2021 ANNUAL GROUNDWATER REPORT

Gallegos Canyon Unit #142E
Incident Number: nAUTOfAB000219
Meter Code: 03906
T29N, R12W Sec 25, Unit G

SITE DETAILS

Site Location: Latitude: 36.699306 N, Longitude: -108.046700 W
Land Type: Private/Fee
Operator: Simcoe LLC

SITE BACKGROUND

Environmental Remediation activities at the Gallegos Canyon Unit #142 (Site) are being managed pursuant to the procedures set forth in the document entitled, "Remediation Plan for Groundwater Encountered During Pit Closure Activities" (Remediation Plan, El Paso Natural Gas Company / El Paso Field Services Company, 1995). This Remediation Plan was conditionally approved by the New Mexico Oil Conservation Division (NMOCD) in correspondence dated November 30, 1995; and the NMOCD approval conditions were adopted into El Paso CGP Company, LLC's (EPCGP's) program methods. Currently, the Site is operated by Simcoe LLC (Simcoe), and is active. According to NMOCD records, Simcoe assumed operation of the Site from BP America Production Company (BP), on February 28, 2020.

The Site is located on private land (T29N, R12W, Sec25, Unit G). An initial site assessment was completed in April 1994, and an excavation to approximately 9 feet below ground surface (bgs) was completed in April 1994, removing approximately 20 cubic yards (cy) of soil. In October 1998 another excavation was completed, removing 882 cy of soil. Various site investigations have occurred since 1997. Temporary piezometers PZ-1 through PZ-6 were installed and removed in 1997. Monitoring wells were installed in 1997 (MW-1), 2001 (MW-2), and 2014 (MW-3 and MW-5 through MW-8). Monitoring well MW-4 was advanced as a soil boring but was not installed. The location of the Site is presented on Figure 1. A Site Plan map depicting the locations of monitoring wells, piezometers, soil borings, and current and historical site features is provided as Figure 2.

In January 1996, BP discovered a release from a discharge pit located in the vicinity of MW-2. On June 2, 1996, light nonaqueous-phase liquid (LNAPL) was discovered in monitoring well MW-2. LNAPL was subsequently discovered in monitoring wells MW-3, MW-8 and TW-1. EPCGP prepared a site conceptual model (SCM) providing a summary of the assessment and remedial activities completed by EPCGP for their release and known information regarding the BP release. Based on the available information, no further action was recommended, and the SCM and no further action request was submitted to the NMOCD on February 11, 2019. To date, no response from the NMOCD has been received regarding this request. In the interim, groundwater sampling continues to be conducted on a semi-annual basis.

GROUNDWATER SAMPLING ACTIVITIES

Pursuant to the 1995 remediation plan Stantec provided access notifications via email to NMOCD on May 12, 2021, and November 3, 2021. Copies of the access notifications are provided as Appendix A. On May 21 and November 12, 2021, water levels were gauged at MW-1, MW-2, MW-3, MW-5, MW-6, MW-7, and MW-8. No LNAPL was detected in site monitoring wells during water level gauging in 2021. Groundwater samples were collected from each well using HydraSleeve™ (HydraSleeve) no-purge groundwater sampling devices. The HydraSleeves were set during the previous sampling event approximately 0.5 foot above the bottom of the screened

2021 ANNUAL GROUNDWATER REPORT

Gallegos Canyon Unit #142E
Incident Number: nAUTOfAB000219
Meter Code: 03906
T29N, R12W Sec 25, Unit G

interval 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 Eurofins-TestAmerica, in Pensacola, Florida. One trip blank and one blind field blank were also collected during each sampling event. Each groundwater sample, field blank, and trip blank were analyzed for benzene, toluene, ethylbenzene, and total xylenes (BTEX) using United States Environmental Protection Agency (EPA) Method 8260. The unused sample water was placed in a waste container and transported to Basin Disposal, Inc. (Basin) in Bloomfield, New Mexico for disposal. Waste disposal documentation is included as Appendix B.

SUMMARY TABLES

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

SITE MAPS

Groundwater analytical maps (Figures 3 and 5) and groundwater elevation contour maps (Figures 4 and 6) summarize results of the 2021 groundwater sampling and gauging events.

ANALYTICAL LAB REPORTS

The groundwater analytical lab reports are included as Appendix C.

GROUNDWATER RESULTS

- The groundwater elevations indicate the flow direction at the Site was generally to the southeast during 2021 (see Figures 3 and 5).
- The concentration of benzene detected in samples collected from MW-1, MW-2, and MW-8 in May 2021 exceeded the New Mexico Water Quality Control Commission (NMWQCC) standard (10 micrograms per liter [µg/L]) for benzene in groundwater. The concentrations of benzene detected in the samples collected from MW-2 and MW-8 in November 2021 exceeded the NMWQCC standard for benzene in groundwater. Monitoring wells MW-1, MW-2, and MW-8 are located hydraulically downgradient from the 1996 BP release. Detections of benzene in remaining groundwater samples collected from site wells in 2021 were below the NMWQCC standard or were not detected.
- Concentrations of toluene were either below the NMWQCC standard (750 µg/L) or were not detected in the site monitoring wells sampled in 2021.
- Concentrations of ethylbenzene were either below the NMWQCC standard (750 µg/L) or were not detected in the site monitoring wells sampled in 2021.
- The concentration of total xylenes detected in the sample collected from MW-2 exceeded the NMWQCC standard (620 µg/L) in May and November 2021. Total xylenes detected in samples from the other site monitoring wells in 2021 were either below the NMWQCC standard or were not detected for total xylenes.

2021 ANNUAL GROUNDWATER REPORT

Gallegos Canyon Unit #142E
Incident Number: nAUTOfAB000219
Meter Code: 03906
T29N, R12W Sec 25, Unit G

- A field duplicate was collected from monitoring well MW-8 during the May and November 2021 sampling events. Significant discrepancies were not noted between either set of primary and duplicate samples.

- Detectable concentrations of BTEX constituents were not reported in the trip blanks collected and analyzed as part of the 2021 groundwater monitoring events.

SITE CLOSURE REQUEST

EPCGP respectfully requests a response from the NMOCD to the February 2019 SCM and No Further Action request.

TABLES

TABLE 1 – GROUNDWATER ANALYTICAL RESULTS

TABLE 2 – GROUNDWATER ELEVATION RESULTS

TABLE 1 - GROUNDWATER ANALYTICAL RESULTS

Gallegos Canyon Unit #142E					
Location	Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)
NMWQCC Standards:		10	750	750	620
MW-1	03/10/97	4010	7960	213	2050
MW-1	08/06/97	1040	1310	49.4	647
MW-1	11/05/97	543	719	33.9	342
MW-1	02/13/98	343	354	27.6	394
MW-1	05/06/98	429	216	13.6	176
MW-1	05/04/99	143	20.4	7.78	63.3
MW-1	05/25/00	230	4.4	6	450
MW-1	06/01/01	130	0.5	3.5	6.1
MW-1	05/14/02	34	4.9	1	3.3
MW-1	03/07/03	270	36.8	8.3	21.1
MW-1	09/17/03	150	77	1.9	12.8
MW-1	03/22/04	1.4	<0.14	<0.029	<0.082
MW-1	03/17/05	169	1.3	2.7	6.6
MW-1	06/23/05	810	1.9	0.62	8.1
MW-1	09/26/05	232	14.9	4	15.1
MW-1	12/14/05	354	10.6	5.9	25.6
MW-1	01/09/06	NS	NS	NS	NS
MW-1	01/18/06	NS	NS	NS	NS
MW-1	03/28/06	362	0.37J	15	15.7
MW-1	06/14/06	210	6.5	2.3	6.1
MW-1	06/28/07	109	12.6	1.1	5.5
MW-1	06/23/08	2320	305	140	934
MW-1	06/02/09	35.3	<1	0.75J	1.4J
MW-1	12/30/09	597	10.7J	26.5	159
MW-1	01/25/10	NS	NS	NS	NS
MW-1	05/25/10	NS	NS	NS	NS
MW-1	09/24/10	NS	NS	NS	NS
MW-1	11/09/10	8610	2770	348	2810
MW-1	02/01/11	NS	NS	NS	NS
MW-1	05/03/11	NS	NS	NS	NS
MW-1	09/27/11	NS	NS	NS	NS
MW-1	11/16/11	229	36.2	5.3	39.3
MW-1	02/16/12	NS	NS	NS	NS
MW-1	05/07/12	NS	NS	NS	NS
MW-1	06/07/13	810	<0.30	<0.20	4.3J
MW-1	09/11/13	25	<0.30	<0.20	0.39J
MW-1	12/13/13	330	<0.90	6.9	20
MW-1	04/03/14	560	<3.8	<2.0	<6.5
MW-1	10/25/14	57	<0.70	1.9	3J
MW-1	05/30/15	270	<5.0	1.6	32
MW-1	11/18/15	990	1.6	26	250
MW-1	04/18/16	22	<5.0	<1.0	<5.0
MW-1	10/14/16	520	<10	<2.0	<10
MW-1	06/11/17	190	<10	<2.0	<10
MW-1	11/13/17	45	<1.0	<1.0	<10
MW-1	05/17/18	8.6	<1.0	<1.0	<10
DP-01(MW-1)*	05/17/18	8.4	<1.0	<1.0	<10
MW-1	10/28/18	1.5	<1.0	<1.0	<10

TABLE 1 - GROUNDWATER ANALYTICAL RESULTS

Gallegos Canyon Unit #142E					
Location	Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)
NMWQCC Standards:		10	750	750	620
MW-1	05/22/19	85	<1.0	1	<10
MW-1	11/11/19	<1.0	<1.0	<1.0	<10
DUP-1(MW-1)*	11/11/19	<1.0	<1.0	<1.0	<10
MW-1	05/15/20	14	<1.0	<1.0	<10
MW-1	11/11/20	<1.0	<1.0	<1.0	<10
MW-1	05/21/21	54	<1.0	<1.0	<10
MW-1	11/12/21	2.5	<1.0	<1.0	<10
MW-2	12/13/01	22000	25000	500	4300
MW-2	05/14/02	NS	NS	NS	NS
MW-2	09/17/03	6890	4760	219	1770
MW-2	03/22/04	13000	8880	321	2850
MW-2	03/17/05	2800	1640	125	978
MW-2	09/14/05	1980	915	63.8	391
MW-2	01/09/06	NS	NS	NS	NS
MW-2	01/18/06	NS	NS	NS	NS
MW-2	06/14/06	2140	811	83.5	610
MW-2	06/28/07	2100	492	140	1050
MW-2	06/23/08	221	1.5J	3.9	5.8
MW-2	06/02/09	NS	NS	NS	NS
MW-2	12/30/09	6660	6750	764	6210
MW-2	01/25/10	NS	NS	NS	NS
MW-2	05/25/10	NS	NS	NS	NS
MW-2	09/24/10	NS	NS	NS	NS
MW-2	11/09/10	3900	2450	342	2660
MW-2	02/01/11	NS	NS	NS	NS
MW-2	05/03/11	NS	NS	NS	NS
MW-2	09/27/11	NS	NS	NS	NS
MW-2	11/16/11	2040	1020	231	1520
MW-2	02/16/12	NS	NS	NS	NS
MW-2	05/07/12	NS	NS	NS	NS
MW-2	06/07/13	6000	1100	500	3800
MW-2	09/11/13	2200	470	240	1900
MW-2	12/13/13	5500	830	510	3700
MW-2	04/03/14	NS	NS	NS	NS
MW-2	10/25/14	NS	NS	NS	NS
MW-2	05/30/15	3300	140	570	3400
MW-2	11/18/15	4000	120	520	1500
MW-2	04/18/16	NS	NS	NS	NS
MW-2	10/14/16	NS	NS	NS	NS
MW-2	06/11/17	NS	NS	NS	NS
MW-2	11/13/17	2100	77	220	1800
MW-2	05/17/18	NS	NS	NS	NS
MW-2	10/28/18	NS	NS	NS	NS
MW-2	05/22/19	1500	<25	840	6200
MW-2	11/11/19	1000	<10	390	2800
MW-2	05/15/20	1100	<25	450	3000
MW-2	11/11/20	1100	<10	550	3800

TABLE 1 - GROUNDWATER ANALYTICAL RESULTS

Gallegos Canyon Unit #142E					
Location	Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)
NMWQCC Standards:		10	750	750	620
MW-2	05/21/21	960	<10	600	6100
MW-2	11/12/21	660	<20	520	3200
MW-3	10/25/14	<0.38	<0.70	<0.50	<1.6
MW-3	05/30/15	<1.0	<5.0	<1.0	<5.0
MW-3	11/18/15	<1.0	<1.0	<1.0	<3.0
MW-3	04/18/16	NS	NS	NS	NS
MW-3	10/14/16	NS	NS	NS	NS
MW-3	06/11/17	NS	NS	NS	NS
MW-3	11/13/17	69	7.8	6.8	160
MW-3	05/17/18	11	6.4	18	200
MW-3	10/28/18	<1.0	<1.0	<1.0	<10
MW-3	05/22/19	2.3	<1.0	1.3	18
MW-3	11/11/19	<1.0	<1.0	<1.0	<10
MW-3	05/15/20	5.0	<1.0	<1.0	<10
DUP-1(MW-3)*	05/15/20	5.2	<1.0	<1.0	<10
MW-3	11/11/20	<1.0	<1.0	<1.0	<10
MW-3	05/21/21	2.1	<1.0	<1.0	<10
MW-3	11/12/21	<1.0	<1.0	<1.0	<10
MW-5	10/25/14	1.8	<0.70	0.89J	11
MW-5	05/30/15	<1.0	<5.0	<1.0	<5.0
MW-5	11/18/15	<1.0	<1.0	<1.0	<3.0
MW-5	04/18/16	22	<5.0	<1.0	5.9
MW-5	10/14/16	<1.0	<5.0	<1.0	<5.0
MW-5	06/11/17	13	<5.0	1.9	15
MW-5	11/13/17	<1.0	<1.0	<1.0	<10
MW-5	05/17/18	<1.0	<1.0	<1.0	<10
MW-5	10/28/18	<1.0	<1.0	<1.0	<10
DUP-1(MW-5)*	10/28/18	<1.0	<1.0	<1.0	<10
MW-5	05/22/19	<1.0	<1.0	<1.0	<10
MW-5	11/11/19	<1.0	<1.0	<1.0	<10
MW-5	05/15/20	<1.0	<1.0	<1.0	<10
MW-5	11/11/20	<1.0	<1.0	<1.0	<10
MW-5	05/21/21	<1.0	<1.0	<1.0	<10
MW-5	11/12/21	<1.0	<1.0	<1.0	<10
MW-6	10/25/14	1.1	<0.70	<0.50	<1.6
MW-6	05/30/15	190	<25	<5.0	110
MW-6	11/18/15	<1.0	<1.0	<1.0	<3.0
MW-6	04/18/16	47	<5.0	20	6.4
MW-6	10/14/16	<1.0	<5.0	<1.0	<5.0
MW-6	06/11/17	2.2	<5.0	<1.0	<5.0
MW-6	11/13/17	<1.0	<1.0	<1.0	<10
MW-6	05/17/18	<1.0	<1.0	<1.0	<10
MW-6	10/28/18	<1.0	<1.0	<1.0	<10
MW-6	05/22/19	<1.0	<1.0	<1.0	<10
DUP-1(MW-6)*	05/22/19	<1.0	<1.0	<1.0	<10
MW-6	11/11/19	<1.0	<1.0	<1.0	<10

TABLE 1 - GROUNDWATER ANALYTICAL RESULTS

Gallegos Canyon Unit #142E					
Location	Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)
NMWQCC Standards:		10	750	750	620
MW-6	05/15/20	<1.0	<1.0	<1.0	<10
MW-6	11/11/20	<1.0	<1.0	<1.0	<10
MW-6	05/21/21	<1.0	<1.0	<1.0	<10
MW-6	11/12/21	<1.0	<1.0	<1.0	<10
MW-7	10/25/14	4.7	0.7J	1.7	5.7J
MW-7	05/30/15	6.5	<5.0	<1.0	1.8J
MW-7	11/18/15	4.3	<1.0	<1.0	<3.0
MW-7	04/18/16	480	350	31	200
MW-7	10/14/16	<1.0	<5.0	<1.0	<5.0
MW-7	06/11/17	120	11	1.9	18
MW-7	11/13/17	7.4	<1.0	<1.0	<10
MW-7	05/17/18	15	<1.0	<1.0	<10
MW-7	10/28/18	<1.0	<1.0	<1.0	<10
MW-7	05/22/19	<1.0	<1.0	<1.0	<10
MW-7	11/11/19	<1.0	<1.0	<1.0	<10
MW-7	05/15/20	38	<1.0	1.9	<10
MW-7	11/11/20	<1.0	<1.0	<1.0	<10
MW-7	05/21/21	<1.0	<1.0	<1.0	<10
MW-7	11/12/21	<1.0	<1.0	<1.0	<10
TMW-1	01/06/06	NS	NS	NS	NS
TMW-1	01/09/06	NS	NS	NS	NS
TMW-1	01/18/06	NS	NS	NS	NS
TMW-1	06/23/08	NS	NS	NS	NS
TMW-1	12/30/09	3660	1550	520	4110
TMW-1	01/25/10	NS	NS	NS	NS
TMW-1	05/25/10	NS	NS	NS	NS
TMW-1	09/24/10	NS	NS	NS	NS
TMW-1	11/09/10	8880	14400	956	9040
TMW-1	02/01/11	NS	NS	NS	NS
TMW-1	05/03/11	NS	NS	NS	NS
TMW-1	09/27/11	NS	NS	NS	NS
TMW-1	11/16/11	3890	6250	420	3610
TMW-1	02/16/12	NS	NS	NS	NS
TMW-1	05/07/12	NS	NS	NS	NS
TMW-1	06/07/13	5100	1100	190	2600
TMW-1	09/11/13	6600	960	190	2600
TMW-1	12/13/13	6500	2200	410	4000
TMW-1	04/03/14	NS	NS	NS	NS
TMW-1 abandoned on September 8, 2014, and replaced with MW-8					

TABLE 1 - GROUNDWATER ANALYTICAL RESULTS

Gallegos Canyon Unit #142E					
Location	Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)
NMWQCC Standards:		10	750	750	620
MW-8	10/25/14	0.77J	<0.70	<0.50	<1.6
MW-8	05/30/15	36	<5.0	3.1	19
MW-8	11/18/15	6.6	<1.0	<1.0	<3.0
MW-8	04/18/16	3	<5.0	<1.0	<5.0
MW-8	10/14/16	4.8	<5.0	<1.0	<5.0
MW-8	06/11/17	NS	NS	NS	NS
MW-8	11/13/17	1900	65	190	1600
MW-8	05/17/18	96	3.4	5.2	74
MW-8	10/28/18	<1.0	<1.0	<1.0	<10
MW-8	05/22/19	1200	<10	120	700
MW-8	11/11/19	1.6	<1.0	<1.0	<10
MW-8	05/15/20	660	<5.0	31	<50
MW-8	11/11/20	<1.0	<1.0	<1.0	<10
DUP-1(MW-8)*	11/11/20	2.4	<1.0	<1.0	<10
MW-8	05/21/21	790	<5.0	6.3	<50
DUP-1(MW-8)*	05/21/21	590	<5.0	<5.0	<50
MW-8	11/12/21	150	<1.0	7.2	24
DUP-1(MW-8)*	11/12/21	130	<1.0	5.5	18

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).
*Field Duplicate results presented immediately below primary sample result

TABLE 2 - GROUNDWATER ELEVATION RESULTS

Gallegos Canyon Unit #142E						
Location	Date	TOC	Depth to LNAPL (ft.)	Depth to Water (ft.)	LNAPL Thickness (ft.)	GW Elevation (ft.)
MW-1	03/10/97	5481.83	NR	16.78		5465.05
MW-1	08/06/97	5481.83	NR	14.46		5467.37
MW-1	11/05/97	5481.83	NR	15.02		5466.81
MW-1	02/13/98	5481.83	NR	18.18		5463.65
MW-1	05/06/98	5481.83	NR	18.69		5463.14
MW-1	05/04/99	5481.83	NR	17.61		5464.22
MW-1	05/25/00	5481.83	NR	16.44		5465.39
MW-1	06/01/01	5481.83	NR	17.08		5464.75
MW-1	05/14/02	5481.83	NR	14.70		5467.13
MW-1	03/07/03	5481.83	ND	15.32		5466.52
MW-1	09/17/03	5481.83	ND	DRY		5460.12
MW-1	03/22/04	5481.83	ND	17.38		5464.45
MW-1	03/17/05	5481.83	ND	18.15		5463.69
MW-1	06/23/05	5481.83	ND	14.72		5467.11
MW-1	09/26/05	5481.83	ND	11.95		5469.88
MW-1	12/14/05	5481.83	ND	14.67		5467.16
MW-1	01/09/06	5481.83	ND	15.67		5466.16
MW-1	01/18/06	5481.83	ND	15.97		5465.86
MW-1	03/28/06	5481.83	ND	18.16		5463.67
MW-1	06/14/06	5481.83	ND	13.08		5468.75
MW-1	06/28/07	5481.83	ND	16.18		5465.65
MW-1	06/23/08	5481.83	ND	15.45		5466.38
MW-1	06/02/09	5481.83	ND	17.80		5464.03
MW-1	12/30/09	5481.83	ND	16.82		5465.01
MW-1	01/25/10	5481.83	ND	17.61		5464.22
MW-1	05/25/10	5481.83	ND	18.45		5463.38
MW-1	09/24/10	5481.83	ND	14.59		5467.24
MW-1	11/09/10	5481.83	ND	14.86		5466.97
MW-1	02/01/11	5481.83	ND	17.46		5464.37
MW-1	05/03/11	5481.83	ND	19.22		5462.61
MW-1	09/27/11	5481.83	ND	11.12		5470.71
MW-1	11/16/11	5481.83	ND	12.75		5469.08
MW-1	02/16/12	5481.83	ND	15.47		5466.36
MW-1	05/07/12	5481.83	ND	16.21		5465.62
MW-1	06/07/13	5481.83	ND	14.06		5467.77
MW-1	09/11/13	5481.83	ND	12.61		5469.22
MW-1	12/13/13	5481.83	ND	14.22		5467.61
MW-1	04/03/14	5481.83	ND	17.66		5464.17
MW-1	10/25/14	5481.83	ND	12.69		5469.14
MW-1	05/30/15	5481.83	ND	16.29		5465.54
MW-1	11/18/15	5481.83	ND	14.52		5467.31
MW-1	04/18/16	5481.83	ND	19.06		5462.77

TABLE 2 - GROUNDWATER ELEVATION RESULTS

Gallegos Canyon Unit #142E						
Location	Date	TOC	Depth to LNAPL (ft.)	Depth to Water (ft.)	LNAPL Thickness (ft.)	GW Elevation (ft.)
MW-1	10/14/16	5481.83	ND	15.54		5466.29
MW-1	06/11/17	5481.83	ND	17.44		5464.39
MW-1	11/13/17	5481.83	ND	14.65		5467.18
MW-1	05/17/18	5481.83	ND	16.74		5465.09
MW-1	10/28/18	5481.83	ND	12.31		5469.52
MW-1	05/22/19	5481.83	ND	15.85		5465.98
MW-1	11/11/19	5481.83	ND	11.51		5470.32
MW-1	05/15/20	5481.83	ND	15.37		5466.46
MW-1	11/11/20	5481.83	ND	11.91		5469.92
MW-1	05/21/21	5481.83	ND	15.78		5466.05
MW-1	11/12/21	5481.83	ND	12.70		5469.13
MW-2	12/13/01	5481.56	NR	14.52		5467.04
MW-2	05/14/02	5481.56	NR	14.37		5467.19
MW-2	09/17/03	5481.56	ND	DRY		5463.56
MW-2	03/22/04	5481.56	ND	17.06		5464.50
MW-2	03/17/05	5481.56	ND	17.83		5463.73
MW-2	09/14/05	5481.56	ND	11.45		5470.11
MW-2	01/09/06	5481.56	ND	15.35		5466.21
MW-2	01/18/06	5481.56	ND	15.65		5465.91
MW-2	06/14/06	5481.56	ND	12.64		5468.92
MW-2	06/28/07	5481.56	ND	16.86		5464.70
MW-2	06/23/08	5481.56	ND	15.15		5466.41
MW-2	06/02/09	5481.56	17.42	17.84	0.42	5464.04
MW-2	12/30/09	5481.56	16.45	16.48	0.03	5465.10
MW-2	01/25/10	5481.56	17.27	17.45	0.18	5464.25
MW-2	05/25/10	5481.56	18.05	18.55	0.50	5463.39
MW-2	09/24/10	5481.56	ND	14.25		5467.31
MW-2	11/09/10	5481.56	14.49	14.50	0.01	5467.07
MW-2	02/01/11	5481.56	ND	17.15		5464.41
MW-2	05/03/11	5481.56	ND	18.91		5462.65
MW-2	09/27/11	5481.56	ND	12.65		5468.91
MW-2	11/16/11	5481.56	ND	12.37		5469.19
MW-2	02/16/12	5481.56	ND	15.13		5466.43
MW-2	05/07/12	5481.56	ND	16.91		5464.65
MW-2	06/07/13	5481.56	ND	13.63		5467.93
MW-2	09/11/13	5481.56	ND	12.18		5469.38
MW-2	12/13/13	5481.56	ND	13.92		5467.64
MW-2	04/03/14	5481.56	17.31	17.42	0.11	5464.22
MW-2	10/25/14	5481.56	ND	12.14		5469.42
MW-2	05/30/15	5481.56	ND	15.92		5465.64
MW-2	11/18/15	5481.56	ND	14.26		5467.30

