2017 ANNUAL GROUNDWATER REPORT

Fields A#7A
NMOCD Case#: 3RP-170-0
Meter Code: 89961
T32N, R11W, S 34, Unit E

SITE DETAILS

Site Location: Latitude: 36.944245 N, Longitude: -107.982116 W
Land Type: Federal
Operator: BP

SITE BACKGROUND

Environmental Remediation activities at the Fields A#7A (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 BP America Production Company and is active.

The Site is located on Federal land. An initial site assessment was completed in August 1994, and an excavation to approximately 12 feet below ground surface (bgs) was completed in September of 1994, removing approximately 70 cubic yards (cy) of soil. Various site investigations have occurred since 1994. Monitoring wells MW-1, MW-2, MW-3 and MW-4 were installed in 1995. Temporary piezometers PZ-1 through PZ-5 were installed and removed in 1997. Monitoring wells MW-4R and MW-5 though MW-11 were installed in 2016. Historically, free product has been observed and periodically recovered. Free product was not observed in 2017. Currently, groundwater sampling is conducted on a semi-annual basis.

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 A. On June 6, and November 13, 2017, water levels were gauged at MW-1, MW-4R, and MW-5 through MW-11. Groundwater samples were collected from each well gauged on May 30, 2017, and from monitoring wells MW-1, MW-4R, MW-7, MW-8 and MW-10 on November 6, 2017. Groundwater samples were collected using HydraSleeve™ (HydraSleeve) no-purge groundwater sampling devices. The HydraSleeves were set during the previous sampling event. HydraSleeves were suspended approximately 0.5 foot above termination depth of the monitoring wells using a suspension tether and stainless steel weights to collect a sample from the screened interval.

The groundwater samples were placed into laboratory-supplied sample containers, packed on ice, and shipped under standard chain-of-custody protocols to TestAmerica Laboratories, Inc. in Pensacola, Florida where they were analyzed for benzene, toluene,

ethylbenzene, and total xylenes (BTEX). As requested by the NMOCD on November 13, 2018, BTEX constituents were analyzed using United States Environmental Protection Agency (EPA) Method 8260 during the November sampling event. The unused sample water was placed in a waste container and taken to Basin Disposal, Inc. for disposal. Waste disposal documentation is included as Appendix B.

SUMMARY TABLES

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

SITE MAPS

Groundwater analytical maps (Figures 1 and 3) and groundwater elevation maps (Figures 2 and 4) summarize results of the 2017 groundwater sampling and gauging events.

ANALYTICAL LAB REPORTS

The June and November 2017 groundwater analytical lab reports are included as Appendix C.

GROUNDWATER RESULTS

- Groundwater elevations indicate a flow direction to the southwest (see Figures 2 and 4).

- Groundwater samples collected in 2017 from MW-1, MW-4R, MW-5, MW-6, MW-7, and MW-8 exceeded the New Mexico Water Quality Control Commission (NMWQCC) standard (10 micrograms per liter [µg/L]) for benzene in groundwater. Benzene was either below the NMWQCC standard (10 µg/L) or not detected in monitoring wells, MW-9, MW-10, and MW-11.

- Concentrations of toluene were either below the NMWQCC standard (750 µg/L) or not detected in all of the Site monitoring wells sampled in 2017.

- Concentrations of ethylbenzene were either below the NMWQCC standard (750 µg/L) or not detected in all of the Site monitoring wells sampled in 2017.

- Concentrations of total xylenes were either below the NMWQCC standard (620 µg/L) or not detected in all of the Site monitoring wells sampled in 2017.

PLANNED FUTURE ACTIVITIES

Pursuant to the work plan dated September 18, 2017, EPCGP will continue to conduct semi-annual groundwater monitoring events through 2018. Monitoring wells MW-1,

MW-4R, MW-7, MW-8, and MW-10 will be sampled during these events and analyzed for BTEX constituents using EPA Method 8260.

EPCGP will await NMOCD receipt and review of information pertaining to the BP release at the site before determining what, if any, additional work may be required of EPCGP.

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TABLES

TABLE 1 - GROUNDWATER ANALYTICAL RESULTS

Fields A#7A					
Location	**Date**	**Benzene (µg/L)**	**Toluene (µg/L)**	**Ethylbenzene (µg/L)**	**Total Xylenes (µg/L)**
NMWQCC Standards:		10	750	750	620
MW-1	08/09/95	1950	1946	115	1361
MW-1	01/03/96	3150	5280	361	3460
MW-1	04/18/96	1300	2140	119	1240
MW-1	07/29/96	503	804	28	363
MW-1	10/21/96	843	1300	26	422
MW-1	01/30/97	1300	2200	76.8	966
MW-1	04/21/97	951	1920	73	894
MW-1	01/26/04	121	54	15.8	216
MW-1	04/21/04	116	58.1	29.3	83.3
MW-1	04/18/05	108	29	14.2	274
MW-1	10/22/05	180	69.2	6.3	154
MW-1	04/25/06	83.7	23.8	2.1 J	82.5
MW-1	10/24/06	254	108	4	169
MW-1	04/24/07	106	37.2	3.3	112
MW-1	04/21/08	246	38.3	1.6 J	81.3
MW-1	04/07/09	25.5	11	0.6 J	21.5
MW-1	05/24/10	100	43.8	1.1 J	56.9
MW-1	05/04/11	158	2.6	2.4	12.1
MW-1	05/07/12	27.1	8.7	1.1	14.2
MW-1	06/07/13	910	110	14.0	170
MW-1	09/12/13	130	13	3.1	29
MW-1	12/13/13	380	30	4.7	98
MW-1	04/05/14	66	11	<0.20	10
MW-1	10/21/14	93	3.8	2.1	23
MW-1	05/31/15	230	12	2.5	43
MW-1	11/22/15	440	8.6	2.7	34
MW-1	04/15/16	150	29	2.3	36
MW-1	10/14/16	22	<5.0	<1.0	<5.0
MW-1	06/06/17	410	43	5.5	68
MW-1	11/13/17	390	27	4.9	64

TABLE 1 - GROUNDWATER ANALYTICAL RESULTS

Fields A#7A					
Location	**Date**	**Benzene (µg/L)**	**Toluene (µg/L)**	**Ethylbenzene (µg/L)**	**Total Xylenes (µg/L)**
NMWQCC Standards:		10	750	750	620
MW-2	01/03/96	28.8	<2.5	297.0	1169
MW-2	04/18/96	<1	<1	2.6	<3
MW-2	07/29/96	<2	<2	<2	<6
MW-2	10/21/96	<1	<1	<1	<3
MW-2	01/30/97	<2	<2	<2	<6
MW-2	04/21/97	<1	<1	<1	<3
MW-2	04/13/01	<0.5	<0.5	<0.5	<0.5
MW-2	04/18/05	<1	<1	<1	<2
MW-2	04/21/08	<2	<2	<2	<6
MW-2	05/04/11	0.38 J	<1	<1	<3
MW-2 abandoned on August 22, 2016					
MW-3	01/03/96	176	16.4	225.0	1550
MW-3	04/18/96	129	<2	212.0	463
MW-3	07/29/96	212	<2	167.0	393
MW-3	10/21/96	165	<1	157.0	467
MW-3	01/30/97	144	<1	198.0	851
MW-3	04/21/97	2070	4340	332.0	4730
MW-3	04/13/01	120	5.2	<5	80
MW-3	04/18/05	<1	<1	<1	<2
MW-3	04/25/06	46.4	<5	<5	<10
MW-3	04/24/07	179	<5	12.3	37.9
MW-3	04/21/08	140	2.5	2.7	16.9
MW-3	04/07/09	182	<50	<50	<100
MW-3	05/04/11	5.7	<1	0.42 J	<3
MW-3	05/07/12	14.6	<1	0.3 J	2.5 J
MW-3 abandoned on August 22, 2016					
MW-4	01/03/96	2470	1880	206.0	2350
MW-4	04/18/96	4760	2460	235.0	1880
MW-4	07/29/96	1830	2380	106.0	967
MW-4	10/21/96	3320	4520	149.0	1680
MW-4	01/30/97	4320	7420	280.0	3250
MW-4	04/21/97	2410	5170	219.0	2530
MW-4	04/21/08	1580	679	6.8 J	3900
MW-4	04/07/09	695	206	<50	745
MW-4	11/01/11	533	207	<10	419
MW-4 replaced with MW-4R on August 21, 2016					
MW-4R	10/14/16	<1.0	<5.0	<1.0	<5.0
MW-4R	06/06/17	50	<5.0	2.1	<5.0
MW-4R	11/13/17	53	<1.0	3.4	<10

TABLE 1 - GROUNDWATER ANALYTICAL RESULTS

Fields A#7A					
Location	**Date**	**Benzene (µg/L)**	**Toluene (µg/L)**	**Ethylbenzene (µg/L)**	**Total Xylenes (µg/L)**
NMWQCC Standards:		10	750	750	620
MW-5	10/14/16	130	6.4	19.0	57
MW-5	06/06/17	78	<5.0	<1.0	<5.0
MW-6	10/14/16	2100	880	490	2300
MW-6	06/06/17	1400	130	340	610
MW-7	10/14/16	410	340	31.0	270
MW-7	06/06/17	12	<5.0	<1.0	<5.0
MW-7	11/13/17	30	12	<1.0	15
MW-8	10/14/16	2.2	<5.0	<1.0	<5.0
MW-8	06/06/17	12	<5.0	<1.0	8.5
MW-8	11/13/17	100	<1.0	<1.0	16
MW-9	10/14/16	12	8.1	4.6	34
MW-9	06/06/17	1.7	<5.0	<1.0	<5.0
MW-10	10/14/16	26	32	4.6	41
MW-10	06/06/17	<1.0	<5.0	<1.0	<5.0
MW-10	11/13/17	1.4	<1.0	<1.0	<10
MW-11	10/14/16	<1.0	<5.0	1.3	9.7
MW-11	06/06/17	<1.0	<5.0	<1.0	<5.0

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 in an approximate value.

