 04/04/17 16:21

Lab Sample ID: 400-136048-3

Matrix: Solid

Percent Solids: 95.8

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C10	<0.095		0.095	mg/Kg	☼	04/11/17 10:30	04/11/17 14:10	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid)	105		65 - 125			04/11/17 10:30	04/11/17 14:10	1

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00095		0.00095	mg/Kg	☼	04/11/17 10:30	04/11/17 14:10	1
Ethylbenzene	<0.00095		0.00095	mg/Kg	☼	04/11/17 10:30	04/11/17 14:10	1
Toluene	<0.0048		0.0048	mg/Kg	☼	04/11/17 10:30	04/11/17 14:10	1
Xylenes, Total	<0.0048		0.0048	mg/Kg	☼	04/11/17 10:30	04/11/17 14:10	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (pid)	101		40 - 150			04/11/17 10:30	04/11/17 14:10	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
C10-C28	6.3		5.2	mg/Kg	☼	04/10/17 16:30	04/12/17 04:39	1
C28-C35	<5.2		5.2	mg/Kg	☼	04/10/17 16:30	04/12/17 04:39	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
o-Terphenyl	60		27 - 151			04/10/17 16:30	04/12/17 04:39	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<20		20	mg/Kg	☼		04/13/17 00:28	1

TestAmerica Pensacola

Client Sample Results

Client: Stantec Consulting Services Inc
Project/Site: El Paso CGP Company, LLC-Lat L O-21 Soil

TestAmerica Job ID: 400-136048-1

Client Sample ID: MW-4 (34-35)

Date Collected: 04/01/17 08:20

Date Received: 04/04/17 16:21

Lab Sample ID: 400-136048-4

Matrix: Solid

Percent Solids: 96.8

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C10	<0.095		0.095	mg/Kg	☼	04/11/17 10:30	04/11/17 14:44	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid)	104		65 - 125			04/11/17 10:30	04/11/17 14:44	1

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00095		0.00095	mg/Kg	☼	04/11/17 10:30	04/11/17 14:44	1
Ethylbenzene	<0.00095		0.00095	mg/Kg	☼	04/11/17 10:30	04/11/17 14:44	1
Toluene	<0.0048		0.0048	mg/Kg	☼	04/11/17 10:30	04/11/17 14:44	1
Xylenes, Total	<0.0048		0.0048	mg/Kg	☼	04/11/17 10:30	04/11/17 14:44	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (pid)	101		40 - 150			04/11/17 10:30	04/11/17 14:44	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
C10-C28	6.3		5.1	mg/Kg	☼	04/10/17 16:30	04/12/17 05:02	1
C28-C35	<5.1		5.1	mg/Kg	☼	04/10/17 16:30	04/12/17 05:02	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
o-Terphenyl	57		27 - 151			04/10/17 16:30	04/12/17 05:02	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<21		21	mg/Kg	☼		04/13/17 00:50	1

Client Sample Results

Client: Stantec Consulting Services Inc
Project/Site: El Paso CGP Company, LLC-Lat L O-21 Soil

TestAmerica Job ID: 400-136048-1

Client Sample ID: MW-5 (30-31)

Date Collected: 04/01/17 14:20

Date Received: 04/04/17 16:21

Lab Sample ID: 400-136048-5

Matrix: Solid

Percent Solids: 78.8

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C10	210		6.2	mg/Kg	☼	04/12/17 12:00	04/13/17 15:32	50
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid)	90		65 - 125			04/12/17 12:00	04/13/17 15:32	50

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.062		0.062	mg/Kg	☼	04/12/17 12:00	04/13/17 15:00	50
Ethylbenzene	0.50		0.062	mg/Kg	☼	04/12/17 12:00	04/13/17 15:00	50
Toluene	1.2		0.31	mg/Kg	☼	04/12/17 12:00	04/13/17 15:00	50
Xylenes, Total	2.4		0.31	mg/Kg	☼	04/12/17 12:00	04/13/17 15:00	50
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (pid)	96		40 - 150			04/12/17 12:00	04/13/17 15:00	50

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
C10-C28	100		6.3	mg/Kg	☼	04/12/17 17:30	04/14/17 14:38	1
C28-C35	8.5		6.3	mg/Kg	☼	04/12/17 17:30	04/14/17 14:38	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
o-Terphenyl	110		27 - 151			04/12/17 17:30	04/14/17 14:38	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	88		25	mg/Kg	☼		04/13/17 01:13	1

TestAmerica Pensacola

QC Association Summary

Client: Stantec Consulting Services Inc
Project/Site: El Paso CGP Company, LLC-Lat L O-21 Soil

TestAmerica Job ID: 400-136048-1

GC VOA

Analysis Batch: 349247

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-136048-2	MW-3R (34-35)	Total/NA	Solid	8021B	349428
400-136048-3	MW-2R (33-34)	Total/NA	Solid	8021B	349428
400-136048-4	MW-4 (34-35)	Total/NA	Solid	8021B	349428
MB 400-349428/3-A	Method Blank	Total/NA	Solid	8021B	349428
LCS 400-349428/1-A	Lab Control Sample	Total/NA	Solid	8021B	349428
400-136048-2 MS	MW-3R (34-35)	Total/NA	Solid	8021B	349428
400-136048-2 MSD	MW-3R (34-35)	Total/NA	Solid	8021B	349428

Analysis Batch: 349248

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-136048-2	MW-3R (34-35)	Total/NA	Solid	8015B	349428
400-136048-3	MW-2R (33-34)	Total/NA	Solid	8015B	349428
400-136048-4	MW-4 (34-35)	Total/NA	Solid	8015B	349428
MB 400-349428/3-A	Method Blank	Total/NA	Solid	8015B	349428
LCS 400-349428/2-A	Lab Control Sample	Total/NA	Solid	8015B	349428
400-136048-2 MS	MW-3R (34-35)	Total/NA	Solid	8015B	349428
400-136048-2 MSD	MW-3R (34-35)	Total/NA	Solid	8015B	349428

Prep Batch: 349428

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-136048-2	MW-3R (34-35)	Total/NA	Solid	5035	
400-136048-3	MW-2R (33-34)	Total/NA	Solid	5035	
400-136048-4	MW-4 (34-35)	Total/NA	Solid	5035	
MB 400-349428/3-A	Method Blank	Total/NA	Solid	5035	
LCS 400-349428/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCS 400-349428/2-A	Lab Control Sample	Total/NA	Solid	5035	
400-136048-2 MS	MW-3R (34-35)	Total/NA	Solid	5035	
400-136048-2 MSD	MW-3R (34-35)	Total/NA	Solid	5035	

Prep Batch: 349473

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-136048-5	MW-5 (30-31)	Total/NA	Solid	5035	
MB 400-349473/1-A	Method Blank	Total/NA	Solid	5035	
LCS 400-349473/2-A	Lab Control Sample	Total/NA	Solid	5035	
LCS 400-349473/3-A	Lab Control Sample	Total/NA	Solid	5035	
400-136430-A-3-C MS	Matrix Spike	Total/NA	Solid	5035	
400-136430-A-3-D MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 349516

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-136048-5	MW-5 (30-31)	Total/NA	Solid	8015B	349473
MB 400-349473/1-A	Method Blank	Total/NA	Solid	8015B	349473
LCS 400-349473/2-A	Lab Control Sample	Total/NA	Solid	8015B	349473
400-136430-A-3-C MS	Matrix Spike	Total/NA	Solid	8015B	349473
400-136430-A-3-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B	349473

Analysis Batch: 349616

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-136048-5	MW-5 (30-31)	Total/NA	Solid	8021B	349473
MB 400-349473/1-A	Method Blank	Total/NA	Solid	8021B	349473
LCS 400-349473/3-A	Lab Control Sample	Total/NA	Solid	8021B	349473

TestAmerica Pensacola

QC Association Summary

Client: Stantec Consulting Services Inc
Project/Site: El Paso CGP Company, LLC-Lat L O-21 Soil

TestAmerica Job ID: 400-136048-1

GC Semi VOA

Prep Batch: 349125

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-136048-2	MW-3R (34-35)	Total/NA	Solid	3546	
400-136048-3	MW-2R (33-34)	Total/NA	Solid	3546	
400-136048-4	MW-4 (34-35)	Total/NA	Solid	3546	
MB 400-349125/1-A	Method Blank	Total/NA	Solid	3546	
LCS 400-349125/2-A	Lab Control Sample	Total/NA	Solid	3546	
400-136282-B-1-B MS	Matrix Spike	Total/NA	Solid	3546	
400-136282-B-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	3546	

Analysis Batch: 349334

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-136048-2	MW-3R (34-35)	Total/NA	Solid	8015B	349125
400-136048-3	MW-2R (33-34)	Total/NA	Solid	8015B	349125
400-136048-4	MW-4 (34-35)	Total/NA	Solid	8015B	349125
MB 400-349125/1-A	Method Blank	Total/NA	Solid	8015B	349125
LCS 400-349125/2-A	Lab Control Sample	Total/NA	Solid	8015B	349125
400-136282-B-1-B MS	Matrix Spike	Total/NA	Solid	8015B	349125
400-136282-B-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B	349125

Prep Batch: 349482

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-136048-5 - RE	MW-5 (30-31)	Total/NA	Solid	3546	
MB 400-349482/1-A	Method Blank	Total/NA	Solid	3546	
LCS 400-349482/2-A	Lab Control Sample	Total/NA	Solid	3546	
400-136334-A-1-B MS	Matrix Spike	Total/NA	Solid	3546	
400-136334-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	3546	

Analysis Batch: 349725

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-136048-5 - RE	MW-5 (30-31)	Total/NA	Solid	8015B	349482
MB 400-349482/1-A	Method Blank	Total/NA	Solid	8015B	349482
LCS 400-349482/2-A	Lab Control Sample	Total/NA	Solid	8015B	349482
400-136334-A-1-B MS	Matrix Spike	Total/NA	Solid	8015B	349482
400-136334-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B	349482

HPLC/IC

Leach Batch: 349384

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-136048-2	MW-3R (34-35)	Soluble	Solid	DI Leach	
400-136048-3	MW-2R (33-34)	Soluble	Solid	DI Leach	
400-136048-4	MW-4 (34-35)	Soluble	Solid	DI Leach	
400-136048-5	MW-5 (30-31)	Soluble	Solid	DI Leach	
MB 400-349384/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 400-349384/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 400-349384/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
400-136048-2 MS	MW-3R (34-35)	Soluble	Solid	DI Leach	
400-136048-2 MSD	MW-3R (34-35)	Soluble	Solid	DI Leach	

TestAmerica Pensacola

QC Association Summary

Client: Stantec Consulting Services Inc
Project/Site: El Paso CGP Company, LLC-Lat L O-21 Soil

TestAmerica Job ID: 400-136048-1

HPLC/IC (Continued)

Analysis Batch: 349551

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-136048-2	MW-3R (34-35)	Soluble	Solid	300.0	349384
400-136048-3	MW-2R (33-34)	Soluble	Solid	300.0	349384
400-136048-4	MW-4 (34-35)	Soluble	Solid	300.0	349384
400-136048-5	MW-5 (30-31)	Soluble	Solid	300.0	349384
MB 400-349384/1-A	Method Blank	Soluble	Solid	300.0	349384
LCS 400-349384/2-A	Lab Control Sample	Soluble	Solid	300.0	349384
LCSD 400-349384/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	349384
400-136048-2 MS	MW-3R (34-35)	Soluble	Solid	300.0	349384
400-136048-2 MSD	MW-3R (34-35)	Soluble	Solid	300.0	349384

General Chemistry

Analysis Batch: 348308

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-136048-2	MW-3R (34-35)	Total/NA	Solid	Moisture	
400-136048-3	MW-2R (33-34)	Total/NA	Solid	Moisture	
400-136048-4	MW-4 (34-35)	Total/NA	Solid	Moisture	
400-136048-5	MW-5 (30-31)	Total/NA	Solid	Moisture	
400-135989-A-6 DU	Duplicate	Total/NA	Solid	Moisture	

QC Sample Results

Client: Stantec Consulting Services Inc
Project/Site: El Paso CGP Company, LLC-Lat L O-21 Soil

TestAmerica Job ID: 400-136048-1

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

Lab Sample ID: MB 400-349428/3-A

Matrix: Solid

Analysis Batch: 349248

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 349428

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C10	<0.10		0.10	mg/Kg		04/11/17 10:30	04/11/17 12:25	1
Surrogate	%Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid)	104		65 - 125			04/11/17 10:30	04/11/17 12:25	1

Lab Sample ID: LCS 400-349428/2-A

Matrix: Solid

Analysis Batch: 349248

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 349428

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits	%Rec.
C6-C10	1.00	1.01		mg/Kg		101	62 - 141	
Surrogate	%Recovery	LCS Qualifier	Limits					
a,a,a-Trifluorotoluene (fid)	108		65 - 125					

Lab Sample ID: 400-136048-2 MS

Matrix: Solid

Analysis Batch: 349248

Client Sample ID: MW-3R (34-35)

Prep Type: Total/NA

Prep Batch: 349428

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits	%Rec.
C6-C10	<0.094		0.955	1.03		mg/Kg	☼	108	10 - 150	
Surrogate	%Recovery	MS Qualifier	Limits							
a,a,a-Trifluorotoluene (fid)	107		65 - 125							

Lab Sample ID: 400-136048-2 MSD

Matrix: Solid

Analysis Batch: 349248

Client Sample ID: MW-3R (34-35)

Prep Type: Total/NA

Prep Batch: 349428

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
C6-C10	<0.094		0.950	0.906		mg/Kg	☼	95	10 - 150	13	32
Surrogate	%Recovery	MSD Qualifier	Limits								
a,a,a-Trifluorotoluene (fid)	107		65 - 125								

Lab Sample ID: MB 400-349473/1-A

Matrix: Solid

Analysis Batch: 349516

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 349473

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C10	<5.0		5.0	mg/Kg		04/12/17 12:00	04/13/17 15:04	50
Surrogate	%Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid)	103		65 - 125			04/12/17 12:00	04/13/17 15:04	50

TestAmerica Pensacola

QC Sample Results

Client: Stantec Consulting Services Inc
Project/Site: El Paso CGP Company, LLC-Lat L O-21 Soil

TestAmerica Job ID: 400-136048-1

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

Lab Sample ID: LCS 400-349473/2-A

Matrix: Solid

Analysis Batch: 349516

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 349473

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
C6-C10	50.0	52.9		mg/Kg		106	62 - 141
Surrogate	%Recovery	LCS Qualifier	Limits				
a,a,a-Trifluorotoluene (fid)	97		65 - 125				

Lab Sample ID: 400-136430-A-3-C MS

Matrix: Solid

Analysis Batch: 349516

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 349473

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
C6-C10	20		50.5	67.9		mg/Kg	☼	95	10 - 150
Surrogate	%Recovery	MS Qualifier	Limits						
a,a,a-Trifluorotoluene (fid)	95		65 - 125						