TABLE 2 - GROUNDWATER ELEVATION RESULTS

Gallegos Canyon Unit #142E						
Location	Date	TOC	Depth to LNAPL (ft.)	Depth to Water (ft.)	LNAPL Thickness (ft.)	GW Elevation (ft.)
MW-2	04/18/16	5481.56	18.69	18.99	0.30	5462.80
MW-2	10/14/16	5481.56	ND	15.26		5466.30
MW-2	06/11/17	5481.56	17.09	17.23	0.14	5464.44
MW-2	11/13/17	5481.56	ND	14.28		5467.28
MW-2	05/17/18	5481.56	16.39	16.43	0.04	5465.16
MW-2	10/28/18	5481.56	ND	11.67		5469.89
MW-2	05/22/19	5481.56	ND	15.56		5466.00
MW-2	11/11/19	5481.56	ND	10.92		5470.64
MW-2	05/15/20	5481.56	ND	15.05		5466.51
MW-2	11/11/20	5481.56	ND	11.35		5470.21
MW-2	05/21/21	5481.56	ND	15.43		5466.13
MW-2	11/12/21	5481.56	ND	12.19		5469.37
MW-3	10/25/14	5481.87	ND	12.53		5469.34
MW-3	05/30/15	5481.87	ND	16.32		5465.55
MW-3	11/18/15	5481.87	ND	14.65		5467.22
MW-3	04/18/16	5481.87	ND	19.18		5462.69
MW-3	10/14/16	5481.87	ND	15.64		5466.23
MW-3	06/11/17	5481.87	17.40	17.57	0.17	5464.43
MW-3	11/13/17	5481.87	ND	14.64		5467.23
MW-3	05/17/18	5481.87	ND	16.60		5465.27
MW-3	10/28/18	5481.87	ND	11.93		5469.94
MW-3	05/22/19	5481.87	ND	15.85		5466.02
MW-3	11/11/19	5481.87	ND	11.25		5470.62
MW-3	05/15/20	5481.87	ND	15.31		5466.56
MW-3	11/11/20	5481.87	ND	11.69		5470.18
MW-3	05/21/21	5481.87	ND	15.75		5466.12
MW-3	11/12/21	5481.87	ND	12.52		5469.35
MW-5	10/25/14	5482.04	ND	12.73		5469.31
MW-5	05/30/15	5482.04	ND	16.50		5465.54
MW-5	11/18/15	5482.04	ND	14.80		5467.24
MW-5	04/18/16	5482.04	ND	19.20		5462.84
MW-5	10/14/16	5482.04	ND	15.78		5466.26
MW-5	06/11/17	5482.04	ND	17.65		5464.39
MW-5	11/13/17	5482.04	ND	14.81		5467.23
MW-5	05/17/18	5482.04	ND	16.95		5465.09
MW-5	10/28/18	5482.04	ND	12.31		5469.73
MW-5	05/22/19	5482.04	ND	16.10		5465.94
MW-5	11/11/19	5482.04	ND	11.58		5470.46
MW-5	05/15/20	5482.04	ND	15.62		5466.42
MW-5	11/11/20	5482.04	ND	11.97		5470.07

TABLE 2 - GROUNDWATER ELEVATION RESULTS

Gallegos Canyon Unit #142E						
Location	Date	TOC	Depth to LNAPL (ft.)	Depth to Water (ft.)	LNAPL Thickness (ft.)	GW Elevation (ft.)
MW-5	05/21/21	5482.04	ND	16.01		5466.03
MW-5	11/12/21	5482.04	ND	12.81		5469.23
MW-6	10/25/14	5481.45	ND	12.31		5469.14
MW-6	05/30/15	5481.45	ND	16.01		5465.44
MW-6	11/18/15	5481.45	ND	14.36		5467.09
MW-6	04/18/16	5481.45	ND	18.73		5462.72
MW-6	10/14/16	5481.45	ND	15.35		5466.10
MW-6	06/11/17	5481.45	ND	17.14		5464.31
MW-6	11/13/17	5481.45	ND	14.39		5467.06
MW-6	05/17/18	5481.45	ND	16.37		5465.08
MW-6	10/28/18	5481.45	ND	11.85		5469.60
MW-6	05/22/19	5481.45	ND	15.60		5465.85
MW-6	11/11/19	5481.45	ND	11.21		5470.24
MW-6	05/15/20	5481.45	ND	15.10		5466.35
MW-6	11/11/20	5481.45	ND	11.59		5469.86
MW-6	05/21/21	5481.45	ND	15.55		5465.90
MW-6	11/12/21	5481.45	ND	12.39		5469.06
MW-7	10/25/14	5481.80	ND	12.59		5469.21
MW-7	05/30/15	5481.80	ND	16.32		5465.48
MW-7	11/18/15	5481.80	ND	14.67		5467.13
MW-7	04/18/16	5481.80	ND	19.09		5462.71
MW-7	10/14/16	5481.80	ND	15.66		5466.14
MW-7	06/11/17	5481.80	ND	17.44		5464.36
MW-7	11/13/17	5481.80	ND	14.67		5467.13
MW-7	05/17/18	5481.80	ND	16.62		5465.18
MW-7	10/28/18	5481.80	ND	12.01		5469.79
MW-7	05/22/19	5481.80	ND	15.86		5465.94
MW-7	11/11/19	5481.80	ND	11.37		5470.43
MW-7	05/15/20	5481.80	ND	15.35		5466.45
MW-7	11/11/20	5481.80	ND	11.78		5470.02
MW-7	05/21/21	5481.80	ND	15.79		5466.01
MW-7	11/12/21	5481.80	ND	12.63		5469.17
TMW-1	01/06/06	5481.43	ND	15.29		5466.14
TMW-1	01/09/06	5481.43	ND	15.27		5466.16
TMW-1	01/18/06	5481.43	ND	15.57		5465.87
TMW-1	06/23/08	5481.43	ND	15.04		5466.39
TMW-1	12/30/09	5481.43	ND	NA		NA
TMW-1	01/25/10	5481.43	ND	17.23		5464.20
TMW-1	05/25/10	5481.43	17.80	18.70	0.90	5463.41
TMW-1	09/24/10	5481.43	14.10	14.45	0.35	5467.25

TABLE 2 - GROUNDWATER ELEVATION RESULTS

Gallegos Canyon Unit #142E						
Location	Date	TOC	Depth to LNAPL (ft.)	Depth to Water (ft.)	LNAPL Thickness (ft.)	GW Elevation (ft.)
TMW-1	11/09/10	5481.43	14.37	14.62	0.25	5467.00
TMW-1	02/01/11	5481.43	17.00	17.45	0.45	5464.32
TMW-1	05/03/11	5481.43	18.55	19.76	1.21	5462.58
TMW-1	09/27/11	5481.43	12.03	12.43	0.40	5469.30
TMW-1	11/16/11	5481.43	12.31	12.44	0.13	5469.09
TMW-1	02/16/12	5481.43	12.03	14.25	2.22	5468.85
TMW-1	05/07/12	5481.43	14.18	14.20	0.02	5467.25
TMW-1	06/07/13	5481.43	ND	13.65		5467.78
TMW-1	09/11/13	5481.43	ND	12.14		5469.29
TMW-1	12/13/13	5481.43	ND	13.90		5467.53
TMW-1	04/03/14	5481.43	17.25	17.36	0.11	5464.16
TMW-1 abandoned on September 8, 2014, and replaced with MW-8						
MW-8	10/25/14	5481.83	ND	12.50		5469.33
MW-8	05/30/15	5481.83	ND	16.28		5465.55
MW-8	11/18/15	5481.83	ND	14.60		5467.23
MW-8	04/18/16	5481.83	ND	19.11		5462.72
MW-8	10/14/16	5481.83	ND	15.61		5466.22
MW-8	06/11/17	5481.83	17.20	18.09	0.89	5464.41
MW-8	11/13/17	5481.83	ND	14.63		5467.20
MW-8	05/17/18	5481.83	ND	16.64		5465.19
MW-8	10/28/18	5481.83	ND	11.97		5469.86
MW-8	05/22/19	5481.83	ND	15.85		5465.98
MW-8	11/11/19	5481.83	ND	11.26		5470.57
MW-8	05/15/20	5481.83	ND	15.33		5466.50
MW-8	11/11/20	5481.83	ND	11.69		5470.14
MW-8	05/21/21	5481.83	ND	15.75		5466.08
MW-8	11/12/21	5481.83	ND	12.55		5469.28

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

FIGURES

FIGURE 1: SITE LOCATION MAP

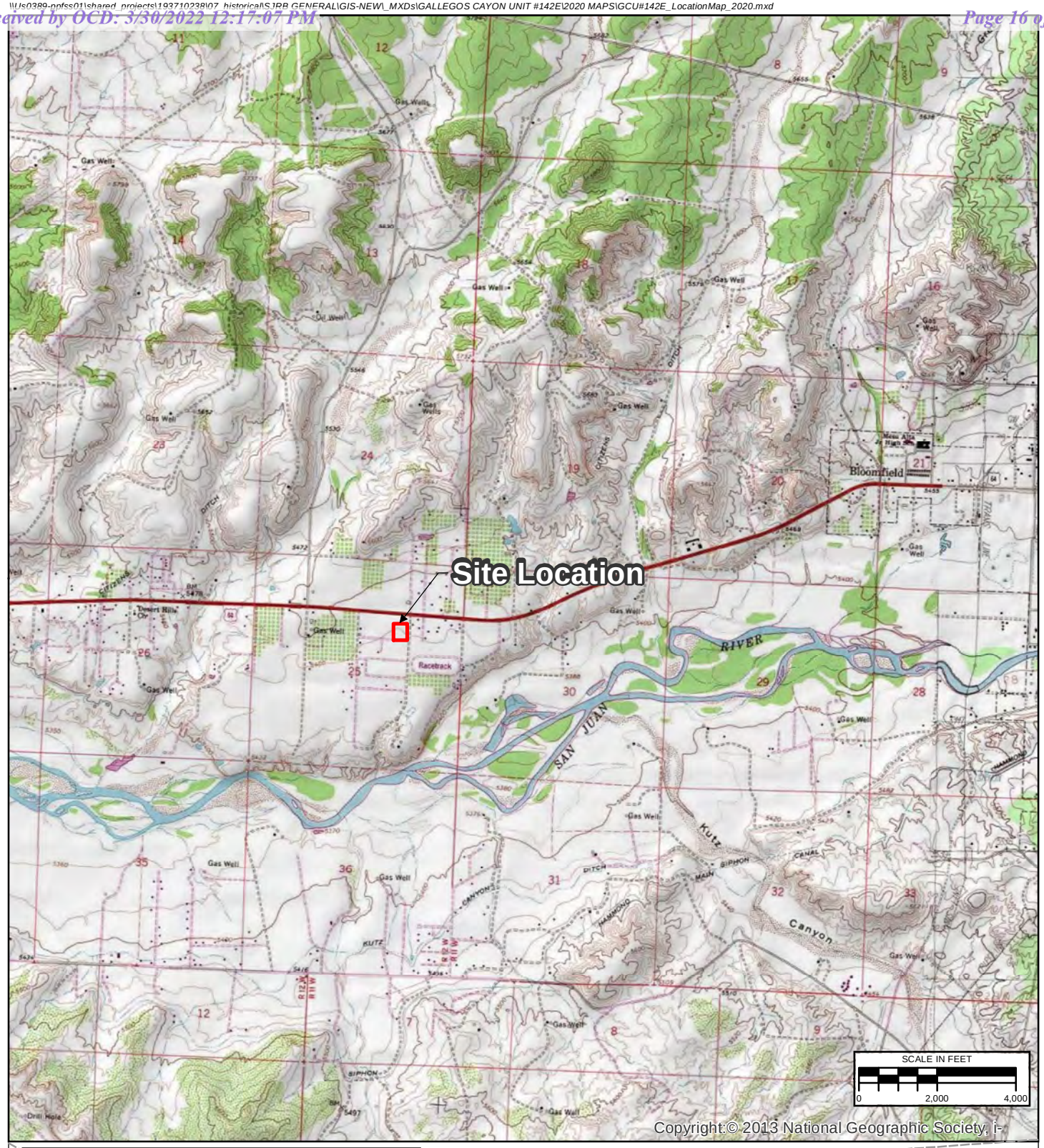
FIGURE 2: SITE PLAN

FIGURE 3: GROUNDWATER ANALYTICAL RESULTS – MAY 21, 2021

FIGURE 4: GROUNDWATER ELEVATION – MAY 21, 2021

FIGURE 5: GROUNDWATER ANALYTICAL RESULTS – NOVEMBER 12, 2021

FIGURE 6: GROUNDWATER ELEVATION MAP – NOVEMBER 12, 2021



N

REVISION	DATE	DESIGN BY	DRAWN BY	REVIEWED BY
	2/22/2021	SAH	SAH	SRV

TITLE

SITE LOCATION

Stantec

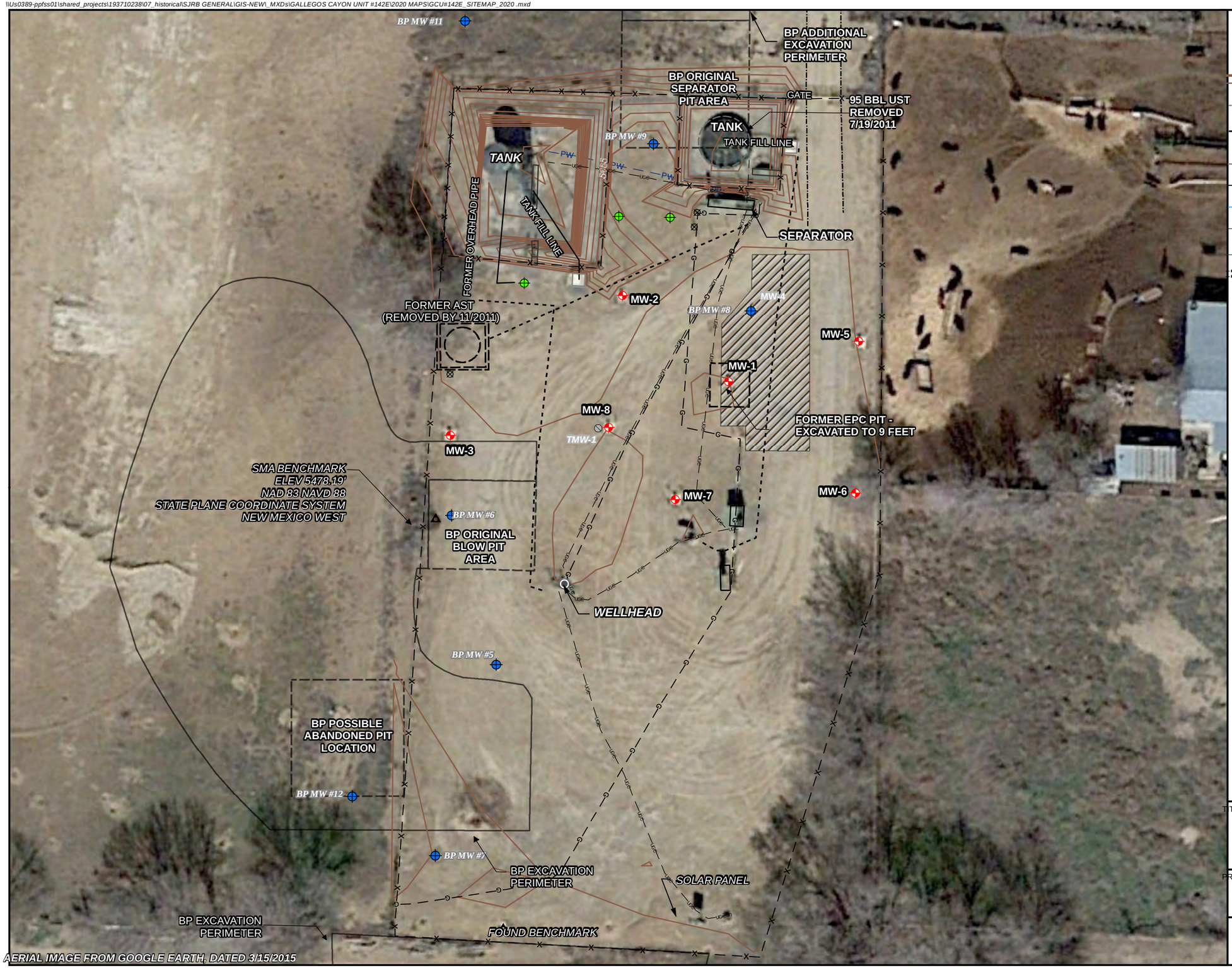
PROJECT

GALLEGOS CANYON UNIT COM A #142E
SAN JUAN RIVER BASIN
SAN JUAN COUNTY, NEW MEXICO

FIGURE

1

\\Us0389-ppfss01\shared_projects\193710238\07_historical\SJRB GENERAL\GIS-NEW_MXDs\GALLEGOS CAYON UNIT #142E\2020 MAPS\GCU#142E_SITEMAP_2020 .mxd



LEGEND:

- 5795 — APPROX. GROUND SURFACE CONTOUR AND ELEVATION, FEET
- ACCESS ROAD
- UNKNOWN LINE (POTENTIALLY ABANDONED)
- LOCATION OF FORMER 95 BARREL UST REMOVED 7/19/2011
- FENCE
- PW — PRODUCED WATER LINE
- UGE / UGC — UNDERGROUND CABLE
- G — UNDERGROUND GAS LINE
- APPROXIMATE FORMER DITCH
- APPROXIMATE EXTENT OF 10/1996 EPNG SOIL EXCAVATION (EXCAVATED TO 15.5 FEET)
- MONITORING WELL
- ABANDONED MONITORING WELL
- SIMCO MONITORING WELL
- NEW BP WELL (10/29/2018)
- WELLHEAD
- SMA BENCHMARK
- RIG ANCHOR

N

SCALE IN FEET

0 30 60

REVISION	DATE	DESIGN BY	DRAWN BY	REVIEWED BY
	2/20/2021	SLG	SLG	SRV

TITLE:

SITE PLAN

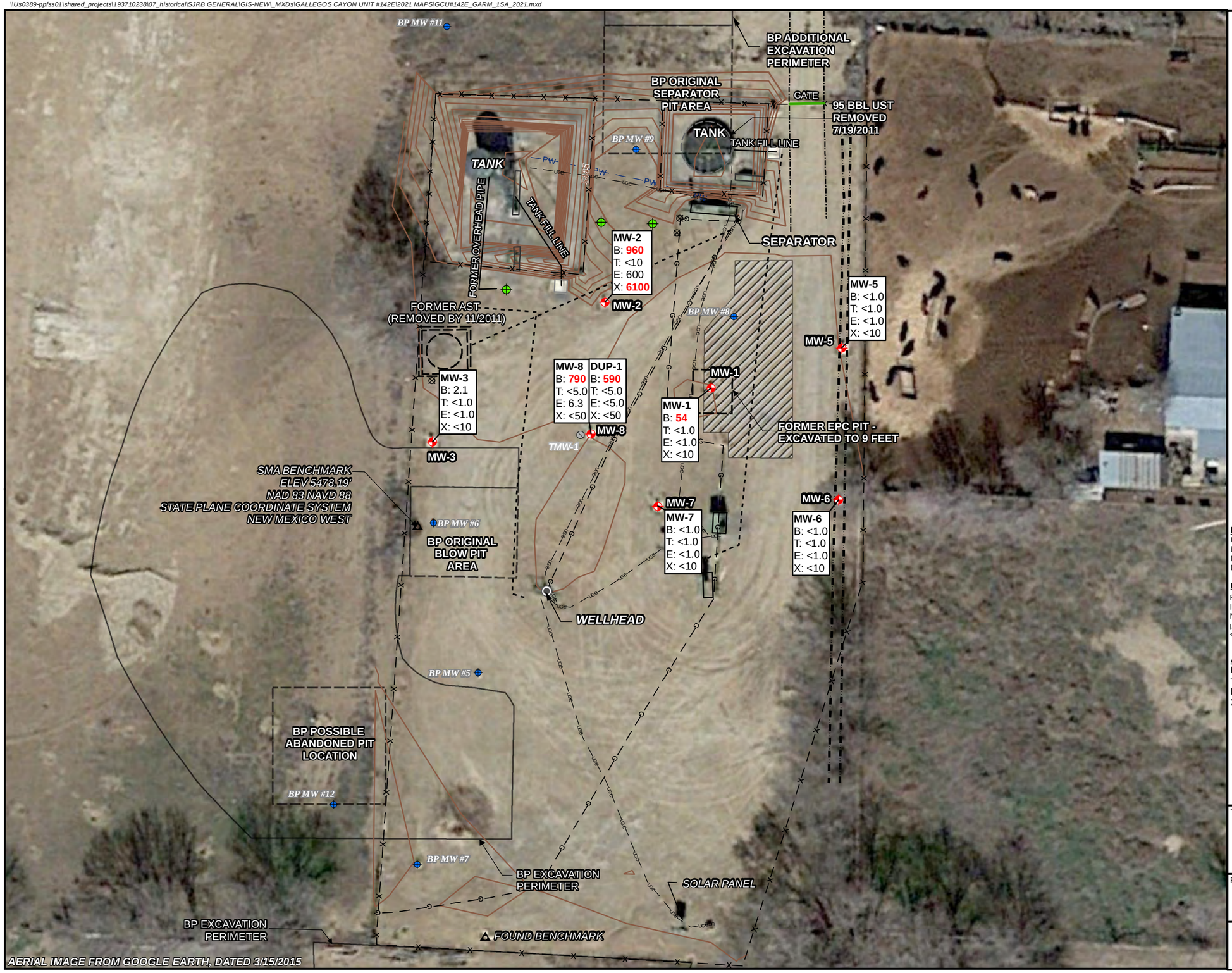
PROJECT:

GALLEGOS CANYON UNIT COM A #142E
SAN JUAN COUNTY, NEW MEXICO

Stantec

Figure No.: 2

\\Us0389-ppfss01\shared_projects\193710238\07_historical\SJRB GENERAL\GIS-NEW_MXDs\GALLEGOS CAYON UNIT #142E\2021 MAPS\GCU#142E_GARM_1SA_2021.mxd



LEGEND:

- 5795 — APPROX. GROUND SURFACE CONTOUR AND ELEVATION, FEET
- ACCESS ROAD
- UNKNOWN LINE (POTENTIALLY ABANDONED)
- LOCATION OF FORMER 95 BARREL UST REMOVED 7/19/2011
- FENCE
- PW — PRODUCED WATER LINE
- UGE / UGC — UNDERGROUND CABLE
- G — UNDERGROUND GAS LINE
- APPROXIMATE FORMER DITCH
- APPROXIMATE EXTENT OF 10/1996 EPNG SOIL EXCAVATION (EXCAVATED TO 15.5 FEET)
- MONITORING WELL
- ABANDONED MONITORING WELL
- SIMCO MONITORING WELL
- NEW BP WELL (10/29/2018)
- WELLHEAD
- SMA BENCHMARK
- RIG ANCHOR

NOTES:
UTILITY LOCATIONS ARE APPROXIMATE.
MW-4 WAS A SOIL BORING ONLY (NO WELL CONSTRUCTED)
BP FORMER PIT AND EXCAVATION PERIMETER INFORMATION OBTAINED FROM 06/24/2011 FIGURE FROM BLAGG ENGINEERING.