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

TABLE 2 - GROUNDWATER ELEVATION RESULTS

Fields A#7A						
Location	Date	TOC	Depth to Water (ft.)	Depth to LNAPL (ft.)	LNAPL Thickness (ft.)	GW Elevation (ft.)
MW-1	08/09/95	6085.98	22.50	NR		6063.48
MW-1	01/03/96	6085.98	23.28	NR		6062.70
MW-1	04/18/96	6085.98	24.20	NR		6061.78
MW-1	05/08/96	6085.98	24.20	NR		6061.78
MW-1	07/29/96	6085.98	25.07	25.02	0.05	6060.95
MW-1	10/21/96	6085.98	25.45	25.38	0.07	6060.59
MW-1	01/30/97	6085.98	26.83	26.57	0.26	6059.35
MW-1	04/21/97	6085.98	26.47	26.44	0.03	6059.54
MW-1	01/30/01	6085.98	30.08	28.74	1.34	6056.91
MW-1	02/08/01	6085.98	29.85	28.65	1.20	6057.03
MW-1	02/16/01	6085.98	30.20	29.08	1.12	6056.62
MW-1	02/17/01	6085.98	29.66	29.08	0.58	6056.76
MW-1	02/26/01	6085.98	29.54	29.39	0.15	6056.56
MW-1	03/05/01	6085.98	29.28	29.25	0.03	6056.73
MW-1	04/11/01	6085.98	29.33	NR		6056.65
MW-1	06/05/01	6085.98	29.46	29.34	0.12	6056.61
MW-1	06/15/01	6085.98	29.65	29.57	0.08	6056.39
MW-1	07/06/01	6085.98	30.00	NR		6055.98
MW-1	07/13/01	6085.98	29.96	NR		6056.02
MW-1	07/20/01	6085.98	29.69	NR		6056.29
MW-1	08/01/01	6085.98	30.19	NR		6055.79
MW-1	08/08/01	6085.98	30.12	NR		6055.86
MW-1	08/18/01	6085.98	30.44	NR		6055.54
MW-1	08/20/01	6085.98	30.32	NR		6055.66
MW-1	09/05/01	6085.98	30.38	NR		6055.60
MW-1	09/21/01	6085.98	30.63	NR		6055.35
MW-1	09/26/01	6085.98	30.78	NR		6055.20
MW-1	10/03/01	6085.98	30.69	NR		6055.29
MW-1	10/10/01	6085.98	30.33	30.32	0.01	6055.66
MW-1	12/04/01	6085.98	30.51	NR		6055.47
MW-1	12/13/01	6085.98	29.43	29.42	0.01	6056.56
MW-1	12/21/01	6085.98	30.40	30.39	0.01	6055.59
MW-1	12/28/01	6085.98	30.64	NR		6055.34
MW-1	01/07/02	6085.98	30.59	30.58	0.01	6055.40
MW-1	01/23/02	6085.98	30.41	30.40	0.01	6055.58
MW-1	01/31/02	6085.98	30.95	30.94	0.01	6055.04
MW-1	02/07/02	6085.98	31.12	31.11	0.01	6054.87
MW-1	02/14/02	6085.98	31.18	31.17	0.01	6054.81
MW-1	02/20/02	6085.98	31.15	31.14	0.01	6054.84
MW-1	03/21/02	6085.98	30.80	30.78	0.02	6055.20

TABLE 2 - GROUNDWATER ELEVATION RESULTS

Fields A#7A						
Location	Date	TOC	Depth to Water (ft.)	Depth to LNAPL (ft.)	LNAPL Thickness (ft.)	GW Elevation (ft.)
MW-1	03/28/02	6085.98	30.92	NR		6055.06
MW-1	04/04/02	6085.98	30.64	NR		6055.34
MW-1	04/12/02	6085.98	31.45	NR		6054.53
MW-1	04/19/02	6085.98	31.56	NR		6054.42
MW-1	04/25/02	6085.98	31.54	NR		6054.44
MW-1	05/03/02	6085.98	31.51	NR		6054.47
MW-1	05/10/02	6085.98	31.59	NR		6054.39
MW-1	05/17/02	6085.98	31.16	NR		6054.82
MW-1	05/24/02	6085.98	31.38	NR		6054.60
MW-1	05/31/02	6085.98	31.23	NR		6054.75
MW-1	06/06/02	6085.98	31.32	NR		6054.66
MW-1	06/14/02	6085.98	31.34	NR		6054.64
MW-1	06/21/02	6085.98	31.67	NR		6054.31
MW-1	06/27/02	6085.98	31.81	NR		6054.17
MW-1	07/02/02	6085.98	31.82	NR		6054.16
MW-1	07/11/02	6085.98	31.84	NR		6054.14
MW-1	07/18/02	6085.98	31.45	NR		6054.53
MW-1	08/21/02	6085.98	32.12	NR		6053.86
MW-1	10/01/02	6085.98	31.77	NR		6054.21
MW-1	01/15/03	6085.98	31.90	ND		6054.08
MW-1	04/27/03	6085.98	31.07	31.06	0.01	6054.92
MW-1	07/16/03	6085.98	31.30	ND		6054.69
MW-1	10/27/03	6085.98	30.97	ND		6055.01
MW-1	01/26/04	6085.98	30.67	ND		6055.31
MW-1	04/21/04	6085.98	30.83	ND		6055.15
MW-1	07/27/04	6085.98	30.97	ND		6055.01
MW-1	10/18/04	6085.98	31.15	ND		6054.83
MW-1	01/25/05	6085.98	30.19	ND		6055.79
MW-1	04/18/05	6085.98	30.19	ND		6055.79
MW-1	10/22/05	6085.98	30.74	ND		6055.24
MW-1	04/25/06	6085.98	31.41	ND		6054.57
MW-1	10/24/06	6085.98	31.39	ND		6054.59
MW-1	04/24/07	6085.98	31.66	ND		6054.32
MW-1	10/29/07	6085.98	31.73	ND		6054.25
MW-1	04/21/08	6085.98	30.31	ND		6055.67
MW-1	10/09/08	6085.98	30.69	ND		6055.29
MW-1	04/07/09	6085.98	31.24	ND		6054.74
MW-1	11/04/09	6085.98	31.77	ND		6054.21
MW-1	05/24/10	6085.98	31.33	ND		6054.65
MW-1	11/02/10	6085.98	29.93	ND		6056.05

TABLE 2 - GROUNDWATER ELEVATION RESULTS

Fields A#7A						
Location	**Date**	**TOC**	**Depth to Water (ft.)**	**Depth to LNAPL (ft.)**	**LNAPL Thickness (ft.)**	**GW Elevation (ft.)**
MW-1	05/04/11	6085.98	29.91	ND		6056.07
MW-1	11/01/11	6085.98	29.80	ND		6056.18
MW-1	05/07/12	6085.98	30.29	ND		6055.69
MW-1	06/07/13	6085.98	31.41	ND		6054.57
MW-1	09/12/13	6085.98	31.55	ND		6054.43
MW-1	12/13/13	6085.98	31.09	ND		6054.89
MW-1	04/05/14	6085.98	31.24	ND		6054.74
MW-1	10/21/14	6085.98	31.65	ND		6054.33
MW-1	05/31/15	6085.98	31.82	ND		6054.16
MW-1	11/22/15	6085.98	31.27	ND		6054.71
MW-1	04/15/16	6085.98	30.87	ND		6055.11
MW-1	10/14/16	6085.98	30.96	ND		6055.02
MW-1	06/06/17	6085.98	30.56	ND		6055.42
MW-1	11/13/17	6085.98	30.71	ND		6055.27

TABLE 2 - GROUNDWATER ELEVATION RESULTS

Fields A#7A						
Location	**Date**	**TOC**	**Depth to Water (ft.)**	**Depth to LNAPL (ft.)**	**LNAPL Thickness (ft.)**	**GW Elevation (ft.)**
MW-2	01/03/96	6084.24	24.27	NR		6059.97
MW-2	04/18/96	6084.24	25.53	NR		6058.71
MW-2	05/08/96	6084.24	25.53	NR		6058.71
MW-2	07/29/96	6084.24	26.48	NR		6057.76
MW-2	10/21/96	6084.24	26.96	NR		6057.28
MW-2	01/30/97	6084.24	27.73	NR		6056.51
MW-2	04/21/97	6084.24	27.77	NR		6056.47
MW-2	04/13/01	6084.24	30.33	NR		6053.91
MW-2	06/05/01	6084.24	30.71	NR		6053.53
MW-2	07/20/01	6084.24	30.95	NR		6053.29
MW-2	08/20/01	6084.24	31.03	NR		6053.21
MW-2	05/17/02	6084.24	31.38	NR		6052.86
MW-2	10/27/03	6084.24	31.79	NR		6052.46
MW-2	04/21/04	6084.24	31.10	ND		6053.14
MW-2	04/18/05	6084.24	30.98	ND		6053.26
MW-2	04/21/08	6084.24	30.66	ND		6053.58
MW-2	11/02/10	6084.24	29.65	ND		6054.59
MW-2	05/04/11	6084.24	31.10	ND		6053.14
MW-2	11/01/11	6084.24	31.42	ND		6052.82
MW-2	05/07/12	6084.24	31.29	ND		6052.95
MW-2	06/07/13	6084.24	DRY	ND		DRY
MW-2	09/12/13	6084.24	DRY	ND		DRY
MW-2	12/13/13	6084.24	DRY	ND		DRY
MW-2	04/05/14	6084.24	DRY	ND		DRY
MW-2	10/21/14	6084.24	DRY	ND		DRY
MW-2	05/31/15	6084.24	DRY	ND		DRY
MW-2	11/22/15	6084.24	DRY	ND		DRY
MW-2	04/15/16	6084.24	DRY	ND		DRY
MW-2 abandoned on August 22, 2016						