Lab Sample ID: 400-136430-A-3-D MSD

Matrix: Solid

Analysis Batch: 349516

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 349473

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
C6-C10	20		50.5	68.1		mg/Kg	☼	96	10 - 150	0	32
Surrogate	%Recovery	MSD Qualifier	Limits								
a,a,a-Trifluorotoluene (fid)	94		65 - 125								

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 400-349428/3-A

Matrix: Solid

Analysis Batch: 349247

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 349428

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0010		0.0010	mg/Kg		04/11/17 10:30	04/11/17 12:25	1
Ethylbenzene	<0.0010		0.0010	mg/Kg		04/11/17 10:30	04/11/17 12:25	1
Toluene	<0.0050		0.0050	mg/Kg		04/11/17 10:30	04/11/17 12:25	1
Xylenes, Total	<0.0050		0.0050	mg/Kg		04/11/17 10:30	04/11/17 12:25	1
Surrogate	%Recovery	MB Qualifier	Limits					
a,a,a-Trifluorotoluene (pid)	102		40 - 150					
				Prepared	Analyzed	Dil Fac		
				04/11/17 10:30	04/11/17 12:25	1		

Lab Sample ID: LCS 400-349428/1-A

Matrix: Solid

Analysis Batch: 349247

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 349428

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.0500	0.0479		mg/Kg		96	74 - 127
Ethylbenzene	0.0500	0.0480		mg/Kg		96	79 - 131

TestAmerica Pensacola

QC Sample Results

Client: Stantec Consulting Services Inc
Project/Site: El Paso CGP Company, LLC-Lat L O-21 Soil

TestAmerica Job ID: 400-136048-1

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: LCS 400-349428/1-A

Matrix: Solid

Analysis Batch: 349247

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 349428

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Toluene	0.0500	0.0485		mg/Kg		97	76 - 127
Xylenes, Total	0.150	0.144		mg/Kg		96	80 - 129
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
a,a,a-Trifluorotoluene (pid)	104		40 - 150				

Lab Sample ID: 400-136048-2 MS

Matrix: Solid

Analysis Batch: 349247

Client Sample ID: MW-3R (34-35)

Prep Type: Total/NA

Prep Batch: 349428

Analysis Date: 040217				Rep Date: 040421						
Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits	
Benzene	<0.00094		0.0478	0.0511		mg/Kg	☼	107	10 - 150	
Ethylbenzene	<0.00094		0.0478	0.0528		mg/Kg	☼	111	10 - 150	
Toluene	<0.0047		0.0478	0.0519		mg/Kg	☼	109	10 - 150	
Xylenes, Total	<0.0047		0.143	0.159		mg/Kg	☼	111	50 - 150	
Surrogate	MS %Recovery	MS Qualifier	Limits							
a,a,a-Trifluorotoluene (pid)	103		40 - 150							

Lab Sample ID: 400-136048-2 MSD

Matrix: Solid

Analysis Batch: 349247

Client Sample ID: MW-3R (34-35)

Prep Type: Total/NA

Prep Batch: 349428

Top Data: 0.0120											
Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	RPD	
	Result	Qualifier	Added	Result	Qualifier				Limits	RPD	Limit
Benzene	<0.00094		0.0475	0.0510		mg/Kg	☼	107	10 - 150	0	34
Ethylbenzene	<0.00094		0.0475	0.0519		mg/Kg	☼	109	10 - 150	2	66
Toluene	<0.0047		0.0475	0.0513		mg/Kg	☼	108	10 - 150	1	44
Xylenes, Total	<0.0047		0.142	0.156		mg/Kg	☼	109	50 - 150	2	46
Surrogate	MSD	MSD									
	%Recovery	Qualifier	Limits								
a,a,a-Trifluorotoluene (pid)	102		40 - 150								

Lab Sample ID: MB 400-349473/1-A

Matrix: Solid

Analysis Batch: 349616

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 349473

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.050		0.050	mg/Kg		04/12/17 12:00	04/13/17 14:01	50
Ethylbenzene	<0.050		0.050	mg/Kg		04/12/17 12:00	04/13/17 14:01	50
Toluene	<0.25		0.25	mg/Kg		04/12/17 12:00	04/13/17 14:01	50
Xylenes, Total	<0.25		0.25	mg/Kg		04/12/17 12:00	04/13/17 14:01	50
Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac		
a,a,a-Trifluorotoluene (pid)	91		40 - 150	04/12/17 12:00	04/13/17 14:01	50		

TestAmerica Pensacola

QC Sample Results

Client: Stantec Consulting Services Inc
Project/Site: El Paso CGP Company, LLC-Lat L O-21 Soil

TestAmerica Job ID: 400-136048-1

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: LCS 400-349473/3-A

Matrix: Solid

Analysis Batch: 349616

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 349473

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	2.50	2.42		mg/Kg		97	74 - 127
Ethylbenzene	2.50	2.48		mg/Kg		99	79 - 131
Toluene	2.50	2.46		mg/Kg		99	76 - 127
Xylenes, Total	7.50	7.49		mg/Kg		100	80 - 129

Surrogate	LCS %Recovery	LCS Qualifier	Limits
a,a,a-Trifluorotoluene (pid)	86		40 - 150

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

Lab Sample ID: MB 400-349125/1-A

Matrix: Solid

Analysis Batch: 349334

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 349125

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
C10-C28	<5.0		5.0	mg/Kg		04/10/17 16:30	04/12/17 03:01	1
C28-C35	<5.0		5.0	mg/Kg		04/10/17 16:30	04/12/17 03:01	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	79		27 - 151	04/10/17 16:30	04/12/17 03:01	1

Lab Sample ID: LCS 400-349125/2-A

Matrix: Solid

Analysis Batch: 349334

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 349125

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
C10-C28	324	266		mg/Kg		82	63 - 153

Surrogate	LCS %Recovery	LCS Qualifier	Limits
o-Terphenyl	83		27 - 151

Lab Sample ID: 400-136282-B-1-B MS

Matrix: Solid

Analysis Batch: 349334

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 349125

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
C10-C28	16		349	296		mg/Kg	☼	80	62 - 204

Surrogate	MS %Recovery	MS Qualifier	Limits
o-Terphenyl	64		27 - 151

Lab Sample ID: 400-136282-B-1-C MSD

Matrix: Solid

Analysis Batch: 349334

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 349125

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
C10-C28	16		347	240		mg/Kg	☼	65	62 - 204	21	30

TestAmerica Pensacola

QC Sample Results

Client: Stantec Consulting Services Inc
Project/Site: El Paso CGP Company, LLC-Lat L O-21 Soil

TestAmerica Job ID: 400-136048-1

Surrogate	MSD %Recovery	MSD Qualifier	Limits
o-Terphenyl	83		27 - 151

Lab Sample ID: MB 400-349482/1-A

Matrix: Solid

Analysis Batch: 349725

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 349482

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
C10-C28	<5.0		5.0	mg/Kg		04/12/17 17:30	04/14/17 10:35	1
C28-C35	<5.0		5.0	mg/Kg		04/12/17 17:30	04/14/17 10:35	1

Surrogate	MB %Recovery	MB Qualifier	Limits
o-Terphenyl	107		27 - 151

Prepared 04/12/17 17:30 Analyzed 04/14/17 10:35 Dil Fac 1

Lab Sample ID: LCS 400-349482/2-A

Matrix: Solid

Analysis Batch: 349725

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 349482

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
C10-C28	338	336		mg/Kg		99	63 - 153

Surrogate	LCS %Recovery	LCS Qualifier	Limits
o-Terphenyl	130		27 - 151

Lab Sample ID: 400-136334-A-1-B MS

Matrix: Solid

Analysis Batch: 349725

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 349482

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
C10-C28	6.0		375	305		mg/Kg	☼	80	62 - 204

Surrogate	MS %Recovery	MS Qualifier	Limits
o-Terphenyl	96		27 - 151

Lab Sample ID: 400-136334-A-1-C MSD

Matrix: Solid

Analysis Batch: 349725

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 349482

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
C10-C28	6.0		370	316		mg/Kg	☼	84	62 - 204	3	30

Surrogate	MSD %Recovery	MSD Qualifier	Limits
o-Terphenyl	104		27 - 151

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 400-349384/1-A

Matrix: Solid

Analysis Batch: 349551

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<20		20	mg/Kg			04/12/17 21:25	1

TestAmerica Pensacola

QC Sample Results

Client: Stantec Consulting Services Inc
Project/Site: El Paso CGP Company, LLC-Lat L O-21 Soil

TestAmerica Job ID: 400-136048-1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 400-349384/2-A

Matrix: Solid

Analysis Batch: 349551

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	100	95.5		mg/Kg		95	80 - 120

Lab Sample ID: LCSD 400-349384/3-A

Matrix: Solid

Analysis Batch: 349551

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	100	97.3		mg/Kg		97	80 - 120	2	15

Lab Sample ID: 400-136048-2 MS

Matrix: Solid

Analysis Batch: 349551

Client Sample ID: MW-3R (34-35)

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	<20		102	102		mg/Kg	☼	98	80 - 120

Lab Sample ID: 400-136048-2 MSD

Matrix: Solid

Analysis Batch: 349551

Client Sample ID: MW-3R (34-35)

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	<20		99.0	101		mg/Kg	☼	100	80 - 120	1	15

Lab Chronicle

Client: Stantec Consulting Services Inc
Project/Site: El Paso CGP Company, LLC-Lat L O-21 Soil

TestAmerica Job ID: 400-136048-1

Client Sample ID: MW-3R (34-35)

Date Collected: 03/31/17 08:30

Date Received: 04/04/17 16:21

Lab Sample ID: 400-136048-2

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			348308	04/04/17 12:43	DAS	TAL PEN
Instrument ID: NOEQUIP										

Client Sample ID: MW-3R (34-35)

Date Collected: 03/31/17 08:30

Date Received: 04/04/17 16:21

Lab Sample ID: 400-136048-2

Matrix: Solid

Percent Solids: 98.2

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.39 g	5.0 g	349428	04/11/17 10:30	GRK	TAL PEN
Total/NA	Analysis	8015B		1	5 mL	5 mL	349248	04/11/17 13:35	GRK	TAL PEN
Instrument ID: CH_JOAN										
Total/NA	Prep	5035			5.39 g	5.0 g	349428	04/11/17 10:30	GRK	TAL PEN
Total/NA	Analysis	8021B		1	5 mL	5 mL	349247	04/11/17 13:35	GRK	TAL PEN
Instrument ID: CH_JOAN										
Total/NA	Prep	3546			15.16 g	1 mL	349125	04/10/17 16:30	KLR	TAL PEN
Total/NA	Analysis	8015B		1			349334	04/12/17 04:28	TJB	TAL PEN
Instrument ID: Eva										
Soluble	Leach	DI Leach			2.54 g	50 mL	349384	04/12/17 09:30	KH1	TAL PEN
Soluble	Analysis	300.0		1			349551	04/12/17 22:34	TAJ	TAL PEN
Instrument ID: IC2										

Client Sample ID: MW-2R (33-34)

Date Collected: 03/31/17 11:55

Date Received: 04/04/17 16:21

Lab Sample ID: 400-136048-3

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			348308	04/04/17 12:43	DAS	TAL PEN
Instrument ID: NOEQUIP										

Client Sample ID: MW-2R (33-34)

Date Collected: 03/31/17 11:55

Date Received: 04/04/17 16:21

Lab Sample ID: 400-136048-3

Matrix: Solid

Percent Solids: 95.8

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.47 g	5.0 g	349428	04/11/17 10:30	GRK	TAL PEN
Total/NA	Analysis	8015B		1	5 mL	5 mL	349248	04/11/17 14:10	GRK	TAL PEN
Instrument ID: CH_JOAN										
Total/NA	Prep	5035			5.47 g	5.0 g	349428	04/11/17 10:30	GRK	TAL PEN
Total/NA	Analysis	8021B		1	5 mL	5 mL	349247	04/11/17 14:10	GRK	TAL PEN
Instrument ID: CH_JOAN										
Total/NA	Prep	3546			15.12 g	1 mL	349125	04/10/17 16:30	KLR	TAL PEN
Total/NA	Analysis	8015B		1			349334	04/12/17 04:39	TJB	TAL PEN
Instrument ID: Eva										

TestAmerica Pensacola

Lab Chronicle

Client: Stantec Consulting Services Inc
Project/Site: El Paso CGP Company, LLC-Lat L O-21 Soil

TestAmerica Job ID: 400-136048-1

Client Sample ID: MW-2R (33-34)

Date Collected: 03/31/17 11:55

Date Received: 04/04/17 16:21

Lab Sample ID: 400-136048-3

Matrix: Solid

Percent Solids: 95.8

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			2.55 g	50 mL	349384	04/12/17 09:30	KH1	TAL PEN
Soluble	Analysis	300.0		1			349551	04/13/17 00:28	TAJ	TAL PEN
Instrument ID: IC2										

Client Sample ID: MW-4 (34-35)

Date Collected: 04/01/17 08:20

Date Received: 04/04/17 16:21

Lab Sample ID: 400-136048-4

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			348308	04/04/17 12:43	DAS	TAL PEN
Instrument ID: NOEQUIP										

Client Sample ID: MW-4 (34-35)

Date Collected: 04/01/17 08:20

Date Received: 04/04/17 16:21

Lab Sample ID: 400-136048-4

Matrix: Solid

Percent Solids: 96.8

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.42 g	5.0 g	349428	04/11/17 10:30	GRK	TAL PEN
Total/NA	Analysis	8015B		1	5 mL	5 mL	349248	04/11/17 14:44	GRK	TAL PEN
Instrument ID: CH_JOAN										
Total/NA	Prep	5035			5.42 g	5.0 g	349428	04/11/17 10:30	GRK	TAL PEN
Total/NA	Analysis	8021B		1	5 mL	5 mL	349247	04/11/17 14:44	GRK	TAL PEN
Instrument ID: CH_JOAN										
Total/NA	Prep	3546			15.11 g	1 mL	349125	04/10/17 16:30	KLR	TAL PEN
Total/NA	Analysis	8015B		1			349334	04/12/17 05:02	TJB	TAL PEN
Instrument ID: Eva										
Soluble	Leach	DI Leach			2.47 g	50 mL	349384	04/12/17 09:30	KH1	TAL PEN
Soluble	Analysis	300.0		1			349551	04/13/17 00:50	TAJ	TAL PEN
Instrument ID: IC2										

Client Sample ID: MW-5 (30-31)

Date Collected: 04/01/17 14:20

Date Received: 04/04/17 16:21

Lab Sample ID: 400-136048-5

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			348308	04/04/17 12:43	DAS	TAL PEN
Instrument ID: NOEQUIP										

TestAmerica Pensacola

Lab Chronicle

Client: Stantec Consulting Services Inc
Project/Site: El Paso CGP Company, LLC-Lat L O-21 Soil

TestAmerica Job ID: 400-136048-1

Client Sample ID: MW-5 (30-31)