EXPLANATION OF ANALYTES AND APPLICABLE STANDARDS:
RESULTS IN **BOLDFACE/RED** 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

N

SCALE IN FEET
0 30 60

REVISION	DATE	DESIGN BY	DRAWN BY	REVIEWED BY
	7/14/2021	SAH	SAH	SRV

TITLE:
GROUNDWATER ANALYTICAL RESULTS MAY 21, 2021

PROJECT:
GALLEGOS CANYON UNIT COM A #142E SAN JUAN COUNTY, NEW MEXICO

Stantec

Figure No.: 3

\\Us0389-ppfss01\shared_projects\193710238\07_historical\SJRB GENERAL\GIS-NEW_MXDs\GALLEGOS CAYON UNIT #142E\2021 MAPS\GCU#142E_GECM_1SA_2021.mxd

BP MW #11

BP ADDITIONAL EXCAVATION PERIMETER

BP ORIGINAL SEPARATOR PIT AREA

GATE

95 BBL UST REMOVED 7/19/2011

TANK

TANK FILL LINE

BP MW #9

TANK

FORMER OVERHEAD PIPE

TANK FILL LINE

SEPARATOR

MW-2
5466.13

MW-2

FORMER AST (REMOVED BY 11/2011)

MW-4

BP MW #8

MW-5
5466.03

MW-5

MW-3
5466.12

MW-3

MW-8

TMW-1

MW-8
5466.08

MW-1

MW-1
5466.05

FORMER EPC PIT - EXCAVATED TO 9 FEET

SMA BENCHMARK
ELEV 5478.19'
NAD 83 NAVD 88
STATE PLANE COORDINATE SYSTEM
NEW MEXICO WEST

MW-7
5466.01

MW-7

MW-6

MW-6
5465.90

5466.1

BP MW #6

BP ORIGINAL BLOW PIT AREA

5466.0

WELLHEAD

BP MW #5

BP POSSIBLE ABANDONED PIT LOCATION

BP MW #12

BP MW #7

BP EXCAVATION PERIMETER

SOLAR PANEL

BP EXCAVATION PERIMETER

FOUND BENCHMARK

AERIAL IMAGE FROM GOOGLE EARTH, DATED 3/15/2015

LEGEND:

- 5795 — APPROX. GROUND SURFACE CONTOUR AND ELEVATION, FEET
- ACCESS ROAD
- UNKNOWN LINE (POTENTIALLY ABANDONED)
- LOCATION OF FORMER 95 BARREL UST REMOVED 7/19/2011
- FENCE
- PW — PRODUCED WATER LINE
- UGE / UGC — UNDERGROUND CABLE
- G — UNDERGROUND GAS LINE
- APPROXIMATE FORMER DITCH
- APPROXIMATE EXTENT OF 10/1996 EPNG SOIL EXCAVATION (EXCAVATED TO 15.5 FEET)
- MONITORING WELL
- ABANDONED MONITORING WELL
- SIMCO MONITORING WELL
- NEW BP WELL (10/29/2018)
- WELLHEAD
- SMA BENCHMARK
- RIG ANCHOR

NOTES:

545.90 — GROUNDWATER ELEVATION (FEET ABOVE MEAN SEA LEVEL)

5466.55 — WATER LEVEL ELEVATION CONTOUR (DASHED WHERE INFERRED, FEET ABOVE MEAN SEA LEVEL)

DIRECTION OF APPARENT GROUNDWATER FLOW

UTILITY LOCATIONS ARE APPROXIMATE.
MW-4 WAS A SOIL BORING ONLY (NO WELL CONSTRUCTED)
BP FORMER PIT AND EXCAVATION PERIMETER INFORMATION OBTAINED FROM 06/24/2011 FIGURE FROM BLAGG ENGINEERING.

N

SCALE IN FEET
0 30 60

REVISION	DATE	DESIGN BY	DRAWN BY	REVIEWED BY
	7/14/2021	SAH	SAH	SRV

TITLE:

GROUNDWATER ELEVATION MAP
MAY 21, 2021

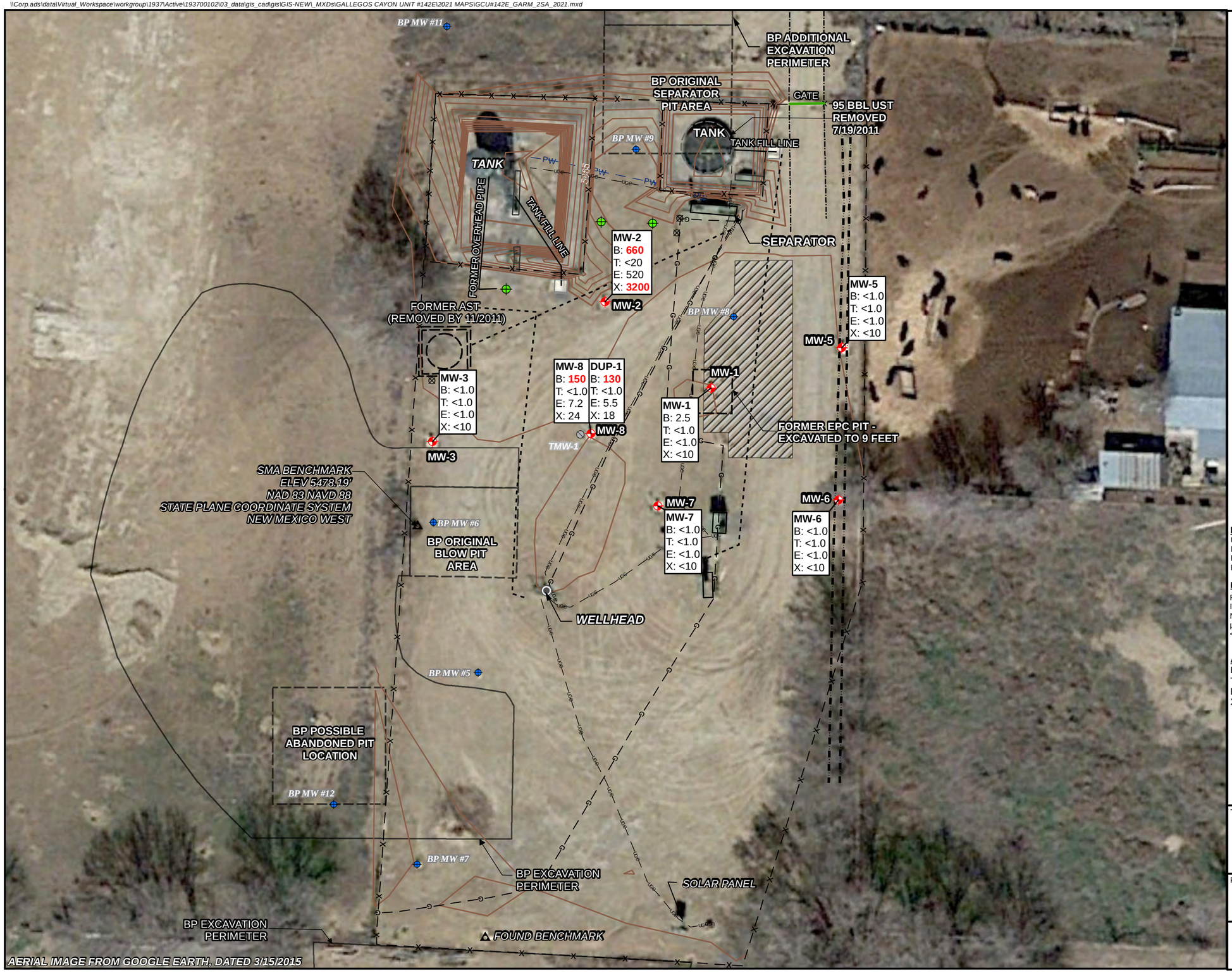
PROJECT:

GALLEGOS CANYON UNIT COM A #142E
SAN JUAN COUNTY, NEW MEXICO

Stantec

Figure No.: 4

\\Corp.ads\data\Virtual_Workspace\workgroup\1937\Active\193700102\03_data\gis_cad\gis\GIS-NEW_MXDs\GALLEGOS CANYON UNIT #142E\2021 MAPS\GCU#142E_GARM_2SA_2021.mxd



LEGEND:

- 5795 — APPROX. GROUND SURFACE CONTOUR AND ELEVATION, FEET
- ACCESS ROAD
- UNKNOWN LINE (POTENTIALLY ABANDONED)
- LOCATION OF FORMER 95 BARREL UST REMOVED 7/19/2011
- FENCE
- PW — PRODUCED WATER LINE
- UGC — UNDERGROUND CABLE
- G — UNDERGROUND GAS LINE
- APPROXIMATE FORMER DITCH
- APPROXIMATE EXTENT OF 10/1996 EPNG SOIL EXCAVATION (EXCAVATED TO 15.5 FEET)
- MONITORING WELL
- ABANDONED MONITORING WELL
- SIMCO MONITORING WELL
- NEW BP WELL (10/29/2018)
- WELLHEAD
- SMA BENCHMARK
- RIG ANCHOR

NOTES:
UTILITY LOCATIONS ARE APPROXIMATE.
MW-4 WAS A SOIL BORING ONLY (NO WELL CONSTRUCTED)
BP FORMER PIT AND EXCAVATION PERIMETER INFORMATION OBTAINED FROM 06/24/2011 FIGURE FROM BLAGG ENGINEERING.

EXPLANATION OF ANALYTES AND APPLICABLE STANDARDS:

RESULTS IN **BOLDFACE/RED** 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

N

SCALE IN FEET
0 30 60

REVISION	DATE	DESIGN BY	DRAWN BY	REVIEWED BY
	2022-01-24	SAH	SAH	SRV

TITLE:

GROUNDWATER ANALYTICAL RESULTS NOVEMBER 12, 2021

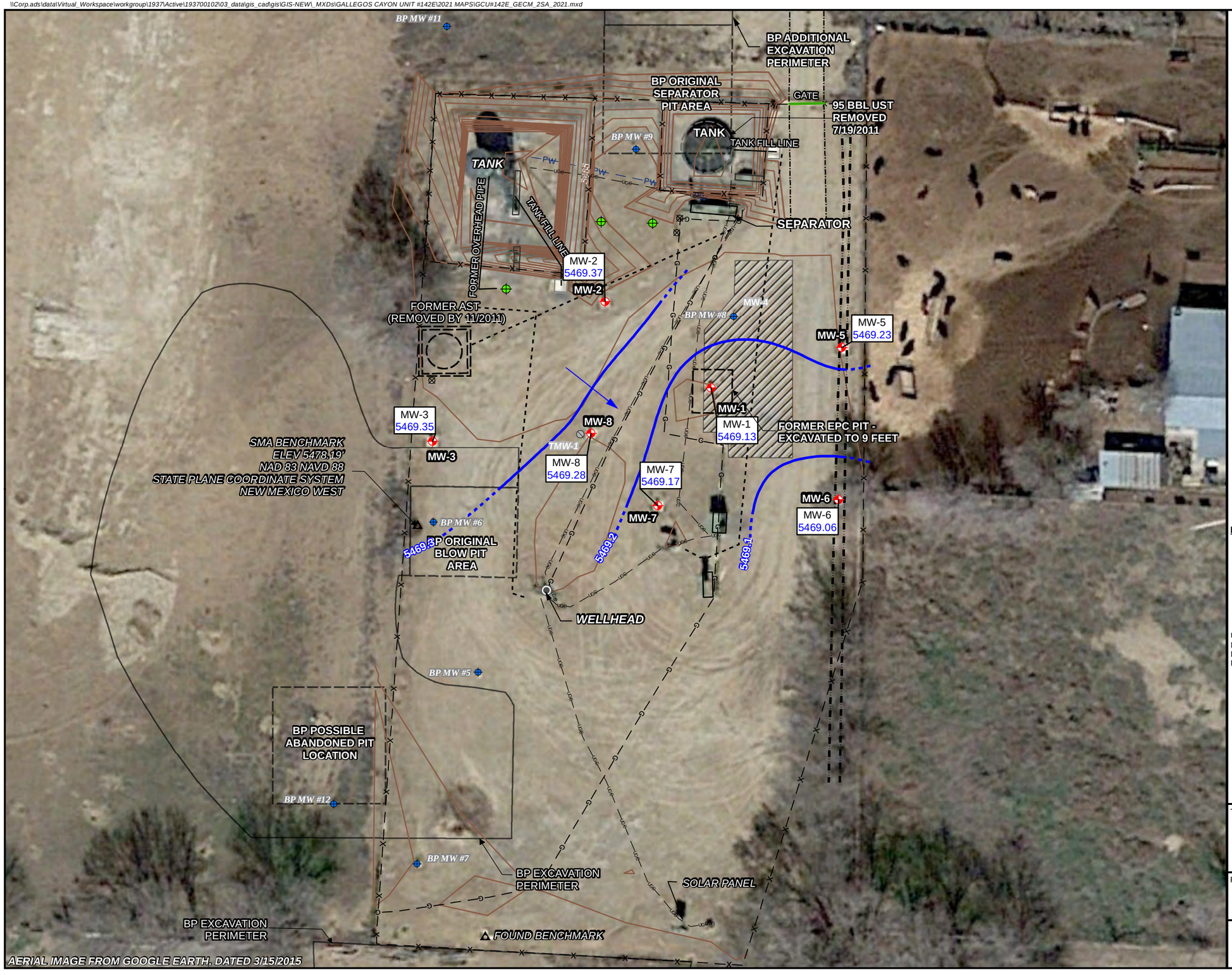
PROJECT:

GALLEGOS CANYON UNIT COM A #142E SAN JUAN COUNTY, NEW MEXICO

Stantec

Figure No.: **5**

\\Corp.ads\data\Virtual_Workspace\workgroup\1937\Active\193700102\03_data\gis_cad\gis\GIS-NEW_MXDs\GALLEGOS CAYON UNIT #142E\2021 MAPS\GCU#142E_GECM_2SA_2021.mxd



LEGEND:

- 5795 — APPROX. GROUND SURFACE CONTOUR AND ELEVATION, FEET
- ACCESS ROAD
- UNKNOWN LINE (POTENTIALLY ABANDONED)
- LOCATION OF FORMER 95 BARREL UST REMOVED 7/19/2011
- FENCE
- PW — PRODUCED WATER LINE
- UGC — UNDERGROUND CABLE
- G — UNDERGROUND GAS LINE
- APPROXIMATE FORMER DITCH
- APPROXIMATE EXTENT OF 10/1996 EPNG SOIL EXCAVATION (EXCAVATED TO 15.5 FEET)
- MONITORING WELL
- ABANDONED MONITORING WELL
- SIMCO MONITORING WELL
- NEW BP WELL (10/29/2018)
- WELLHEAD
- SMA BENCHMARK
- RIG ANCHOR

NOTES:

545.90 — GROUNDWATER ELEVATION (FEET ABOVE MEAN SEA LEVEL)

5466.55 — WATER LEVEL ELEVATION CONTOUR (DASHED WHERE INFERRED, FEET ABOVE MEAN SEA LEVEL)

DIRECTION OF APPARENT GROUNDWATER FLOW

UTILITY LOCATIONS ARE APPROXIMATE.
MW-4 WAS A SOIL BORING ONLY (NO WELL CONSTRUCTED)
BP FORMER PIT AND EXCAVATION PERIMETER INFORMATION OBTAINED FROM 06/24/2011 FIGURE FROM BLAGG ENGINEERING.

N

SCALE IN FEET
0 30 60

REVISION	DATE	DESIGN BY	DRAWN BY	REVIEWED BY
	2022-01-24	SAH	SAH	SRV

TITLE:

GROUNDWATER ELEVATION MAP
NOVEMBER 12, 2021

PROJECT:

GALLEGOS CANYON UNIT COM A #142E
SAN JUAN COUNTY, NEW MEXICO

Stantec

Figure No.: 6

APPENDICES

APPENDIX A – NOTIFICATIONS OF SAMPLING ACTIVITIES

APPENDIX B – WASTEWATER DISPOSAL DOCUMENTATION

APPENDIX C – GROUNDWATER SAMPLING ANALYTICAL REPORTS

APPENDIX A

From: Varsa, Steve
To: Smith, Cory, EMNRD
Cc: Griswold, Jim, EMNRD; Wiley, Joe
Subject: El Paso CGP Company - Notice of upcoming groundwater sampling activities
Date: Wednesday, May 12, 2021 2:45:52 PM

Hi Cory -

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

Site Name	Incident Number	Sample Date
Canada Mesa #2	nAUTOfAB000065	05/19/2021
Fields A#7A	nAUTOfAB000176	05/22/2021
Fogelson 4-1	nAUTOfAB000192	05/22/2021
Gallegos Canyon Unit #124E	nAUTOfAB000205	05/21/2021
GCU Com A #142E	nAUTOfAB000219	05/21/2021
James F. Bell #1E	nAUTOfAB000291	05/23/2021
Johnston Fed #4	nAUTOfAB000305	05/18/2021
Johnston Fed #6A	nAUTOfAB000309	05/18/2021
K27 LDO72	nAUTOfAB000316	05/19/2021
Knight #1	nAUTOfAB000324	05/21/2021
Lateral L 40 Line Drip	nAUTOfAB000335	05/23/2021
Miles Fed #1A	nAUTOfAB000391	05/19/2021
Sandoval GC A #1A	nAUTOfAB000635	05/18/2021
Standard Oil Com #1	nAUTOfAB000666	05/19/2021
State Gas Com N #1	nAUTOfAB000668	05/22/2021

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

Thank you,
Steve

Stephen Varsa, P.G.
Senior Hydrogeologist
Stantec Environmental Services
11153 Aurora Avenue
Des Moines, Iowa 50322
Direct: (515) 251-1020
Cell: (515) 710-7523
Office: (515) 253-0830
steve.varsa@stantec.com

From: Varsa, Steve
To: Smith, Cory, EMNRD
Cc: Griswold, Jim, EMNRD; Wiley, Joe
Subject: El Paso CGP Company - Notice of upcoming groundwater sampling activities
Date: Wednesday, November 03, 2021 10:14:55 AM

Hi Cory -

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

Site Name	Incident Number	Sample Date
Canada Mesa #2	nAUTOfAB000065	11/11/2021
Fields A#7A	nAUTOfAB000176	11/14/2021
Fogelson 4-1	nAUTOfAB000192	11/14/2021
Gallegos Canyon Unit #124E	nAUTOfAB000205	11/12/2021
GCU Com A #142E	nAUTOfAB000219	11/12/2021
James F. Bell #1E	nAUTOfAB000291	11/13/2021
Johnston Fed #4	nAUTOfAB000305	11/15/2021
Johnston Fed #6A	nAUTOfAB000309	11/15/2021
K27 LDO72	nAUTOfAB000316	11/11/2021
Knight #1	nAUTOfAB000324	11/12/2021
Lateral L 40 Line Drip	nAUTOfAB000335	11/13/2021
Miles Fed #1A	nAUTOfAB000391	11/11/2021
Sandoval GC A #1A	nAUTOfAB000635	11/15/2021
Standard Oil Com #1	nAUTOfAB000666	11/11/2021
State Gas Com N #1	nAUTOfAB000668	11/14/2021

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

Thank you,
Steve

Stephen Varsa, P.G.
Senior Hydrogeologist
Stantec Environmental Services
11153 Aurora Avenue
Des Moines, Iowa 50322
Direct: (515) 251-1020
Cell: (515) 710-7523
Office: (515) 253-0830
steve.varsa@stantec.com

APPENDIX B

DATE 05-21-21 DEL. TKT#.

GENERATOR: EL PASO BILL TO: EL PASO

HAULING CO. Stanlac DRIVER: Sean Clary
(Print Full Name)

ORDERED BY: Joe Wiley CODES:

WASTE DESCRIPTION: ☒ Exempt Oilfield Waste ☒ Produced Water ☐ Drilling/Completion Fluids

STATE: ☒ NM ☐ CO ☐ AZ ☐ UT TREATMENT/DISPOSAL METHODS: ☒ EVAPORATION ☒ INJECTION ☒ TREATING PLANT

NO.	TRUCK	LOCATION(S)	VOLUME	COST	H2S	COST	TOTAL	TIME
1		Standard Oil Com #1 Knight #1 / GCU #124E		120				
2		GCU Com A #142E					'21 MAY 21 3:23 PM	
3		Johnston Fed #4 / #6A						
4		Sundoval GC A #1A /						
5		CANADA MESA #2 K-27-20N-12W, Miley Fed #1A						

I, Joe Wiley, representative or authorized agent for _____ do hereby certify that according to the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988 regulatory determination, the above described waste is: RCRA Exempt: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non -exempt waste.

☐ Approved ☐ Denied ATTENDANT SIGNATURE _____

SAN JUAN PRINTING 2020 1973-1

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. 817538
NMOCD PERMIT: NM -001-0005
Oil Field Waste Document, Form C138
INVOICE:

DATE 11.13.21

GENERATOR: El paso cGP

HAULING CO. ~~El paso cgp~~ Slan tech

ORDERED BY: Joe wiley

DEL. TKT#.

BILL TO: El paso cGp

DRIVER: Sean C.
(Print Full Name)

CODES:

WASTE DESCRIPTION: ☒ Exempt Oilfield Waste ☐ Produced Water ☐ Drilling/Completion Fluids

STATE: ☑ NM ☐ CO ☐ AZ ☐ UT

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

NO.	TRUCK	LOCATION(S)	VOLUME	COST	H2S	COST	TOTAL	TIME
1		· Knight ·	1	70			70 21 NOV 13 5:31 PM	
2		Gallegos canyon unit 124E						
3		GCU · COM A #1 12E						
4		Laedl 2-10 ·						
5		James F. Bell #1E						

I, _____, representative or authorized agent for _____ do hereby certify that according to the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988 regulatory determination, the above described waste is: RCRA Exempt: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non -exempt waste.

☑ Approved ☐ Denied ATTENDANT SIGNATURE _____

SAN JUAN PRINTING 2020 1973-1

APPENDIX C

eurofins | Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 400-203813-1
Client Project/Site: GCU Com A #142E

For:
Stantec Consulting Services Inc
11153 Aurora Avenue
Des Moines, Iowa 50322-7904

Attn: Steve Varsa

Marty Edwards

Authorized for release by:
6/7/2021 9:07:22 PM

Marty Edwards, Client Service Manager
(850)471-6227
Marty.Edwards@Eurofinset.com

Client: Stantec Consulting Services Inc
Project/Site: GCU Com A #142E

Laboratory Job ID: 400-203813-1

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 16
QC Sample Results 17
Chronicle 20
Certification Summary 22
Method Summary 23
Chain of Custody 24
Receipt Checklists 25

Definitions/Glossary

Client: Stantec Consulting Services Inc
Project/Site: GCU Com A #142E

Job ID: 400-203813-1

Glossary

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

Case Narrative

Client: Stantec Consulting Services Inc
Project/Site: GCU Com A #142E

Job ID: 400-203813-1

Job ID: 400-203813-1

Laboratory: Eurofins TestAmerica, Pensacola

Narrative

Job Narrative
400-203813-1

Comments
No additional comments.

Receipt
The samples were received on 5/25/2021 9:35 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 1.3º C.

GC/MS VOA
Method 8260C: The following samples were diluted to bring the concentration of target analytes within the calibration range: DUP-01 (400-203813-2), MW-2 (400-203813-4) and MW-8 (400-203813-9). Elevated reporting limits (RLs) are provided.

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

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

Detection Summary

Client: Stantec Consulting Services Inc
Project/Site: GCU Com A #142E

Job ID: 400-203813-1

Client Sample ID: TB-01 — Lab Sample ID: 400-203813-1

No Detections.