TABLE 2 - GROUNDWATER ELEVATION RESULTS

Fields A#7A						
Location	**Date**	**TOC**	**Depth to Water (ft.)**	**Depth to LNAPL (ft.)**	**LNAPL Thickness (ft.)**	**GW Elevation (ft.)**
MW-3	01/03/96	6084.06	24.88	NR		6059.18
MW-3	04/18/96	6084.06	25.75	NR		6058.31
MW-3	05/08/96	6084.06	25.75	NR		6058.31
MW-3	07/29/96	6084.06	26.64	NR		6057.42
MW-3	10/21/96	6084.06	27.16	NR		6056.90
MW-3	01/30/97	6084.06	27.92	NR		6056.14
MW-3	04/21/97	6084.06	28.00	NR		6056.06
MW-3	04/13/01	6084.06	30.48	NR		6053.58
MW-3	06/05/01	6084.06	30.79	NR		6053.27
MW-3	07/20/01	6084.06	31.03	NR		6053.03
MW-3	08/20/01	6084.06	31.14	NR		6052.92
MW-3	04/02/02	6084.06	31.62	NR		6052.44
MW-3	05/17/02	6084.06	32.05	NR		6052.01
MW-3	01/25/05	6084.06	31.93	ND		6052.14
MW-3	04/18/05	6084.06	30.77	ND		6053.29
MW-3	10/22/05	6084.06	31.57	ND		6052.49
MW-3	04/25/06	6084.06	31.61	ND		6052.45
MW-3	10/24/06	6084.06	31.90	ND		6052.16
MW-3	04/24/07	6084.06	31.90	ND		6052.16
MW-3	10/29/07	6084.06	31.93	ND		6052.13
MW-3	04/21/08	6084.06	30.40	ND		6053.66
MW-3	10/09/08	6084.06	31.56	ND		6052.50
MW-3	04/07/09	6084.06	31.40	ND		6052.66
MW-3	11/04/09	6084.06	31.97	ND		6052.09
MW-3	05/24/10	6084.06	31.87	ND		6052.19
MW-3	11/02/10	6084.06	29.83	ND		6054.23
MW-3	05/04/11	6084.06	30.71	ND		6053.35
MW-3	11/01/11	6084.06	31.08	ND		6052.98
MW-3	05/07/12	6084.06	31.57	ND		6052.49
MW-3	06/07/13	6084.06	DRY	ND		DRY
MW-3	09/12/13	6084.06	DRY	ND		DRY
MW-3	12/13/13	6084.06	DRY	ND		DRY
MW-3	04/05/14	6084.06	DRY	ND		DRY
MW-3	10/21/14	6084.06	DRY	ND		DRY
MW-3	05/31/15	6084.06	DRY	ND		DRY
MW-3	11/22/15	6084.06	DRY	ND		DRY
MW-3	04/15/16	6084.06	DRY	ND		DRY
MW-3 abandoned on August 22, 2016						

TABLE 2 - GROUNDWATER ELEVATION RESULTS

Fields A#7A						
Location	Date	TOC	Depth to Water (ft.)	Depth to LNAPL (ft.)	LNAPL Thickness (ft.)	GW Elevation (ft.)
MW-4	01/03/96	6084.61	25.69	NR		6058.92
MW-4	04/18/96	6084.61	26.42	NR		6058.19
MW-4	01/00/00	6084.61	26.42	25.83	0.59	6058.64
MW-4	07/29/96	6084.61	28.65	26.82	1.83	6057.34
MW-4	10/21/96	6084.61	28.84	27.45	1.39	6056.82
MW-4	01/30/97	6084.61	28.85	28.43	0.42	6056.08
MW-4	04/21/97	6084.61	28.68	28.58	0.10	6056.01
MW-4	06/05/01	6084.61	31.25	31.01	0.24	6053.54
MW-4	06/15/01	6084.61	31.56	31.12	0.44	6053.38
MW-4	07/06/01	6084.61	DRY	31.20	-	DRY
MW-4	07/13/01	6084.61	DRY	31.44	-	DRY
MW-4	07/20/01	6084.61	DRY	31.51	-	DRY
MW-4	08/01/01	6084.61	DRY	31.54	-	DRY
MW-4	08/08/01	6084.61	DRY	NR		DRY
MW-4	08/16/01	6084.61	DRY	NR		DRY
MW-4	08/20/01	6084.61	DRY	NR		DRY
MW-4	09/05/01	6084.61	DRY	NR		DRY
MW-4	09/21/01	6084.61	DRY	NR		DRY
MW-4	09/26/01	6084.61	DRY	NR		DRY
MW-4	10/03/01	6084.61	DRY	NR		DRY
MW-4	10/10/01	6084.61	DRY	NR		DRY
MW-4	12/04/01	6084.61	DRY	NR		DRY
MW-4	12/13/01	6084.61	DRY	31.65	-	DRY
MW-4	12/21/01	6084.61	DRY	31.61	-	DRY
MW-4	12/28/01	6084.61	31.61	NR		6053.00
MW-4	01/07/02	6084.61	DRY	31.61	-	DRY
MW-4	01/23/02	6084.61	DRY	31.62	-	DRY
MW-4	01/31/02	6084.61	DRY	31.61	-	DRY
MW-4	02/07/02	6084.61	DRY	31.60	-	DRY
MW-4	02/14/02	6084.61	DRY	31.62	-	DRY
MW-4	02/20/02	6084.61	DRY	31.62	-	DRY
MW-4	03/21/02	6084.61	DRY	NR		DRY
MW-4	04/04/02	6084.61	DRY	NR		DRY
MW-4	05/17/02	6084.61	DRY	NR		DRY
MW-4	05/24/02	6084.61	DRY	NR		DRY
MW-4	05/31/02	6084.61	DRY	NR		DRY
MW-4	06/06/02	6084.61	DRY	NR		DRY
MW-4	06/14/02	6084.61	DRY	NR		DRY
MW-4	07/18/02	6084.61	DRY	NR		DRY
MW-4	10/01/02	6084.61	DRY	NR		DRY

TABLE 2 - GROUNDWATER ELEVATION RESULTS

Fields A#7A						
Location	**Date**	**TOC**	**Depth to Water (ft.)**	**Depth to LNAPL (ft.)**	**LNAPL Thickness (ft.)**	**GW Elevation (ft.)**
MW-4	01/15/03	6084.61	DRY	ND		DRY
MW-4	01/26/04	6084.61	DRY	ND		DRY
MW-4	04/21/04	6084.61	DRY	ND		DRY
MW-4	07/27/04	6084.61	DRY	ND		DRY
MW-4	10/18/04	6084.61	DRY	ND		DRY
MW-4	01/25/05	6084.61	DRY	ND		DRY
MW-4	04/18/05	6084.61	DRY	ND		DRY
MW-4	04/21/08	6084.61	31.22	ND		6053.39
MW-4	10/09/08	6084.61	31.40	ND		6053.21
MW-4	04/07/09	6084.61	31.40	ND		6053.21
MW-4	11/04/09	6084.61	31.58	ND		6053.03
MW-4	05/24/10	6084.61	31.47	ND		6053.14
MW-4	11/02/10	6084.61	30.60	ND		6054.01
MW-4	05/04/11	6084.61	31.05	ND		6053.56
MW-4	11/01/11	6084.61	31.05	ND		6053.56
MW-4	05/07/12	6084.61	31.47	ND		6053.14
MW-4	06/07/13	6084.61	31.42	ND		6053.19
MW-4	09/12/13	6084.61	DRY	ND		DRY
MW-4	12/13/13	6084.61	DRY	ND		DRY
MW-4	04/05/14	6084.61	DRY	ND		DRY
MW-4	10/21/14	6084.61	DRY	ND		DRY
MW-4	05/31/15	6084.61	DRY	ND		DRY
MW-4	11/22/15	6084.61	DRY	ND		DRY
MW-4	04/15/16	6084.61	DRY	ND		DRY
MW-4 replaced with MW-4R on August 21, 2016						
MW-4R	10/14/16	6084.43	32.53	ND		6051.90
MW-4R	06/06/17	6084.43	32.13	ND		6052.30
MW-4R	11/13/17	6084.43	32.39	ND		6052.04