Lab Sample ID: 400-136048-5

Date Collected: 04/01/17 14:20

Matrix: Solid

Date Received: 04/04/17 16:21

Percent Solids: 78.8

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.13 g	5.00 g	349473	04/12/17 12:00	SAB	TAL PEN
Total/NA	Analysis	8015B		50	5 mL	5 mL	349516	04/13/17 15:32	GRK	TAL PEN
		Instrument ID: CH_RITA								
Total/NA	Prep	5035			5.13 g	5.00 g	349473	04/12/17 12:00	SAB	TAL PEN
Total/NA	Analysis	8021B		50	5 mL	5 mL	349616	04/13/17 15:00	GRK	TAL PEN
		Instrument ID: ETHYL								
Total/NA	Prep	3546	RE		15.15 g	1 mL	349482	04/12/17 17:30	KLR	TAL PEN
Total/NA	Analysis	8015B	RE	1			349725	04/14/17 14:38	TJB	TAL PEN
		Instrument ID: WALLE								
Soluble	Leach	DI Leach			2.51 g	50 mL	349384	04/12/17 09:30	KH1	TAL PEN
Soluble	Analysis	300.0		1			349551	04/13/17 01:13	TAJ	TAL PEN
		Instrument ID: IC2								

Laboratory References:

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

Accreditation/Certification Summary

Client: Stantec Consulting Services Inc
Project/Site: El Paso CGP Company, LLC-Lat L O-21 Soil

TestAmerica Job ID: 400-136048-1

Laboratory: TestAmerica Pensacola

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

Authority	Program	EPA Region	Identification Number	Expiration Date
Alabama	State Program	4	40150	06-30-17
Arizona	State Program	9	AZ0710	01-11-18
Arkansas DEQ	State Program	6	88-0689	09-01-17
California	ELAP	9	2510	03-31-18
Florida	NELAP	4	E81010	06-30-17
Georgia	State Program	4	N/A	06-30-17
Illinois	NELAP	5	200041	10-09-17
Iowa	State Program	7	367	08-01-18
Kansas	NELAP	7	E-10253	10-31-17
Kentucky (UST)	State Program	4	53	06-30-17
Kentucky (WW)	State Program	4	98030	12-31-17
L-A-B	ISO/IEC 17025		L2471	02-22-20
Louisiana	NELAP	6	30976	06-30-17
Louisiana (DW)	NELAP Secondary AB	6	LA170005	12-31-17
Maryland	State Program	3	233	09-30-17
Massachusetts	State Program	1	M-FL094	06-30-17
Michigan	State Program	5	9912	05-06-17
New Jersey	NELAP	2	FL006	06-30-17
North Carolina (WW/SW)	State Program	4	314	12-31-17
Oklahoma	State Program	6	9810	08-31-17
Pennsylvania	NELAP	3	68-00467	01-31-18
Rhode Island	State Program	1	LAO00307	12-30-17
South Carolina	State Program	4	96026	06-30-17
Tennessee	State Program	4	TN02907	06-30-17
Texas	NELAP	6	T104704286-16-10	09-30-17
USDA	Federal		P330-16-00172	05-24-19
Virginia	NELAP	3	460166	06-14-17
Washington	State Program	10	C915	05-15-17
West Virginia DEP	State Program	3	136	06-30-17

Method Summary

Client: Stantec Consulting Services Inc
Project/Site: El Paso CGP Company, LLC-Lat L O-21 Soil

TestAmerica Job ID: 400-136048-1

Method	Method Description	Protocol	Laboratory
8015B	Gasoline Range Organics - (GC)	SW846	TAL PEN
8021B	Volatile Organic Compounds (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

Protocol References:

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 = TestAmerica Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

TestAmerica Pensacola
3355 McLemore Drive
Pensacola, FL 32514
Phone (850) 474-1001 Fax (850) 478-2871

Chain of Custody Record

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Client Information Client Contact: Steve Varsa Company: Stanlec Consulting Services Inc. Address: 11153 Aurora Avenue City: Des Moines State, Zip: IA, 50322-7904 Phone: 303-291-2239(Tel) Email: steve.varsa@stanlec.com Project Name: Lat 0-21 Soil Site: At 0-21 Lat 0-21 Line Drip		Lab POC: Webb, Carol M EX Mail: carol.webb@testamerica.com Sample: Brad Barton Phone: 314 305 2789		Carrier Tracking No(s): COC No: 400-64034-28438.1 Page: Page 1 of 1 Job #:	
Due Date Requested: Per ARF TAT Requested (days): Per ARF PO #: 303-291-2239(Tel) Purchase Order Requested: 303-291-2239(Tel) Project #: 400-64034-28438.1 SSOW#:		Analysis Requested 8021B - BTEX 8021 8016B - GRO, 8021B 8015B - DRO - DRO C10-C28 / GRO, and 300.0 Chloride  400-136048 COC			
Sample Identification Sample ID: MW-3A (34-35) Sample ID: MW-2R (33-34) Sample ID: MW-4 (34-35) Sample ID: MW-5 (30-31)		Sample Date 3/31/17 3/31/17 4/1/17 4/1/17	Sample Time 0830 1155 0820 1420	Sample Type (C=comp, G=grab) G G G G	Matrix (Water, Soil, Sediment, Other) Water Solid Solid Solid Solid Solid Solid Solid Solid Solid
Possible Hazard Identification ☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B Deliverable Requested: I, II, III, IV, Other (specify) Per ARF		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) ☐ Return To Client ☒ Disposal By Lab Special Instructions/OC Requirements: Per ARF			
Empty Kit Relinquished by: Relinquished by:		Date: Date/Time:			
Relinquished by:		Date/Time:			
Relinquished by:		Date/Time:			
Relinquished by:		Date/Time:			
Custody Seals intact: Custody Seal No.: A Yes Δ No		Cooler Temperature(s) °C and Other Remarks: 3.3°C 587			

Login Sample Receipt Checklist

Client: Stantec Consulting Services Inc

Job Number: 400-136048-1

Login Number: 136048

List Source: TestAmerica Pensacola

List Number: 1

Creator: Franklin, Justin H

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ 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	3.3°C IR-7
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.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Pensacola

3355 McLemore Drive

Pensacola, FL 32514

Tel: (850)474-1001

TestAmerica Job ID: 400-136323-1

Client Project/Site: El Paso CGP Company, LLC-Lat L O-21 Soil

For:

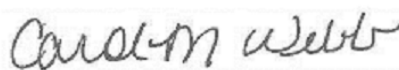
Stantec Consulting Services Inc

1560 Broadway

Suite 1800

Denver, Colorado 80202

Attn: Ms. Sarah Gardner



Authorized for release by:

4/21/2017 1:46:15 PM

Carol Webb, Project Manager II

(850)471-6250

carol.webb@testamericainc.com

LINKS

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www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 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 signature.

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

Table of Contents

Cover Page	1
Table of Contents	2
Definitions	3
Case Narrative	4
Detection Summary	5
Sample Summary	6
Client Sample Results	7
QC Association	10
QC Sample Results	12
Chronicle	16
Certification Summary	18
Method Summary	19
Chain of Custody	20
Receipt Checklists	21



Definitions/Glossary

Client: Stantec Consulting Services Inc
Project/Site: El Paso CGP Company, LLC-Lat L O-21 Soil

TestAmerica Job ID: 400-136323-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
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)

Case Narrative

Client: Stantec Consulting Services Inc
Project/Site: El Paso CGP Company, LLC-Lat L O-21 Soil

TestAmerica Job ID: 400-136323-1

Job ID: 400-136323-1

Laboratory: TestAmerica Pensacola

Narrative

Job Narrative
400-136323-1

Comments

No additional comments.

Receipt

The samples were received on 4/8/2017 8:40 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.4° C.

HPLC/IC

No analytical or quality issues were noted, other than those described 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.

Detection Summary

Client: Stantec Consulting Services Inc
Project/Site: El Paso CGP Company, LLC-Lat L O-21 Soil

TestAmerica Job ID: 400-136323-1

Client Sample ID: MW-6 (34-35)

Lab Sample ID: 400-136323-1

☐ No Detections.

Client Sample ID: SB-1 (30-31)

Lab Sample ID: 400-136323-2

☐ No Detections.

Client Sample ID: SB-1 (34-35)

Lab Sample ID: 400-136323-3

☐ No Detections.

This Detection Summary does not include radiochemical test results.

TestAmerica Pensacola

Sample Summary

Client: Stantec Consulting Services Inc
Project/Site: El Paso CGP Company, LLC-Lat L O-21 Soil

TestAmerica Job ID: 400-136323-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-136323-1	MW-6 (34-35)	Solid	04/05/17 14:25	04/08/17 08:40
400-136323-2	SB-1 (30-31)	Solid	04/06/17 08:05	04/08/17 08:40
400-136323-3	SB-1 (34-35)	Solid	04/06/17 08:10	04/08/17 08:40

Client Sample Results

Client: Stantec Consulting Services Inc
Project/Site: El Paso CGP Company, LLC-Lat L O-21 Soil

TestAmerica Job ID: 400-136323-1

Client Sample ID: MW-6 (34-35)

Date Collected: 04/05/17 14:25

Date Received: 04/08/17 08:40

Lab Sample ID: 400-136323-1

Matrix: Solid

Percent Solids: 97.0

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C10	<0.098		0.098	mg/Kg	☼	04/12/17 10:30	04/12/17 13:28	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid)	102		65 - 125			04/12/17 10:30	04/12/17 13:28	1

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00098		0.00098	mg/Kg	☼	04/12/17 10:30	04/12/17 13:28	1
Ethylbenzene	<0.00098		0.00098	mg/Kg	☼	04/12/17 10:30	04/12/17 13:28	1
Toluene	<0.0049		0.0049	mg/Kg	☼	04/12/17 10:30	04/12/17 13:28	1
Xylenes, Total	<0.0049		0.0049	mg/Kg	☼	04/12/17 10:30	04/12/17 13:28	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (pid)	99		40 - 150			04/12/17 10:30	04/12/17 13:28	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
C10-C28	<5.1		5.1	mg/Kg	☼	04/13/17 15:40	04/14/17 23:21	1
C28-C35	<5.1		5.1	mg/Kg	☼	04/13/17 15:40	04/14/17 23:21	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
o-Terphenyl	84		27 - 151			04/13/17 15:40	04/14/17 23:21	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<20		20	mg/Kg	☼		04/13/17 01:36	1

TestAmerica Pensacola

Client Sample Results

Client: Stantec Consulting Services Inc
Project/Site: El Paso CGP Company, LLC-Lat L O-21 Soil

TestAmerica Job ID: 400-136323-1

Client Sample ID: SB-1 (30-31)

Date Collected: 04/06/17 08:05

Date Received: 04/08/17 08:40

Lab Sample ID: 400-136323-2

Matrix: Solid

Percent Solids: 93.9

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C10	<0.10		0.10	mg/Kg	☼	04/12/17 10:30	04/12/17 14:03	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid)	104		65 - 125			04/12/17 10:30	04/12/17 14:03	1

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0010		0.0010	mg/Kg	☼	04/12/17 10:30	04/12/17 14:03	1
Ethylbenzene	<0.0010		0.0010	mg/Kg	☼	04/12/17 10:30	04/12/17 14:03	1
Toluene	<0.0051		0.0051	mg/Kg	☼	04/12/17 10:30	04/12/17 14:03	1
Xylenes, Total	<0.0051		0.0051	mg/Kg	☼	04/12/17 10:30	04/12/17 14:03	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (pid)	102		40 - 150			04/12/17 10:30	04/12/17 14:03	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
C10-C28	<5.2		5.2	mg/Kg	☼	04/13/17 15:40	04/14/17 23:30	1
C28-C35	<5.2		5.2	mg/Kg	☼	04/13/17 15:40	04/14/17 23:30	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
o-Terphenyl	99		27 - 151			04/13/17 15:40	04/14/17 23:30	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<21		21	mg/Kg	☼		04/13/17 01:59	1

TestAmerica Pensacola

Client Sample Results

Client: Stantec Consulting Services Inc
Project/Site: El Paso CGP Company, LLC-Lat L O-21 Soil

TestAmerica Job ID: 400-136323-1

Client Sample ID: SB-1 (34-35)

Date Collected: 04/06/17 08:10

Date Received: 04/08/17 08:40

Lab Sample ID: 400-136323-3

Matrix: Solid

Percent Solids: 96.6

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C10	<0.094		0.094	mg/Kg	☼	04/12/17 10:30	04/12/17 14:39	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid)	103		65 - 125			04/12/17 10:30	04/12/17 14:39	1

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00094		0.00094	mg/Kg	☼	04/12/17 10:30	04/12/17 14:39	1
Ethylbenzene	<0.00094		0.00094	mg/Kg	☼	04/12/17 10:30	04/12/17 14:39	1
Toluene	<0.0047		0.0047	mg/Kg	☼	04/12/17 10:30	04/12/17 14:39	1
Xylenes, Total	<0.0047		0.0047	mg/Kg	☼	04/12/17 10:30	04/12/17 14:39	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (pid)	99		40 - 150			04/12/17 10:30	04/12/17 14:39	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
C10-C28	<5.1		5.1	mg/Kg	☼	04/13/17 15:40	04/14/17 23:40	1
C28-C35	<5.1		5.1	mg/Kg	☼	04/13/17 15:40	04/14/17 23:40	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
o-Terphenyl	101		27 - 151			04/13/17 15:40	04/14/17 23:40	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<20		20	mg/Kg	☼		04/13/17 02:22	1

TestAmerica Pensacola

QC Association Summary

Client: Stantec Consulting Services Inc
Project/Site: El Paso CGP Company, LLC-Lat L O-21 Soil

TestAmerica Job ID: 400-136323-1

GC VOA

Analysis Batch: 349410

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-136323-1	MW-6 (34-35)	Total/NA	Solid	8021B	349431
400-136323-2	SB-1 (30-31)	Total/NA	Solid	8021B	349431
400-136323-3	SB-1 (34-35)	Total/NA	Solid	8021B	349431
MB 400-349431/3-A	Method Blank	Total/NA	Solid	8021B	349431
LCS 400-349431/1-A	Lab Control Sample	Total/NA	Solid	8021B	349431
400-136323-1 MS	MW-6 (34-35)	Total/NA	Solid	8021B	349431
400-136323-1 MSD	MW-6 (34-35)	Total/NA	Solid	8021B	349431

Analysis Batch: 349411

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-136323-1	MW-6 (34-35)	Total/NA	Solid	8015B	349431
400-136323-2	SB-1 (30-31)	Total/NA	Solid	8015B	349431
400-136323-3	SB-1 (34-35)	Total/NA	Solid	8015B	349431
MB 400-349431/3-A	Method Blank	Total/NA	Solid	8015B	349431
LCS 400-349431/2-A	Lab Control Sample	Total/NA	Solid	8015B	349431