Client Sample ID: DUP-01 — Lab Sample ID: 400-203813-2

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Benzene	590		5.0		ug/L	5		8260C	Total/NA

Client Sample ID: MW-1 — Lab Sample ID: 400-203813-3

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Benzene	54		1.0		ug/L	1		8260C	Total/NA

Client Sample ID: MW-2 — Lab Sample ID: 400-203813-4

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Benzene	960		10		ug/L	10		8260C	Total/NA
Ethylbenzene	600		10		ug/L	10		8260C	Total/NA
Xylenes, Total - DL	6100		250		ug/L	25		8260C	Total/NA

Client Sample ID: MW-3 — Lab Sample ID: 400-203813-5

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

Client Sample ID: MW-5 — Lab Sample ID: 400-203813-6

No Detections.

Client Sample ID: MW-6 — Lab Sample ID: 400-203813-7

No Detections.

Client Sample ID: MW-7 — Lab Sample ID: 400-203813-8

No Detections.

Client Sample ID: MW-8 — Lab Sample ID: 400-203813-9

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Benzene	790		5.0		ug/L	5		8260C	Total/NA
Ethylbenzene	6.3		5.0		ug/L	5		8260C	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Pensacola

Sample Summary

Client: Stantec Consulting Services Inc
Project/Site: GCU Com A #142E

Job ID: 400-203813-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
400-203813-1	TB-01	Water	05/21/21 13:00	05/25/21 09:35	
400-203813-2	DUP-01	Water	05/21/21 15:00	05/25/21 09:35	
400-203813-3	MW-1	Water	05/21/21 14:11	05/25/21 09:35	
400-203813-4	MW-2	Water	05/21/21 14:22	05/25/21 09:35	
400-203813-5	MW-3	Water	05/21/21 14:29	05/25/21 09:35	
400-203813-6	MW-5	Water	05/21/21 14:33	05/25/21 09:35	
400-203813-7	MW-6	Water	05/21/21 14:37	05/25/21 09:35	
400-203813-8	MW-7	Water	05/21/21 14:47	05/25/21 09:35	
400-203813-9	MW-8	Water	05/21/21 14:00	05/25/21 09:35	

Client Sample Results

Client: Stantec Consulting Services Inc
Project/Site: GCU Com A #142E

Job ID: 400-203813-1

Client Sample ID: TB-01

Lab Sample ID: 400-203813-1

Date Collected: 05/21/21 13:00
Matrix: Water
Date Received: 05/25/21 09:35

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			06/03/21 16:48	1
Toluene	<1.0		1.0		ug/L			06/03/21 16:48	1
Ethylbenzene	<1.0		1.0		ug/L			06/03/21 16:48	1
Xylenes, Total	<10		10		ug/L			06/03/21 16:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*98*		*78 - 118*		*06/03/21 16:48*	*1*
Dibromofluoromethane	*104*		*81 - 121*		*06/03/21 16:48*	*1*
Toluene-d8 (Surr)	*92*		*80 - 120*		*06/03/21 16:48*	*1*

Client Sample Results

Client: Stantec Consulting Services Inc
Project/Site: GCU Com A #142E

Job ID: 400-203813-1

Client Sample ID: DUP-01

Date Collected: 05/21/21 15:00
Date Received: 05/25/21 09:35

Lab Sample ID: 400-203813-2

Matrix: Water

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**590**		5.0		ug/L			06/03/21 20:07	5
Toluene	<5.0		5.0		ug/L			06/03/21 20:07	5
Ethylbenzene	<5.0		5.0		ug/L			06/03/21 20:07	5
Xylenes, Total	<50		50		ug/L			06/03/21 20:07	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*98*		*78 - 118*		*06/03/21 20:07*	*5*
Dibromofluoromethane	*104*		*81 - 121*		*06/03/21 20:07*	*5*
Toluene-d8 (Surr)	*91*		*80 - 120*		*06/03/21 20:07*	*5*

Client Sample Results

Client: Stantec Consulting Services Inc
Project/Site: GCU Com A #142E

Job ID: 400-203813-1

Client Sample ID: MW-1

Date Collected: 05/21/21 14:11
Date Received: 05/25/21 09:35

Lab Sample ID: 400-203813-3

Matrix: Water

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**54**		1.0		ug/L			06/03/21 17:10	1
Toluene	<1.0		1.0		ug/L			06/03/21 17:10	1
Ethylbenzene	<1.0		1.0		ug/L			06/03/21 17:10	1
Xylenes, Total	<10		10		ug/L			06/03/21 17:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*96*		*78 - 118*		*06/03/21 17:10*	*1*
Dibromofluoromethane	*102*		*81 - 121*		*06/03/21 17:10*	*1*
Toluene-d8 (Surr)	*90*		*80 - 120*		*06/03/21 17:10*	*1*

Client Sample Results

Client: Stantec Consulting Services Inc
Project/Site: GCU Com A #142E

Job ID: 400-203813-1

Client Sample ID: MW-2

Lab Sample ID: 400-203813-4

Date Collected: 05/21/21 14:22
Matrix: Water
Date Received: 05/25/21 09:35

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**960**		10		ug/L			06/04/21 13:11	10
Toluene	<10		10		ug/L			06/04/21 13:11	10
Ethylbenzene	**600**		10		ug/L			06/04/21 13:11	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*101*		*78 - 118*		*06/04/21 13:11*	*10*
Dibromofluoromethane	*106*		*81 - 121*		*06/04/21 13:11*	*10*
Toluene-d8 (Surr)	*96*		*80 - 120*		*06/04/21 13:11*	*10*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Xylenes, Total	**6100**		250		ug/L			06/04/21 14:39	25

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*100*		*78 - 118*		*06/04/21 14:39*	*25*
Dibromofluoromethane	*102*		*81 - 121*		*06/04/21 14:39*	*25*
Toluene-d8 (Surr)	*91*		*80 - 120*		*06/04/21 14:39*	*25*

Client Sample Results

Client: Stantec Consulting Services Inc
Project/Site: GCU Com A #142E

Job ID: 400-203813-1

Client Sample ID: MW-3

Date Collected: 05/21/21 14:29
Date Received: 05/25/21 09:35

Lab Sample ID: 400-203813-5

Matrix: Water

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**2.1**		1.0		ug/L			06/03/21 17:32	1
Toluene	<1.0		1.0		ug/L			06/03/21 17:32	1
Ethylbenzene	<1.0		1.0		ug/L			06/03/21 17:32	1
Xylenes, Total	<10		10		ug/L			06/03/21 17:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*99*		*78 - 118*		*06/03/21 17:32*	*1*
Dibromofluoromethane	*105*		*81 - 121*		*06/03/21 17:32*	*1*
Toluene-d8 (Surr)	*92*		*80 - 120*		*06/03/21 17:32*	*1*

Client Sample Results

Client: Stantec Consulting Services Inc
Project/Site: GCU Com A #142E

Job ID: 400-203813-1

Client Sample ID: MW-5

Date Collected: 05/21/21 14:33
Date Received: 05/25/21 09:35

Lab Sample ID: 400-203813-6

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			06/03/21 17:54	1
Toluene	<1.0		1.0		ug/L			06/03/21 17:54	1
Ethylbenzene	<1.0		1.0		ug/L			06/03/21 17:54	1
Xylenes, Total	<10		10		ug/L			06/03/21 17:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*98*		*78 - 118*		*06/03/21 17:54*	*1*
Dibromofluoromethane	*104*		*81 - 121*		*06/03/21 17:54*	*1*
Toluene-d8 (Surr)	*89*		*80 - 120*		*06/03/21 17:54*	*1*

Client Sample Results

Client: Stantec Consulting Services Inc
Project/Site: GCU Com A #142E

Job ID: 400-203813-1

Client Sample ID: MW-6

Date Collected: 05/21/21 14:37
Date Received: 05/25/21 09:35

Lab Sample ID: 400-203813-7

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			06/03/21 18:16	1
Toluene	<1.0		1.0		ug/L			06/03/21 18:16	1
Ethylbenzene	<1.0		1.0		ug/L			06/03/21 18:16	1
Xylenes, Total	<10		10		ug/L			06/03/21 18:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*98*		*78 - 118*		*06/03/21 18:16*	*1*
Dibromofluoromethane	*103*		*81 - 121*		*06/03/21 18:16*	*1*
Toluene-d8 (Surr)	*90*		*80 - 120*		*06/03/21 18:16*	*1*

Client Sample Results

Client: Stantec Consulting Services Inc
Project/Site: GCU Com A #142E

Job ID: 400-203813-1

Client Sample ID: MW-7

Date Collected: 05/21/21 14:47
Date Received: 05/25/21 09:35

Lab Sample ID: 400-203813-8

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			06/03/21 18:38	1
Toluene	<1.0		1.0		ug/L			06/03/21 18:38	1
Ethylbenzene	<1.0		1.0		ug/L			06/03/21 18:38	1
Xylenes, Total	<10		10		ug/L			06/03/21 18:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*98*		*78 - 118*		*06/03/21 18:38*	*1*
Dibromofluoromethane	*105*		*81 - 121*		*06/03/21 18:38*	*1*
Toluene-d8 (Surr)	*91*		*80 - 120*		*06/03/21 18:38*	*1*

Client Sample Results

Client: Stantec Consulting Services Inc
Project/Site: GCU Com A #142E

Job ID: 400-203813-1

Client Sample ID: MW-8
Date Collected: 05/21/21 14:00
Date Received: 05/25/21 09:35

Lab Sample ID: 400-203813-9
Matrix: Water

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**790**		5.0		ug/L			06/04/21 12:48	5
Toluene	<5.0		5.0		ug/L			06/04/21 12:48	5
Ethylbenzene	**6.3**		5.0		ug/L			06/04/21 12:48	5
Xylenes, Total	<50		50		ug/L			06/04/21 12:48	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*97*		*78 - 118*		*06/04/21 12:48*	*5*
Dibromofluoromethane	*104*		*81 - 121*		*06/04/21 12:48*	*5*
Toluene-d8 (Surr)	*95*		*80 - 120*		*06/04/21 12:48*	*5*

QC Association Summary

Client: Stantec Consulting Services Inc
Project/Site: GCU Com A #142E

Job ID: 400-203813-1

GC/MS VOA

Analysis Batch: 534185

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-203813-1	TB-01	Total/NA	Water	8260C	
400-203813-2	DUP-01	Total/NA	Water	8260C	
400-203813-3	MW-1	Total/NA	Water	8260C	
400-203813-5	MW-3	Total/NA	Water	8260C	
400-203813-6	MW-5	Total/NA	Water	8260C	
400-203813-7	MW-6	Total/NA	Water	8260C	
400-203813-8	MW-7	Total/NA	Water	8260C	
MB 400-534185/6	Method Blank	Total/NA	Water	8260C	
LCS 400-534185/1003	Lab Control Sample	Total/NA	Water	8260C	
400-204023-C-14 MS	Matrix Spike	Total/NA	Water	8260C	
400-204023-C-14 MSD	Matrix Spike Duplicate	Total/NA	Water	8260C	

Analysis Batch: 534361

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-203813-4	MW-2	Total/NA	Water	8260C	
400-203813-4 - DL	MW-2	Total/NA	Water	8260C	
400-203813-9	MW-8	Total/NA	Water	8260C	
MB 400-534361/6	Method Blank	Total/NA	Water	8260C	
LCS 400-534361/1003	Lab Control Sample	Total/NA	Water	8260C	
400-203817-A-4 MS	Matrix Spike	Total/NA	Water	8260C	
400-203817-A-4 MSD	Matrix Spike Duplicate	Total/NA	Water	8260C	

QC Sample Results

Client: Stantec Consulting Services Inc
Project/Site: GCU Com A #142E

Job ID: 400-203813-1

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

Lab Sample ID: MB 400-534185/6
Matrix: Water
Analysis Batch: 534185

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			06/03/21 10:54	1
Toluene	<1.0		1.0		ug/L			06/03/21 10:54	1
Ethylbenzene	<1.0		1.0		ug/L			06/03/21 10:54	1
Xylenes, Total	<10		10		ug/L			06/03/21 10:54	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*98*		*78 - 118*		*06/03/21 10:54*	*1*
Dibromofluoromethane	*102*		*81 - 121*		*06/03/21 10:54*	*1*
Toluene-d8 (Surr)	*93*		*80 - 120*		*06/03/21 10:54*	*1*

Lab Sample ID: LCS 400-534185/1003
Matrix: Water
Analysis Batch: 534185

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	49.9		ug/L		100	70 - 130		
Toluene			50.0	45.1		ug/L		90	70 - 130		
Ethylbenzene			50.0	46.2		ug/L		92	70 - 130		
Xylenes, Total			100	92.6		ug/L		93	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*94*		*78 - 118*
Dibromofluoromethane	*106*		*81 - 121*
Toluene-d8 (Surr)	*93*		*80 - 120*

Lab Sample ID: 400-204023-C-14 MS
Matrix: Water
Analysis Batch: 534185

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene	<1.0		50.0	51.2		ug/L		102	56 - 142		
Toluene	<1.0		50.0	45.3		ug/L		89	65 - 130		
Ethylbenzene	<1.0		50.0	45.1		ug/L		90	58 - 131		
Xylenes, Total	<10		100	90.5		ug/L		90	59 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene	*91*		*78 - 118*
Dibromofluoromethane	*103*		*81 - 121*
Toluene-d8 (Surr)	*91*		*80 - 120*

Lab Sample ID: 400-204023-C-14 MSD
Matrix: Water
Analysis Batch: 534185

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	48.7		ug/L		97	56 - 142	5	30
Toluene	<1.0		50.0	42.6		ug/L		83	65 - 130	6	30
Ethylbenzene	<1.0		50.0	40.4		ug/L		81	58 - 131	11	30

QC Sample Results

Client: Stantec Consulting Services Inc
Project/Site: GCU Com A #142E

Job ID: 400-203813-1

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

Lab Sample ID: 400-204023-C-14 MSD
Matrix: Water
Analysis Batch: 534185

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Xylenes, Total	<10		100	80.2		ug/L		80	59 - 130	12	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene	*95*		*78 - 118*
Dibromofluoromethane	*104*		*81 - 121*
Toluene-d8 (Surr)	*92*		*80 - 120*

Lab Sample ID: MB 400-534361/6
Matrix: Water
Analysis Batch: 534361

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			06/04/21 10:58	1
Toluene	<1.0		1.0		ug/L			06/04/21 10:58	1
Ethylbenzene	<1.0		1.0		ug/L			06/04/21 10:58	1
Xylenes, Total	<10		10		ug/L			06/04/21 10:58	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*103*		*78 - 118*		*06/04/21 10:58*	*1*
Dibromofluoromethane	*104*		*81 - 121*		*06/04/21 10:58*	*1*
Toluene-d8 (Surr)	*92*		*80 - 120*		*06/04/21 10:58*	*1*

Lab Sample ID: LCS 400-534361/1003
Matrix: Water
Analysis Batch: 534361

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	49.3		ug/L		99	70 - 130		
Toluene			50.0	42.9		ug/L		86	70 - 130		
Ethylbenzene			50.0	43.9		ug/L		88	70 - 130		
Xylenes, Total			100	86.7		ug/L		87	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*92*		*78 - 118*
Dibromofluoromethane	*103*		*81 - 121*
Toluene-d8 (Surr)	*92*		*80 - 120*

Lab Sample ID: 400-203817-A-4 MS
Matrix: Water
Analysis Batch: 534361

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene	<1.0		50.0	51.1		ug/L		102	56 - 142		
Toluene	<1.0		50.0	39.3		ug/L		79	65 - 130		
Ethylbenzene	<1.0		50.0	37.0		ug/L		74	58 - 131		
Xylenes, Total	<10		100	74.5		ug/L		75	59 - 130		

QC Sample Results

Client: Stantec Consulting Services Inc
Project/Site: GCU Com A #142E

Job ID: 400-203813-1

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

Lab Sample ID: 400-203817-A-4 MS
Matrix: Water
Analysis Batch: 534361

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

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene	94		78 - 118
Dibromofluoromethane	104		81 - 121
Toluene-d8 (Surr)	87		80 - 120

Lab Sample ID: 400-203817-A-4 MSD
Matrix: Water
Analysis Batch: 534361

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	47.2		ug/L		94	56 - 142	8	30
Toluene	<1.0		50.0	37.8		ug/L		76	65 - 130	4	30
Ethylbenzene	<1.0		50.0	35.6		ug/L		71	58 - 131	4	30
Xylenes, Total	<10		100	71.3		ug/L		71	59 - 130	4	30

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene	95		78 - 118
Dibromofluoromethane	103		81 - 121
Toluene-d8 (Surr)	91		80 - 120

Lab Chronicle

Client: Stantec Consulting Services Inc
Project/Site: GCU Com A #142E

Job ID: 400-203813-1

Client Sample ID: TB-01 — Lab Sample ID: 400-203813-1

Date Collected: 05/21/21 13:00 — **Matrix: Water**
Date Received: 05/25/21 09:35

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	534185	06/03/21 16:48	CAR	TAL PEN
	Instrument ID: CH_LARS									

Client Sample ID: DUP-01 — Lab Sample ID: 400-203813-2

Date Collected: 05/21/21 15:00 — **Matrix: Water**
Date Received: 05/25/21 09:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		5	5 mL	5 mL	534185	06/03/21 20:07	CAR	TAL PEN
	Instrument ID: CH_LARS									

Client Sample ID: MW-1 — Lab Sample ID: 400-203813-3

Date Collected: 05/21/21 14:11 — **Matrix: Water**
Date Received: 05/25/21 09:35

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	534185	06/03/21 17:10	CAR	TAL PEN
	Instrument ID: CH_LARS									

Client Sample ID: MW-2 — Lab Sample ID: 400-203813-4

Date Collected: 05/21/21 14:22 — **Matrix: Water**
Date Received: 05/25/21 09:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		10	5 mL	5 mL	534361	06/04/21 13:11	WPD	TAL PEN
	Instrument ID: CH_LARS									
Total/NA	Analysis	8260C	DL	25	5 mL	5 mL	534361	06/04/21 14:39	WPD	TAL PEN
	Instrument ID: CH_LARS									

Client Sample ID: MW-3 — Lab Sample ID: 400-203813-5

Date Collected: 05/21/21 14:29 — **Matrix: Water**
Date Received: 05/25/21 09:35

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	534185	06/03/21 17:32	CAR	TAL PEN
	Instrument ID: CH_LARS									

Client Sample ID: MW-5 — Lab Sample ID: 400-203813-6

Date Collected: 05/21/21 14:33 — **Matrix: Water**
Date Received: 05/25/21 09:35

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	534185	06/03/21 17:54	CAR	TAL PEN
	Instrument ID: CH_LARS									

Lab Chronicle

Client: Stantec Consulting Services Inc
Project/Site: GCU Com A #142E

Job ID: 400-203813-1

Client Sample ID: MW-6

Lab Sample ID: 400-203813-7

Date Collected: 05/21/21 14:37
Matrix: Water
Date Received: 05/25/21 09:35

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	534185	06/03/21 18:16	CAR	TAL PEN
	Instrument ID: CH_LARS									

Client Sample ID: MW-7

Lab Sample ID: 400-203813-8

Date Collected: 05/21/21 14:47
Matrix: Water
Date Received: 05/25/21 09:35

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	534185	06/03/21 18:38	CAR	TAL PEN
	Instrument ID: CH_LARS									

Client Sample ID: MW-8

Lab Sample ID: 400-203813-9

Date Collected: 05/21/21 14:00
Matrix: Water
Date Received: 05/25/21 09:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		5	5 mL	5 mL	534361	06/04/21 12:48	WPD	TAL PEN
	Instrument ID: CH_LARS									

Laboratory References:

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

Accreditation/Certification Summary

Client: Stantec Consulting Services Inc
Project/Site: GCU Com A #142E

Job ID: 400-203813-1

Laboratory: Eurofins TestAmerica, Pensacola

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

Authority	Program	Identification Number	Expiration Date
Alabama	State	40150	06-30-21
ANAB	ISO/IEC 17025	L2471	02-23-23
Arizona	State	AZ0710	01-12-22
Arkansas DEQ	State	88-0689	09-02-21
California	State	2510	06-30-21
Florida	NELAP	E81010	06-30-21
Georgia	State	E81010(FL)	06-30-21
Illinois	NELAP	200041	10-09-21
Iowa	State	367	08-01-22
Kansas	NELAP	E-10253	10-31-21
Kentucky (UST)	State	53	06-30-21
Kentucky (WW)	State	KY98030	12-31-21
Louisiana	NELAP	30976	06-30-21
Louisiana (DW)	State	LA017	12-31-21
Maryland	State	233	09-30-21
Massachusetts	State	M-FL094	06-30-21
Michigan	State	9912	06-30-21
New Jersey	NELAP	FL006	06-30-21
North Carolina (WW/SW)	State	314	12-31-21
Oklahoma	State	9810	08-31-21
Pennsylvania	NELAP	68-00467	01-31-22
Rhode Island	State	LAO00307	12-30-21
South Carolina	State	96026	06-30-21
Tennessee	State	TN02907	06-30-21
Texas	NELAP	T104704286	09-30-21
US Fish & Wildlife	US Federal Programs	058448	07-31-21
USDA	US Federal Programs	P330-21-00056	05-17-24
Virginia	NELAP	460166	06-14-21
Washington	State	C915	05-15-22
West Virginia DEP	State	136	06-30-21

Method Summary

Client: Stantec Consulting Services Inc
Project/Site: GCU Com A #142E

Job ID: 400-203813-1

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

Protocol References:

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

Laboratory References:

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

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

Chain of Custody Record

eurofins | Environment Testing America

Client Information	Sampler: SRC, MW	Lab PM: Edwards, Marty P	Carrier Tracking No(s):	COC No: 400-102801-36536.1
Client Contact: Steve Varsa	Phone: 913-980-0281	E-Mail: Marty.Edwards@Eurofinset.com	State of Origin:	Page: Page 1 of 1
Company: Stantec Consulting Services Inc	PWSID:			Job #:
Address: 11153 Aurora Avenue	Due Date Requested:			
City: Des Moines	TAT Requested (days): STD			
State, Zip: IA, 50322-7904	Compliance Project: Δ Yes Δ No			
Phone: 303-291-2239(Tel)	PO #: See Project Notes			
Email: steve.varsa@stantec.com	WO #:			
Project Name: GCU Com A #142E.00	Project #: 40005479			
Site: GCU 142	SSOW#:			

Analysis Requested

400-203813 COC

Preservation Codes:

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

Other:

W-ERG-STW-05-06-2021 → SRC-05

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260C - (MOD) BTEX 8260	Total Number of containers	Special Instructions/Note:
			Preservation Code:				A		
TB-01	5/21/2021	1300	G	Water			2	2	Trip Blank
DUP-01	5/21/2021	1500	G	Water			3	3	Duplicate
MW-1	5/21/2021	1411	G	Water			3	3	
MW-2	5/21/2021	1422	G	Water			3	3	
MW-3	5/21/2021	1429	G	Water			3	3	
MW-5	5/21/2021	1433	G	Water			3	3	
MW-6	5/21/2021	1437	G	Water			3	3	
MW-7	5/21/2021	1447	G	Water			3	3	
MW-8	5/21/2021	1400	G	Water			3	3	

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

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

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

Special Instructions/QC Requirements:

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

	Date/Time	Company		Date/Time	Company
Relinquished by: Sam N Clay	5/24/2021 0800	STW	Received by: Fedex	5/24/2021 0800	Fedex
Relinquished by:			Received by:		
Relinquished by:			Received by:	5-25-21/0935	ETA

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

Cooler Temperature(s) °C and Other Remarks: 1.3°C IR7

Ver: 11/01/2020

Login Sample Receipt Checklist

Client: Stantec Consulting Services Inc Job Number: 400-203813-1

Login Number: 203813 **List Source: Eurofins TestAmerica, Pensacola**
List Number: 1
Creator: Whitley, Adrian

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	1.3°C IR7
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

eurofins | Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 400-211283-1
Client Project/Site: GCU Com A #142E

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

Attn: Steve Varsa

Cheyenne Whitmire

Authorized for release by:
11/30/2021 11:51:29 AM

Cheyenne Whitmire, Project Manager II
(850)471-6222
Cheyenne.Whitmire@Eurofinset.com

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

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

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

Client: Stantec Consulting Services Inc
Project/Site: GCU Com A #142E

Laboratory Job ID: 400-211283-1

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 16
QC Sample Results 17
Chronicle 21
Certification Summary 23
Method Summary 24
Chain of Custody 25
Receipt Checklists 26

Definitions/Glossary

Client: Stantec Consulting Services Inc
Project/Site: GCU Com A #142E

Job ID: 400-211283-1

Qualifiers

GC/MS VOA

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

Glossary

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

Case Narrative

Client: Stantec Consulting Services Inc
Project/Site: GCU Com A #142E

Job ID: 400-211283-1

Job ID: 400-211283-1

Laboratory: Eurofins TestAmerica, Pensacola

Narrative

Job Narrative
400-211283-1

Comments
No additional comments.