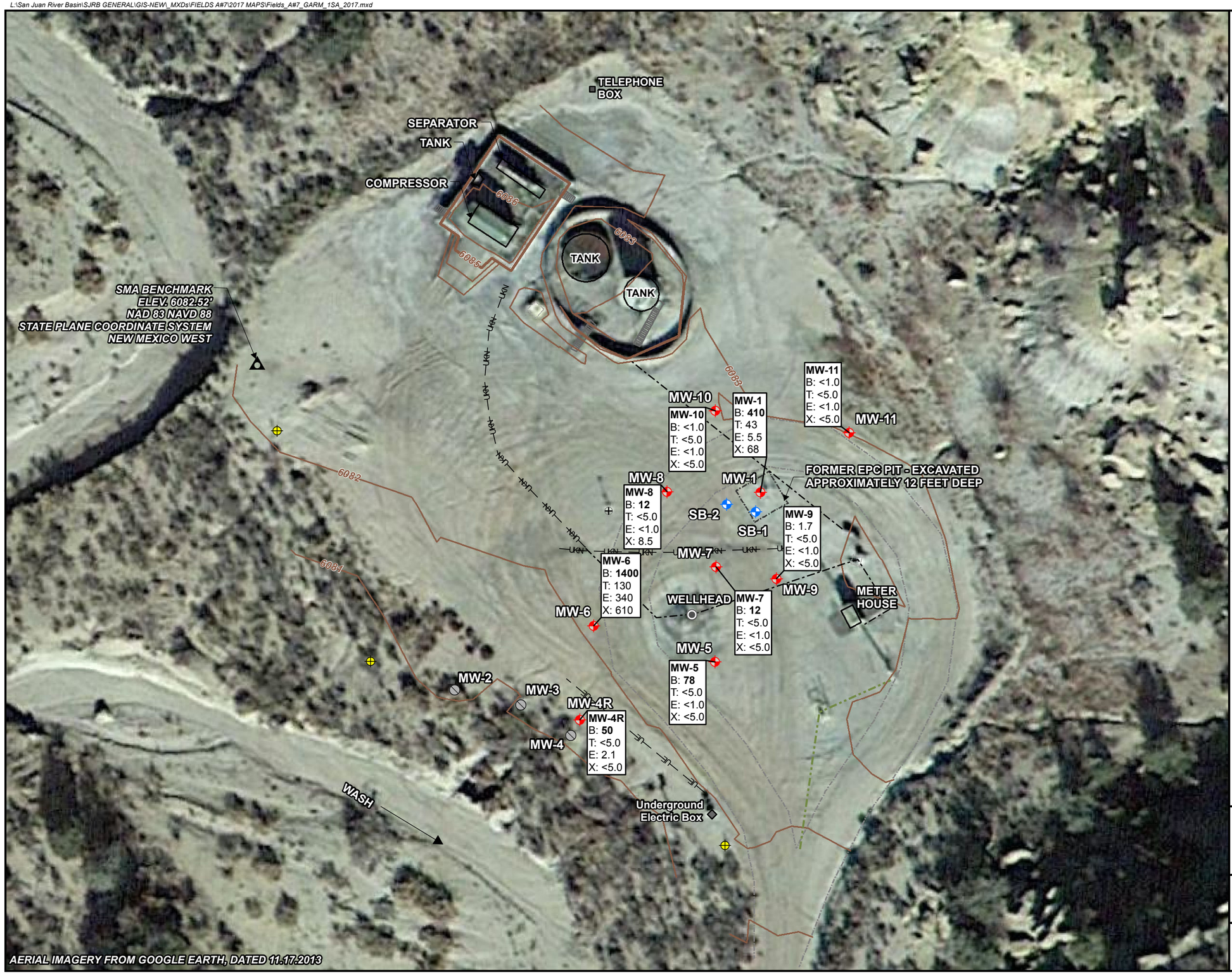
TABLE 2 - GROUNDWATER ELEVATION RESULTS

Fields A#7A						
Location	**Date**	**TOC**	**Depth to Water (ft.)**	**Depth to LNAPL (ft.)**	**LNAPL Thickness (ft.)**	**GW Elevation (ft.)**
MW-5	10/14/16	6081.99	28.08	ND		6053.91
MW-5	06/06/17	6081.99	27.70	ND		6054.29
MW-5	11/13/17	6081.99	27.89	ND		6054.10
MW-6	10/14/16	6081.99	29.78	ND		6052.21
MW-6	06/06/17	6081.99	29.37	ND		6052.62
MW-6	11/13/17	6081.99	29.63	ND		6052.36
MW-7	10/14/16	6082.19	27.46	ND		6054.73
MW-7	06/06/17	6082.19	27.13	ND		6055.06
MW-7	11/13/17	6082.19	27.31	ND		6054.88
MW-8	10/14/16	6082.28	27.80	ND		6054.48
MW-8	06/06/17	6082.28	27.41	ND		6054.87
MW-8	11/13/17	6082.28	27.58	ND		6054.70
MW-9	10/14/16	6082.35	27.37	ND		6054.98
MW-9	06/06/17	6082.35	26.98	ND		6055.37
MW-9	11/13/17	6082.35	27.12	ND		6055.23
MW-10	10/14/16	6086.17	31.16	ND		6055.01
MW-10	06/06/17	6086.17	30.79	ND		6055.38
MW-10	11/13/17	6086.17	30.90	ND		6055.27
MW-11	10/14/16	6085.79	30.47	ND		6055.32
MW-11	06/06/17	6085.79	30.22	ND		6055.57
MW-11	11/13/17	6085.79	30.31	ND		6055.48

Notes:
"ft" = feet
"TOC" = Top of Casing
"LNAPL" = Light non-aqueous phase liquid
"ND" = LNAPL not detected
"NR" = LNAPL not recorded
"DRY" = No water detected

FIGURES

L:\San Juan River Basin\SJRB GENERAL\GIS-NEW_MXDs\FIELDS A#7\2017 MAPS\Fields_A#7_GARM_1SA_2017.mxd



LEGEND:

- 6082 — APPROX. GROUND SURFACE CONTOUR AND ELEVATION, FEET
- ACCESS ROAD
- SMA BENCHMARK
- MONITORING WELL
- SOIL BORING
- ABANDONED MONITORING WELL
- OTHER MONITORING WELL
- PASSIVE VENT WELL
- WELLHEAD
- UKN — UKN UNKNOWN LINE
- UE — UE UNDERGROUND ELECTRIC
- PIPELINE
- COMMUNICATION

EXPLANATION OF ANALYTES AND APPLICABLE STANDARDS:

RESULTS IN **BOLDFACE** TYPE INDICATE CONCENTRATION IN EXCESS OF THE STANDARD FOR THAT ANALYTE.
µg/L = MICROGRAMS PER LITER
<1 = BELOW METHOD DETECTION LIMIT

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

N

SCALE IN FEET
0 30 60

REVISION	DATE	DESIGN BY	DRAWN BY	REVIEWED BY
A	3/27/2018	SLG	SLG	SV

TITLE:

GROUNDWATER ANALYTICAL RESULTS
JUNE 6, 2017

PROJECT:

FIELDS A#7A
SAN JUAN RIVER BASIN
SAN JUAN COUNTY, NEW MEXICO

Stantec

Figure No.: 1

L:\San Juan River Basin\SJRB GENERAL\GIS-NEW_MXDs\FIELDS A#7\2017 MAPS\Fields_A#7_GECM_1SA_2017.mxd

TELEPHONE BOX
SEPARATOR
TANK
COMPRESSOR
6086
6085
6083
TANK
TANK
SMA BENCHMARK
ELEV. 6082.52'
NAD 83 NAVD 88
STATE PLANE COORDINATE SYSTEM
NEW MEXICO WEST
6082
6055
6054
6053
6084
MW-10
6055.38
MW-10
MW-11
6055.57
MW-11
FORMER EPC PIT - EXCAVATED APPROXIMATELY 12 FEET DEEP
MW-8
6054.88
MW-8
MW-1
6055.42
MW-1
MW-7
6055.06
MW-7
MW-9
6055.37
MW-9
METER HOUSE
WELLHEAD
MW-6
MW-6
6052.62
MW-5
6054.29
MW-5
MW-2
MW-3
MW-4R
6052.30
MW-4R
MW-4
WASH
Underground Electric Box
AERIAL IMAGERY FROM GOOGLE EARTH, DATED 11.17.2013

LEGEND:

- 6082 — APPROX. GROUND SURFACE CONTOUR AND ELEVATION, FEET
- ACCESS ROAD
- SMA BENCHMARK
- MONITORING WELL
- ABANDONED MONITORING WELL
- OTHER MONITORING WELL
- PASSIVE VENT WELL
- WELLHEAD
- UKN — UNKNOWN LINE
- UE — UNDERGROUND ELECTRIC
- PIPELINE
- COMMUNICATION

NOTES:

5739.86 GROUNDWATER ELEVATION CORRECTED FOR PRODUCT THICKNESS. FEET ABOVE MEAN SEA LEVEL

5739.6 CORRECTED WATER LEVEL ELEVATION CONTOUR DASHED WHERE INFERRED (FEET ABOVE MEAN SEA LEVEL)

DIRECTION OF APPARENT GROUNDWATER FLOW

N

SCALE IN FEET

0 30 60

REVISION	DATE	DESIGN BY	DRAWN BY	REVIEWED BY
	3/27/2018	SLG	SLG	SRV

TITLE:

GROUNDWATER ELEVATION MAP
JUNE 6, 2017

PROJECT:

FIELDS A#7A
SAN JUAN RIVER BASIN
SAN JUAN COUNTY, NEW MEXICO

Stantec

Figure No.: 2

L:\San Juan River Basin\SJRB GENERAL\GIS-NEW_MXDs\FIELDS A#7\2017 MAPS\Fields_A#7_GARM_2SA_2017.mxd

TELEPHONE BOX
SEPARATOR
TANK
COMPRESSOR
6086
6085
6083
TANK
TANK
SMA BENCHMARK
ELEV. 6082.52'
NAD 83 NAVD 88
STATE PLANE COORDINATE SYSTEM
NEW MEXICO WEST
MW-10
B: 1.4
T: <1.0
E: <1.0
X: <10
MW-10
MW-1
B: 390
T: 27
E: 4.9
X: 64
MW-11
NS
MW-11
FORMER EPC PIT - EXCAVATED APPROXIMATELY 12 FEET DEEP
6082
MW-8
MW-8
B: 100
T: <1.0
E: <1.0
X: 16
MW-1
SB-2
SB-1
6081
MW-7
MW-9
NS
MW-9
WELLHEAD
MW-7
B: 30
T: 12
E: <1.0
X: 15
METER HOUSE
MW-6
MW-6
NS
MW-5
MW-5
NS
MW-2
MW-3
MW-4R
MW-4R
B: 53
T: <1.0
E: 3.4
X: <10
MW-4
WASH
Underground Electric Box
AERIAL IMAGERY FROM GOOGLE EARTH, DATED 11.17.2013

LEGEND:

- 6082 — APPROX. GROUND SURFACE CONTOUR AND ELEVATION, FEET
- ACCESS ROAD
- SMA BENCHMARK
- MONITORING WELL
- SOIL BORING
- ABANDONED MONITORING WELL
- OTHER MONITORING WELL
- PASSIVE VENT WELL
- WELLHEAD
- UKN — UKN UNKNOWN LINE
- UE — UE UNDERGROUND ELECTRIC
- PIPELINE
- COMMUNICATION

EXPLANATION OF ANALYTES AND APPLICABLE STANDARDS:

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

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

N

SCALE IN FEET
0 30 60

REVISION	DATE	DESIGN BY	DRAWN BY	REVIEWED BY
A	3/27/2018	SLG	SLG	SV

TITLE:

GROUNDWATER ANALYTICAL RESULTS
NOVEMBER 13, 2017

PROJECT:

FIELDS A#7A
SAN JUAN RIVER BASIN
SAN JUAN COUNTY, NEW MEXICO

Stantec

Figure No.: **3**

L:\San Juan River Basin\SJRB GENERAL\GIS-NEW_MXDs\FIELDS A#7\2017 MAPS\Fields_A#7_GECM_2SA_2017.mxd