Prep Batch: 349431

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-136323-1	MW-6 (34-35)	Total/NA	Solid	5035	
400-136323-2	SB-1 (30-31)	Total/NA	Solid	5035	
400-136323-3	SB-1 (34-35)	Total/NA	Solid	5035	
MB 400-349431/3-A	Method Blank	Total/NA	Solid	5035	
LCS 400-349431/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCS 400-349431/2-A	Lab Control Sample	Total/NA	Solid	5035	
400-136323-1 MS	MW-6 (34-35)	Total/NA	Solid	5035	
400-136323-1 MSD	MW-6 (34-35)	Total/NA	Solid	5035	

GC Semi VOA

Prep Batch: 349641

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-136323-1	MW-6 (34-35)	Total/NA	Solid	3546	
400-136323-2	SB-1 (30-31)	Total/NA	Solid	3546	
400-136323-3	SB-1 (34-35)	Total/NA	Solid	3546	
MB 400-349641/1-A	Method Blank	Total/NA	Solid	3546	
LCS 400-349641/2-A	Lab Control Sample	Total/NA	Solid	3546	
400-136337-A-1-B MS	Matrix Spike	Total/NA	Solid	3546	
400-136337-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	3546	

Analysis Batch: 349841

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-136323-1	MW-6 (34-35)	Total/NA	Solid	8015B	349641
400-136323-2	SB-1 (30-31)	Total/NA	Solid	8015B	349641
400-136323-3	SB-1 (34-35)	Total/NA	Solid	8015B	349641
MB 400-349641/1-A	Method Blank	Total/NA	Solid	8015B	349641
LCS 400-349641/2-A	Lab Control Sample	Total/NA	Solid	8015B	349641

Analysis Batch: 349922

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-136337-A-1-B MS	Matrix Spike	Total/NA	Solid	8015B	349641

TestAmerica Pensacola

QC Association Summary

Client: Stantec Consulting Services Inc
Project/Site: El Paso CGP Company, LLC-Lat L O-21 Soil

TestAmerica Job ID: 400-136323-1

GC Semi VOA (Continued)

Analysis Batch: 349922 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-136337-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B	349641

HPLC/IC

Leach Batch: 349384

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-136323-1	MW-6 (34-35)	Soluble	Solid	DI Leach	
400-136323-2	SB-1 (30-31)	Soluble	Solid	DI Leach	
400-136323-3	SB-1 (34-35)	Soluble	Solid	DI Leach	
MB 400-349384/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 400-349384/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 400-349384/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
400-136048-A-2-C MS	Matrix Spike	Soluble	Solid	DI Leach	
400-136048-A-2-D MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 349551

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-136323-1	MW-6 (34-35)	Soluble	Solid	300.0	349384
400-136323-2	SB-1 (30-31)	Soluble	Solid	300.0	349384
400-136323-3	SB-1 (34-35)	Soluble	Solid	300.0	349384
MB 400-349384/1-A	Method Blank	Soluble	Solid	300.0	349384
LCS 400-349384/2-A	Lab Control Sample	Soluble	Solid	300.0	349384
LCSD 400-349384/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	349384
400-136048-A-2-C MS	Matrix Spike	Soluble	Solid	300.0	349384
400-136048-A-2-D MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	349384

General Chemistry

Analysis Batch: 349264

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-136323-1	MW-6 (34-35)	Total/NA	Solid	Moisture	
400-136323-2	SB-1 (30-31)	Total/NA	Solid	Moisture	
400-136323-3	SB-1 (34-35)	Total/NA	Solid	Moisture	
400-136281-B-21 MS	Matrix Spike	Total/NA	Solid	Moisture	
400-136281-B-21 MSD	Matrix Spike Duplicate	Total/NA	Solid	Moisture	
400-136345-C-6 DU	Duplicate	Total/NA	Solid	Moisture	

QC Sample Results

Client: Stantec Consulting Services Inc
Project/Site: El Paso CGP Company, LLC-Lat L O-21 Soil

TestAmerica Job ID: 400-136323-1

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

Lab Sample ID: MB 400-349431/3-A

Matrix: Solid

Analysis Batch: 349411

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 349431

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C10	<0.10		0.10	mg/Kg		04/12/17 10:30	04/12/17 12:52	1
Surrogate	%Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid)	103		65 - 125			04/12/17 10:30	04/12/17 12:52	1

Lab Sample ID: LCS 400-349431/2-A

Matrix: Solid

Analysis Batch: 349411

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 349431

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits	
C6-C10	1.00	0.947		mg/Kg		95	62 - 141	
Surrogate	%Recovery	LCS Qualifier	Limits					
a,a,a-Trifluorotoluene (fid)	108		65 - 125					

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 400-349431/3-A

Matrix: Solid

Analysis Batch: 349410

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 349431

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0010		0.0010	mg/Kg		04/12/17 10:30	04/12/17 12:52	1
Ethylbenzene	<0.0010		0.0010	mg/Kg		04/12/17 10:30	04/12/17 12:52	1
Toluene	<0.0050		0.0050	mg/Kg		04/12/17 10:30	04/12/17 12:52	1
Xylenes, Total	<0.0050		0.0050	mg/Kg		04/12/17 10:30	04/12/17 12:52	1
Surrogate	%Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (pid)	102		40 - 150			04/12/17 10:30	04/12/17 12:52	1

Lab Sample ID: LCS 400-349431/1-A

Matrix: Solid

Analysis Batch: 349410

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 349431

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits	
Benzene	0.0500	0.0494		mg/Kg		99	74 - 127	
Ethylbenzene	0.0500	0.0506		mg/Kg		101	79 - 131	
Toluene	0.0500	0.0507		mg/Kg		101	76 - 127	
Xylenes, Total	0.150	0.152		mg/Kg		102	80 - 129	
Surrogate	%Recovery	LCS Qualifier	Limits					
a,a,a-Trifluorotoluene (pid)	104		40 - 150					

TestAmerica Pensacola

QC Sample Results

Client: Stantec Consulting Services Inc
Project/Site: El Paso CGP Company, LLC-Lat L O-21 Soil

TestAmerica Job ID: 400-136323-1

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: 400-136323-1 MS

Matrix: Solid

Analysis Batch: 349410

Client Sample ID: MW-6 (34-35)

Prep Type: Total/NA

Prep Batch: 349431

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Benzene	<0.00098		0.0490	0.0509		mg/Kg	☼	104	10 - 150
Ethylbenzene	<0.00098		0.0490	0.0523		mg/Kg	☼	107	10 - 150
Toluene	<0.0049		0.0490	0.0520		mg/Kg	☼	106	10 - 150
Xylenes, Total	<0.0049		0.147	0.156		mg/Kg	☼	106	50 - 150

Surrogate	MS %Recovery	MS Qualifier	Limits
a,a,a-Trifluorotoluene (pid)	103		40 - 150

Lab Sample ID: 400-136323-1 MSD

Matrix: Solid

Analysis Batch: 349410

Client Sample ID: MW-6 (34-35)

Prep Type: Total/NA

Prep Batch: 349431

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	<0.00098		0.0505	0.0521		mg/Kg	☼	103	10 - 150	2	34
Ethylbenzene	<0.00098		0.0505	0.0537		mg/Kg	☼	106	10 - 150	3	66
Toluene	<0.0049		0.0505	0.0537		mg/Kg	☼	106	10 - 150	3	44
Xylenes, Total	<0.0049		0.152	0.160		mg/Kg	☼	105	50 - 150	3	46

Surrogate	MSD %Recovery	MSD Qualifier	Limits
a,a,a-Trifluorotoluene (pid)	103		40 - 150

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

Lab Sample ID: MB 400-349641/1-A

Matrix: Solid

Analysis Batch: 349841

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 349641

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
C10-C28	<4.9		4.9	mg/Kg		04/13/17 15:40	04/14/17 20:43	1
C28-C35	<4.9		4.9	mg/Kg		04/13/17 15:40	04/14/17 20:43	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	90		27 - 151	04/13/17 15:40	04/14/17 20:43	1

Lab Sample ID: LCS 400-349641/2-A

Matrix: Solid

Analysis Batch: 349841

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 349641

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
C10-C28	337	289		mg/Kg		86	63 - 153

Surrogate	LCS %Recovery	LCS Qualifier	Limits
o-Terphenyl	106		27 - 151

TestAmerica Pensacola

QC Sample Results

Client: Stantec Consulting Services Inc
Project/Site: El Paso CGP Company, LLC-Lat L O-21 Soil

TestAmerica Job ID: 400-136323-1

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

Lab Sample ID: 400-136337-A-1-B MS

Matrix: Solid

Analysis Batch: 349922

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 349641

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
C10-C28	610		394	931		mg/Kg	☼	81	62 - 204
Surrogate	MS %Recovery	MS Qualifier	Limits						
o-Terphenyl	79		27 - 151						

Lab Sample ID: 400-136337-A-1-C MSD

Matrix: Solid

Analysis Batch: 349922

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 349641

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
C10-C28	610		398	927		mg/Kg	☼	79	62 - 204	0	30
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
o-Terphenyl	75		27 - 151								

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 400-349384/1-A

Matrix: Solid

Analysis Batch: 349551

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<20		20	mg/Kg			04/12/17 21:25	1

Lab Sample ID: LCS 400-349384/2-A

Matrix: Solid

Analysis Batch: 349551

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	100	95.5		mg/Kg		95	80 - 120

Lab Sample ID: LCSD 400-349384/3-A

Matrix: Solid

Analysis Batch: 349551

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	100	97.3		mg/Kg		97	80 - 120	2	15

Lab Sample ID: 400-136048-A-2-C MS

Matrix: Solid

Analysis Batch: 349551

Client Sample ID: Matrix Spike

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	<20		102	102		mg/Kg	☼	98	80 - 120

TestAmerica Pensacola

QC Sample Results

Client: Stantec Consulting Services Inc
Project/Site: El Paso CGP Company, LLC-Lat L O-21 Soil

TestAmerica Job ID: 400-136323-1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 400-136048-A-2-D MSD

Matrix: Solid

Analysis Batch: 349551

Client Sample ID: Matrix Spike Duplicate

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	<20		99.0	101		mg/Kg	☼	100	80 - 120	1	15

Lab Chronicle

Client: Stantec Consulting Services Inc
Project/Site: El Paso CGP Company, LLC-Lat L O-21 Soil

TestAmerica Job ID: 400-136323-1

Client Sample ID: MW-6 (34-35)

Date Collected: 04/05/17 14:25

Date Received: 04/08/17 08:40

Lab Sample ID: 400-136323-1

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			349264	04/11/17 14:54	DAS	TAL PEN
Instrument ID: NOEQUIP										

Client Sample ID: MW-6 (34-35)

Date Collected: 04/05/17 14:25

Date Received: 04/08/17 08:40

Lab Sample ID: 400-136323-1

Matrix: Solid

Percent Solids: 97.0

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.28 g	5.00 g	349431	04/12/17 10:30	SAB	TAL PEN
Total/NA	Analysis	8015B		1	5 mL	5 mL	349411	04/12/17 13:28	GRK	TAL PEN
Instrument ID: CH_JOAN										
Total/NA	Prep	5035			5.28 g	5.00 g	349431	04/12/17 10:30	SAB	TAL PEN
Total/NA	Analysis	8021B		1	5 mL	5 mL	349410	04/12/17 13:28	GRK	TAL PEN
Instrument ID: CH_JOAN										
Total/NA	Prep	3546			15.22 g	1 mL	349641	04/13/17 15:40	KLR	TAL PEN
Total/NA	Analysis	8015B		1			349841	04/14/17 23:21	RM	TAL PEN
Instrument ID: WALLE										
Soluble	Leach	DI Leach			2.55 g	50 mL	349384	04/12/17 09:30	KH1	TAL PEN
Soluble	Analysis	300.0		1			349551	04/13/17 01:36	TAJ	TAL PEN
Instrument ID: IC2										

Client Sample ID: SB-1 (30-31)

Date Collected: 04/06/17 08:05

Date Received: 04/08/17 08:40

Lab Sample ID: 400-136323-2

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			349264	04/11/17 14:54	DAS	TAL PEN
Instrument ID: NOEQUIP										

Client Sample ID: SB-1 (30-31)

Date Collected: 04/06/17 08:05

Date Received: 04/08/17 08:40

Lab Sample ID: 400-136323-2

Matrix: Solid

Percent Solids: 93.9

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.18 g	5.00 g	349431	04/12/17 10:30	SAB	TAL PEN
Total/NA	Analysis	8015B		1	5 mL	5 mL	349411	04/12/17 14:03	GRK	TAL PEN
Instrument ID: CH_JOAN										
Total/NA	Prep	5035			5.18 g	5.00 g	349431	04/12/17 10:30	SAB	TAL PEN
Total/NA	Analysis	8021B		1	5 mL	5 mL	349410	04/12/17 14:03	GRK	TAL PEN
Instrument ID: CH_JOAN										
Total/NA	Prep	3546			15.25 g	1 mL	349641	04/13/17 15:40	KLR	TAL PEN
Total/NA	Analysis	8015B		1			349841	04/14/17 23:30	RM	TAL PEN
Instrument ID: WALLE										

TestAmerica Pensacola

Lab Chronicle

Client: Stantec Consulting Services Inc
Project/Site: El Paso CGP Company, LLC-Lat L O-21 Soil

TestAmerica Job ID: 400-136323-1

Client Sample ID: SB-1 (30-31)

Date Collected: 04/06/17 08:05

Date Received: 04/08/17 08:40

Lab Sample ID: 400-136323-2

Matrix: Solid

Percent Solids: 93.9

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			2.48 g	50 mL	349384	04/12/17 09:30	KH1	TAL PEN
Soluble	Analysis	300.0		1			349551	04/13/17 01:59	TAJ	TAL PEN
Instrument ID: IC2										

Client Sample ID: SB-1 (34-35)

Date Collected: 04/06/17 08:10

Date Received: 04/08/17 08:40

Lab Sample ID: 400-136323-3

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			349264	04/11/17 14:54	DAS	TAL PEN
Instrument ID: NOEQUIP										

Client Sample ID: SB-1 (34-35)

Date Collected: 04/06/17 08:10

Date Received: 04/08/17 08:40

Lab Sample ID: 400-136323-3

Matrix: Solid

Percent Solids: 96.6

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.52 g	5.00 g	349431	04/12/17 10:30	SAB	TAL PEN
Total/NA	Analysis	8015B		1	5 mL	5 mL	349411	04/12/17 14:39	GRK	TAL PEN
Instrument ID: CH_JOAN										
Total/NA	Prep	5035			5.52 g	5.00 g	349431	04/12/17 10:30	SAB	TAL PEN
Total/NA	Analysis	8021B		1	5 mL	5 mL	349410	04/12/17 14:39	GRK	TAL PEN
Instrument ID: CH_JOAN										
Total/NA	Prep	3546			15.27 g	1 mL	349641	04/13/17 15:40	KLR	TAL PEN
Total/NA	Analysis	8015B		1			349841	04/14/17 23:40	RM	TAL PEN
Instrument ID: WALLE										
Soluble	Leach	DI Leach			2.56 g	50 mL	349384	04/12/17 09:30	KH1	TAL PEN
Soluble	Analysis	300.0		1			349551	04/13/17 02:22	TAJ	TAL PEN
Instrument ID: IC2										