Receipt
The samples were received on 11/16/2021 9:10 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 0.7º C.

GC/MS VOA
Method 8260C: The following sample was diluted to bring the concentration of target analytes within the calibration range: MW-2 (400-211283-4). Elevated reporting limits (RLs) are provided.

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

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

Detection Summary

Client: Stantec Consulting Services Inc
Project/Site: GCU Com A #142E

Job ID: 400-211283-1

Client Sample ID: TB-01 Lab Sample ID: 400-211283-1

No Detections.

Client Sample ID: DUP-01 Lab Sample ID: 400-211283-2

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Benzene	130		1.0		ug/L	1		8260C	Total/NA
Ethylbenzene	5.5		1.0		ug/L	1		8260C	Total/NA
Xylenes, Total	18		10		ug/L	1		8260C	Total/NA

Client Sample ID: MW-1 Lab Sample ID: 400-211283-3

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Benzene	2.5		1.0		ug/L	1		8260C	Total/NA

Client Sample ID: MW-2 Lab Sample ID: 400-211283-4

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Benzene	660		20		ug/L	20		8260C	Total/NA
Ethylbenzene	520		20		ug/L	20		8260C	Total/NA
Xylenes, Total	3200		200		ug/L	20		8260C	Total/NA

Client Sample ID: MW-3 Lab Sample ID: 400-211283-5

No Detections.

Client Sample ID: MW-5 Lab Sample ID: 400-211283-6

No Detections.

Client Sample ID: MW-6 Lab Sample ID: 400-211283-7

No Detections.

Client Sample ID: MW-7 Lab Sample ID: 400-211283-8

No Detections.

Client Sample ID: MW-8 Lab Sample ID: 400-211283-9

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Benzene	150		1.0		ug/L	1		8260C	Total/NA
Ethylbenzene	7.2		1.0		ug/L	1		8260C	Total/NA
Xylenes, Total	24		10		ug/L	1		8260C	Total/NA

This Detection Summary does not include radiochemical test results.

Sample Summary

Client: Stantec Consulting Services Inc
Project/Site: GCU Com A #142E

Job ID: 400-211283-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-211283-1	TB-01	Water	11/12/21 11:00	11/16/21 09:10
400-211283-2	DUP-01	Water	11/12/21 13:00	11/16/21 09:10
400-211283-3	MW-1	Water	11/12/21 12:11	11/16/21 09:10
400-211283-4	MW-2	Water	11/12/21 12:16	11/16/21 09:10
400-211283-5	MW-3	Water	11/12/21 12:22	11/16/21 09:10
400-211283-6	MW-5	Water	11/12/21 12:26	11/16/21 09:10
400-211283-7	MW-6	Water	11/12/21 12:30	11/16/21 09:10
400-211283-8	MW-7	Water	11/12/21 12:34	11/16/21 09:10
400-211283-9	MW-8	Water	11/12/21 12:00	11/16/21 09:10

Client Sample Results

Client: Stantec Consulting Services Inc
Project/Site: GCU Com A #142E

Job ID: 400-211283-1

Client Sample ID: TB-01

Date Collected: 11/12/21 11:00
Date Received: 11/16/21 09:10

Lab Sample ID: 400-211283-1

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			11/23/21 17:42	1
Toluene	<1.0		1.0		ug/L			11/23/21 17:42	1
Ethylbenzene	<1.0		1.0		ug/L			11/23/21 17:42	1
Xylenes, Total	<10		10		ug/L			11/23/21 17:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*96*		*72 - 119*		*11/23/21 17:42*	*1*
Dibromofluoromethane	*110*		*75 - 126*		*11/23/21 17:42*	*1*
Toluene-d8 (Surr)	*90*		*64 - 132*		*11/23/21 17:42*	*1*

Client Sample Results

Client: Stantec Consulting Services Inc
Project/Site: GCU Com A #142E

Job ID: 400-211283-1

Client Sample ID: DUP-01
Date Collected: 11/12/21 13:00
Date Received: 11/16/21 09:10

Lab Sample ID: 400-211283-2
Matrix: Water

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**130**		1.0		ug/L			11/26/21 15:19	1
Toluene	<1.0		1.0		ug/L			11/26/21 15:19	1
Ethylbenzene	**5.5**		1.0		ug/L			11/26/21 15:19	1
Xylenes, Total	**18**		10		ug/L			11/26/21 15:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*96*		*72 - 119*		*11/26/21 15:19*	*1*
Dibromofluoromethane	*104*		*75 - 126*		*11/26/21 15:19*	*1*
Toluene-d8 (Surr)	*95*		*64 - 132*		*11/26/21 15:19*	*1*

Client Sample Results

Client: Stantec Consulting Services Inc
Project/Site: GCU Com A #142E

Job ID: 400-211283-1

Client Sample ID: MW-1

Date Collected: 11/12/21 12:11
Date Received: 11/16/21 09:10

Lab Sample ID: 400-211283-3

Matrix: Water

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**2.5**		1.0		ug/L			11/24/21 17:43	1
Toluene	<1.0		1.0		ug/L			11/24/21 17:43	1
Ethylbenzene	<1.0		1.0		ug/L			11/24/21 17:43	1
Xylenes, Total	<10		10		ug/L			11/24/21 17:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*88*		*72 - 119*		*11/24/21 17:43*	*1*
Dibromofluoromethane	*109*		*75 - 126*		*11/24/21 17:43*	*1*
Toluene-d8 (Surr)	*106*		*64 - 132*		*11/24/21 17:43*	*1*

Client Sample Results

Client: Stantec Consulting Services Inc
Project/Site: GCU Com A #142E

Job ID: 400-211283-1

Client Sample ID: MW-2

Date Collected: 11/12/21 12:16
Date Received: 11/16/21 09:10

Lab Sample ID: 400-211283-4

Matrix: Water

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**660**		20		ug/L			11/24/21 22:29	20
Toluene	<20		20		ug/L			11/24/21 22:29	20
Ethylbenzene	**520**		20		ug/L			11/24/21 22:29	20
Xylenes, Total	**3200**		200		ug/L			11/24/21 22:29	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*91*		*72 - 119*		*11/24/21 22:29*	*20*
Dibromofluoromethane	*106*		*75 - 126*		*11/24/21 22:29*	*20*
Toluene-d8 (Surr)	*112*		*64 - 132*		*11/24/21 22:29*	*20*

Client Sample Results

Client: Stantec Consulting Services Inc
Project/Site: GCU Com A #142E

Job ID: 400-211283-1

Client Sample ID: MW-3
Date Collected: 11/12/21 12:22
Date Received: 11/16/21 09:10

Lab Sample ID: 400-211283-5
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			11/24/21 18:09	1
Toluene	<1.0		1.0		ug/L			11/24/21 18:09	1
Ethylbenzene	<1.0		1.0		ug/L			11/24/21 18:09	1
Xylenes, Total	<10		10		ug/L			11/24/21 18:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*90*		*72 - 119*		*11/24/21 18:09*	*1*
Dibromofluoromethane	*107*		*75 - 126*		*11/24/21 18:09*	*1*
Toluene-d8 (Surr)	*104*		*64 - 132*		*11/24/21 18:09*	*1*

Client Sample Results

Client: Stantec Consulting Services Inc
Project/Site: GCU Com A #142E

Job ID: 400-211283-1

Client Sample ID: MW-5

Date Collected: 11/12/21 12:26
Date Received: 11/16/21 09:10

Lab Sample ID: 400-211283-6

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			11/24/21 13:22	1
Toluene	<1.0		1.0		ug/L			11/24/21 13:22	1
Ethylbenzene	<1.0		1.0		ug/L			11/24/21 13:22	1
Xylenes, Total	<10		10		ug/L			11/24/21 13:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*92*		*72 - 119*		*11/24/21 13:22*	*1*
Dibromofluoromethane	*106*		*75 - 126*		*11/24/21 13:22*	*1*
Toluene-d8 (Surr)	*106*		*64 - 132*		*11/24/21 13:22*	*1*

Client Sample Results

Client: Stantec Consulting Services Inc
Project/Site: GCU Com A #142E

Job ID: 400-211283-1

Client Sample ID: MW-6
Date Collected: 11/12/21 12:30
Date Received: 11/16/21 09:10

Lab Sample ID: 400-211283-7
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			11/24/21 18:35	1
Toluene	<1.0		1.0		ug/L			11/24/21 18:35	1
Ethylbenzene	<1.0		1.0		ug/L			11/24/21 18:35	1
Xylenes, Total	<10		10		ug/L			11/24/21 18:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*89*		*72 - 119*		*11/24/21 18:35*	*1*
Dibromofluoromethane	*106*		*75 - 126*		*11/24/21 18:35*	*1*
Toluene-d8 (Surr)	*105*		*64 - 132*		*11/24/21 18:35*	*1*

Client Sample Results

Client: Stantec Consulting Services Inc
Project/Site: GCU Com A #142E

Job ID: 400-211283-1

Client Sample ID: MW-7

Date Collected: 11/12/21 12:34
Date Received: 11/16/21 09:10

Lab Sample ID: 400-211283-8

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			11/24/21 19:01	1
Toluene	<1.0		1.0		ug/L			11/24/21 19:01	1
Ethylbenzene	<1.0		1.0		ug/L			11/24/21 19:01	1
Xylenes, Total	<10		10		ug/L			11/24/21 19:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*91*		*72 - 119*		*11/24/21 19:01*	*1*
Dibromofluoromethane	*111*		*75 - 126*		*11/24/21 19:01*	*1*
Toluene-d8 (Surr)	*105*		*64 - 132*		*11/24/21 19:01*	*1*

Client Sample Results

Client: Stantec Consulting Services Inc
Project/Site: GCU Com A #142E

Job ID: 400-211283-1

Client Sample ID: MW-8
Date Collected: 11/12/21 12:00
Date Received: 11/16/21 09:10

Lab Sample ID: 400-211283-9
Matrix: Water

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**150**		1.0		ug/L			11/26/21 15:44	1
Toluene	<1.0		1.0		ug/L			11/26/21 15:44	1
Ethylbenzene	**7.2**		1.0		ug/L			11/26/21 15:44	1
Xylenes, Total	**24**		10		ug/L			11/26/21 15:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*95*		*72 - 119*		*11/26/21 15:44*	*1*
Dibromofluoromethane	*106*		*75 - 126*		*11/26/21 15:44*	*1*
Toluene-d8 (Surr)	*96*		*64 - 132*		*11/26/21 15:44*	*1*

QC Association Summary

Client: Stantec Consulting Services Inc
Project/Site: GCU Com A #142E

Job ID: 400-211283-1

GC/MS VOA

Analysis Batch: 557092

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-211283-1	TB-01	Total/NA	Water	8260C	
MB 400-557092/4	Method Blank	Total/NA	Water	8260C	
LCS 400-557092/1002	Lab Control Sample	Total/NA	Water	8260C	
400-211352-A-6 MS	Matrix Spike	Total/NA	Water	8260C	
400-211352-A-6 MSD	Matrix Spike Duplicate	Total/NA	Water	8260C	

Analysis Batch: 557183

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-211283-3	MW-1	Total/NA	Water	8260C	
400-211283-4	MW-2	Total/NA	Water	8260C	
400-211283-5	MW-3	Total/NA	Water	8260C	
400-211283-6	MW-5	Total/NA	Water	8260C	
400-211283-7	MW-6	Total/NA	Water	8260C	
400-211283-8	MW-7	Total/NA	Water	8260C	
MB 400-557183/4	Method Blank	Total/NA	Water	8260C	
LCS 400-557183/1002	Lab Control Sample	Total/NA	Water	8260C	
400-211283-6 MS	MW-5	Total/NA	Water	8260C	
400-211283-6 MSD	MW-5	Total/NA	Water	8260C	

Analysis Batch: 557351

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-211283-2	DUP-01	Total/NA	Water	8260C	
400-211283-9	MW-8	Total/NA	Water	8260C	
MB 400-557351/28	Method Blank	Total/NA	Water	8260C	
LCS 400-557351/1002	Lab Control Sample	Total/NA	Water	8260C	
400-211320-A-3 MS	Matrix Spike	Total/NA	Water	8260C	
400-211320-A-3 MSD	Matrix Spike Duplicate	Total/NA	Water	8260C	

QC Sample Results

Client: Stantec Consulting Services Inc
Project/Site: GCU Com A #142E

Job ID: 400-211283-1

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

Lab Sample ID: MB 400-557092/4
Matrix: Water
Analysis Batch: 557092

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			11/23/21 15:18	1
Toluene	<1.0		1.0		ug/L			11/23/21 15:18	1
Ethylbenzene	<1.0		1.0		ug/L			11/23/21 15:18	1
Xylenes, Total	<10		10		ug/L			11/23/21 15:18	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*95*		*72 - 119*		*11/23/21 15:18*	*1*
Dibromofluoromethane	*109*		*75 - 126*		*11/23/21 15:18*	*1*
Toluene-d8 (Surr)	*91*		*64 - 132*		*11/23/21 15:18*	*1*

Lab Sample ID: LCS 400-557092/1002
Matrix: Water
Analysis Batch: 557092

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	44.8		ug/L		90	70 - 130		
Toluene			50.0	45.1		ug/L		90	70 - 130		
Ethylbenzene			50.0	42.1		ug/L		84	70 - 130		
Xylenes, Total			100	87.0		ug/L		87	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*102*		*72 - 119*
Dibromofluoromethane	*109*		*75 - 126*
Toluene-d8 (Surr)	*101*		*64 - 132*

Lab Sample ID: 400-211352-A-6 MS
Matrix: Water
Analysis Batch: 557092

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	40.2		ug/L		80	56 - 142		
Toluene	<1.0		50.0	38.7		ug/L		77	65 - 130		
Ethylbenzene	<1.0		50.0	35.3		ug/L		71	58 - 131		
Xylenes, Total	<10		100	73.0		ug/L		73	59 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene	*104*		*72 - 119*
Dibromofluoromethane	*107*		*75 - 126*
Toluene-d8 (Surr)	*100*		*64 - 132*

Lab Sample ID: 400-211352-A-6 MSD
Matrix: Water
Analysis Batch: 557092

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	39.0		ug/L		78	56 - 142	3	30
Toluene	<1.0		50.0	37.1		ug/L		74	65 - 130	4	30
Ethylbenzene	<1.0		50.0	33.3		ug/L		67	58 - 131	6	30

QC Sample Results

Client: Stantec Consulting Services Inc
Project/Site: GCU Com A #142E

Job ID: 400-211283-1

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

Lab Sample ID: 400-211352-A-6 MSD
Matrix: Water
Analysis Batch: 557092

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Xylenes, Total	<10		100	68.6		ug/L		69	59 - 130	6	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene	*102*		*72 - 119*
Dibromofluoromethane	*107*		*75 - 126*
Toluene-d8 (Surr)	*100*		*64 - 132*

Lab Sample ID: MB 400-557183/4
Matrix: Water
Analysis Batch: 557183

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			11/24/21 12:56	1
Toluene	<1.0		1.0		ug/L			11/24/21 12:56	1
Ethylbenzene	<1.0		1.0		ug/L			11/24/21 12:56	1
Xylenes, Total	<10		10		ug/L			11/24/21 12:56	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*87*		*72 - 119*		*11/24/21 12:56*	*1*
Dibromofluoromethane	*102*		*75 - 126*		*11/24/21 12:56*	*1*
Toluene-d8 (Surr)	*106*		*64 - 132*		*11/24/21 12:56*	*1*

Lab Sample ID: LCS 400-557183/1002
Matrix: Water
Analysis Batch: 557183

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	45.5		ug/L		91	70 - 130		
Toluene			50.0	50.3		ug/L		101	70 - 130		
Ethylbenzene			50.0	56.0		ug/L		112	70 - 130		
Xylenes, Total			100	111		ug/L		111	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*90*		*72 - 119*
Dibromofluoromethane	*106*		*75 - 126*
Toluene-d8 (Surr)	*101*		*64 - 132*

Lab Sample ID: 400-211283-6 MS
Matrix: Water
Analysis Batch: 557183

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene	<1.0		50.0	51.0		ug/L		102	56 - 142		
Toluene	<1.0		50.0	53.6		ug/L		107	65 - 130		
Ethylbenzene	<1.0		50.0	47.9		ug/L		96	58 - 131		
Xylenes, Total	<10		100	95.8		ug/L		96	59 - 130		

QC Sample Results

Client: Stantec Consulting Services Inc
Project/Site: GCU Com A #142E

Job ID: 400-211283-1

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

Lab Sample ID: 400-211283-6 MS
Matrix: Water
Analysis Batch: 557183

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

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene	92		72 - 119
Dibromofluoromethane	104		75 - 126
Toluene-d8 (Surr)	108		64 - 132

Lab Sample ID: 400-211283-6 MSD
Matrix: Water
Analysis Batch: 557183

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<1.0		50.0	43.4		ug/L		87	56 - 142	16	30
Toluene	<1.0		50.0	47.5		ug/L		95	65 - 130	12	30
Ethylbenzene	<1.0		50.0	47.2		ug/L		94	58 - 131	2	30
Xylenes, Total	<10		100	95.1		ug/L		95	59 - 130	1	30

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene	93		72 - 119
Dibromofluoromethane	103		75 - 126
Toluene-d8 (Surr)	105		64 - 132

Lab Sample ID: MB 400-557351/28
Matrix: Water
Analysis Batch: 557351

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			11/26/21 11:59	1
Toluene	<1.0		1.0		ug/L			11/26/21 11:59	1
Ethylbenzene	<1.0		1.0		ug/L			11/26/21 11:59	1
Xylenes, Total	<10		10		ug/L			11/26/21 11:59	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	98		72 - 119		11/26/21 11:59	1
Dibromofluoromethane	103		75 - 126		11/26/21 11:59	1
Toluene-d8 (Surr)	92		64 - 132		11/26/21 11:59	1

Lab Sample ID: LCS 400-557351/1002
Matrix: Water
Analysis Batch: 557351

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	44.4		ug/L		89	70 - 130		
Toluene			50.0	40.6		ug/L		81	70 - 130		
Ethylbenzene			50.0	42.8		ug/L		86	70 - 130		
Xylenes, Total			100	85.2		ug/L		85	70 - 130		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene	94		72 - 119
Dibromofluoromethane	103		75 - 126

QC Sample Results

Client: Stantec Consulting Services Inc
Project/Site: GCU Com A #142E

Job ID: 400-211283-1

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

Lab Sample ID: LCS 400-557351/1002
Matrix: Water
Analysis Batch: 557351

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

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Toluene-d8 (Surr)	92		64 - 132

Lab Sample ID: 400-211320-A-3 MS
Matrix: Water
Analysis Batch: 557351

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	42.6		ug/L		84	56 - 142
Toluene	<1.0		50.0	33.0		ug/L		66	65 - 130
Ethylbenzene	<1.0		50.0	29.0		ug/L		58	58 - 131
Xylenes, Total	<10	F1	100	57.8	F1	ug/L		58	59 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene	89		72 - 119
Dibromofluoromethane	103		75 - 126
Toluene-d8 (Surr)	91		64 - 132

Lab Sample ID: 400-211320-A-3 MSD
Matrix: Water
Analysis Batch: 557351

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	46.4		ug/L		92	56 - 142	8	30
Toluene	<1.0		50.0	36.3		ug/L		73	65 - 130	10	30
Ethylbenzene	<1.0		50.0	31.6		ug/L		63	58 - 131	9	30
Xylenes, Total	<10	F1	100	63.2		ug/L		63	59 - 130	9	30

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene	86		72 - 119
Dibromofluoromethane	105		75 - 126
Toluene-d8 (Surr)	90		64 - 132

Lab Chronicle

Client: Stantec Consulting Services Inc
Project/Site: GCU Com A #142E

Job ID: 400-211283-1

Client Sample ID: TB-01
Date Collected: 11/12/21 11:00
Date Received: 11/16/21 09:10

Lab Sample ID: 400-211283-1
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	557092	11/23/21 17:42	BEP	TAL PEN
	Instrument ID: Einstein									

Client Sample ID: DUP-01
Date Collected: 11/12/21 13:00
Date Received: 11/16/21 09:10

Lab Sample ID: 400-211283-2
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	557351	11/26/21 15:19	WPD	TAL PEN
	Instrument ID: CH_LARS									

Client Sample ID: MW-1
Date Collected: 11/12/21 12:11
Date Received: 11/16/21 09:10

Lab Sample ID: 400-211283-3
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	557183	11/24/21 17:43	BPO	TAL PEN
	Instrument ID: CH_TAN									

Client Sample ID: MW-2
Date Collected: 11/12/21 12:16
Date Received: 11/16/21 09:10

Lab Sample ID: 400-211283-4
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		20	5 mL	5 mL	557183	11/24/21 22:29	BPO	TAL PEN
	Instrument ID: CH_TAN									

Client Sample ID: MW-3
Date Collected: 11/12/21 12:22
Date Received: 11/16/21 09:10

Lab Sample ID: 400-211283-5
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	557183	11/24/21 18:09	BPO	TAL PEN
	Instrument ID: CH_TAN									

Client Sample ID: MW-5
Date Collected: 11/12/21 12:26
Date Received: 11/16/21 09:10

Lab Sample ID: 400-211283-6
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	557183	11/24/21 13:22	BPO	TAL PEN
	Instrument ID: CH_TAN									

Lab Chronicle

Client: Stantec Consulting Services Inc
Project/Site: GCU Com A #142E

Job ID: 400-211283-1

Client Sample ID: MW-6
Date Collected: 11/12/21 12:30
Date Received: 11/16/21 09:10

Lab Sample ID: 400-211283-7
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	557183	11/24/21 18:35	BPO	TAL PEN
	Instrument ID: CH_TAN									

Client Sample ID: MW-7
Date Collected: 11/12/21 12:34
Date Received: 11/16/21 09:10

Lab Sample ID: 400-211283-8
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	557183	11/24/21 19:01	BPO	TAL PEN
	Instrument ID: CH_TAN									

Client Sample ID: MW-8
Date Collected: 11/12/21 12:00
Date Received: 11/16/21 09:10

Lab Sample ID: 400-211283-9
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	557351	11/26/21 15:44	WPD	TAL PEN
	Instrument ID: CH_LARS									

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

Accreditation/Certification Summary

Client: Stantec Consulting Services Inc
Job ID: 400-211283-1
Project/Site: GCU Com A #142E

Laboratory: Eurofins TestAmerica, Pensacola

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

Authority	Program	Identification Number	Expiration Date
Alabama	State	40150	06-30-22
ANAB	ISO/IEC 17025	L2471	02-23-23
Arizona	State	AZ0710	01-12-22
Arkansas DEQ	State	88-0689	09-01-22
California	State	2510	06-30-22
Florida	NELAP	E81010	06-30-22
Georgia	State	E81010(FL)	06-30-22
Illinois	NELAP	200041	10-09-22
Iowa	State	367	08-01-22
Kansas	NELAP	E-10253	11-30-21
Kentucky (UST)	State	53	06-30-22
Kentucky (WW)	State	KY98030	12-31-21
Louisiana	NELAP	30976	06-30-22
Louisiana (DW)	State	LA017	12-31-21
Maryland	State	233	09-30-22
Massachusetts	State	M-FL094	06-30-22
Michigan	State	9912	06-30-22
New Jersey	NELAP	FL006	06-30-22
North Carolina (WW/SW)	State	314	12-31-21
Oklahoma	State	9810	08-31-22
Pennsylvania	NELAP	68-00467	01-31-22
Rhode Island	State	LAO00307	12-30-21
South Carolina	State	96026	06-30-22
Tennessee	State	TN02907	06-30-22
Texas	NELAP	T104704286	09-30-22
US Fish & Wildlife	US Federal Programs	058448	07-31-22
USDA	US Federal Programs	P330-21-00056	05-17-24
Virginia	NELAP	460166	06-14-22
Washington	State	C915	05-15-22
West Virginia DEP	State	136	12-31-21