TELEPHONE BOX
SEPARATOR
TANK
COMPRESSOR
6086
6085
6083
TANK
TANK
SMA BENCHMARK
ELEV. 6082.52'
NAD 83 NAVD 88
STATE PLANE COORDINATE SYSTEM
NEW MEXICO WEST
6082
6084
MW-10
6055.27
MW-10
MW-11
6055.48
MW-11
FORMER EPC PIT - EXCAVATED APPROXIMATELY 12 FEET DEEP
MW-8
6054.71
MW-8
MW-1
6055.27
MW-1
MW-7
6054.88
MW-7
MW-9
6055.23
MW-9
METER HOUSE
MW-6
6052.36
MW-6
WELLHEAD
MW-5
6054.10
MW-5
6055
6054
MW-2
MW-3
MW-4R
6052.04
MW-4R
MW-4
6053
WASH
Underground Electric Box
AERIAL IMAGERY FROM GOOGLE EARTH, DATED 11.17.2013

LEGEND:

- 6082 — APPROX. GROUND SURFACE CONTOUR AND ELEVATION, FEET
- ACCESS ROAD
- SMA BENCHMARK
- MONITORING WELL
- ABANDONED MONITORING WELL
- OTHER MONITORING WELL
- PASSIVE VENT WELL
- WELLHEAD
- UKN — UNKNOWN LINE
- UE — UNDERGROUND ELECTRIC
- PIPELINE
- COMMUNICATION

NOTES:

5739.86 GROUNDWATER ELEVATION CORRECTED FOR PRODUCT THICKNESS. FEET ABOVE MEAN SEA LEVEL

5739.6 CORRECTED WATER LEVEL ELEVATION CONTOUR DASHED WHERE INFERRED (FEET ABOVE MEAN SEA LEVEL)

DIRECTION OF APPARENT GROUNDWATER FLOW

N

SCALE IN FEET

0 30 60

REVISION	DATE	DESIGN BY	DRAWN BY	REVIEWED BY
	3/27/2018	SLG	SLG	SRV

TITLE:

GROUNDWATER ELEVATION MAP
NOVEMBER 13, 2017

PROJECT:

FIELDS A#7A
SAN JUAN RIVER BASIN
SAN JUAN COUNTY, NEW MEXICO

Stantec

Figure No.: 4

APPENDICES

APPENDIX A – NOTIFICATIONS OF SAMPLING ACTIVITIES

APPENDIX B – WASTE DISPOSAL DOCUMENTATION

APPENDIX C – JUNE 6, 2017 GROUNDWATER SAMPLING ANALYTICAL REPORT
NOVEMBER 13, 2017 GROUNDWATER SAMPLING ANALYTICAL REPORT

APPENDIX A

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

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

APPENDIX B

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. 687962
NMOCD PERMIT: NM -001-0005
Oil Field Waste Document, Form C138
INVOICE:

DATE 6-8-12 DEL. TKT#.

GENERATOR: EL PASO BILL TO: EL PASO

HAULING CO. DRIVER: Sarah Gardner
(Print Full Name)

ORDERED BY: Joseph Wiley 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	01	JICARILLA E #1E	1	75			75	4:13PM
2		STATE GAS COM N #1 CARRACAS #2						
3		MESTEJA Fields A #2A						
4		Lindrith B #24 Hamm #4 #4A						
5		KNIGHT #1 K271072						

I, _____ representitive 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 _____

san juan reproduction 168-6

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. 700071

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

DATE 11-14-17

DEL. TKT#.

GENERATOR: El Paso

BILL TO: El Paso

HAULING CO. Stanteo

DRIVER: Sam Spring
(Print Full Name)

ORDERED BY: Joseph Wiley

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	1	Fogelson 4-1	1	75			75 17 NOV 14	2:31 pm
2		~~State Gas Com~~, Knight JF Bell, ~~Lat L-40~~, ~~Std Oil Com~~						
3		~~Sandoval~~, GCU 124E ~~J Fed 4~~, ~~J Fed 6~~						
4		Fields A7A, GCU 142E Fogelson, Canada Mesa, K-27						
5		Miles Fed						

I, _____ representitive 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 _____

san juan reproduction 168-6

APPENDIX C

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: 400-139062-1
Client Project/Site: ElPaso CGP Company, LLC - Fields A#7A

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

Attn: Ms. Sarah Gardner

Madonna Myers

Authorized for release by:
6/22/2017 11:59:29 AM
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Designee for

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Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
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: ElPaso CGP Company, LLC - Fields A#7A

TestAmerica Job ID: 400-139062-1

Job ID: 400-139062-1

Laboratory: TestAmerica Pensacola

Narrative

Job Narrative
400-139062-1

Comments
No additional comments.

Receipt
The samples were received on 6/9/2017 11:11 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 2.7º C and 3.1º 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 - Fields A#7A

TestAmerica Job ID: 400-139062-1

Client Sample ID: MW-1 — Lab Sample ID: 400-139062-1

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Benzene	410		2.0		ug/L	2		8021B	Total/NA
Ethylbenzene	5.5		2.0		ug/L	2		8021B	Total/NA
Toluene	43		10		ug/L	2		8021B	Total/NA
Xylenes, Total	68		10		ug/L	2		8021B	Total/NA

Client Sample ID: MW-4A — Lab Sample ID: 400-139062-2

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Benzene	50		1.0		ug/L	1		8021B	Total/NA
Ethylbenzene	2.1		1.0		ug/L	1		8021B	Total/NA

Client Sample ID: MW-5 — Lab Sample ID: 400-139062-3

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Benzene	78		1.0		ug/L	1		8021B	Total/NA

Client Sample ID: MW-6 — Lab Sample ID: 400-139062-4

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Benzene	1400		20		ug/L	20		8021B	Total/NA
Ethylbenzene	340		20		ug/L	20		8021B	Total/NA
Toluene	130		100		ug/L	20		8021B	Total/NA
Xylenes, Total	610		100		ug/L	20		8021B	Total/NA

Client Sample ID: MW-7 — Lab Sample ID: 400-139062-5

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Benzene	12		1.0		ug/L	1		8021B	Total/NA

Client Sample ID: MW-8 — Lab Sample ID: 400-139062-6

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Benzene	12		1.0		ug/L	1		8021B	Total/NA
Xylenes, Total	8.5		5.0		ug/L	1		8021B	Total/NA

Client Sample ID: MW-9 — Lab Sample ID: 400-139062-7

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Benzene	1.7		1.0		ug/L	1		8021B	Total/NA

Client Sample ID: MW-10 — Lab Sample ID: 400-139062-8

No Detections.

Client Sample ID: MW-11 — Lab Sample ID: 400-139062-9

No Detections.

Client Sample ID: TRIP BLANK — Lab Sample ID: 400-139062-10

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 - Fields A#7A

TestAmerica Job ID: 400-139062-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-139062-1	MW-1	Water	06/06/17 10:45	06/09/17 11:11
400-139062-2	MW-4A	Water	06/06/17 10:30	06/09/17 11:11
400-139062-3	MW-5	Water	06/06/17 10:50	06/09/17 11:11
400-139062-4	MW-6	Water	06/06/17 11:00	06/09/17 11:11
400-139062-5	MW-7	Water	06/06/17 10:55	06/09/17 11:11
400-139062-6	MW-8	Water	06/06/17 10:20	06/09/17 11:11
400-139062-7	MW-9	Water	06/06/17 10:40	06/09/17 11:11
400-139062-8	MW-10	Water	06/06/17 10:15	06/09/17 11:11
400-139062-9	MW-11	Water	06/06/17 10:00	06/09/17 11:11
400-139062-10	TRIP BLANK	Water	06/06/17 10:00	06/09/17 11:11

Client: Stantec Consulting Services Inc
Project/Site: ElPaso CGP Company, LLC - Fields A#7A

TestAmerica Job ID: 400-139062-1

Client Sample ID: MW-1
Date Collected: 06/06/17 10:45
Date Received: 06/09/17 11:11

Lab Sample ID: 400-139062-1
Matrix: Water

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	410		2.0		ug/L			06/14/17 15:20	2
Ethylbenzene	5.5		2.0		ug/L			06/14/17 15:20	2
Toluene	43		10		ug/L			06/14/17 15:20	2
Xylenes, Total	68		10		ug/L			06/14/17 15:20	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (pid)	*86*		*78 - 124*		*06/14/17 15:20*	*2*

Client: Stantec Consulting Services Inc
Project/Site: ElPaso CGP Company, LLC - Fields A#7A

TestAmerica Job ID: 400-139062-1

Client Sample ID: MW-4A
Date Collected: 06/06/17 10:30
Date Received: 06/09/17 11:11

Lab Sample ID: 400-139062-2
Matrix: Water

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**50**		1.0		ug/L			06/14/17 13:48	1
Ethylbenzene	**2.1**		1.0		ug/L			06/14/17 13:48	1
Toluene	<5.0		5.0		ug/L			06/14/17 13:48	1
Xylenes, Total	<5.0		5.0		ug/L			06/14/17 13:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (pid)	*110*		*78 - 124*		*06/14/17 13:48*	*1*

Client: Stantec Consulting Services Inc
Project/Site: ElPaso CGP Company, LLC - Fields A#7A

TestAmerica Job ID: 400-139062-1

Client Sample ID: MW-5
Date Collected: 06/06/17 10:50
Date Received: 06/09/17 11:11

Lab Sample ID: 400-139062-3
Matrix: Water

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**78**		1.0		ug/L			06/14/17 03:36	1
Ethylbenzene	<1.0		1.0		ug/L			06/14/17 03:36	1
Toluene	<5.0		5.0		ug/L			06/14/17 03:36	1
Xylenes, Total	<5.0		5.0		ug/L			06/14/17 03:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (pid)	*111*		*78 - 124*		*06/14/17 03:36*	*1*

Client: Stantec Consulting Services Inc
Project/Site: ElPaso CGP Company, LLC - Fields A#7A

TestAmerica Job ID: 400-139062-1

Client Sample ID: MW-6
Date Collected: 06/06/17 11:00
Date Received: 06/09/17 11:11

Lab Sample ID: 400-139062-4
Matrix: Water

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	1400		20		ug/L			06/13/17 23:01	20
Ethylbenzene	340		20		ug/L			06/13/17 23:01	20
Toluene	130		100		ug/L			06/13/17 23:01	20
Xylenes, Total	610		100		ug/L			06/13/17 23:01	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (pid)	*106*		*78 - 124*		*06/13/17 23:01*	*20*

Client: Stantec Consulting Services Inc
Project/Site: ElPaso CGP Company, LLC - Fields A#7A