Laboratory References:

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

TestAmerica Pensacola

Accreditation/Certification Summary

Client: Stantec Consulting Services Inc
Project/Site: El Paso CGP Company, LLC-Lat L O-21 Soil

TestAmerica Job ID: 400-136323-1

Laboratory: TestAmerica Pensacola

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

Authority	Program	EPA Region	Identification Number	Expiration Date
Alabama	State Program	4	40150	06-30-17
Arizona	State Program	9	AZ0710	01-11-18
Arkansas DEQ	State Program	6	88-0689	09-01-17
California	ELAP	9	2510	03-31-18
Florida	NELAP	4	E81010	06-30-17
Georgia	State Program	4	N/A	06-30-17
Illinois	NELAP	5	200041	10-09-17
Iowa	State Program	7	367	08-01-18
Kansas	NELAP	7	E-10253	10-31-17
Kentucky (UST)	State Program	4	53	06-30-17
Kentucky (WW)	State Program	4	98030	12-31-17
L-A-B	ISO/IEC 17025		L2471	02-22-20
Louisiana	NELAP	6	30976	06-30-17
Louisiana (DW)	NELAP Secondary AB	6	LA170005	12-31-17
Maryland	State Program	3	233	09-30-17
Massachusetts	State Program	1	M-FL094	06-30-17
Michigan	State Program	5	9912	05-06-17
New Jersey	NELAP	2	FL006	06-30-17
North Carolina (WW/SW)	State Program	4	314	12-31-17
Oklahoma	State Program	6	9810	08-31-17
Pennsylvania	NELAP	3	68-00467	01-31-18
Rhode Island	State Program	1	LAO00307	12-30-17
South Carolina	State Program	4	96026	06-30-17
Tennessee	State Program	4	TN02907	06-30-17
Texas	NELAP	6	T104704286-16-10	09-30-17
USDA	Federal		P330-16-00172	05-24-19
Virginia	NELAP	3	460166	06-14-17
Washington	State Program	10	C915	05-15-17
West Virginia DEP	State Program	3	136	06-30-17

TestAmerica Pensacola

Method Summary

Client: Stantec Consulting Services Inc
Project/Site: El Paso CGP Company, LLC-Lat L O-21 Soil

TestAmerica Job ID: 400-136323-1

Method	Method Description	Protocol	Laboratory
8015B	Gasoline Range Organics - (GC)	SW846	TAL PEN
8021B	Volatile Organic Compounds (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

Protocol References:

EPA = US Environmental Protection Agency

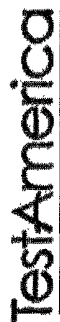
MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

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

Laboratory References:

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

Chain of Custody Record



THE LEADER IN ENVIRONMENTAL TESTING

Client Information Client Contact: Steve Varsa Company: Stantec Consulting Services Inc		Lab Fw: Webb, Carol M E-Mail: carol.webb@testamericainc.com		Carrier Tracking No(s): 400-64034-26438.2		Page: 1 of 2 Job #:	
Address: 11153 Aurora Avenue City: Des Moines State, Zip: IA, 50322-7904 Phone: 303-291-2239(Tel) Email: steve.varsa@stantec.com Project Name: Lat 0-21 Soil Site: Lat 0-21 Line Aris		Due Date Requested: Per ACF TAT Requested (days): Per ACF PO #: 303-291-2239(Tel) Purchase Order Requested: Per ACF Project #: 40005479 SSOW#:		Analysis Requested		Preservation Codes: M - Hexane N - None O - AsNaO2 P - Na2O4S Q - Na2SO3 R - Na2SO3 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4-5 Z - other (specify) Other:	
Sample Identification MW-6 (34.35) SB-1 (30.31) SB-1 (34.35)		Sample Date 4/5/17 4/6/17 4/6/17		Sample Time 1415 0805 0810		Sample Type (C=comp, G=grab) G G G	
Matrix (Wetwater, S-solids, O-wetwater, BT-Tissue, A=Air)		Solid Solid Solid		Solid Solid Solid		Solid Solid Solid	
Possible Hazard Identification ☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological		Deliverable Requested: I, II, III, IV, Other (specify) Per ACF		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) ☐ Return To Client ☒ Disposal By Lab ☐ Archive For Months		Special Instructions/Note: Per ACF	
Empty Kit Relinquished by:		Relinquished by: Bud Bat		Relinquished by: Fed Ex		Relinquished by: Fed Ex	
Relinquished by: Bud Bat		Relinquished by: Fed Ex		Relinquished by: Fed Ex		Relinquished by: Fed Ex	
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Relinquished by: Fed Ex							

Login Sample Receipt Checklist

Client: Stantec Consulting Services Inc

Job Number: 400-136323-1

Login Number: 136323

List Source: TestAmerica Pensacola

List Number: 1

Creator: Perez, Trina M

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ 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	2.4°C IR-2
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.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

APPENDIX C



MANIFEST # 56264
GENERATOR EL Paso
POINT OF ORIGIN Lat 0-21
TRANSPORTER Sierra Oil Field
DATE 4-7-17 JOB # 14073-0023

DATE 4-7-17 JOB # 14073-0023

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.

Signatures required prior to distribution of the legal document.

DISTRIBUTION: **White** - Company Records, **Yellow** - Billing, **Pink** - Customer, **Goldenrod** - LF Copy

BOL# 56264

CHLORIDE TESTING / PAINT FILTER TESTING

DATE 4.7.17 TIME 1300

Attach test strip here

CUSTOMER EL PASOSITE Lot 0-21DRIVER [Signature]SAMPLE Soil Straight ☒ With Dirt ☐CHLORIDE TEST -290 mg/KgACCEPTED YES ☒ NO ☐PAINT FILTER TEST Time started 1300 Time completed 1315PASS YES ☒ NO ☐SAMPLER/ANALYST Gary Robinson

BASIN DISPOSAL

30 Years of Environmental Health and Safety Excellence

200 Montana, Bloomfield, NM 87413

505-632-8936 or 505-334-3013

OPEN 24 Hours per Day

683711

NO.

NMOC D PERMIT: NM-001-0005

Oil Field Waste Document, Form C138

INVOICE:

DATE

GENERATOR:

HAULING CO.

ORDERED BY:

WASTE DESCRIPTION: ☒ Exempt Oilfield Waste

STATE: ☒ NM ☐ CO ☐ AZ ☐ UT

☒ Produced Water ☐ Drilling/Completion Fluids ☐ Reserve Pit

TREATMENT/DISPOSAL METHODS: ☒ EVAPORATION ☒ INJECTION ☒ TREATING PLANT

NO.	TRUCK	LOCATION(S)	VOLUME	COST	H2S	COST	TOTAL	TIME
1	SY	Lat 0-21	25	25			725	
2							17 APR 7	9:57AM
3								
4								
5		John East						

I, _____ representative or authorized agent for the above generator and hauler hereby certify that according to the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988 regulatory determination that the above described waste is RCRA Exempt Oil field wastes.

☒ Approved

☐ Denied

ATTENDANT SIGNATURE

BASIN DISPOSAL

30 Years of Environmental Health and Safety Excellence

200 Montana, Bloomfield, NM 87413

505-632-8936 or 505-334-3013

OPEN 24 Hours per Day

688185

NO.

NMOC D PERMIT: NM -001-0005

Oil Field Waste Document, Form C138

INVOICE:

DATE 6/11/17

GENERATOR: El Paso CGP

HAULING CO. Stanton

ORDERED BY: Joseph Wiley

DEL. TKT#.

BILL TO: El Paso CGP

DRIVER:

(Print Full Name)

CODES:

WASTE DESCRIPTION: ☒ Exempt Oilfield Waste

☐ Produced Water

☐ Drilling/Completion Fluids

☐ Reserve Pit

STATE: ☐ NM ☐ CO ☐ AZ ☐ UT

TREATMENT/DISPOSAL METHODS: ☒ EVAPORATION ☒ INJECTION ☒ TREATING PLANT

NO.	TRUCK	LOCATION(S)	VOLUME	COST	H2S	COST	TOTAL	TIME
1		Fogelson 4-1, Gallegos CU 124E	50 BB1					
2		GCUCOM A 142E Johnson Fed 4						
3		Johnston Lateral L-40 Fed 6A Lato-21 line						
4		Sandoval GC standard A#1A oil com 1						
5								

I, Samuel Stein representative or authorized agent for the above generator and hauler hereby certify that according to the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988 regulatory determination that the above described waste is RCRA Exempt Oil field wastes.

☒ Approved

☐ Denied

ATTENDANT SIGNATURE

Samuel Stein

BASIN DISPOSAL

30 Years of Environmental Health and Safety Excellence

200 Montana, Bloomfield, NM 87413
505-632-8936 or 505-334-3013
OPEN 24 Hours per Day

NO. **699930**

NMOCD PERMIT: NM -001-0005
Oil Field Waste Document, Form C138
INVOICE:

DATE 11.12.17
GENERATOR: El Paso
HAULING CO. Stantec
ORDERED BY: Joe Wiley

DEL. TKT# _____
BILL TO: Stantec
DRIVER: Sam Spiering
(Print Full Name)
CODES: _____

WASTE DESCRIPTION: ☒ Exempt Oilfield Waste

☐ Produced Water ☒ Drilling/Completion Fluids ☐ Reserve Pit

STATE: ☒ NM ☐ CO ☐ AZ ☐ UT

TREATMENT/DISPOSAL METHODS: ☒ EVAPORATION ☒ INJECTION ☒ TREATING PLANT

NO.	TRUCK	LOCATION(S)	VOLUME	COST	H2S	COST	TOTAL	TIME
1		Fogelson 4-1	1	704			1770012	1:45 PM
2		State Gas Com, Knight, JF Bell Lot L-40, 5th Oil Com						
3		Sandoval, GCU124E, J-Fed 4 J-Fed 6						
4								
5								

I, [Signature] representative or authorized agent for the above generator and hauler hereby certify that according to the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988 regulatory determination that the above described waste is RCRA Exempt Oil field wastes.

☒ Approved

☐ Denied

ATTENDANT SIGNATURE [Signature]

APPENDIX D

From: [Varsa, Steve](#)
To: Jim.Griswold@state.nm.us
Cc: brandon.powell@state.nm.us; [Wiley, Joe](#)
Bcc: [Malcomson, Robert](#); [Varsa, Steve](#)
Subject: Fogelson 4-1 (3RP-068-0) and Lat O-21 Line Drip (3RP-213-0) - Monitoring Well Installation Work Plans and Notice of Field Work
Date: Wednesday, March 15, 2017 6:09:00 PM

Mr. Griswold –

The 2017 Monitoring Well Installation Work Plans for the two above-referenced Cases have been uploaded to the Department FTP site for your reference and use. The monitoring well installation activities at Fogelson 4-1 (3RP-068-0) is scheduled to begin on March 29, 2017, with Lat O-21 Line Drip (3RP-213-0) monitoring well installation activities planned to begin on March 30, 2017. Well installation activities are expected to be completed by or before April 14, 2017.

Please contact Mr. Joseph Wiley, Project Manager with El Paso CGP Company, LLC, at (713) 420-3475, or me, if you have any questions.

Thank you,
Steve

Stephen Varsa, P.G.

Supervising Hydrogeologist
MWH, now part of Stantec
11153 Aurora Avenue
Des Moines, Iowa 50322
Direct: (515) 251-1020
Cell: (515) 710-7523
Office: (515) 253-0830
steve.varsa@stantec.com



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From: [Varsa, Steve](#)
To: Randolph.Bayliss@state.nm.us
Cc: brandon.powell@state.nm.us; [Wiley, Joe](#)
Subject: El Paso CGP Company - Notice of upcoming groundwater sampling activities
Date: Tuesday, May 30, 2017 3:05:18 PM

Hi Randy –

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

Site Name	NMOCD Case #
Canada Mesa #2	3RP-155-0
Fields A#7A	3RP-170-0
Fogelson 4-1	3RP-068-0
Gallegos Canyon Unit #124E	3RP-407-0
GCU Com A #142E	3RP-179-0
Hammond #41A	3RP-186-0
James F. Bell #1E	3RP-196-0
Johnston Fed #4	3RP-201-0
Johnston Fed #6A	3RP-202-0
K27 LDO72	3RP-204-0
Knight #1	3RP-207-0
Lateral L 40 Line Drip	3RP-212-0
Lat O-21 Line Drip	3RP-213-0
Lindrith B #24	3RP-214-0
Miles Fed #1A	3RP-223-0
Sandoval GC A #1A	3RP-235-0
Standard Oil Com #1	3RP-238-0
State Gas Com N #1	3RP-239-0

Groundwater sampling and monitoring is planned to be conducted the week of June 5, 2017.

Thank you,
Steve

Stephen Varsa, P.G.
Supervising Hydrogeologist
MWH, now part of Stantec
11153 Aurora Avenue
Des Moines, Iowa 50322
Direct: (515) 251-1020
Cell: (515) 710-7523

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



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From: [Varsa, Steve](#)
To: [Bayliss, Randolph, EMNRD](#)
Cc: [Smith, Cory, EMNRD](#); [Fields, Vanessa, EMNRD](#); [Wiley, Joe](#)
Subject: El Paso CGP Company - Notice of upcoming groundwater sampling activities
Date: Monday, November 06, 2017 11:41:36 AM

Hi Randy –

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

Site Name	NMOCD Case #
Canada Mesa #2	3RP-155-0
Fields A#7A	3RP-170-0
Fogelson 4-1	3RP-068-0
Gallegos Canyon Unit #124E	3RP-407-0
GCU Com A #142E	3RP-179-0
James F. Bell #1E	3RP-196-0
Johnston Fed #4	3RP-201-0
Johnston Fed #6A	3RP-202-0
K27 LDO72	3RP-204-0
Knight #1	3RP-207-0
Lateral L 40 Line Drip	3RP-212-0
Lat O-21 Line Drip	3RP-213-0
Miles Fed #1A	3RP-223-0
Sandoval GC A #1A	3RP-235-0
Standard Oil Com #1	3RP-238-0
State Gas Com N #1	3RP-239-0

Groundwater sampling and monitoring is planned to be conducted November 10-14, 2017.

Please contact Joe Wiley, remediation manager with El Paso CGP Company, at (713) 420-3475, or me, if you have any questions.

Thank you,
Steve

Stephen Varsa, P.G.