Method Summary

Client: Stantec Consulting Services Inc
Project/Site: GCU Com A #142E

Job ID: 400-211283-1

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

Protocol References:

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

Laboratory References:

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

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

Chain of Custody Record

eurofins | Environment Testing America

Client Information	Sampler: SRC	Lab PM: Edwards, Marty P	Carrier Tracking No(s):	COC No: 400-105798-37673.1
Client Contact: Steve Varsa	Phone: 913-980-0281	E-Mail: Marty.Edwards@Eurofinset.com	State of Origin:	Page: Page 1 of 1
Company: Stantec Consulting Services Inc	PWSID:			Job #:
Address: 11311 Aurora Avenue	Due Date Requested:			
City: Des Moines	TAT Requested (days):			
State, Zip: IA, 50322-7904	Compliance Project: Δ Yes Δ No			
Phone: 303-291-2239(Tel)	PO #: WD801941			
Email: steve.varsa@stantec.com	WO #:			
Project Name: GCU Com A #142E.00	Project #: 40005479			
Site:	SSOW#:			

Analysis Requested

400-211283 COC

Preservation Codes:

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

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260C - (MOD) BTEX 8260	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
SAH-05									
TB-01	11/12/21	1100	G	Water	—	—	2	2	Trip Blank
DUP-01	11/12/21	1300	G	Water	—	—	3	3	Blind Dup
MW-1	11/12/21	1211	G	Water	—	—	3	3	
MW-2	11/12/21	1216	G	Water	—	—	3	3	
MW-3	11/12/21	1222	G	Water	—	—	3	3	
MW-5	11/12/21	1226	G	Water	—	—	3	3	
MW-6	11/12/21	1230	G	Water	—	—	3	3	
MW-7	11/12/21	1234	G	Water	—	—	3	3	
MW-8	11/12/21	1200	G	Water	—	—	3	3	

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

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

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

Special Instructions/QC Requirements:

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

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	Sam A Clary	11/15/21 0600	STW			
	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
					11.16.21 09:10	

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

Cooler Temperature(s) °C and Other Remarks: 0.7°C IR9

Ver: 06/08/2021

Login Sample Receipt Checklist

Client: Stantec Consulting Services Inc Job Number: 400-211283-1

Login Number: 211283 **List Source: Eurofins TestAmerica, Pensacola**
List Number: 1
Creator: Roberts, Alexis J

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	0.7°C IR9
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Stantec Consulting Services Inc.
11153 Aurora Avenue
Des Moines, Iowa 50322
Phone: (515) 253-0830
Fax: (515) 253-9592

VIA ELECTRONIC SUBMITTAL

January 25, 2019

Ms. Vanessa Fields
New Mexico Oil Conservation Division
1000 Rio Brazos Road
Aztec, New Mexico 87410

RE: 2018 Groundwater Sampling Activities, Site Conceptual Model and Request for Site Closure
GCU Com A #142E Site
NMOCD Case No. 3RP-189-0 Incident No. nAUTOfAB000219
METER CODE: 3906
T29N, R12W, Sec25, Unit G
Latitude: 36.699300 Longitude: -108.046700

Dear Ms. Fields:

Stantec Consulting Services Inc. (Stantec), on behalf of El Paso CGP Company, LLC (EPCGP), presents this report of 2018 groundwater sampling activities and request for regulatory closure of the Gallegos Canyon Unit (GCU) Com A #142E site, New Mexico Oil Conservation Division (NMOCD) Case number 3RP-189-0 (Site). In support of the regulatory closure request, this report presents an overview of previously completed activities and a Site Conceptual Model (SCM) for the Site. Based on this information, EPCGP is requesting closure of the Site recognizing ongoing impacts from a separate release by the current operator. This separate release is hampering the achievement of Site closure criteria outlined in the Remediation Plan approved by the NMOCD on November 30, 1995.

2018 Groundwater Sampling Activities

Pursuant to the 1995 remediation plan, Stantec provided notification of upcoming field activities via email to NMOCD on May 9, 2018, and October 23, 2018. Copies of the notifications are provided in Attachment A. On May 17 and October 28, 2018, water levels were gauged at MW-1, MW-2, MW-3, MW-5, MW-6, MW-7, and MW-8. With the exception of MW-2 on October 23, 2018, 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 of the monitoring wells using a suspension tether and stainless-steel weights to collect a sample from the screened interval.

Monitoring well MW-2 was found on October 28, 2018, to have been opened by others and the HydraSleeve partially removed; therefore, this well was not sampled. The old HydraSleeve device was removed and replaced prior to leaving the site, in preparation for groundwater sampling in 2019.

Reference: 2018 Activities, Site Conceptual Model and Request for Site Closure

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, 2017, BTEX constituents were analyzed using United States Environmental Protection Agency (EPA) Method 8260. As requested by the NMOCD on March 20, 2018, EPCGP began collecting blind field duplicates of groundwater samples, as clarified in a March 21, 2018 electronic mail message to NMOCD. The unused sample water was combined in a waste container and taken to Basin Disposal, Inc. for disposal. Waste disposal documentation is included as Attachment B.

A summary and discussion of the 2018 groundwater gauging data is presented in the Site Characterization section below. A summary and presentation of the 2018 groundwater analytical data is presented in the Groundwater Concentration and Trends section below.

Site History

The Site is located on fee land owned by 6 Road 5267 LLC. Currently, the Site property has an active gas production well and associated infrastructure owned and operated by BP America Production Company (BP) (American Petroleum Institute [API] well number 30-045-26125). Amoco Oil Company (now BP) spud the current production well on December 4, 1984. El Paso Natural Gas Company (EPNG) was approved to begin transporting natural gas from the production well on February 10, 1985. EPNG closed the dehydrator pit in April 1994. The pipeline assets were transferred to Enterprise Products Company (Enterprise) on April 4, 2002. Following an initial assessment, 20 cubic yards of soil were excavated by EPNG from the former pit. In October 1996, an additional 882 cubic yards were excavated to a depth of up to 15.5 feet below ground surface (bgs) and removed. Available documentation of the October 1996 soil excavation activities, not found in NMOCD files, is presented as Attachment C.

NMOCD Case number 3RP-189-0 was established for a release from this pit. EPCGP has since installed seven monitoring wells, one temporary well, and six piezometers, and advanced one soil boring to assess the nature and extent of hydrocarbons at the Site. Product recovery has also been conducted from Site monitoring wells. A summary of the activities completed at GCU Com A #142E are presented as Attachment D. A site plan depicting the location of the former EPNGC pit, existing monitoring wells, and other pertinent site features is included in Attachment E. A photographic log with photographs of historical and current Site features is presented as Attachment F.

On April 7, 2014, in response to EPCGP's request to BP for documentation of environmental conditions associated with releases by BP at the GCU Com A #142E site, BP provided EPCGP with a single figure, included here as Attachment G. Based on the figure, three areas around the site had been excavated, mostly outside the boundaries of the production location. The

Reference: 2018 Activities, Site Conceptual Model and Request for Site Closure

map also shows the existence of 10 monitoring wells. EPCGP has been unable to obtain any further information regarding site conditions associated with BP's environmental releases from either BP or NMOCD. No NMOCD file was set up in the public access portal until very recently. The NMOCD established Case number 3RP-1055 for the BP release, but to date no information is contained in this file.

Site Characterization

As summarized in Attachment E, seven monitoring wells (MW-1 through MW-3, and MW-5 through MW-8), six piezometers (PZ-1 through PZ-6), one temporary monitoring well (TW-1), and one soil boring (MW-4) have been advanced at the Site. The data collected during advancement, and ongoing monitoring of the Site since 1996 have provided most of the information used to characterize the Site. Beyond the single figure provided to EPCGP on April 7, 2014, additional characterization information from BP is not available.

Site Topography

As noted in Attachment E, the majority of the Site slopes very gently to the south, with a surface elevation of approximately 5479 feet above sea level (ASL). Historically, a ditch was located along and inside the length of the eastern fence of the GCU 142E operations, as depicted in Attachment H. Elevated earthen berms are present around two BP tanks located to the north and northwest of the former EPNGC pit.

Local Geology and Hydrology

A summary of local geology and hydrology can be found as part of the BP's July 27, 2011 Closure Plan (API 30-045-26125), included under the production well's file in the NMOCD online document portal (not the environmental file 3RP-1055) included as Attachment I. Soils in the area are derived from weathered bedrock, transported mostly by eolian processes, and to a lesser extent, fluvial processes. Based on the site's position in the San Juan River valley, the site is situated on Quaternary floodplain and terrace deposits consisting of gravel, sand, silt, and clay totaling less than 100 feet thick, and underlain by bedrock. Depth to groundwater is less than 50 feet. From the location of the Site, there are no continuously flowing waterways within 300 feet, no other waterways, surface water bodies, sinkholes, or playas within 200 feet, and no wetlands within 500 feet.

Reference: 2018 Activities, Site Conceptual Model and Request for Site Closure

Site Geology

The monitoring well, piezometer, and soil boring logs, advanced by EPCGP to depths of up to 25 feet bgs, have been included in previously-submitted documents to the NMOCD. For reference, these logs are included as Attachment J. Cross-sections prepared to depict the generalized geology noted in the EPCGP soil boring logs are shown on Attachment K.

As noted in Attachments J and K, fill materials were logged at the MW-1 location to a depth of 9 feet bgs. A dry, loose, low plasticity, gravelly silty sand, also potentially a fill material, was encountered at the monitoring well locations MW-2, and MW-4 through MW-8, to depth of up to 10 feet bgs. At the MW-3 location, a low plasticity clay was encountered in the upper 10 feet. Underlying the fill or gravelly silty sand, at least six to 10 feet of a stiff, high plastic clay is encountered, typically moist or wet. The clay is underlain by up to 10 feet of loose, wet, sandy clay containing gravel at the MW-3 and MW-6 locations. Underlying the sandy clay, loose, wet, gravelly sand or gravels were encountered to the termination depth. The gravel and sands are poorly graded, suggesting deposition by alluvial processes. At the MW-4 location, auger refusal was encountered at a depth of 20 feet bgs, presumably atop the gravel or gravelly sand unit encountered at other locations.

Site Hydrogeology

For reference, temporary and permanent monitoring well logs completed by EPCGP are included in Attachment J. Gauging data collected from EPCGP monitoring wells, including data collected during the May 17 and October 28, 2018 gauging events, are presented in Attachment L. Historically, measured groundwater elevations in the monitoring wells have ranged from a high elevation of 5470.7 feet ASL in September of 2011, to a low elevation of 5462.6 feet ASL in May of 2011. Monitoring well MW-1 and MW-2 were both reported as "dry" on September 7, 2003, but it is believed water levels were instead not measured as water samples were collected from these wells on this date.

Groundwater elevation maps generated from well gauging data collected during the May 17 and October 27, 2018, gauging events are included as Attachment M. Historical groundwater elevation figures were included in previously submitted reports. Over the years, EPCGP reports submitted to NMOCD for this site have included 20 groundwater elevation figures, prepared using EPCGP wells or piezometers. A vast majority of the gauging events have documented groundwater flow direction to be to the southeast. Anomalous groundwater flow directions to the south or southwest appear to coincide to with groundwater elevations at their historic lows, or when insufficient monitoring points were present to confirm flow direction across the Site. The April 2011 BP figure included in Attachment G also depicts a groundwater flow direction to the southeast.

Reference: 2018 Activities, Site Conceptual Model and Request for Site Closure

Although no aquifer testing has been conducted at the Site, the saturated sands and gravels encountered at depth at the Site are expected to have a relatively high hydraulic conductivity. Groundwater gradient, as calculated using the May 17, 2018 gauging data collected from MW-8 and MW-1, was 0.0025 feet/foot. In Stantec's experience, the relatively low groundwater gradient is also consistent with course-grained soils on gentle slopes with a high hydraulic conductivity.

Migration of Petroleum Constituents to the Saturated Zone

Evidence of petroleum constituents (i.e., logged petroleum odors, elevated photo-ionization detection [PID] readings, elevated soil concentrations) were not noted in the field-apparent vadose zone in any of the monitoring wells or the soil boring (Attachment J). Evidence of petroleum constituents was documented as shallow as 10 feet bgs (MW-2 and MW-7), and generally beginning at 13 feet bgs (MW-1, MW-4, MW-5 and MW-6). Likely due to poor sample recoveries, evidence of hydrocarbons were not noted until greater depths in the MW-3 and MW-8 logs. Based on field evidence during advancement as subsequent monitoring well gauging data, the first occurrence of hydrocarbon impacts at these locations are within or below the smear zone. In the MW-2 log, it was noted hydrocarbon staining was present along vertical parting structures (fractures) in the clay, suggesting vertical movement within the smear zone to underlying gravel and cobbles. Shallower evidence of hydrocarbons may have been removed during excavation activities and replaced with fill. It was noted no evidence of hydrocarbons were present in the 9 to 12-foot bgs interval during advancement of MW-1, installed in the former EPNGC pit. The lack of significant hydrocarbons in this interval suggest the overlying pit may not have been a significant source of hydrocarbons at the Site.

Constituents of Concern

The constituents of concern for the Site as follows:

Constituent of Concern	Media	
	Soil	Groundwater
Benzene	X	X
Toluene	N/A	X
Ethylbenzene	N/A	X
Xylenes	N/A	X
Total benzene, toluene, ethylbenzene, and xylenes (BTEX)	X	N/A
Total Petroleum Hydrocarbons (TPH)	X	N/A
Chloride	X	N/A
Free Product	N/A	X

Reference: 2018 Activities, Site Conceptual Model and Request for Site Closure

Soil Analytical Results

Six soil samples have been collected as part of Site characterization activities, as summarized in Attachment N. A figure depicting the location of the soil samples is also presented in Attachment N. Soil analytical laboratory reports were included in previously-submitted reports. Based on the logs generated during advancement of each monitoring well (Attachment J), the six soil samples collected were in the saturated zone. With the presence of free product at the Site and previous excavation activities, the soil analytical data is not particularly useful in identifying overlying source areas.

Free Product

An apparent nearby release(s) has occurred and product has migrated vertically to the saturated zone at a location not assessed by EPCGP. Once encountering the saturated zone, free product from the release(s) have migrated horizontally. Site monitoring well gauging activities have detected measurable free product in monitoring wells MW-2, MW-3, MW-8, and TW-1. As summarized in Attachment L, free product was first encountered in monitoring well MW-2 (0.42 feet thick) on June 2, 2009, a monitoring well up-gradient (sometimes side-gradient) to the former EPNGC pit and located immediately down-gradient of BP storage facilities. Measurable free product was subsequently discovered in wells TW-1 (0.90 feet thick, 5/25/2010), MW-3 (0.17 feet, 6/11/2017), and MW-8 (0.89 feet thick, 6/11/2017). Based on the groundwater flow direction observed over many measuring events at the site, these wells are upgradient of the former EPNG dehydrator pit. Intermittent product recovery was initiated in 2009 using absorbent socks, with less than an estimated 1 gallon of product recovered through 2013. No measurable free product has been detected in monitoring well MW-1.

A hydrograph depicting groundwater elevations in comparison with the presence and thickness of free product in monitoring wells MW-2, MW-3, and TW-1/MW-8 are presented in Attachment O. Free product was first observed 7 years into the gauging record of MW-2, and its occurrence does not coincide with unique or extreme groundwater elevations. Monitoring well MW-1 was installed on February 26, 1997, and measurable product has not been observed since it was installed. Monitoring well MW-2 was installed on December 12, 2001, and free product was first discovered on June 2, 2009. The first appearance of measurable free product in down-gradient TW-1 (later replaced by well MW-8) occurred on May 25, 2010. Measurable free product was first discovered in monitoring well MW-3 on June 11, 2017.

Groundwater Analytical Results and Trends

A summary of groundwater analytical results obtained from 37 separate groundwater sampling events at the Site is depicted on Attachment P. Figures showing the results from the May 17, and October 28, 2018 groundwater sampling events are presented in Attachment Q.

Reference: 2018 Activities, Site Conceptual Model and Request for Site Closure

The laboratory analytical report for the 2018 groundwater sampling events are presented in Attachment R. Laboratory analytical reports for 2017 and earlier were presented in previously-submitted reports. As noted in Attachment P, the groundwater concentrations in MW-1 have been one or more orders of magnitude less than monitoring well MW-2, located in the up-gradient direction, when both wells have been sampled. This trend continued in 2018, where monitoring well concentrations were below the applicable New Mexico Water Quality Control Commission (NMWQCC) criteria in MW-1. Groundwater samples from MW-1 have met NMWQCC standards three times: once on March 22, 2004, and for both groundwater sampling events completed in 2018.

Groundwater hydrographs depicting historical groundwater elevation data and benzene concentrations (the most limiting analytical constituent) for the Site monitoring wells are presented in Attachment S. As noted in the MW-1 hydrograph, groundwater benzene concentrations in MW-1 generally declined and leveled-off through 2008, following closure of the EPNGC pit in 1994 and subsequent soil excavation in 1996. Groundwater benzene concentrations in MW-1 increased significantly shortly after the discovery of free product in up-gradient MW-2 in 2009. The impact causing the elevated groundwater concentrations and LNAPL in up-gradient well MW-2 likely contributed to continued elevated benzene concentrations in MW-1.

The behavior of the MW-1 hydrograph indicates a significant soil source was not present in the vicinity of MW-1 from prior to 2009. Beginning in 2009, following the appearance of free product in MW-2, the MW-1 hydrograph behavior switched to a more direct relationship between groundwater concentrations and elevation. This direct relationship between groundwater concentrations and groundwater elevations can be attributed to the clayey sands around MW-1 absorbing free product and/or highly-impacted groundwater that had migrated from an upgradient source, creating an ongoing local source.

The hydrograph for MW-2 depicts an initial decline but continued elevated groundwater concentrations at this location. Groundwater concentrations at MW-2 have always been high at this location upgradient of MW-2, as a result of historical or new releases in this area. It is expected groundwater concentrations will remain elevated with the continued presence of free product. The hydrographs for monitoring wells MW-3 and TW-1 (later replaced with monitoring well MW-8) also are elevated based on the presence or appearance of free product at these locations, with free product likely having migrated from one or more up-gradient sources.

The hydrographs for monitoring wells MW-5, MW-6 and MW-7 depict the generally low hydrocarbon concentrations, with benzene occasionally exceeding the applicable NMWQCC standard. The hydrographs for these monitoring wells generally exhibit inverse relationships with groundwater elevations, suggesting a significant hydrocarbon source is not present in smear-zone soils, but likely receive hydrocarbon-impacted water from upgradient

Reference: 2018 Activities, Site Conceptual Model and Request for Site Closure

sources and/or areas where free product has migrated to. Any significant historical soil source immediately up-gradient of these wells may have been eliminated as part of the 1996 soil excavation.

Summary

Based on the available data collected at the Site, the following is offered regarding the GCU 142E site:

- Amoco (now BP) spud the GCU 143E well in December of 1984, and they continue to operate in the nearly 24 years since. BPs operations include at least three tanks, one of which has been closed, and at least three pits. EPNGC operated a natural gas distribution pipeline and a dehydrator pit for approximately nine years. EPNGC closed the pit in April 1994 and has no remaining operations.
- Following an initial assessment of the closed dehydrator pit, EPNG excavated and removed 20 cubic yards of soil. In October 1996, EPNG excavated an additional 882 cubic yards of soil from the former Pit area and eastward, to a depth of up to 15.5 feet bgs. The excavated soil was removed from the site for treatment and disposal. Soils encountered during advancement of other EPCGP monitoring wells and a soil boring indicate fill materials (as a loose, gravelly silty sand), may be present up to 10 feet bgs at other portions of the Site.
- The log of MW-1, advanced in the former EPNGC pit, documents the absence of hydrocarbon odors or staining in the upper 3 feet of stiff silty clay (below the base of the excavation), indicating this pit may not have been a significant source of hydrocarbons encountered across the Site.
- Groundwater monitoring at the Site was initiated on March 10, 1997, over twelve years after BP began operating at the Site.
- Measurable free product was first detected in EPCGP monitoring wells on June 2, 2009, in monitoring well MW-2. However, dissolved hydrocarbon concentration in this well were two orders of magnitude higher than concentrations at MW-1, the source well associated with the EPNG dehydrator pit. Monitoring well MW-2 is located near BP's above ground storage tank and a truck loading manifold 45 feet northwest and upgradient of the former EPCG dehydrator pit. EPCGP believes it is likely that the elevated concentrations, and later LNAPL, at well MW-2 have always been associated with BP's operation at the site, not the former EPNG dehydrator pit.
- Measurable free product was detected in temporary monitoring well TW-1, located south of MW-2 and near a former Amoco blow pit location, on May 25, 2010. Following their installation in August of 2014, measurable free product was subsequently detected in monitoring well MW-3, located on the western portion of

Reference: 2018 Activities, Site Conceptual Model and Request for Site Closure

the site near former and active BP operations, and MW-8, which replaced TW-1. Measurable free product has not been detected in MW-1.

- Migration of hydrocarbons, both as free product and/or impacted groundwater, is most likely during periods of lower groundwater elevations, when the water table is in or near the top of the loose gravelly sand and gravels, the highly transmissive alluvial (likely fluvial) unit underlying the Site. During periods of higher groundwater elevations, free product would be trapped and absorbed into the overlying clayey sand. When impacted by free product, these formerly un-impacted clayey sands may behave as source areas for hydrocarbons detected in groundwater across the Site.
- Other than monitoring wells MW-1 (since 2009) and MW-2 (entire monitoring record), the groundwater hydrographs for the EPCGP monitoring wells do not indicate significant saturated soil sources at these locations, and the source of hydrocarbons in groundwater are coming from upgradient locations. Groundwater flow across the site is primarily to the southeast. The highest groundwater concentrations at the Site have consistently been from MW-2, with lower hydrocarbon concentrations in downgradient monitoring wells.
- Hydrocarbon concentrations in monitoring well MW-1 met the applicable NMWQCC standards for during the March 22, 2004, and May and October 2018 groundwater monitoring events.
- Hydrocarbon concentrations in MW-1 are generally lower when groundwater flow is more of an eastern direction, where existing BP infrastructure is not directly upgradient of the former EPNG pit.
- Monitoring wells MW-5 and MW-6, located east of the former EPNG pit, have not had substantially high concentrations of BTEX constituents in groundwater, as would be expected if MW-1 was a significant source of hydrocarbons at the Site.
- By April 2011, BP had installed at least 10 monitoring wells and apparently completed excavation activities around three former pits. Details and results of these activities completed by BP are largely unknown at this time because associated reports have been unavailable. Three additional monitoring wells, also apparently installed by BP, were found at the Site during the October 28, 2018 sampling event.

Request for No Further Action

A review of the data gathered by EPCGP since 1996 indicates the former EPNGC pit may not have been a significant source of hydrocarbon impacts at this site. Additionally, the weight of scientific evidence compiled by EPCGP since 1996 strongly suggests that the former El Paso dehydrator pit is not the cause of hydrocarbon impact remaining at the Site. Based on the information presented in this document, EPCGP respectfully requests the NMOCD grant site closure for NMOCD case number 3RP-189.

Reference: 2018 Activities, Site Conceptual Model and Request for Site Closure

If you have any comments or questions concerning this correspondence, please contact me or Joseph Wiley with EPCGP at (713) 420-3475.

Sincerely,

Stantec Consulting Services Inc.