TestAmerica Job ID: 400-139062-1

Client Sample ID: MW-7
Date Collected: 06/06/17 10:55
Date Received: 06/09/17 11:11

Lab Sample ID: 400-139062-5
Matrix: Water

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**12**		1.0		ug/L			06/14/17 12:17	1
Ethylbenzene	<1.0		1.0		ug/L			06/14/17 12:17	1
Toluene	<5.0		5.0		ug/L			06/14/17 12:17	1
Xylenes, Total	<5.0		5.0		ug/L			06/14/17 12:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (pid)	*109*		*78 - 124*		*06/14/17 12:17*	*1*

Client: Stantec Consulting Services Inc
Project/Site: ElPaso CGP Company, LLC - Fields A#7A

TestAmerica Job ID: 400-139062-1

Client Sample ID: MW-8
Date Collected: 06/06/17 10:20
Date Received: 06/09/17 11:11

Lab Sample ID: 400-139062-6
Matrix: Water

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**12**		1.0		ug/L			06/14/17 04:07	1
Ethylbenzene	<1.0		1.0		ug/L			06/14/17 04:07	1
Toluene	<5.0		5.0		ug/L			06/14/17 04:07	1
Xylenes, Total	**8.5**		5.0		ug/L			06/14/17 04:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (pid)	*107*		*78 - 124*		*06/14/17 04:07*	*1*

Client: Stantec Consulting Services Inc
Project/Site: ElPaso CGP Company, LLC - Fields A#7A

TestAmerica Job ID: 400-139062-1

Client Sample ID: MW-9
Date Collected: 06/06/17 10:40
Date Received: 06/09/17 11:11

Lab Sample ID: 400-139062-7
Matrix: Water

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**1.7**		1.0		ug/L			06/14/17 04:38	1
Ethylbenzene	<1.0		1.0		ug/L			06/14/17 04:38	1
Toluene	<5.0		5.0		ug/L			06/14/17 04:38	1
Xylenes, Total	<5.0		5.0		ug/L			06/14/17 04:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (pid)	*109*		*78 - 124*		*06/14/17 04:38*	*1*

Client: Stantec Consulting Services Inc
Project/Site: ElPaso CGP Company, LLC - Fields A#7A

TestAmerica Job ID: 400-139062-1

Client Sample ID: MW-10
Date Collected: 06/06/17 10:15
Date Received: 06/09/17 11:11

Lab Sample ID: 400-139062-8
Matrix: Water

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0		ug/L			06/14/17 06:09	1
Ethylbenzene	<1.0		1.0		ug/L			06/14/17 06:09	1
Toluene	<5.0		5.0		ug/L			06/14/17 06:09	1
Xylenes, Total	<5.0		5.0		ug/L			06/14/17 06:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (pid)	*109*		*78 - 124*		*06/14/17 06:09*	*1*

Client: Stantec Consulting Services Inc
Project/Site: ElPaso CGP Company, LLC - Fields A#7A

TestAmerica Job ID: 400-139062-1

Client Sample ID: MW-11
Date Collected: 06/06/17 10:00
Date Received: 06/09/17 11:11

Lab Sample ID: 400-139062-9
Matrix: Water

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0		ug/L			06/14/17 06:40	1
Ethylbenzene	<1.0		1.0		ug/L			06/14/17 06:40	1
Toluene	<5.0		5.0		ug/L			06/14/17 06:40	1
Xylenes, Total	<5.0		5.0		ug/L			06/14/17 06:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (pid)	*109*		*78 - 124*		*06/14/17 06:40*	*1*

Client: Stantec Consulting Services Inc
Project/Site: ElPaso CGP Company, LLC - Fields A#7A

TestAmerica Job ID: 400-139062-1

Client Sample ID: TRIP BLANK
Date Collected: 06/06/17 10:00
Date Received: 06/09/17 11:11

Lab Sample ID: 400-139062-10
Matrix: Water

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0		ug/L			06/14/17 01:34	1
Ethylbenzene	<1.0		1.0		ug/L			06/14/17 01:34	1
Toluene	<5.0		5.0		ug/L			06/14/17 01:34	1
Xylenes, Total	<5.0		5.0		ug/L			06/14/17 01:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (pid)	*109*		*78 - 124*		*06/14/17 01:34*	*1*

QC Association Summary

Client: Stantec Consulting Services Inc
Project/Site: ElPaso CGP Company, LLC - Fields A#7A

TestAmerica Job ID: 400-139062-1

GC VOA

Analysis Batch: 356821

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-139062-3	MW-5	Total/NA	Water	8021B	
400-139062-4	MW-6	Total/NA	Water	8021B	
400-139062-6	MW-8	Total/NA	Water	8021B	
400-139062-7	MW-9	Total/NA	Water	8021B	
400-139062-8	MW-10	Total/NA	Water	8021B	
400-139062-9	MW-11	Total/NA	Water	8021B	
400-139062-10	TRIP BLANK	Total/NA	Water	8021B	
MB 400-356821/4	Method Blank	Total/NA	Water	8021B	
LCS 400-356821/1003	Lab Control Sample	Total/NA	Water	8021B	
400-139059-A-5 MS	Matrix Spike	Total/NA	Water	8021B	
400-139059-A-5 MSD	Matrix Spike Duplicate	Total/NA	Water	8021B	

Analysis Batch: 356920

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-139062-1	MW-1	Total/NA	Water	8021B	
400-139062-2	MW-4A	Total/NA	Water	8021B	
400-139062-5	MW-7	Total/NA	Water	8021B	
MB 400-356920/2	Method Blank	Total/NA	Water	8021B	
LCS 400-356920/1001	Lab Control Sample	Total/NA	Water	8021B	
400-139062-5 MS	MW-7	Total/NA	Water	8021B	
400-139062-5 MSD	MW-7	Total/NA	Water	8021B	

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 400-356821/4
Matrix: Water
Analysis Batch: 356821

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			06/13/17 18:26	1
Ethylbenzene	<1.0		1.0		ug/L			06/13/17 18:26	1
Toluene	<5.0		5.0		ug/L			06/13/17 18:26	1
Xylenes, Total	<5.0		5.0		ug/L			06/13/17 18:26	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (pid)	*108*		*78 - 124*		*06/13/17 18:26*	*1*

Lab Sample ID: LCS 400-356821/1003
Matrix: Water
Analysis Batch: 356821

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	46.1		ug/L		92	85 - 115		
Ethylbenzene			50.0	46.5		ug/L		93	85 - 115		
Toluene			50.0	45.4		ug/L		91	85 - 115		
Xylenes, Total			150	141		ug/L		94	85 - 115		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
a,a,a-Trifluorotoluene (pid)	*107*		*78 - 124*

Lab Sample ID: 400-139059-A-5 MS
Matrix: Water
Analysis Batch: 356821

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene	<1.0		50.0	55.4		ug/L		111	44 - 150		
Ethylbenzene	<1.0		50.0	56.5		ug/L		113	70 - 142		
Toluene	<5.0		50.0	55.0		ug/L		110	69 - 136		
Xylenes, Total	<5.0		150	172		ug/L		115	68 - 142		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
a,a,a-Trifluorotoluene (pid)	*107*		*78 - 124*

Lab Sample ID: 400-139059-A-5 MSD
Matrix: Water
Analysis Batch: 356821

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<1.0		50.0	57.7		ug/L		115	44 - 150	4	16
Ethylbenzene	<1.0		50.0	58.4		ug/L		117	70 - 142	3	16
Toluene	<5.0		50.0	56.9		ug/L		114	69 - 136	3	16
Xylenes, Total	<5.0		150	178		ug/L		118	68 - 142	3	15

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
a,a,a-Trifluorotoluene (pid)	*106*		*78 - 124*

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

Lab Sample ID: MB 400-356920/2
Matrix: Water
Analysis Batch: 356920

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			06/14/17 10:25	1
Ethylbenzene	<1.0		1.0		ug/L			06/14/17 10:25	1
Toluene	<5.0		5.0		ug/L			06/14/17 10:25	1
Xylenes, Total	<5.0		5.0		ug/L			06/14/17 10:25	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (pid)	*107*		*78 - 124*		*06/14/17 10:25*	*1*

Lab Sample ID: LCS 400-356920/1001
Matrix: Water
Analysis Batch: 356920

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	55.6		ug/L		111	85 - 115		
Ethylbenzene			50.0	55.2		ug/L		110	85 - 115		
Toluene			50.0	54.2		ug/L		108	85 - 115		
Xylenes, Total			150	166		ug/L		111	85 - 115		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
a,a,a-Trifluorotoluene (pid)	*108*		*78 - 124*

Lab Sample ID: 400-139062-5 MS
Matrix: Water
Analysis Batch: 356920

Client Sample ID: MW-7
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene	12		50.0	71.2		ug/L		118	44 - 150		
Ethylbenzene	<1.0		50.0	61.5		ug/L		123	70 - 142		
Toluene	<5.0		50.0	60.1		ug/L		118	69 - 136		
Xylenes, Total	<5.0		150	189		ug/L		124	68 - 142		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
a,a,a-Trifluorotoluene (pid)	*106*		*78 - 124*

Lab Sample ID: 400-139062-5 MSD
Matrix: Water
Analysis Batch: 356920

Client Sample ID: MW-7
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	12		50.0	71.2		ug/L		118	44 - 150	0	16
Ethylbenzene	<1.0		50.0	62.0		ug/L		124	70 - 142	1	16
Toluene	<5.0		50.0	60.6		ug/L		119	69 - 136	1	16
Xylenes, Total	<5.0		150	191		ug/L		124	68 - 142	1	15

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
a,a,a-Trifluorotoluene (pid)	*106*		*78 - 124*

Lab Chronicle

Client: Stantec Consulting Services Inc
Project/Site: ElPaso CGP Company, LLC - Fields A#7A

TestAmerica Job ID: 400-139062-1

Client Sample ID: MW-1

Date Collected: 06/06/17 10:45
Date Received: 06/09/17 11:11

Lab Sample ID: 400-139062-1
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		2	5 mL	5 mL	356920	06/14/17 15:20	CMW	TAL PEN
	Instrument ID: CH_PAULA									