Supervising Hydrogeologist
MWH, now part of Stantec
11153 Aurora Avenue
Des Moines, Iowa 50322
Direct: (515) 251-1020
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APPENDIX E

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

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

TestAmerica Job ID: 400-139102-1

Client Project/Site: EIPaso CGP Company, LLC - LAT 0-21

For:

Stantec Consulting Services Inc
1560 Broadway
Suite 1800
Denver, Colorado 80202

Attn: Ms. Sarah Gardner



Authorized for release by:

6/20/2017 5:04:31 PM

Debra Vergin, Project Manager II
(850)363-5129

debra.vergin@testamericainc.com

Designee for

Carol Webb, Project Manager II
(850)471-6250

carol.webb@testamericainc.com

LINKS

Review your project
results through

TotalAccess

Have a Question?



Visit us at:

www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 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 signature.

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

Table of Contents

Cover Page	1
Table of Contents	2
Definitions	3
Case Narrative	4
Detection Summary	5
Sample Summary	6
Client Sample Results	7
QC Association	14
QC Sample Results	15
Chronicle	16
Certification Summary	18
Method Summary	19
Chain of Custody	20
Receipt Checklists	21



Definitions/Glossary

Client: Stantec Consulting Services Inc
Project/Site: EIPaso CGP Company, LLC - LAT 0-21

TestAmerica Job ID: 400-139102-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
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)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
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)

Case Narrative

Client: Stantec Consulting Services Inc
Project/Site: EIPaso CGP Company, LLC - LAT 0-21

TestAmerica Job ID: 400-139102-1

Job ID: 400-139102-1

Laboratory: TestAmerica Pensacola

Narrative

Job Narrative
400-139102-1

Comments

No additional comments.

Receipt

The samples were received on 6/10/2017 8:18 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.2° C.

GC VOA

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.

Detection Summary

Client: Stantec Consulting Services Inc
Project/Site: ElPaso CGP Company, LLC - LAT 0-21

TestAmerica Job ID: 400-139102-1

Client Sample ID: MW-1

Lab Sample ID: 400-139102-1

No Detections.

Client Sample ID: MW-2R

Lab Sample ID: 400-139102-2

No Detections.

Client Sample ID: MW-3R

Lab Sample ID: 400-139102-3

No Detections.

Client Sample ID: MW-4

Lab Sample ID: 400-139102-4

No Detections.

Client Sample ID: MW-5

Lab Sample ID: 400-139102-5

No Detections.

Client Sample ID: MW-6

Lab Sample ID: 400-139102-6

No Detections.

Client Sample ID: TRIP BLANK

Lab Sample ID: 400-139102-7

No Detections.

This Detection Summary does not include radiochemical test results.

TestAmerica Pensacola

Sample Summary

Client: Stantec Consulting Services Inc
Project/Site: ElPaso CGP Company, LLC - LAT 0-21

TestAmerica Job ID: 400-139102-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-139102-1	MW-1	Water	06/09/17 13:00	06/10/17 08:18
400-139102-2	MW-2R	Water	06/09/17 13:10	06/10/17 08:18
400-139102-3	MW-3R	Water	06/09/17 13:20	06/10/17 08:18
400-139102-4	MW-4	Water	06/09/17 13:30	06/10/17 08:18
400-139102-5	MW-5	Water	06/09/17 13:40	06/10/17 08:18
400-139102-6	MW-6	Water	06/09/17 13:50	06/10/17 08:18
400-139102-7	TRIP BLANK	Water	06/09/17 12:50	06/10/17 08:18

Client Sample Results

Client: Stantec Consulting Services Inc
Project/Site: EIPaso CGP Company, LLC - LAT 0-21

TestAmerica Job ID: 400-139102-1

Client Sample ID: MW-1

Lab Sample ID: 400-139102-1

Date Collected: 06/09/17 13:00

Matrix: Water

Date Received: 06/10/17 08:18

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0	ug/L			06/15/17 13:49	1
Ethylbenzene	<1.0		1.0	ug/L			06/15/17 13:49	1
Toluene	<5.0		5.0	ug/L			06/15/17 13:49	1
Xylenes, Total	<5.0		5.0	ug/L			06/15/17 13:49	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (pid)	97		78 - 124				06/15/17 13:49	1

Client Sample Results

Client: Stantec Consulting Services Inc
Project/Site: EIPaso CGP Company, LLC - LAT 0-21

TestAmerica Job ID: 400-139102-1

Client Sample ID: MW-2R

Lab Sample ID: 400-139102-2

Date Collected: 06/09/17 13:10

Matrix: Water

Date Received: 06/10/17 08:18

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0	ug/L			06/15/17 14:24	1
Ethylbenzene	<1.0		1.0	ug/L			06/15/17 14:24	1
Toluene	<5.0		5.0	ug/L			06/15/17 14:24	1
Xylenes, Total	<5.0		5.0	ug/L			06/15/17 14:24	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (pid)	97		78 - 124		06/15/17 14:24	1

Client Sample Results

Client: Stantec Consulting Services Inc
Project/Site: EIPaso CGP Company, LLC - LAT 0-21

TestAmerica Job ID: 400-139102-1

Client Sample ID: MW-3R

Lab Sample ID: 400-139102-3

Date Collected: 06/09/17 13:20

Matrix: Water

Date Received: 06/10/17 08:18

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0	ug/L			06/15/17 15:00	1
Ethylbenzene	<1.0		1.0	ug/L			06/15/17 15:00	1
Toluene	<5.0		5.0	ug/L			06/15/17 15:00	1
Xylenes, Total	<5.0		5.0	ug/L			06/15/17 15:00	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (pid)	96		78 - 124				06/15/17 15:00	1

Client Sample Results

Client: Stantec Consulting Services Inc
Project/Site: EIPaso CGP Company, LLC - LAT 0-21

TestAmerica Job ID: 400-139102-1

Client Sample ID: MW-4

Lab Sample ID: 400-139102-4

Date Collected: 06/09/17 13:30

Matrix: Water

Date Received: 06/10/17 08:18

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0	ug/L			06/15/17 15:36	1
Ethylbenzene	<1.0		1.0	ug/L			06/15/17 15:36	1
Toluene	<5.0		5.0	ug/L			06/15/17 15:36	1
Xylenes, Total	<5.0		5.0	ug/L			06/15/17 15:36	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (pid)	100		78 - 124		06/15/17 15:36	1

Client Sample Results

Client: Stantec Consulting Services Inc
Project/Site: EIPaso CGP Company, LLC - LAT 0-21

TestAmerica Job ID: 400-139102-1

Client Sample ID: MW-5

Lab Sample ID: 400-139102-5

Date Collected: 06/09/17 13:40

Matrix: Water

Date Received: 06/10/17 08:18

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0	ug/L			06/15/17 16:12	1
Ethylbenzene	<1.0		1.0	ug/L			06/15/17 16:12	1
Toluene	<5.0		5.0	ug/L			06/15/17 16:12	1
Xylenes, Total	<5.0		5.0	ug/L			06/15/17 16:12	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (pid)	101		78 - 124				06/15/17 16:12	1

Client Sample Results

Client: Stantec Consulting Services Inc
Project/Site: EIPaso CGP Company, LLC - LAT 0-21

TestAmerica Job ID: 400-139102-1

Client Sample ID: MW-6

Lab Sample ID: 400-139102-6

Date Collected: 06/09/17 13:50

Matrix: Water

Date Received: 06/10/17 08:18

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0	ug/L			06/15/17 16:47	1
Ethylbenzene	<1.0		1.0	ug/L			06/15/17 16:47	1
Toluene	<5.0		5.0	ug/L			06/15/17 16:47	1
Xylenes, Total	<5.0		5.0	ug/L			06/15/17 16:47	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (pid)	96		78 - 124				06/15/17 16:47	1

Client Sample Results

Client: Stantec Consulting Services Inc
Project/Site: EIPaso CGP Company, LLC - LAT 0-21

TestAmerica Job ID: 400-139102-1

Client Sample ID: TRIP BLANK

Lab Sample ID: 400-139102-7

Date Collected: 06/09/17 12:50

Matrix: Water

Date Received: 06/10/17 08:18

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0	ug/L			06/15/17 19:09	1
Ethylbenzene	<1.0		1.0	ug/L			06/15/17 19:09	1
Toluene	<5.0		5.0	ug/L			06/15/17 19:09	1
Xylenes, Total	<5.0		5.0	ug/L			06/15/17 19:09	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (pid)	98		78 - 124				06/15/17 19:09	1

QC Association Summary

Client: Stantec Consulting Services Inc
Project/Site: ElPaso CGP Company, LLC - LAT 0-21

TestAmerica Job ID: 400-139102-1

GC VOA

Analysis Batch: 356986

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-139102-1	MW-1	Total/NA	Water	8021B	
400-139102-2	MW-2R	Total/NA	Water	8021B	
400-139102-3	MW-3R	Total/NA	Water	8021B	
400-139102-4	MW-4	Total/NA	Water	8021B	
400-139102-5	MW-5	Total/NA	Water	8021B	
400-139102-6	MW-6	Total/NA	Water	8021B	
400-139102-7	TRIP BLANK	Total/NA	Water	8021B	
MB 400-356986/4	Method Blank	Total/NA	Water	8021B	
LCS 400-356986/1002	Lab Control Sample	Total/NA	Water	8021B	
400-139102-1 MS	MW-1	Total/NA	Water	8021B	
400-139102-1 MSD	MW-1	Total/NA	Water	8021B	

QC Sample Results

Client: Stantec Consulting Services Inc
Project/Site: EIPaso CGP Company, LLC - LAT 0-21

TestAmerica Job ID: 400-139102-1

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 400-356986/4

Matrix: Water

Analysis Batch: 356986

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			06/15/17 13:13	1
Ethylbenzene	<1.0		1.0	ug/L			06/15/17 13:13	1
Toluene	<5.0		5.0	ug/L			06/15/17 13:13	1
Xylenes, Total	<5.0		5.0	ug/L			06/15/17 13:13	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (pid)	95		78 - 124		06/15/17 13:13	1

Lab Sample ID: LCS 400-356986/1002

Matrix: Water

Analysis Batch: 356986

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	50.0	44.0		ug/L		88	85 - 115
Ethylbenzene	50.0	45.1		ug/L		90	85 - 115
Toluene	50.0	45.2		ug/L		90	85 - 115
Xylenes, Total	150	135		ug/L		90	85 - 115

Surrogate	LCS %Recovery	LCS Qualifier	Limits
a,a,a-Trifluorotoluene (pid)	101		78 - 124

Lab Sample ID: 400-139102-1 MS

Matrix: Water

Analysis Batch: 356986

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	54.7		ug/L		109	44 - 150
Ethylbenzene	<1.0		50.0	56.2		ug/L		112	70 - 142
Toluene	<5.0		50.0	55.5		ug/L		111	69 - 136
Xylenes, Total	<5.0		150	169		ug/L		113	68 - 142

Surrogate	MS %Recovery	MS Qualifier	Limits
a,a,a-Trifluorotoluene (pid)	97		78 - 124

Lab Sample ID: 400-139102-1 MSD

Matrix: Water

Analysis Batch: 356986

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	60.9		ug/L		122	44 - 150	11	16
Ethylbenzene	<1.0		50.0	61.9		ug/L		124	70 - 142	10	16
Toluene	<5.0		50.0	61.5		ug/L		123	69 - 136	10	16
Xylenes, Total	<5.0		150	186		ug/L		124	68 - 142	9	15

Surrogate	MSD %Recovery	MSD Qualifier	Limits
a,a,a-Trifluorotoluene (pid)	103		78 - 124

TestAmerica Pensacola

Lab Chronicle

Client: Stantec Consulting Services Inc
Project/Site: EIPaso CGP Company, LLC - LAT 0-21

TestAmerica Job ID: 400-139102-1

Client Sample ID: MW-1

Date Collected: 06/09/17 13:00

Date Received: 06/10/17 08:18

Lab Sample ID: 400-139102-1

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	8021B		1	5 mL	5 mL	356986	06/15/17 13:49	GRK	TAL PEN
Instrument ID: CH_JOAN										

Client Sample ID: MW-2R

Date Collected: 06/09/17 13:10

Date Received: 06/10/17 08:18

Lab Sample ID: 400-139102-2

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	8021B		1	5 mL	5 mL	356986	06/15/17 14:24	GRK	TAL PEN
Instrument ID: CH_JOAN										

Client Sample ID: MW-3R

Date Collected: 06/09/17 13:20

Date Received: 06/10/17 08:18

Lab Sample ID: 400-139102-3

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	8021B		1	5 mL	5 mL	356986	06/15/17 15:00	GRK	TAL PEN
Instrument ID: CH_JOAN										

Client Sample ID: MW-4

Date Collected: 06/09/17 13:30

Date Received: 06/10/17 08:18

Lab Sample ID: 400-139102-4

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	8021B		1	5 mL	5 mL	356986	06/15/17 15:36	GRK	TAL PEN
Instrument ID: CH_JOAN										

Client Sample ID: MW-5

Date Collected: 06/09/17 13:40

Date Received: 06/10/17 08:18

Lab Sample ID: 400-139102-5

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	8021B		1	5 mL	5 mL	356986	06/15/17 16:12	GRK	TAL PEN
Instrument ID: CH_JOAN										

Client Sample ID: MW-6

Date Collected: 06/09/17 13:50

Date Received: 06/10/17 08:18

Lab Sample ID: 400-139102-6

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	8021B		1	5 mL	5 mL	356986	06/15/17 16:47	GRK	TAL PEN
Instrument ID: CH_JOAN										

TestAmerica Pensacola

Lab Chronicle

Client: Stantec Consulting Services Inc
Project/Site: EIPaso CGP Company, LLC - LAT 0-21

TestAmerica Job ID: 400-139102-1

Client Sample ID: TRIP BLANK
Date Collected: 06/09/17 12:50
Date Received: 06/10/17 08:18

Lab Sample ID: 400-139102-7
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	5 mL	5 mL	356986	06/15/17 19:09	GRK	TAL PEN
Instrument ID: CH_JOAN										

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

Accreditation/Certification Summary

Client: Stantec Consulting Services Inc
Project/Site: EIPaso CGP Company, LLC - LAT 0-21

TestAmerica Job ID: 400-139102-1

Laboratory: TestAmerica Pensacola

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

Authority	Program	EPA Region	Identification Number	Expiration Date
Alabama	State Program	4	40150	06-30-17
Arizona	State Program	9	AZ0710	01-11-18
Arkansas DEQ	State Program	6	88-0689	09-01-17
California	ELAP	9	2510	03-31-18
Florida	NELAP	4	E81010	06-30-18
Georgia	State Program	4	N/A	06-30-17
Illinois	NELAP	5	200041	10-09-17
Iowa	State Program	7	367	08-01-18
Kansas	NELAP	7	E-10253	10-31-17
Kentucky (UST)	State Program	4	53	06-30-17
Kentucky (WW)	State Program	4	98030	12-31-17
L-A-B	ISO/IEC 17025		L2471	02-22-20
Louisiana	NELAP	6	30976	06-30-18
Louisiana (DW)	NELAP	6	LA170005	12-31-17
Maryland	State Program	3	233	09-30-17
Massachusetts	State Program	1	M-FL094	06-30-17
Michigan	State Program	5	9912	06-30-17
New Jersey	NELAP	2	FL006	06-30-17
North Carolina (WW/SW)	State Program	4	314	12-31-17
Oklahoma	State Program	6	9810	08-31-17
Pennsylvania	NELAP	3	68-00467	01-31-18
Rhode Island	State Program	1	LAO00307	12-30-17
South Carolina	State Program	4	96026	06-30-17
Tennessee	State Program	4	TN02907	06-30-17
Texas	NELAP	6	T104704286-16-10	09-30-17
USDA	Federal		P330-16-00172	05-24-19
Virginia	NELAP	3	460166	06-14-18
Washington	State Program	10	C915	05-15-18
West Virginia DEP	State Program	3	136	06-30-17