Stephen Varsa, P.G.
Project Manager
Phone: (515) 251-1020
steve.varsa@stantec.com

/rsm:srv:leh

cc: Joseph Wiley, EPCGP
Cory Smith, NMOCD District 3
Jim Griswold, NMOCD Santa Fe
Morris Young, 6 Road 5267 LLC

Attachments:

Attachment A – NMOCD Notifications
Attachment B – Waste Disposal Documentation
Attachment C – October 1996 Field Pit Remediation Closure Form
Attachment D – Site History Table
Attachment E – Site Plan
Attachment F – Photographic Log
Attachment G – April 2011 BP Figure
Attachment H – Historical Map
Attachment I – Local Hydro-Geo Summary
Attachment J – EPCGP Soil Boring Logs
Attachment K – Cross-Sections
Attachment L – Groundwater Gauging Data
Attachment M – 2018 Groundwater Elevation Figures
Attachment N – Soil Analytical Data
Attachment O – Product Hydrograph
Attachment P – Groundwater Analytical Data
Attachment Q – 2018 Groundwater Analytical Figures
Attachment R – Analytical Lab Reports
Attachment S - Groundwater Hydrographs

ATTACHMENT A

From: Varsa, Steve
To: Fields, Vanessa, EMNRD; Smith, Cory, EMNRD
Cc: "Bayliss, Randolph, EMNRD"; Griswold, Jim, EMNRD; "Wiley, Joe"
Bcc: Sarah Gardner (sarah.gardner@stantec.com); Varsa, Steve
Subject: El Paso CGP Company - Notice of upcoming groundwater sampling activities
Date: Wednesday, May 09, 2018 9:23:00 AM

Vanessa and Cory -

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

Site Name	NMOCD Case #	Sample Date
Canada Mesa #2	3RP-155-0	5/15/2018
Fields A#7A	3RP-170-0	5/17/2018
Fogelson 4-1	3RP-068-0	5/17/2018
Gallegos Canyon Unit #124E	3RP-407-0	5/17/2018
GCU Com A #142E	3RP-179-0	5/17/2018
James F. Bell #1E	3RP-196-0	5/19/2019
Johnston Fed #4	3RP-201-0	5/16/2018
Johnston Fed #6A	3RP-202-0	5/16/2018
K27 LDO72	3RP-204-0	5/15/2018
Knight #1	3RP-207-0	5/19/2019
Lateral L 40 Line Drip	3RP-212-0	5/18/2018
Lat O-21 Line Drip	3RP-213-0	5/16/2018
Miles Fed #1A	3RP-223-0	5/15/2018
Sandoval GC A #1A	3RP-235-0	5/16/2018
Standard Oil Com #1	3RP-238-0	5/15/2018
State Gas Com N #1	3RP-239-0	5/18/2018

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

Thank you,
Steve

Stephen Varsa, P.G.
Senior Hydrogeologist
Stantec Environmental Services
11153 Aurora Avenue
Des Moines, Iowa 50322
Direct: (515) 251-1020
Cell: (515) 710-7523
Office: (515) 253-0830
steve.varsa@stantec.com

From: Varsa, Steve
To: Fields, Vanessa, EMNRD; Smith, Cory, EMNRD
Cc: "Bayliss, Randolph, EMNRD"; Griswold, Jim, EMNRD; "Wiley, Joe"
Bcc: Varsa, Steve
Subject: El Paso CGP Company - Notice of upcoming groundwater sampling activities
Date: Tuesday, October 23, 2018 1:22:00 PM

Vanessa and Cory -

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

Site Name	NMOCD Case #	Sample Date
Canada Mesa #2	3RP-155-0	10/27/2018
Fields A#7A	3RP-170-0	10/26/2018
Fogelson 4-1	3RP-068-0	10/28/2018
Gallegos Canyon Unit #124E	3RP-407-0	10/28/2018
GCU Com A #142E	3RP-179-0	10/28/2018
James F. Bell #1E	3RP-196-0	10/29/2018
Johnston Fed #4	3RP-201-0	10/26/2018
Johnston Fed #6A	3RP-202-0	10/26/2018
K27 LDO72	3RP-204-0	10/27/2018
Knight #1	3RP-207-0	10/29/2018
Lateral L 40 Line Drip	3RP-212-0	10/31/2018
Miles Fed #1A	3RP-223-0	10/27/2018
Sandoval GC A #1A	3RP-235-0	10/28/2018
Standard Oil Com #1	3RP-238-0	10/27/2018
State Gas Com N #1	3RP-239-0	10/26/2018

Additionally, we will be at the State Gas Com N#1 site on October 30, 2018, to complete the proposed aquifer testing activities. We will be completing aquifer testing using slug-out methods, and collecting recovery measurements manually over several days.

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

Thank you,
Steve

Stephen Varsa, P.G.
Senior Hydrogeologist
Stantec Environmental Services
11153 Aurora Avenue
Des Moines, Iowa 50322
Direct: (515) 251-1020
Cell: (515) 710-7523
Office: (515) 253-0830
steve.varsa@stantec.com

ATTACHMENT B

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

State of New Mexico
Energy Minerals and Natural Resources

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

Form C-138
Revised August 1, 2011

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

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. **Generator Name and Address:**
El Paso CGP Company L.L.C., 1001 Louisiana Street, Houston, TX 77002

2. **Originating Site(s):**
Fields A#7A, Fogelson 4-1, Gallegos Canyon Unit #124E, GCU Com A #142E, James F. Bell #1E, Knight #1, Lat L 40, and State Gas Com N #1.

3. **Location of Material (Street Address, City, State or ULSTR):**
Unit E, Sec. 34, T32N, R11W; Unit P, Sec. 4, T29N, R11W; Unit N, Sec. 35, T28N, R12W; Unit G, Sec. 25, R29N, R12W; Unit P, Sec. 10, T30N, R13W; Unit A, Sec. 5, T30N, R13W; Unit H, Sec. 13, T28N, R04W; Unit H, Sec. 16, T31N, R12W, respectively.

4. **Source and Description of Waste:**
Historic releases occurred on the above-referenced properties. As part of environmental remediation activities, monitoring wells will be sampled and purged groundwater will be removed from the Site.

Estimated Volume 1 yd^3 / (bbls) Known Volume (to be entered by the operator at the end of the haul) _____ yd^3 / bbls

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

I, Joseph Wiley, representative or authorized agent for El Paso CGP Company L.L.C. do hereby certify that according to the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988 regulatory determination, the above described waste is: (Check the appropriate classification)

☒ RCRA Exempt: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste. *Operator Use Only: Waste Acceptance Frequency ☐ Monthly ☐ Weekly ☒ Per Load*

☐ RCRA Non-Exempt: Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by characteristics established in RCRA regulations, 40 CFR 261.21-261.24, or listed hazardous waste as defined in 40 CFR, part 261, subpart D, as amended. The following documentation is attached to demonstrate the above-described waste is non-hazardous. (Check the appropriate items)

☐ MSDS Information ☐ RCRA Hazardous Waste Analysis ☐ Process Knowledge ☐ Other (Provide description in Box 4)

GENERATOR 19.15.36.15 WASTE TESTING CERTIFICATION STATEMENT FOR LANDFARMS

I, Susan Gardner, representative for El Paso CGP Company L.L.C. do hereby certify that representative samples of the oil field waste have been subjected to the paint filter test and tested for chloride content and that the samples have been found to conform to the specific requirements applicable to landfarms pursuant to Section 15 of 19.15.36 NMAC. The results of the representative samples are attached to demonstrate the above-described waste conform to the requirements of Section 15 of 19.15.36 NMAC.

5. **Transporter: Stantec Consulting Services**

OCD Permitted Surface Waste Management Facility

Name and Facility Permit #: Basin Disposal, Inc., Permit # NM1-005
Address of Facility: 906 S. Main Avenue, Aztec, NM 87410-2285
Method of Treatment and/or Disposal:

☐ Evaporation ☒ Injection ☐ Treating Plant ☐ Landfarm ☐ Landfill ☐ Other

Waste Acceptance Status:

☐ **APPROVED** ☐ **DENIED** (Must Be Maintained As Permanent Record)

PRINT NAME: Velmer Fergison TITLE: Attorney-in-Fact DATE: 5/19/15

SIGNATURE: _____ TELEPHONE NO.: 505-637-8926

Surface Waste Management Facility Authorized Agent

30 Years of Environmental Health and Safety Excellence

BASIN DISPOSAL

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

NO. 714236
NMOCD PERMIT: NM -001-0005
Oil Field Waste Document, Form C138
INVOICE:

DATE 3/19/16
DEL. TKT#.
GENERATOR: El Paso
BILL TO: El Paso
HAULING CO. Stevens Tech
DRIVER: Salah (Print Full Name)
ORDERED BY: Josphiley
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		Field A7A, Fogelson 4A Gallegos Canyon Unit 129E	100bbl	.70		$00.	70	
2		Scozoma 192E James Bell 1E Knight LatL 46	~~.70~~					
3		State Gas Com N#1						
4								
5								

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

30 Years of Environmental Health and Safety Excellence

BASIN DISPOSAL

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

NO. 727466
NMOCD PERMIT: NM -001-0005
Oil Field Waste Document, Form C138
INVOICE:

DATE 11-1-18
GENERATOR: El Paso CGP Com.
HAULING CO. Stantec Consulting
ORDERED BY: Joe W.

DEL. TKT#:
BILL TO: El Paso CGP
DRIVER: Sarah G.
(Print Full Name)
CODES:

WASTE DESCRIPTION: ☒ Exempt Oilfield Waste ☑ Produced Water ☐ Drilling/Completion Fluids

STATE: ☑ NM ☐ CO ☐ AZ ☐ UT

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

NO.	TRUCK	LOCATION(S)	VOLUME	COST	H2S	COST	TOTAL	TIME
1		Fogel on 4-1	1	70			70	
2		Gallegos Canyon Unit #121E						'18 NOV 1 6:35PM
3		GCU Com A #111E						
4		Jundrival GCA #1A						
5		Jones Bell #1E						

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 PRINTING 0818018B

representative samples of the oil field waste have been subjected to the paint filter test and found to have been found to conform to the specific requirements applicable to landfarms pursuant to Section 15 of 19.15.36 NMAC. The results of the representative samples are attached to demonstrate the above-described waste conform to the requirements of Section 15 of 19.15.36 NMAC.

5. **Transporter: Stantec Consulting Services**

OCD Permitted Surface Waste Management Facility

Name and Facility Permit #: Basin Disposal, Inc., Permit # NM1-005
Address of Facility: 906 S. Main Avenue, Aztec, NM 87410-2285
Method of Treatment and/or Disposal:

☐ Evaporation ☒ Injection ☐ Treating Plant ☐ Landfarm ☐ Landfill ☐ Other

Waste Acceptance Status: ☑ **APPROVED** ☐ **DENIED** (Must Be Maintained As Permanent Record)

PRINT NAME: Damian Hernandez TITLE: [redacted] DATE: _____

SIGNATURE: _____ TELEPHONE NO.: [redacted]

Surface Waste Management Facility Authorized Agent

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

State of New Mexico
Energy Minerals and Natural Resources

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

Form C-138
Revised August 1, 2011

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

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. **Generator Name and Address:**
El Paso CGP Company L.L.C., 1001 Louisiana Street, Houston, TX 77002

2. **Originating Site(s):**
Fogelson 4-1, Gallegos Canyon Unit #124E, GCU Com A #142E, Sandoval GC A#1A, James F. Bell #1E, Knight #1, Lat L 40, and State Gas Com N #1.

3. **Location of Material (Street Address, City, State or ULSTR):**
Unit P, Sec. 4, T29N, R11W; Unit N, Sec. 35, T28N, R12W; Unit G, Sec. 25, R29N, R12W; Unit H, Sec. 13, T28N, R04W; Unit P, Sec. 10, T30N, R13W; Unit A, Sec. 5, T30N, R13W; Unit H, Sec. 13, T28N, R04W; Unit H, Sec. 16, T31N, R12W, respectively.

4. **Source and Description of Waste:**
Historic releases occurred on the above-referenced properties. As part of environmental remediation activities, monitoring wells will be sampled and purged groundwater will be removed from the Site. Wastewater generated from aquifer testing of existing monitoring wells at the State Gas Com N#1 site is also being removed from the subject site.

Estimated Volume 1 yd^3 / (bbls) Known Volume (to be entered by the operator at the end of the haul) [redacted] yd^3 / bbls

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

I, Joseph Wiley, representative or authorized agent for El Paso CGP Company L.L.C. do hereby certify that according to the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988 regulatory determination, the above described waste is: (Check the appropriate classification)

☒ RCRA Exempt: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste. *Operator Use Only: Waste Acceptance Frequency* ☐ *Monthly* ☐ *Weekly* ☒ *Per Load*

☐ RCRA Non-Exempt: Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by characteristics established in RCRA regulations, 40 CFR 261.21-261.24, or listed hazardous waste as defined in 40 CFR, part 261, subpart D, as amended. The following documentation is attached to demonstrate the above-described waste is non-hazardous. (Check the appropriate items)

☐ MSDS Information ☐ RCRA Hazardous Waste Analysis ☐ Process Knowledge ☐ Other (Provide description in Box 4)

GENERATOR 19.15.36.15 WASTE TESTING CERTIFICATION STATEMENT FOR LANDFARMS

I, [redacted] representative for El Paso CGP Company L.L.C. do hereby certify that representative samples of the oil field waste have been subjected to the paint filter test and tested for chloride content and that the samples have been found to conform to the specific requirements applicable to landfarms pursuant to Section 15 of 19.15.36 NMAC. The results of the representative samples are attached to demonstrate the above-described waste conform to the requirements of Section 15 of 19.15.36 NMAC.

5. **Transporter: Stantec Consulting Services**

OCD Permitted Surface Waste Management Facility

Name and Facility Permit #: Basin Disposal, Inc., Permit # NM1-005
Address of Facility: 906 S. Main Avenue, Aztec, NM 87410-2285
Method of Treatment and/or Disposal:

☐ Evaporation ☒ Injection ☐ Treating Plant ☐ Landfarm ☐ Landfill ☐ Other

Waste Acceptance Status:

☒ **APPROVED** ☐ **DENIED** (Must Be Maintained As Permanent Record)

PRINT NAME: Damian Hernandez TITLE: [redacted] DATE: _____

SIGNATURE: _____ TELEPHONE NO.: [redacted]

Surface Waste Management Facility Authorized Agent

ATTACHMENT C

FIELD PIT REMEDIATION/CLOSURE FORM/PHASE III

10/22/96

GENERAL

Meter: 03906 Location: Gallegos Canyon Unit Com A #142E

Coordinates: Letter: G Section 25 Township: 29 Range: 12

Or Latitude _____ Longitude _____

Date Started : 10-11-96 Area: 02 Run: 33

FIELD OBSERVATIONS

Sample Number(s): MK536 @ 20' MK537 _____ _____

Sample Depth: 11'-20' 15'6" Feet

Final PID Reading 3657 ppm PID Reading Depth 11 Feet

Yes No

Groundwater Encountered ☒ (1) ☐ (2) Approximate Depth 13' Feet

Final Dimensions: Length 62' Width 30' Depth 15'6

CLOSURE

Remediation Method : 10/22/96

Excavation ☒ (1) Approx. Cubic Yards 882

Onsite Bioremediation ☐ (2)

Backfill Pit Without Excavation ☐ (3)

Overburden Cubic Yards _____

Soil Disposition:

Envirotech ☒ (1) ☐ (3) Tierra

Other Facility ☐ (2) Name: _____

10/22/96

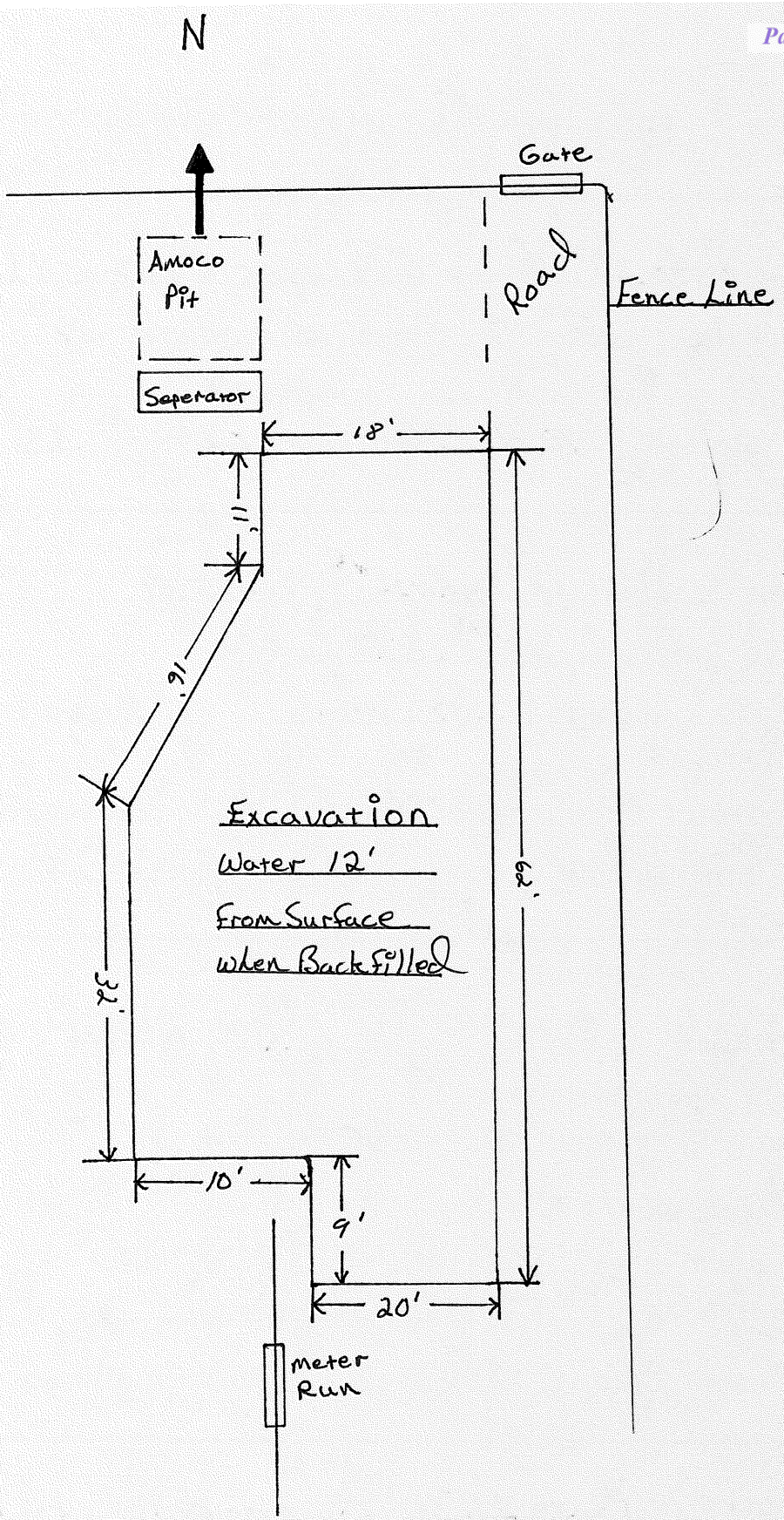
Pit Closure Date: 11/16/96 Pit Closed By: Philip Env.

REMARKS

Remarks : Phase III The over Burden in this pit was not pid reading on it was 177 PPM Finial Reading on the wall North-wall 963 PPM South-wall 3604 East-wall 987 west-wall 54 PPM Bottom 1073 PPM soil was total Saturated

Signature of Specialist: Morgan Killion

(SP3195) 05/01/95


N
Gate
Amoco Pit
Road
Fence Line
Seperator
18'
11'
91'
62'
Excavation
Water 12'
From Surface
when Backfilled
32'
10'
9'
20'
meter Run

ATTACHMENT D

Gallegos Canyon Unit Com A #142E
Project History
San Juan River Basin, New Mexico

Date	Source (Regulatory File #)	Event/Action	Description /Comments
12/4/1984	API# 30-045-26125	Amoco Production Company (Amoco) Gallegos Canyon Unit (GCU) Com A #142E (Site) well spudded	
2/10/1985	30-045-26125	El Paso Natural Gas Company (EPNGC) approved to transport gas from GCU Com A 142E	Permian Corporation approved as transporter of condensate; Meridian Oil Company approved as condensate transporter on April 3, 1989.
4/1/1994	ACI# 3RP-179-0	El Paso Field Services (EPFS) - pit closure and excavation	20 cubic yards of soil removed.
10/1/1996	3RP-179-0	EPFS Soil Excavation	An additional 882 cubic yards of soil was excavated and removed. Excavation depth was to at least 9 feet bgs.
2/26/1997	3RP-179-0	EPFS - MW-1 well installation	No soil samples retained during advancement of BH-2 (completed as MW-1). Well gauged and sampled on 3/10/1997. MW-1 exceeds NMWQCC standards for benzene, toluene, and total xylenes. Quarterly sampling begins in August 1997.
9/25-29/1997	3RP-179-0	EPFS well temp installation and groundwater sampling	PZ-1 through PZ-6 installed and groundwater sampled for BTEX. Results from PZ-1 and PZ-6 indicate there is an up-gradient source.
2/27/1998	3RP-179-0	EPFS 1997 Annual Report	Quarterly groundwater sampling for BTEX completed from MW-1 in 1997. Recommends NFA until operator commences remediation of their production pits.
7/8/1998	3RP-179-0	New Mexico Oil Conservation Division (NMOCD) Notification	NMOCD approves annual sampling. NMOCD sends notice to Amoco to investigate and remediate groundwater on July 9, 1998.
3/31/1999	3RP-179-0	EPFS 1998 Annual Report	1998 quarterly groundwater sampling results from MW-1 through second quarter 1998 presented. Annual sampling at the site is proposed and EPFS will contact operator and provide pertinent information on EPFS activities.
3/24/2000	3RP-179-0	EPFS 1999 Annual Report	1999 annual sampling results from MW-1 presented. Annual sampling at the site proposed and continue to provide data to the operator. EPFS provided 1997 data to the operator.

Gallegos Canyon Unit Com A #142E
Project History
San Juan River Basin, New Mexico

2/26/2001	3RP-179-0	EPFS 2000 Annual Report	2000 annual sampling results from MW-1 presented. Continue annual sampling at the site proposed until BTEX concentrations have decreased, and continue to provide data to the operator.
7/18/2001	3RP-179-0	NMOCD Notification to EPFS	NMOCD acknowledges potential contamination related to operator activities. OCD requests EPFS to work with operator.
12/13/2001	3RP-179-0	Monitoring well MW-2 installed and sampled	Upgradient of MW-1.
12/31/2001	30-045-26125	Well operator changed to BP America Production Company	EPCG transferred the pipleine assets to Enterprise Products Company on April 4, 2002.
2/13/2002	30-045-26125	Amoco fracs well to comingle with second pool	Giant Refining Company approved as oil transporter on August 1, 2002.
2/28/2002	3RP-179-0	EPFS 2001 Annual Report	2001 annual sampling results from MW-1, and results from installation and sampling of MW-2 presented. Groundwater BTEX concentrations over two orders of magnitude above 2001 MW-1 concentrations. Proposed to continue sampling MW-1 annually.
2/28/2003	N/A (missing from 3RP-179-0)	EPFS 2002 Annual Report	2002 annual sampling results from MW-1 presented. Semi-annual annual sampling of MW-1, and annual sampling of MW-2 proposed.
2/26/2004	3RP-179-0	EPFS 2003 Annual Report	2003 annual sampling results from MW-1 and MW-2 presented. With MW-1 concentrations below NMWQCC standards, quarterly sampling of MW-1, and annual sampling of MW-2, are proposed.
2/1/2005	N/A (missing from 3RP-179-0)	EPFS 2004 Annual Report	2004 quarterly sampling results from MW-1 and semi-annual sampling results from MW-2 presented.
3/1/2006	N/A (missing from 3RP-179-0)	MWH 2005 Annual Report (for El Paso Tennessee Pipeline Company [EPTPC])	2005 semi-annual sampling results from MW-1 and annual sampling results from MW-2 presented.
2/12/2007	N/A (missing from 3RP-179-0)	MWH 2006 Annual Report (for EPTPC)	2006 annual sampling results from MW-1 and MW-2 are presented. Piezometer TW-1 installed on January 6, 2006 to determine groundwater flow direction in subsequent monitoring events.
4/2/2008	3RP-179-0	MWH 2007 Annual Report (for EPTPC)	2007 annual sampling results from MW-1 and MW-2 presented, and gauging data from TW-1. Continued annual sampling of MW-1 and MW-2 recommended.