Client Sample ID: MW-4A

Date Collected: 06/06/17 10:30
Date Received: 06/09/17 11:11

Lab Sample ID: 400-139062-2
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	356920	06/14/17 13:48	CMW	TAL PEN
	Instrument ID: CH_PAULA									

Client Sample ID: MW-5

Date Collected: 06/06/17 10:50
Date Received: 06/09/17 11:11

Lab Sample ID: 400-139062-3
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	356821	06/14/17 03:36	MKA	TAL PEN
	Instrument ID: CH_PAULA									

Client Sample ID: MW-6

Date Collected: 06/06/17 11:00
Date Received: 06/09/17 11:11

Lab Sample ID: 400-139062-4
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		20	5 mL	5 mL	356821	06/13/17 23:01	MKA	TAL PEN
	Instrument ID: CH_PAULA									

Client Sample ID: MW-7

Date Collected: 06/06/17 10:55
Date Received: 06/09/17 11:11

Lab Sample ID: 400-139062-5
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	356920	06/14/17 12:17	CMW	TAL PEN
	Instrument ID: CH_PAULA									

Client Sample ID: MW-8

Date Collected: 06/06/17 10:20
Date Received: 06/09/17 11:11

Lab Sample ID: 400-139062-6
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	356821	06/14/17 04:07	MKA	TAL PEN
	Instrument ID: CH_PAULA									

Lab Chronicle

Client: Stantec Consulting Services Inc
Project/Site: ElPaso CGP Company, LLC - Fields A#7A

TestAmerica Job ID: 400-139062-1

Client Sample ID: MW-9

Lab Sample ID: 400-139062-7

Date Collected: 06/06/17 10:40
Matrix: Water
Date Received: 06/09/17 11:11

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	356821	06/14/17 04:38	MKA	TAL PEN
	Instrument ID: CH_PAULA									

Client Sample ID: MW-10

Lab Sample ID: 400-139062-8

Date Collected: 06/06/17 10:15
Matrix: Water
Date Received: 06/09/17 11:11

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	356821	06/14/17 06:09	MKA	TAL PEN
	Instrument ID: CH_PAULA									

Client Sample ID: MW-11

Lab Sample ID: 400-139062-9

Date Collected: 06/06/17 10:00
Matrix: Water
Date Received: 06/09/17 11:11

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	356821	06/14/17 06:40	MKA	TAL PEN
	Instrument ID: CH_PAULA									

Client Sample ID: TRIP BLANK

Lab Sample ID: 400-139062-10

Date Collected: 06/06/17 10:00
Matrix: Water
Date Received: 06/09/17 11:11

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	356821	06/14/17 01:34	MKA	TAL PEN
	Instrument ID: CH_PAULA									

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: ElPaso CGP Company, LLC - Fields A#7A

TestAmerica Job ID: 400-139062-1

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: ElPaso CGP Company, LLC - Fields A#7A

TestAmerica Job ID: 400-139062-1

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	Sampler: Sarah Gardner / Justin Gaver	Lab PM: Webb, Carol M	Carrier Tracking No(s):	COC No: 400-65856-26931.1
Client Contact: Ms. Sarah Gardner	Phone: 303 291 2239	E-Mail: carol.webb@testamericainc.com		Page: Page 1 of 1
Company: Stantec Consulting Services Inc				Job #:

Address: 1560 Broadway Suite 1800	Due Date Requested:	Analysis Requested	Preservation Codes:
City: Denver	TAT Requested (days): Standard		A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)
State, Zip: CO, 80202			
Phone: 303-291-2239(Tel)	PO #: Purchase Order Requested		Other:
Email: sarah.gardner@mwhglobal.com	WO #:		
Project Name: Fields A#7A	Project #: 40005479		
Site: Fields A#7A	SSOW#:		

400-139062 COC

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8021B - BTEX 8021	Total Number of containers	Special Instructions/Note:
			Preservation Code:				A		
MW-1	6/6/2017	1045	G	W			2	2	
MW-4A	6/6/2017	1030	G	W			2	2	
MW-5	6/6/2017	1050	G	W			2	2	
MW-6	6/6/2017	1100	G	W			2	2	
MW-7	6/6/2017	1055	G	W			2	2	
MW-8	6/6/2017	1020	G	W			2	2	
MW-9	6/6/2017	1040	G	W			2	2	
MW-10	6/6/2017	1015	G	W			2	2	
MW-11	6/6/2017	1000	G	W			2	2	
TRIP	6/6/2017	1000		W			2	2	

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

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

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

Special Instructions/QC Requirements:

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

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Sarah Gardner	6/8/2017 845	Stantec			
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
				6-9-17 1111	

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 3.1°C, 2.7°C IR2

6/22/2017

Login Sample Receipt Checklist

Client: Stantec Consulting Services Inc

Job Number: 400-139062-1

Login Number: 139062

List Source: TestAmerica Pensacola

List Number: 1

Creator: Johnson, Jeremy N

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	3.1°C, 2.7°C IR2
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 <6mm (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: 400-145976-1
Client Project/Site: El Paso CGP Company - Fields A 7

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 12:18:00 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

Table of Contents

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
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)

Job ID: 400-145976-1

Laboratory: TestAmerica Pensacola

Narrative

Job Narrative
400-145976-1

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 0.0º 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
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: El Paso CGP Company - Fields A 7

TestAmerica Job ID: 400-145976-1

Client Sample ID: TRIP BLANK — Lab Sample ID: 400-145976-1

No Detections.

Client Sample ID: MW-1 — Lab Sample ID: 400-145976-2

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Benzene	390		2.0		ug/L	2		8260C	Total/NA
Toluene	27		2.0		ug/L	2		8260C	Total/NA
Ethylbenzene	4.9		2.0		ug/L	2		8260C	Total/NA
Xylenes, Total	64		20		ug/L	2		8260C	Total/NA

Client Sample ID: MW-4R — Lab Sample ID: 400-145976-3

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Benzene	53		1.0		ug/L	1		8260C	Total/NA
Ethylbenzene	3.4		1.0		ug/L	1		8260C	Total/NA

Client Sample ID: MW-7 — Lab Sample ID: 400-145976-4

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Benzene	30		1.0		ug/L	1		8260C	Total/NA
Toluene	12		1.0		ug/L	1		8260C	Total/NA
Xylenes, Total	15		10		ug/L	1		8260C	Total/NA

Client Sample ID: MW-8 — Lab Sample ID: 400-145976-5

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Benzene	100		1.0		ug/L	1		8260C	Total/NA
Xylenes, Total	16		10		ug/L	1		8260C	Total/NA

Client Sample ID: MW-10 — Lab Sample ID: 400-145976-6

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Benzene	1.4		1.0		ug/L	1		8260C	Total/NA

This Detection Summary does not include radiochemical test results.

Sample Summary

Client: Stantec Consulting Services Inc
Project/Site: El Paso CGP Company - Fields A 7

TestAmerica Job ID: 400-145976-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-145976-1	TRIP BLANK	Water	11/13/17 08:10	11/14/17 09:01
400-145976-2	MW-1	Water	11/13/17 09:06	11/14/17 09:01
400-145976-3	MW-4R	Water	11/13/17 09:00	11/14/17 09:01
400-145976-4	MW-7	Water	11/13/17 08:47	11/14/17 09:01
400-145976-5	MW-8	Water	11/13/17 08:54	11/14/17 09:01
400-145976-6	MW-10	Water	11/13/17 08:42	11/14/17 09:01

Client: Stantec Consulting Services Inc
Project/Site: El Paso CGP Company - Fields A 7

TestAmerica Job ID: 400-145976-1

Client Sample ID: TRIP BLANK
Date Collected: 11/13/17 08:10
Date Received: 11/14/17 09:01

Lab Sample ID: 400-145976-1
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 09:48	1
Toluene	<1.0		1.0		ug/L			11/18/17 09:48	1
Ethylbenzene	<1.0		1.0		ug/L			11/18/17 09:48	1
Xylenes, Total	<10		10		ug/L			11/18/17 09:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane	*104*		*81 - 121*		*11/18/17 09:48*	*1*
4-Bromofluorobenzene	*97*		*78 - 118*		*11/18/17 09:48*	*1*
Toluene-d8 (Surr)	*92*		*80 - 120*		*11/18/17 09:48*	*1*

Client Sample Results

Client: Stantec Consulting Services Inc
Project/Site: El Paso CGP Company - Fields A 7

TestAmerica Job ID: 400-145976-1

Client Sample ID: MW-1
Date Collected: 11/13/17 09:06
Date Received: 11/14/17 09:01

Lab Sample ID: 400-145976-2
Matrix: Water

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**390**		2.0		ug/L			11/18/17 16:48	2
Toluene	**27**		2.0		ug/L			11/18/17 16:48	2
Ethylbenzene	**4.9**		2.0		ug/L			11/18/17 16:48	2
Xylenes, Total	**64**		20		ug/L			11/18/17 16:48	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane	*106*		*81 - 121*		*11/18/17 16:48*	*2*
4-Bromofluorobenzene	*102*		*78 - 118*		*11/18/17 16:48*	*2*
Toluene-d8 (Surr)	*95*		*80 - 120*		*11/18/17 16:48*	*2*

Client Sample Results

Client: Stantec Consulting Services Inc
Project/Site: El Paso CGP Company - Fields A 7

TestAmerica Job ID: 400-145976-1

Client Sample ID: MW-4R
Date Collected: 11/13/17 09:00
Date Received: 11/14/17 09:01

Lab Sample ID: 400-145976-3
Matrix: Water

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**53**		1.0		ug/L			11/18/17 10:13	1
Toluene	<1.0		1.0		ug/L			11/18/17 10:13	1
Ethylbenzene	**3.4**		1.0		ug/L			11/18/17 10:13	1
Xylenes, Total	<10		10		ug/L			11/18/17 10:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane	*108*		*81 - 121*		*11/18/17 10:13*	*1*
4-Bromofluorobenzene	*103*		*78 - 118*		*11/18/17 10:13*	*1*
Toluene-d8 (Surr)	*93*		*80 - 120*		*11/18/17 10:13*	*1*