Method Summary

Client: Stantec Consulting Services Inc
Project/Site: El Paso CGP Company, LLC - LAT 0-21

TestAmerica Job ID: 400-139102-1

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	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 = TestAmerica Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

TestAmerica Pensacola

3355 McLemore Drive
Pensacola, FL 32514
Phone (850) 474-1001 Fax (850) 478-2671

Chain of Custody Record



TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information Client Contact: <u>S. Gardner</u> Ms. Sarah Gardner Company: <u>Stantec Consulting Services Inc</u> Address: <u>1560 Broadway Suite 1800</u> City: <u>Denver</u> State, Zip: <u>CO, 80202</u> Phone: <u>303-291-2239(Tel)</u> Email: <u>sarah.gardner@mwglobal.com</u> Project Name: <u>Lat 0-21</u> Site: <u>Lat 0-21</u>		Lab PM: <u>Webb, Carol M</u> E-Mail: <u>carol.webb@testamericainc.com</u> Carrier Tracking No(s): <u>400-139102 COC</u> COC No: <u>400-65866-26941.1</u> Page: <u>Page 1 of 1</u> Job #:					
Due Date Requested: TAT Requested (days): <u>Standard</u> PO #: <u>Purchase Order Requested</u> WO #: <u>40005479</u> Project #: <u>40005479</u> SOW#:		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 Other:					
Sample Identification Sample Date Sample Time Sample Type (C=Comp, G=grab) Matrix (W=water, S=solid, O=wastefoli, BI=issue, A=air)		Field Filtered Sample (Yes or No) Perform MS/MSD (Yes or No) Total Number of Containers Special Instructions/Note:					
MW-1	June 9, 2017	1300	G	W	N	2	
MW-2P	June 9, 2017	1310	G	W	N	2	
MW-3P	June 9, 2017	1320	G	W	N	2	
MW-4	June 9, 2017	1330	G	W	N	2	
MW-5	June 9, 2017	1340	G	W	N	2	
MW-6	June 9, 2017	1350	G	W	N	2	
TRIP BLANK	June 9, 2017	1250	-	W	N	2	
Possible Hazard Identification ☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological Deliverable Requested: I, II, III, IV, Other (specify)				Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) ☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months			
Empty Kit Relinquished by:				Method of Shipment:			
Relinquished by: <u>[Signature]</u> Date/Time: <u>6/9/2017 1500</u> Company: <u>stantec</u>				Received by: <u>[Signature]</u> Date/Time: <u>6/10/17 0818</u> Company: <u>TH-fer</u>			
Relinquished by: <u>[Signature]</u> Date/Time: <u>6/9/2017 1500</u> Company: <u>stantec</u>				Received by: <u>[Signature]</u> Date/Time: <u>6/10/17 0818</u> Company: <u>TH-fer</u>			
Relinquished by: <u>[Signature]</u> Date/Time: <u>6/9/2017 1500</u> Company: <u>stantec</u>				Received by: <u>[Signature]</u> Date/Time: <u>6/10/17 0818</u> Company: <u>TH-fer</u>			
Custody Seals Intact: <u>Yes</u> ☐ No ☐				Cooler Temperature(s) °C and Other Remarks: <u>3.2°C JR2</u>			

Login Sample Receipt Checklist

Client: Stantec Consulting Services Inc

Job Number: 400-139102-1

Login Number: 139102

List Source: TestAmerica Pensacola

List Number: 1

Creator: Perez, Trina M

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ 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	3.2°C IR-2
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.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

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

TestAmerica Job ID: 400-145971-1

Client Project/Site: El Paso CGP Company - Lat 0-21 Line Drip

For:

Stantec Consulting Services Inc
1560 Broadway
Suite 1800
Denver, Colorado 80202

Attn: Ms. Sarah Gardner

Madonna Myers

Authorized for release by:

11/20/2017 12:16:55 PM

Madonna Myers, Project Manager II
(615)796-1870

madonna.myers@testamericainc.com

Designee for

Carol Webb, Project Manager II
(850)471-6250

carol.webb@testamericainc.com

LINKS

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results through

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Have a Question?



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www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 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 signature.

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

Table of Contents

Cover Page	1
Table of Contents	2
Definitions	3
Case Narrative	4
Detection Summary	5
Sample Summary	6
Client Sample Results	7
QC Association	14
QC Sample Results	15
Chronicle	18
Certification Summary	20
Method Summary	21
Chain of Custody	22
Receipt Checklists	23



Definitions/Glossary

Client: Stantec Consulting Services Inc
Project/Site: El Paso CGP Company - Lat 0-21 Line Drip

TestAmerica Job ID: 400-145971-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	ISTD response or retention time outside acceptable limits

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
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)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
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)

Case Narrative

Client: Stantec Consulting Services Inc
Project/Site: El Paso CGP Company - Lat 0-21 Line Drip

TestAmerica Job ID: 400-145971-1

Job ID: 400-145971-1

Laboratory: TestAmerica Pensacola

Narrative

Job Narrative 400-145971-1

Comments

No additional comments.

Receipt

The samples were received on 11/14/2017 9:01 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 1.9° C.

Receipt Exceptions

The Chain-of-Custody (COC) was incomplete as received and/or improperly completed. Per client instructions, method 8260 was used in place of method 8021.

GC/MS VOA

Method(s) 8260C: One of three internal standard recoveries for the following samples was outside control limits: MW-2R (400-145971-2), MW-3R (400-145971-3) and MW-4 (400-145971-4). The only analyte quantitated with this internal standard is the 4-Bromofluorobenzene surrogate which was within acceptance limits for all samples. Therefore, the data is reported.

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

GC/MS Semi VOA

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

Organic Prep

Method(s) 3520C: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 400-376072.

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: El Paso CGP Company - Lat 0-21 Line Drip

TestAmerica Job ID: 400-145971-1

Client Sample ID: MW-1

Lab Sample ID: 400-145971-1

☐ No Detections.

Client Sample ID: MW-2R

Lab Sample ID: 400-145971-2

☐ No Detections.

Client Sample ID: MW-3R

Lab Sample ID: 400-145971-3

☐ No Detections.

Client Sample ID: MW-4

Lab Sample ID: 400-145971-4

☐ No Detections.

Client Sample ID: MW-5

Lab Sample ID: 400-145971-5

☐ No Detections.

Client Sample ID: MW-6

Lab Sample ID: 400-145971-6

☐ No Detections.

Client Sample ID: TRIP BLANK

Lab Sample ID: 400-145971-7

☐ No Detections.

This Detection Summary does not include radiochemical test results.

TestAmerica Pensacola

Sample Summary

Client: Stantec Consulting Services Inc
Project/Site: El Paso CGP Company - Lat 0-21 Line Drip

TestAmerica Job ID: 400-145971-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-145971-1	MW-1	Water	11/12/17 15:06	11/14/17 09:01
400-145971-2	MW-2R	Water	11/12/17 15:27	11/14/17 09:01
400-145971-3	MW-3R	Water	11/12/17 15:21	11/14/17 09:01
400-145971-4	MW-4	Water	11/12/17 14:42	11/14/17 09:01
400-145971-5	MW-5	Water	11/12/17 14:49	11/14/17 09:01
400-145971-6	MW-6	Water	11/12/17 15:15	11/14/17 09:01
400-145971-7	TRIP BLANK	Water	11/12/17 14:30	11/14/17 09:01

Client Sample Results

Client: Stantec Consulting Services Inc
Project/Site: El Paso CGP Company - Lat 0-21 Line Drip

TestAmerica Job ID: 400-145971-1

Client Sample ID: MW-1

Date Collected: 11/12/17 15:06

Date Received: 11/14/17 09:01

Lab Sample ID: 400-145971-1

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			11/18/17 17:07	1
Toluene	<1.0		1.0	ug/L			11/18/17 17:07	1
Ethylbenzene	<1.0		1.0	ug/L			11/18/17 17:07	1
Xylenes, Total	<10		10	ug/L			11/18/17 17:07	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Dibromofluoromethane	99		81 - 121				11/18/17 17:07	1
4-Bromofluorobenzene	87		78 - 118				11/18/17 17:07	1
Toluene-d8 (Surr)	108		80 - 120				11/18/17 17:07	1

TestAmerica Pensacola

Client Sample Results

Client: Stantec Consulting Services Inc
Project/Site: El Paso CGP Company - Lat 0-21 Line Drip

TestAmerica Job ID: 400-145971-1

Client Sample ID: MW-2R

Date Collected: 11/12/17 15:27

Date Received: 11/14/17 09:01

Lab Sample ID: 400-145971-2

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			11/18/17 17:29	1
Toluene	<1.0		1.0	ug/L			11/18/17 17:29	1
Ethylbenzene	<1.0		1.0	ug/L			11/18/17 17:29	1
Xylenes, Total	<10		10	ug/L			11/18/17 17:29	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane	99		81 - 121		11/18/17 17:29	1
4-Bromofluorobenzene	85	*	78 - 118		11/18/17 17:29	1
Toluene-d8 (Surr)	110		80 - 120		11/18/17 17:29	1

TestAmerica Pensacola

Client Sample Results

Client: Stantec Consulting Services Inc
Project/Site: El Paso CGP Company - Lat 0-21 Line Drip

TestAmerica Job ID: 400-145971-1

Client Sample ID: MW-3R

Date Collected: 11/12/17 15:21

Date Received: 11/14/17 09:01

Lab Sample ID: 400-145971-3

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			11/18/17 17:51	1
Toluene	<1.0		1.0	ug/L			11/18/17 17:51	1
Ethylbenzene	<1.0		1.0	ug/L			11/18/17 17:51	1
Xylenes, Total	<10		10	ug/L			11/18/17 17:51	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Dibromofluoromethane	99		81 - 121				11/18/17 17:51	1
4-Bromofluorobenzene	93	*	78 - 118				11/18/17 17:51	1
Toluene-d8 (Surr)	101		80 - 120				11/18/17 17:51	1

Client Sample Results

Client: Stantec Consulting Services Inc
Project/Site: El Paso CGP Company - Lat 0-21 Line Drip

TestAmerica Job ID: 400-145971-1

Client Sample ID: MW-4
Date Collected: 11/12/17 14:42
Date Received: 11/14/17 09:01

Lab Sample ID: 400-145971-4
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			11/18/17 18:13	1
Toluene	<1.0		1.0	ug/L			11/18/17 18:13	1
Ethylbenzene	<1.0		1.0	ug/L			11/18/17 18:13	1
Xylenes, Total	<10		10	ug/L			11/18/17 18:13	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Dibromofluoromethane	98		81 - 121				11/18/17 18:13	1
4-Bromofluorobenzene	90	*	78 - 118				11/18/17 18:13	1
Toluene-d8 (Surr)	104		80 - 120				11/18/17 18:13	1

Client Sample Results

Client: Stantec Consulting Services Inc
Project/Site: El Paso CGP Company - Lat 0-21 Line Drip

TestAmerica Job ID: 400-145971-1

Client Sample ID: MW-5
Date Collected: 11/12/17 14:49
Date Received: 11/14/17 09:01

Lab Sample ID: 400-145971-5
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			11/18/17 18:35	1
Toluene	<1.0		1.0	ug/L			11/18/17 18:35	1
Ethylbenzene	<1.0		1.0	ug/L			11/18/17 18:35	1
Xylenes, Total	<10		10	ug/L			11/18/17 18:35	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Dibromofluoromethane	100		81 - 121				11/18/17 18:35	1
4-Bromofluorobenzene	91		78 - 118				11/18/17 18:35	1
Toluene-d8 (Surr)	102		80 - 120				11/18/17 18:35	1

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]pyrene	<0.26		0.26	ug/L		11/15/17 15:59	11/16/17 19:26	1
1-Methylnaphthalene	<0.26		0.26	ug/L		11/15/17 15:59	11/16/17 19:26	1
2-Methylnaphthalene	<0.26		0.26	ug/L		11/15/17 15:59	11/16/17 19:26	1
Naphthalene	<0.26		0.26	ug/L		11/15/17 15:59	11/16/17 19:26	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	85		15 - 122			11/15/17 15:59	11/16/17 19:26	1
Nitrobenzene-d5	68		19 - 130			11/15/17 15:59	11/16/17 19:26	1
Terphenyl-d14	73		33 - 138			11/15/17 15:59	11/16/17 19:26	1

Client Sample Results

Client: Stantec Consulting Services Inc
Project/Site: El Paso CGP Company - Lat 0-21 Line Drip

TestAmerica Job ID: 400-145971-1

Client Sample ID: MW-6

Date Collected: 11/12/17 15:15

Date Received: 11/14/17 09:01

Lab Sample ID: 400-145971-6

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			11/18/17 18:57	1
Toluene	<1.0		1.0	ug/L			11/18/17 18:57	1
Ethylbenzene	<1.0		1.0	ug/L			11/18/17 18:57	1
Xylenes, Total	<10		10	ug/L			11/18/17 18:57	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Dibromofluoromethane	103		81 - 121				11/18/17 18:57	1
4-Bromofluorobenzene	90		78 - 118				11/18/17 18:57	1
Toluene-d8 (Surr)	102		80 - 120				11/18/17 18:57	1

TestAmerica Pensacola

Client Sample Results

Client: Stantec Consulting Services Inc
Project/Site: El Paso CGP Company - Lat 0-21 Line Drip

TestAmerica Job ID: 400-145971-1

Client Sample ID: TRIP BLANK

Lab Sample ID: 400-145971-7

Date Collected: 11/12/17 14:30

Matrix: Water

Date Received: 11/14/17 09:01

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			11/18/17 10:31	1
Toluene	<1.0		1.0	ug/L			11/18/17 10:31	1
Ethylbenzene	<1.0		1.0	ug/L			11/18/17 10:31	1
Xylenes, Total	<10		10	ug/L			11/18/17 10:31	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Dibromofluoromethane	98		81 - 121				11/18/17 10:31	1
4-Bromofluorobenzene	93		78 - 118				11/18/17 10:31	1
Toluene-d8 (Surr)	100		80 - 120				11/18/17 10:31	1

QC Association Summary

Client: Stantec Consulting Services Inc
Project/Site: El Paso CGP Company - Lat 0-21 Line Drip