Client: Stantec Consulting Services Inc
Project/Site: El Paso CGP Company - Fields A 7

TestAmerica Job ID: 400-145976-1

Client Sample ID: MW-7
Date Collected: 11/13/17 08:47
Date Received: 11/14/17 09:01

Lab Sample ID: 400-145976-4
Matrix: Water

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**30**		1.0		ug/L			11/18/17 14:43	1
Toluene	**12**		1.0		ug/L			11/18/17 14:43	1
Ethylbenzene	<1.0		1.0		ug/L			11/18/17 14:43	1
Xylenes, Total	**15**		10		ug/L			11/18/17 14:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane	*103*		*81 - 121*		*11/18/17 14:43*	*1*
4-Bromofluorobenzene	*103*		*78 - 118*		*11/18/17 14:43*	*1*
Toluene-d8 (Surr)	*90*		*80 - 120*		*11/18/17 14:43*	*1*

Client Sample ID: MW-8
Date Collected: 11/13/17 08:54
Date Received: 11/14/17 09:01

Lab Sample ID: 400-145976-5
Matrix: Water

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**100**		1.0		ug/L			11/18/17 15:08	1
Toluene	<1.0		1.0		ug/L			11/18/17 15:08	1
Ethylbenzene	<1.0		1.0		ug/L			11/18/17 15:08	1
Xylenes, Total	**16**		10		ug/L			11/18/17 15:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane	*106*		*81 - 121*		*11/18/17 15:08*	*1*
4-Bromofluorobenzene	*103*		*78 - 118*		*11/18/17 15:08*	*1*
Toluene-d8 (Surr)	*96*		*80 - 120*		*11/18/17 15:08*	*1*

Client Sample Results

Client: Stantec Consulting Services Inc
Project/Site: El Paso CGP Company - Fields A 7

TestAmerica Job ID: 400-145976-1

Client Sample ID: MW-10
Date Collected: 11/13/17 08:42
Date Received: 11/14/17 09:01

Lab Sample ID: 400-145976-6
Matrix: Water

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**1.4**		1.0		ug/L			11/18/17 15:32	1
Toluene	<1.0		1.0		ug/L			11/18/17 15:32	1
Ethylbenzene	<1.0		1.0		ug/L			11/18/17 15:32	1
Xylenes, Total	<10		10		ug/L			11/18/17 15:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane	*104*		*81 - 121*		*11/18/17 15:32*	*1*
4-Bromofluorobenzene	*100*		*78 - 118*		*11/18/17 15:32*	*1*
Toluene-d8 (Surr)	*92*		*80 - 120*		*11/18/17 15:32*	*1*

QC Association Summary

Client: Stantec Consulting Services Inc
Project/Site: El Paso CGP Company - Fields A 7

TestAmerica Job ID: 400-145976-1

GC/MS VOA

Analysis Batch: 376472

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-145976-1	TRIP BLANK	Total/NA	Water	8260C	
400-145976-2	MW-1	Total/NA	Water	8260C	
400-145976-3	MW-4R	Total/NA	Water	8260C	
400-145976-4	MW-7	Total/NA	Water	8260C	
400-145976-5	MW-8	Total/NA	Water	8260C	
400-145976-6	MW-10	Total/NA	Water	8260C	
MB 400-376472/4	Method Blank	Total/NA	Water	8260C	
LCS 400-376472/1002	Lab Control Sample	Total/NA	Water	8260C	
400-145976-3 MS	MW-4R	Total/NA	Water	8260C	
400-145976-3 MSD	MW-4R	Total/NA	Water	8260C	

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

Lab Sample ID: MB 400-376472/4
Matrix: Water
Analysis Batch: 376472

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 09:00	1
Toluene	<1.0		1.0		ug/L			11/18/17 09:00	1
Ethylbenzene	<1.0		1.0		ug/L			11/18/17 09:00	1
Xylenes, Total	<10		10		ug/L			11/18/17 09:00	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane	*105*		*81 - 121*		*11/18/17 09:00*	*1*
4-Bromofluorobenzene	*100*		*78 - 118*		*11/18/17 09:00*	*1*
Toluene-d8 (Surr)	*93*		*80 - 120*		*11/18/17 09:00*	*1*

Lab Sample ID: LCS 400-376472/1002
Matrix: Water
Analysis Batch: 376472

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	50.9		ug/L		102	70 - 130		
Toluene			50.0	43.2		ug/L		86	70 - 130		
Ethylbenzene			50.0	43.7		ug/L		87	70 - 130		
Xylenes, Total			100	87.5		ug/L		87	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Dibromofluoromethane	*106*		*81 - 121*
4-Bromofluorobenzene	*104*		*78 - 118*
Toluene-d8 (Surr)	*94*		*80 - 120*

Lab Sample ID: 400-145976-3 MS
Matrix: Water
Analysis Batch: 376472

Client Sample ID: MW-4R
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene	53		50.0	106		ug/L		107	56 - 142		
Toluene	<1.0		50.0	43.0		ug/L		86	65 - 130		
Ethylbenzene	3.4		50.0	45.7		ug/L		85	58 - 131		
Xylenes, Total	<10		100	84.2		ug/L		84	59 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Dibromofluoromethane	*111*		*81 - 121*
4-Bromofluorobenzene	*103*		*78 - 118*
Toluene-d8 (Surr)	*93*		*80 - 120*

Lab Sample ID: 400-145976-3 MSD
Matrix: Water
Analysis Batch: 376472

Client Sample ID: MW-4R
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	53		50.0	101		ug/L		97	56 - 142	5	30
Toluene	<1.0		50.0	38.3		ug/L		77	65 - 130	12	30

Client: Stantec Consulting Services Inc
Project/Site: El Paso CGP Company - Fields A 7

TestAmerica Job ID: 400-145976-1

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

Lab Sample ID: 400-145976-3 MSD
Matrix: Water
Analysis Batch: 376472

Client Sample ID: MW-4R
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ethylbenzene	3.4		50.0	39.3		ug/L		72	58 - 131	15	30
Xylenes, Total	<10		100	72.6		ug/L		73	59 - 130	15	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Dibromofluoromethane	*107*		*81 - 121*
4-Bromofluorobenzene	*105*		*78 - 118*
Toluene-d8 (Surr)	*94*		*80 - 120*

Lab Chronicle

Client: Stantec Consulting Services Inc
Project/Site: El Paso CGP Company - Fields A 7

TestAmerica Job ID: 400-145976-1

Client Sample ID: TRIP BLANK
Date Collected: 11/13/17 08:10
Date Received: 11/14/17 09:01

Lab Sample ID: 400-145976-1
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	376472	11/18/17 09:48	WPD	TAL PEN
	Instrument ID: CH_TAN									

Client Sample ID: MW-1
Date Collected: 11/13/17 09:06
Date Received: 11/14/17 09:01

Lab Sample ID: 400-145976-2
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		2	5 mL	5 mL	376472	11/18/17 16:48	WPD	TAL PEN
	Instrument ID: CH_TAN									

Client Sample ID: MW-4R
Date Collected: 11/13/17 09:00
Date Received: 11/14/17 09:01

Lab Sample ID: 400-145976-3
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	376472	11/18/17 10:13	WPD	TAL PEN
	Instrument ID: CH_TAN									

Client Sample ID: MW-7
Date Collected: 11/13/17 08:47
Date Received: 11/14/17 09:01

Lab Sample ID: 400-145976-4
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	376472	11/18/17 14:43	WPD	TAL PEN
	Instrument ID: CH_TAN									

Client Sample ID: MW-8
Date Collected: 11/13/17 08:54
Date Received: 11/14/17 09:01

Lab Sample ID: 400-145976-5
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	376472	11/18/17 15:08	WPD	TAL PEN
	Instrument ID: CH_TAN									

Client Sample ID: MW-10
Date Collected: 11/13/17 08:42
Date Received: 11/14/17 09:01

Lab Sample ID: 400-145976-6
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	376472	11/18/17 15:32	WPD	TAL PEN
	Instrument ID: CH_TAN									

Lab Chronicle

Client: Stantec Consulting Services Inc
Project/Site: El Paso CGP Company - Fields A 7

TestAmerica Job ID: 400-145976-1

Laboratory References:

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

Accreditation/Certification Summary

Client: Stantec Consulting Services Inc
TestAmerica Job ID: 400-145976-1
Project/Site: El Paso CGP Company - Fields A 7

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 - Fields A 7

TestAmerica Job ID: 400-145976-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	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

00-145976 COC

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: Daniel Babcock	Lab PM: Webb, Carol M	Carrier Tracking No(s):	COC No: 400-69054-27988.1
Client Contact: Ms. Sarah Gardner	Phone:	E-Mail: carol.webb@testamericainc.com		Page: Page 1 of 1
Company: Stantec Consulting Services Inc		Analysis Requested		Job #: 20372028 1
Address: 1560 Broadway Suite 1800	Due Date Requested:			Preservation Codes:
City: Denver	TAT Requested (days): 10 day Std			A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)
State, Zip: CO, 80202	PO #: Purchase Order Requested			
Phone: 303-291-2239(Tel)	WO#: ~~ARF~~ W-ERG-STN-05-17-17-SLG-02			
Email: sarah.gardner@mwhglobal.com	Project #: 40005479 Fields A7A			Other:
Project Name: Fields A#7A Nov 2017				
Site:	SSOW#:			

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	8021B - BTEX 8021	Special Instructions/Note:
Trip Blank	11/13/17	080	G TB	—	A 2	Per ARF
MW-1	"	906	G	W	A 2	
MW-4R	"	900	"	"	A 2	
MW-7	"	847	"	"	A 2	
MW-8	"	854	"	"	A 2	
MW-10	11/13/17	842			A 2	

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

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

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

Special Instructions/QC Requirements:

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

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
[signature]	11/13/17 1100	Stantec	[signature]	11/14/17 0901	TA Pen
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 0.0°C IR7

Ver: 08/04/2016

Login Sample Receipt Checklist

Client: Stantec Consulting Services Inc

Job Number: 400-145976-1

Login Number: 145976
List Number: 1
Creator: Perez, Trina M

List Source: TestAmerica Pensacola

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	0.0°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 <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	