TestAmerica Job ID: 400-145971-1

GC/MS VOA

Analysis Batch: 376485

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-145971-1	MW-1	Total/NA	Water	8260C	
400-145971-2	MW-2R	Total/NA	Water	8260C	
400-145971-3	MW-3R	Total/NA	Water	8260C	
400-145971-4	MW-4	Total/NA	Water	8260C	
400-145971-5	MW-5	Total/NA	Water	8260C	
400-145971-6	MW-6	Total/NA	Water	8260C	
400-145971-7	TRIP BLANK	Total/NA	Water	8260C	
MB 400-376485/4	Method Blank	Total/NA	Water	8260C	
LCS 400-376485/1002	Lab Control Sample	Total/NA	Water	8260C	
400-145795-A-10 MS	Matrix Spike	Total/NA	Water	8260C	
400-145795-A-10 MSD	Matrix Spike Duplicate	Total/NA	Water	8260C	

GC/MS Semi VOA

Prep Batch: 376072

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-145971-5	MW-5	Total/NA	Water	3520C	
MB 400-376072/1-A	Method Blank	Total/NA	Water	3520C	
LCS 400-376072/2-A	Lab Control Sample	Total/NA	Water	3520C	
LCSD 400-376072/3-A	Lab Control Sample Dup	Total/NA	Water	3520C	

Analysis Batch: 376151

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-145971-5	MW-5	Total/NA	Water	8270C LL	376072
MB 400-376072/1-A	Method Blank	Total/NA	Water	8270C LL	376072
LCS 400-376072/2-A	Lab Control Sample	Total/NA	Water	8270C LL	376072
LCSD 400-376072/3-A	Lab Control Sample Dup	Total/NA	Water	8270C LL	376072

QC Sample Results

Client: Stantec Consulting Services Inc
Project/Site: El Paso CGP Company - Lat 0-21 Line Drip

TestAmerica Job ID: 400-145971-1

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

Lab Sample ID: MB 400-376485/4

Matrix: Water

Analysis Batch: 376485

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			11/18/17 09:47	1
Toluene	<1.0		1.0	ug/L			11/18/17 09:47	1
Ethylbenzene	<1.0		1.0	ug/L			11/18/17 09:47	1
Xylenes, Total	<10		10	ug/L			11/18/17 09:47	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane	97		81 - 121		11/18/17 09:47	1
4-Bromofluorobenzene	87		78 - 118		11/18/17 09:47	1
Toluene-d8 (Surr)	106		80 - 120		11/18/17 09:47	1

Lab Sample ID: LCS 400-376485/1002

Matrix: Water

Analysis Batch: 376485

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	45.7		ug/L		91	70 - 130
Toluene	50.0	42.4		ug/L		85	70 - 130
Ethylbenzene	50.0	42.3		ug/L		85	70 - 130
Xylenes, Total	100	82.6		ug/L		83	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Dibromofluoromethane	98		81 - 121
4-Bromofluorobenzene	80		78 - 118
Toluene-d8 (Surr)	90		80 - 120

Lab Sample ID: 400-145795-A-10 MS

Matrix: Water

Analysis Batch: 376485

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	38		50.0	72.1		ug/L		67	56 - 142
Toluene	<1.0		50.0	36.6		ug/L		73	65 - 130
Ethylbenzene	<1.0		50.0	32.6		ug/L		65	58 - 131
Xylenes, Total	<10		100	64.5		ug/L		65	59 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
Dibromofluoromethane	96		81 - 121
4-Bromofluorobenzene	86		78 - 118
Toluene-d8 (Surr)	98		80 - 120

Lab Sample ID: 400-145795-A-10 MSD

Matrix: Water

Analysis Batch: 376485

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	38		50.0	78.3		ug/L		80	56 - 142	8	30
Toluene	<1.0		50.0	41.5		ug/L		83	65 - 130	13	30

TestAmerica Pensacola

QC Sample Results

Client: Stantec Consulting Services Inc
Project/Site: El Paso CGP Company - Lat 0-21 Line Drip

TestAmerica Job ID: 400-145971-1

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

Lab Sample ID: 400-145795-A-10 MSD

Matrix: Water

Analysis Batch: 376485

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
Ethylbenzene	<1.0		50.0	38.9		ug/L		78	58 - 131	18	30
Xylenes, Total	<10		100	76.6		ug/L		77	59 - 130	17	30
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
Dibromofluoromethane	99		81 - 121								
4-Bromofluorobenzene	87		78 - 118								
Toluene-d8 (Surr)	97		80 - 120								

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Lab Sample ID: MB 400-376072/1-A

Matrix: Water

Analysis Batch: 376151

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 376072

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]pyrene	<0.20		0.20	ug/L		11/15/17 15:59	11/16/17 15:58	1
1-Methylnaphthalene	<0.20		0.20	ug/L		11/15/17 15:59	11/16/17 15:58	1
2-Methylnaphthalene	<0.20		0.20	ug/L		11/15/17 15:59	11/16/17 15:58	1
Naphthalene	<0.20		0.20	ug/L		11/15/17 15:59	11/16/17 15:58	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	98		15 - 122			11/15/17 15:59	11/16/17 15:58	1
Nitrobenzene-d5	79		19 - 130			11/15/17 15:59	11/16/17 15:58	1
Terphenyl-d14	105		33 - 138			11/15/17 15:59	11/16/17 15:58	1

Lab Sample ID: LCS 400-376072/2-A

Matrix: Water

Analysis Batch: 376151

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 376072

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzo[a]pyrene	20.0	18.3		ug/L		91	52 - 120
1-Methylnaphthalene	20.0	17.4		ug/L		87	41 - 120
2-Methylnaphthalene	20.0	17.3		ug/L		86	32 - 124
Naphthalene	20.0	15.7		ug/L		79	39 - 125
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
2-Fluorobiphenyl	89		15 - 122				
Nitrobenzene-d5	73		19 - 130				
Terphenyl-d14	91		33 - 138				

Lab Sample ID: LCSD 400-376072/3-A

Matrix: Water

Analysis Batch: 376151

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 376072

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzo[a]pyrene	20.0	18.3		ug/L		92	52 - 120	0	50
1-Methylnaphthalene	20.0	16.7		ug/L		84	41 - 120	4	55

TestAmerica Pensacola

QC Sample Results

Client: Stantec Consulting Services Inc
Project/Site: El Paso CGP Company - Lat 0-21 Line Drip

TestAmerica Job ID: 400-145971-1

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Lab Sample ID: LCSD 400-376072/3-A

Matrix: Water

Analysis Batch: 376151

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 376072

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
2-Methylnaphthalene	20.0	16.6		ug/L		83	32 - 124	4	57
Naphthalene	20.0	14.8		ug/L		74	39 - 125	6	56

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
2-Fluorobiphenyl	81		15 - 122
Nitrobenzene-d5	73		19 - 130
Terphenyl-d14	86		33 - 138

Lab Chronicle

Client: Stantec Consulting Services Inc
Project/Site: El Paso CGP Company - Lat 0-21 Line Drip

TestAmerica Job ID: 400-145971-1

Client Sample ID: MW-1

Date Collected: 11/12/17 15:06

Date Received: 11/14/17 09:01

Lab Sample ID: 400-145971-1

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	376485	11/18/17 17:07	CAR	TAL PEN
Instrument ID: CH_LARS										

Client Sample ID: MW-2R

Date Collected: 11/12/17 15:27

Date Received: 11/14/17 09:01

Lab Sample ID: 400-145971-2

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	376485	11/18/17 17:29	CAR	TAL PEN
Instrument ID: CH_LARS										

Client Sample ID: MW-3R

Date Collected: 11/12/17 15:21

Date Received: 11/14/17 09:01

Lab Sample ID: 400-145971-3

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	376485	11/18/17 17:51	CAR	TAL PEN
Instrument ID: CH_LARS										

Client Sample ID: MW-4

Date Collected: 11/12/17 14:42

Date Received: 11/14/17 09:01

Lab Sample ID: 400-145971-4

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	376485	11/18/17 18:13	CAR	TAL PEN
Instrument ID: CH_LARS										

Client Sample ID: MW-5

Date Collected: 11/12/17 14:49

Date Received: 11/14/17 09:01

Lab Sample ID: 400-145971-5

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	376485	11/18/17 18:35	CAR	TAL PEN
Instrument ID: CH_LARS										
Total/NA	Prep	3520C			193.4 mL	1.0 mL	376072	11/15/17 15:59	VC1	TAL PEN
Total/NA	Analysis	8270C LL		1			376151	11/16/17 19:26	RM	TAL PEN
Instrument ID: Peanuts										

TestAmerica Pensacola

Lab Chronicle

Client: Stantec Consulting Services Inc
Project/Site: El Paso CGP Company - Lat 0-21 Line Drip

TestAmerica Job ID: 400-145971-1

Client Sample ID: MW-6

Date Collected: 11/12/17 15:15

Date Received: 11/14/17 09:01

Lab Sample ID: 400-145971-6

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	376485	11/18/17 18:57	CAR	TAL PEN
Instrument ID: CH_LARS										

Client Sample ID: TRIP BLANK

Date Collected: 11/12/17 14:30

Date Received: 11/14/17 09:01

Lab Sample ID: 400-145971-7

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	376485	11/18/17 10:31	CAR	TAL PEN
Instrument ID: CH_LARS										

Laboratory References:

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

Accreditation/Certification Summary

Client: Stantec Consulting Services Inc
Project/Site: El Paso CGP Company - Lat 0-21 Line Drip

TestAmerica Job ID: 400-145971-1

Laboratory: TestAmerica Pensacola

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

Authority	Program	EPA Region	Identification Number	Expiration Date
Alabama	State Program	4	40150	06-30-18
Arizona	State Program	9	AZ0710	01-11-18
Arkansas DEQ	State Program	6	88-0689	09-01-18
California	ELAP	9	2510	03-31-18
Florida	NELAP	4	E81010	06-30-18
Georgia	State Program	4	N/A	06-30-18
Illinois	NELAP	5	200041	10-09-18
Iowa	State Program	7	367	08-01-18
Kansas	NELAP	7	E-10253	12-31-17
Kentucky (UST)	State Program	4	53	06-30-18
Kentucky (WW)	State Program	4	98030	12-31-17
L-A-B	ISO/IEC 17025		L2471	02-22-20
Louisiana	NELAP	6	30976	06-30-18
Louisiana (DW)	NELAP	6	LA170005	12-31-17
Maryland	State Program	3	233	09-30-18
Massachusetts	State Program	1	M-FL094	06-30-18
Michigan	State Program	5	9912	06-30-18
New Jersey	NELAP	2	FL006	06-30-18
North Carolina (WW/SW)	State Program	4	314	12-31-17
Oklahoma	State Program	6	9810	08-31-18
Pennsylvania	NELAP	3	68-00467	01-31-18
Rhode Island	State Program	1	LAO00307	12-30-17
South Carolina	State Program	4	96026	06-30-18
Tennessee	State Program	4	TN02907	06-30-18
Texas	NELAP	6	T104704286-17-12	09-30-18
USDA	Federal		P330-16-00172	05-24-19
Virginia	NELAP	3	460166	06-14-18
Washington	State Program	10	C915	05-15-18
West Virginia DEP	State Program	3	136	06-30-18

Method Summary

Client: Stantec Consulting Services Inc
Project/Site: El Paso CGP Company - Lat 0-21 Line Drip

TestAmerica Job ID: 400-145971-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL PEN
8270C LL	Semivolatile Organic Compounds by GCMS - Low Levels	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 = TestAmerica Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

TestAmerica Pensacola

3355 McLeMere Drive
Pensacola, FL 32514
Phone (850) 474-1001 Fax (850) 478-2671

Chain of Custody Record



TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Client Information Client Contact: Ms. Sarah Gardner Company: Stantec Consulting Services Inc Address: 1560 Broadway Suite 1800 City: Denver State, Zip: CO, 80202 Phone: 303-291-2239 (Tel) Email: sarah.gardner@mwhglobal.com Project Name: W-ERL-SIN-05-17-17-SL6-12-LE-021 Lat 0-21 Nov 2017 Site:		Lab PM: Webb, Carol M E-Mail: carol.webb@testamericainc.com Phone: 515-306-1353 Due Date Requested: 10 day Std. TAT Requested (days): PO #: W-ERL-SIN-05-17-17-SL6-12-LE-021 Purchase Order Requested: 40005479 SSOW#:		Sampler: SMS Lab PM: Webb, Carol M E-Mail: carol.webb@testamericainc.com Phone: 515-306-1353 Due Date Requested: 10 day Std. TAT Requested (days): PO #: W-ERL-SIN-05-17-17-SL6-12-LE-021 Purchase Order Requested: 40005479 SSOW#:		Carrier Tracking No(s): 00-145971 COC Lab PM: Webb, Carol M E-Mail: carol.webb@testamericainc.com Phone: 515-306-1353 Due Date Requested: 10 day Std. TAT Requested (days): PO #: W-ERL-SIN-05-17-17-SL6-12-LE-021 Purchase Order Requested: 40005479 SSOW#:		COC No: 400-69063-27997.1 Page: Page 1 of 1 Job #: 203120381	
Analysis Requested A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Anchlor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA Other:		Preservation Codes: M - Hexane N - None O - AsNaO2 P - Na2O4S Q - Na2SO3 R - Na2SO3 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4.5 Z - other (specify)		Special Instructions/Note: Res ARF		Special Instructions/Note: Res ARF		Special Instructions/Note: Res ARF	
Sample Identification MW-1 MW-2R MW-3R MW-4 MW-5 MW-6 Trip Blank		Sample Date 11/12/17 1506 1527 1521 1442 1449 1515 1430		Sample Type (C=Comp, G=grab) G 		Matrix (W=water, S=solid, O=oil, BT=issue, Ar=Ar) W 		8021B - LVI Project Specific PAFs 8270C - LVI Project Specific PAFs	
Possible Hazard Identification ☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological		Deliverable Requested: I, II, III, IV, Other (specify)		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) ☐ Return To Client ☒ Disposal By Lab ☐ Archive For Months		Special Instructions/QC Requirements:		Method of Shipment:	
Relinquished by: [Signature] Date/Time: 11/13/17 1100 Company: [Signature]		Relinquished by: [Signature] Date/Time: 11/13/17 1100 Company: [Signature]		Relinquished by: [Signature] Date/Time: 11/13/17 1100 Company: [Signature]		Relinquished by: [Signature] Date/Time: 11/13/17 1100 Company: [Signature]		Relinquished by: [Signature] Date/Time: 11/13/17 1100 Company: [Signature]	
Custody Seals Intact: ☐ Yes ☐ No		Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks: 1.9°C 2H8		Ver: 08/04/2016		Ver: 08/04/2016	

Client: Stantec Consulting Services Inc

Job Number: 400-145971-1

Login Number: 145971

List Source: TestAmerica Pensacola

List Number: 1

Creator: Perez, Trina M

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	1.9°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.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	