Gallegos Canyon Unit Com A #142E
Project History
San Juan River Basin, New Mexico

2/28/2009	3RP-179-0	MWH 2008 Annual Report (for EPTPC)	2008 annual sampling results from MW-1 and MW-2 presented, and guaging data from TW-1. Continued annual sampling of MW-1 and MW-2 recommended, plus initiate annual sampling of TW-1.
4/1/2010	3RP-179-0	MWH 2009 Annual Report (for EPTPC)	2009 semi-annual sampling results from MW-1 and MW-2 and annual sampling of TW-1 presented. Measurable product (up to 0.42 feet in MW-2) first detected at site, and product recovery initiated. Continue annual sampling and monitoring of MW-1, MW-2, and TW-1 recommended.
3/2/2011	3RP-179-0	MWH 2010 Annual Report (for EPTPC)	2010 annual sampling from MW-1, MW-2, and TW-1, and quarterly gauging and product recovery from MW-2 and TW-1 presented. Product also detected in MW-1, and recovery initiated. Measurable product (up to 0.50 feet in MW-2 and up to 0.90 feet in TW-1) present. Continue annual sampling and quarterly product recovery is recommended. Its noted historically there may have been issues with the site product pit.
7/28/2011	30-045-26125	BP closure of 95 barrel below ground Tank A	Form C-144. No release was reported based on soil sample BTEX and TPH results, collected at a depth of 5 feet bgs.
8/20/2012	3RP-179-0	MWH 2011 Annual Report (for El Paso CGP Company [EPCGP])	2011 annual sampling and quarterly product recovery results from MW-1, MW-2, and TW-1 presented. Continued annual sampling and quarterly product recovery recommended, in additional to evaluation of up-gradient sources.
8/22/2013	3RP-179-0	MWH 2013 Monitoring well Installation Work Plan (for EPCGP)	Outlines procedures to install monitoring wells MW-3 through MW-5 to better delineate hydrocarbons in groundwater, and installing a replacement well for TW-1. The work plan was not implemented.
3/4/2014	3RP-179-0	MWH 2014 Monitoring Well Installation Work Plan (for EPCGP)	Outlines procedures to install monitoring wells MW-3 through MW-8 to better delineate hydrocarbons in groundwater, assess a potential upgradient source, and install a replacement well for TW-1. No written response to the work plan from NMOCD was received.
4/3/2014	3RP-179-0	MWH 2013 Annual Report (for EPCGP)	Documents a re-survey of the site and three quarterly gauging and sampling event, in which MW-1 and MW-2 were sampled. Product recovery activities ceased. Implementation of the March 4, 2014 well installation work plan, and semi-annual sampling, is recommended.

Gallegos Canyon Unit Com A #142E
Project History
San Juan River Basin, New Mexico

4/7/2014	N/A (e-mail)	BP provides site figure to EPCGP	Electronic mail message from BP to EPCGP. The June 2011 figure prepared by Blagg Engineering depicts BP well locations and soil excavation areas. Correspondence indicates a NMOCD case number was not setup for the historical BP release.
8/23-24/14	3RP-179-0	Monitoring wells MW-3, MW-5 through MW-8 installed.	MW-4 advanced as soil boring adjacent to BP well MW-8, temp well TW-1 plugged and abandoned, six soil samples collected for laboratory analysis.
2/3/2015	3RP-179-0	MWH 2014 Annual Report (for EPCGP)	Results from well installation, soil sampling, and semi-annual sampling presented. Product (0.11 feet) present in MW-2. Continued semiannual sampling recommended as EPCGP awaits additional action from BP.
2/12/2016	3RP-179-0	MWH 2015 Annual Report (for EPCGP)	Results from semi-annual sampling presented. Continued semiannual sampling recommended as EPCGP awaits additional action from BP.
3/28/2017	3RP-179-0	Stantec 2016 Annual Report (for EPCGP)	Results from semi-annual sampling presented. Product (0.30 feet) present in MW-2. Continued semiannual sampling recommended as EPCGP awaits additional action from BP.
6/2/2017	3RP-179-0	NMOCD Comment Letter to EPCGP	Comments to 2016 Annual Report, and request to complete additional delineation around MW-2 and MW-7, and complete product recovery activities.
7/19/2017	3RP-179-0	EPCGP Response Letter to NMOCD	EPCGP requests NMOCD obtain additional information from BP on the nature and extent of their release before determining what, if any, additional activities are required of EPCGP.
9/18/2017	3RP-179-0	Stantec Groundwater Monitoring Work Plan (for EPCGP)	As requested by NMOCD during an August 15, 1997 meeting with EPCGP, work plan requests semi-annual sampling until additional information is obtained about the BP release to determine what, if any, additional information is required of EPCGP.
11/14/2017	3RP-179-0	NMOCD Notification to EPCGP	Approval of 9/18/2017 work plan. NMOCD established ACI# 3RP-1055 to place monitoring data for the historical BP release at the Site. As of January 24, 2019, no information was found in the 3RP-1055 file.
3/29/2018	3RP-179-0	Stantec 2017 Annual Report (for EPCGP)	Semi-annual groundwater sampling results presented. Continued semi-annual sampling recommended. Additoinal activities on hold until additional information regarding BP release is provided.

Gallegos Canyon Unit Com A #142E
Project History
San Juan River Basin, New Mexico

5/14/2018	30-045-26125	BP work plan to conduct groundwater delineation activities	BP proposes to advance 2 soil borings, to be completed as monitoring wells, north and northwest of the former EPNGC pit.
1/25/2019	3RP-179-0	Stantec 2018 Annual Report and Case Closure Request.	2018 semi-annual groundwater sampling results presented, in addition to detailed site conceptual model and request for case closure. Installation of three new wells by others noted on 10/28/2018.

ATTACHMENT E

L:\San Juan River Basin\SJRB GENERAL\GIS-NEW_MXDs\GALLEGOS CAYON UNIT #142E\2018 MAPS\GCU#142E_SITE_2018_REPORT.mxd

LEGEND:

- 5795 — APPROX. GROUND SURFACE CONTOUR AND ELEVATION, FEET
- ACCESS ROAD
- UNKNOWN LINE (POTENTIALLY ABANDONED)
- LOCATION OF FORMER 95 BARREL UST REMOVED 7/19/2011
- FENCE
- PW — PRODUCED WATER LINE
- UGC — UNDERGROUND CABLE
- G — UNDERGROUND GAS LINE
- APPROXIMATE FORMER DITCH
- APPROXIMATE EXTENT OF 10/1996 EPNG SOIL EXCAVATION (EXCAVATED TO 15.5 FEET)
- MONITORING WELL
- SOIL BORING
- ABANDONED MONITORING WELL
- MONITORING WELL ASSOCIATED WITH UNRELATED BP RELEASE
- NEW BP WELL (10/29/2018)
- PROPOSED BP MONITORING WELL
- PIEZOMETER (2006)
- WELLHEAD
- SMA BENCHMARK
- RIG ANCHOR

NOTES:

UTILITY LOCATIONS ARE APPROXIMATE.

MW-4 WAS A SOIL BORING ONLY (NO WELL CONSTRUCTED)

BP FORMER PIT AND EXCAVATION PERIMETER INFORMATION OBTAINED FROM 06/24/2011 FIGURE FROM BLAGG ENGINEERING.

BP PROPOSED MONITORING WELL LOCATIONS OBTAINED FROM 4/5/2018 GROUNDWATER DELINEATION PLAN FROM BLAGG ENGINEERING.

N

SCALE IN FEET

0 30 60

REVISION	DATE	DESIGN BY	DRAWN BY	REVIEWED BY
	12/11/2018	SLG	SLG	SRV

TITLE:

SITE PLAN

PROJECT:

GALLEGOS CANYON UNIT COM A #142E
SAN JUAN COUNTY, NEW MEXICO

Stantec

Figure No.: **1**

ATTACHMENT F

Stantec

Photographic Log

Client:	**El Paso CGP Company**	**Project:**	**193710238**
Site Name:	**GCU Com A #142E**	**Site Location:**	**San Juan River Basin, New Mexico**

Photograph ID: 1

Photo Location:
GCU Com A #142E

Direction:
Southwest

Survey Date:
4/4/1994

Comments:
Former EPNG Dehydrator Pit

Photograph ID: 2

Photo Location:
GCU Com A #142E

Direction:
South

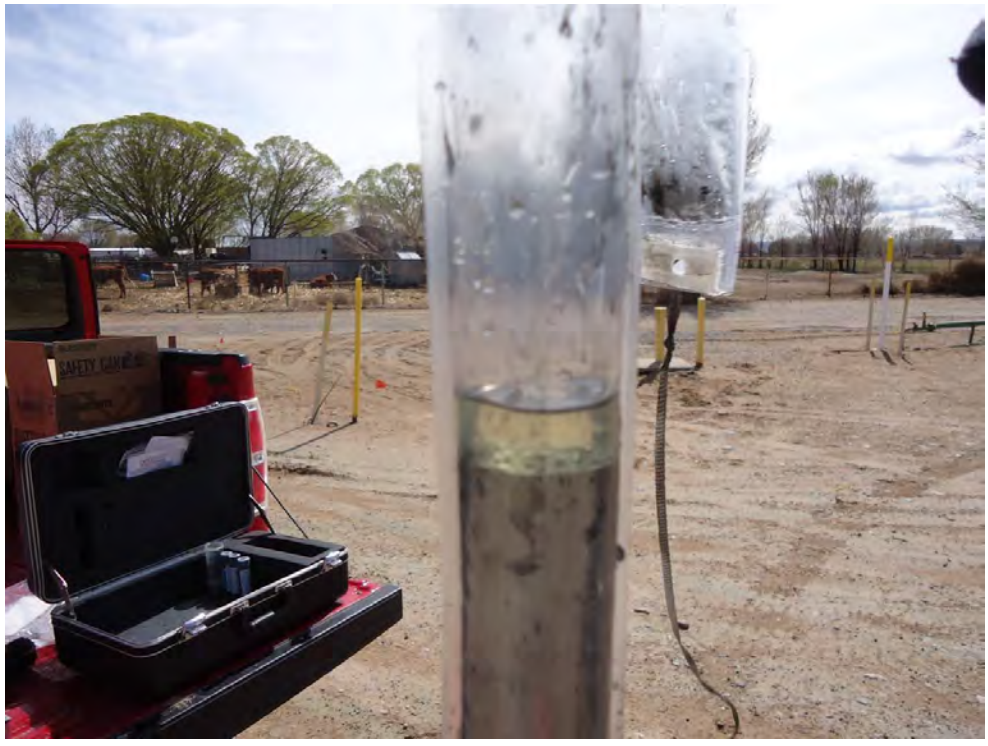
Survey Date:
4/4/1994

Comments:
View of site from the north, including existing BP tanks and overhead pipe.

Stantec

Photographic Log

Client:	**El Paso CGP Company**	**Project:**	**193710238**
Site Name:	**GCU Com A #142E**	**Site Location:**	**San Juan River Basin, New Mexico**

Photograph ID: 3 **Photo Location:** GCU Com A #142E **Direction:** Southwest **Survey Date:** 6/2/2009 **Comments:** MW-1 (center), former above-ground tank (right - removed by 2011), and MW-2 (far right)	
Photograph ID: 4 **Photo Location:** GCU Com A #142E **Direction:** Southeast **Survey Date:** 4/3/2014 **Comments:** Free product in HydraSleeve retrieved from MW-1	

Stantec

Photographic Log

Client:	**El Paso CGP Company**	**Project:**	**193710238**
Site Name:	**GCU Com A #142E**	**Site Location:**	**San Juan River Basin, New Mexico**

Photograph ID: 5 **Photo Location:** GCU Com A #142E **Direction:** Southwest **Survey Date:** 8/23/2014 **Comments:** EPCGP monitoring well installation activities (MW-3)	
Photograph ID: 6 **Photo Location:** GCU Com A #142E **Direction:** Northwest **Survey Date:** 6/11/2017 **Comments:** Condensate tank with nearby fill line, and MW-2 (foreground)	

Stantec

Photographic Log

Client:	**El Paso CGP Company**	**Project:**	**193710238**
Site Name:	**GCU Com A #142E**	**Site Location:**	**San Juan River Basin, New Mexico**

Photograph ID: 7

Photo Location:
GCU Com A #142E

Direction:
Northeast

Survey Date:
6/11/2017

Comments:
Separator and wastewater tank, with existing BP MW-9 well

Photograph ID: 8

Photo Location:
GCU Com A #142E

Direction:
Southeast

Survey Date:
6/11/2017

Comments:
Meter house and MW-8

Stantec

Photographic Log

Client:	**El Paso CGP Company**	**Project:**	**193710238**
Site Name:	**GCU Com A #142E**	**Site Location:**	**San Juan River Basin, New Mexico**

Photograph ID: 9

Photo Location:
GCU Com A #142E

Direction:
North

Survey Date:
6/11/2017

Comments:
BP MW-7 and site property looking north

Photograph ID: 10

Photo Location:
GCU Com A #142E

Direction:
North

Survey Date:
10/31/2018

Comments:
MW-2 and new BP wells between condensate tank (left) and separator (right)

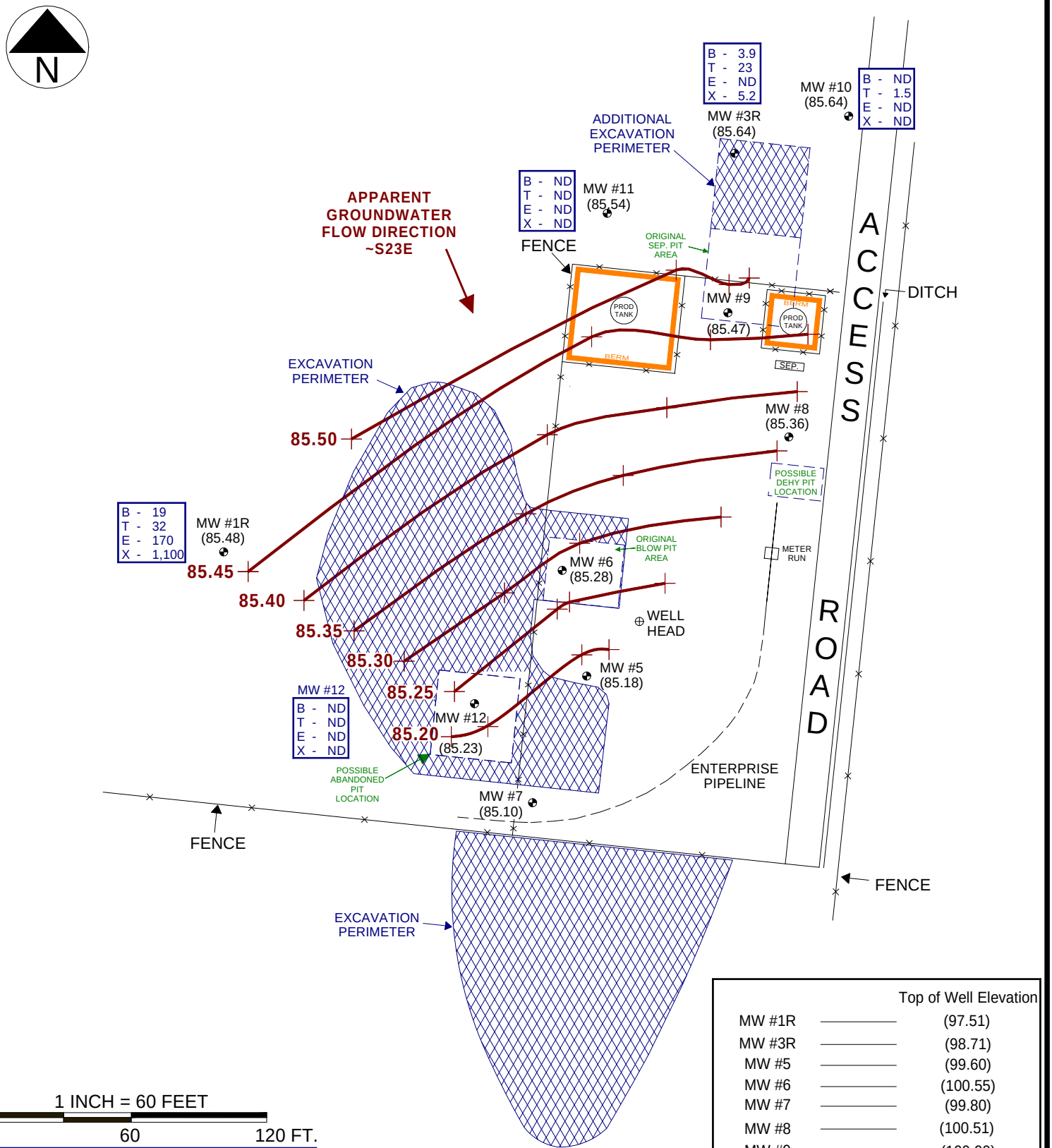
Stantec

Photographic Log

Client:	**El Paso CGP Company**	**Project:**	**193710238**
Site Name:	**GCU Com A #142E**	**Site Location:**	**San Juan River Basin, New Mexico**

Photograph ID: 11 **Photo Location:** GCU Com A #142E **Direction:** South **Survey Date:** 10/29/2018 **Comments:** BP MW-8 (foreground) and MW-1 (center) looking south	
Photograph ID: 12 **Photo Location:** GCU Com A #142E **Direction:** North **Survey Date:** 10/29/2018 **Comments:** Eastern fence line with MW-6 (foreground) and MW-5 (background)	

ATTACHMENT G



1 INCH = 60 FEET

0 60 120 FT.

MONITOR WELL LOCATIONS ARE ONLY AS ACCURATE AS THE INSTRUMENTS USED IN OBTAINING THE FOOTAGE AND BEARING FROM THE WELL HEAD (TAPE MEASURE, LASER RANGE FINDER, & BRUNTON COMPASS). ALL OTHER STRUCTURES DISPLAYED ON THE SCHEMATIC ARE SOLELY FOR REFERENCE AND MAY NOT BE TO SCALE.

	Top of Well Elevation
MW #1R	(97.51)
MW #3R	(98.71)
MW #5	(99.60)
MW #6	(100.55)
MW #7	(99.80)
MW #8	(100.51)
MW #9	(100.90)
MW #10	(99.69)
MW #11	(98.69)
MW #12	(96.98)

MW # 1R (85.48) — Groundwater Elevation as of 06/14/11.

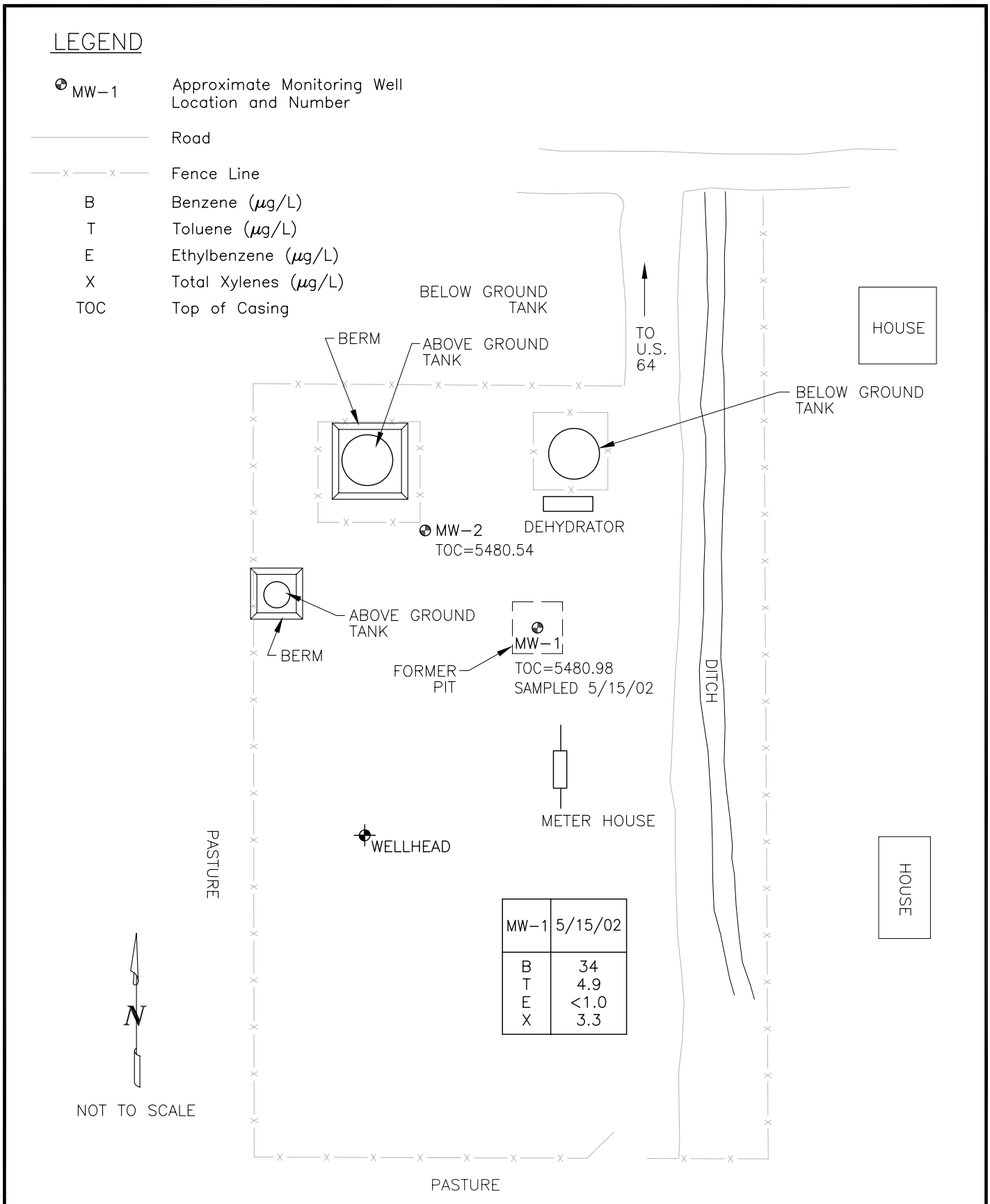
BP AMERICA PRODUCTION COMPANY
GCU COM A # 142E
SW/4 NE/4 SEC. 25, T29N, R12W
SAN JUAN COUNTY, NEW MEXICO

BLAGG ENGINEERING, INC.
CONSULTING PETROLEUM / RECLAMATION SERVICES
P.O. BOX 87
BLOOMFIELD, NEW MEXICO 87413
PHONE: (505) 632-1199

PROJECT: MW SAMPLING
DRAWN BY: NJV
FILENAME: 142E 06-14-11-GW.SKF
REVISED: 06/24/11 NJV

GROUNDWATER CONTOUR MAP
06/11

ATTACHMENT H



gallegos142_02.dwg

GALLEGOS CANYON UNIT A142E, METER 03906
MAY, 2002

GROUNDWATER SITES
EL PASO FIELD SERVICES

FIGURE 1

ATTACHMENT I

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

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

Form C-144
July 21, 2008

For temporary pits, closed-loop systems, and below-grade tanks, submit to the appropriate NMOCD District Office.
For permanent pits and exceptions submit to the Santa Fe Environmental Bureau office and provide a copy to the appropriate NMOCD District Office.

Pit, Closed-Loop System, Below-Grade Tank, or Proposed Alternative Method Permit or Closure Plan Application

Type of action:
- [x] Permit of a pit, closed-loop system, below-grade tank, or proposed alternative method
- [ ] Closure of a pit, closed-loop system, below-grade tank, or proposed alternative method
- [ ] Modification to an existing permit
- [x] Closure plan only submitted for an existing permitted or non-permitted pit, closed-loop system, below-grade tank, or proposed alternative method

Instructions: Please submit one application (Form C-144) per individual pit, closed-loop system, below-grade tank or alternative request

Please be advised that approval of this request does not relieve the operator of liability should operations result in pollution of surface water, ground water or the environment. Nor does approval relieve the operator of its responsibility to comply with any other applicable governmental authority's rules, regulations or ordinances.

1.
Operator: BP AMERICA PRODUCTION COMPANY OGRID #: 778
Address: 200 Energy Court, Farmington, NM 87401
Facility or well name: GALLEGOS CANYON UNIT COM A 142E
API Number: 3004526125 OCD Permit Number:
U/L or Qtr/Qtr G Section 25.0 Township 29.0N Range 12W County: San Juan County
Center of Proposed Design: Latitude 36.69972 Longitude -108.04646 NAD: [ ] 1927 [x] 1983
Surface Owner: [ ] Federal [ ] State [x] Private [ ] Tribal Trust or Indian Allotment

2.
[ ] **Pit:** Subsection F or G of 19.15.17.11 NMAC
Temporary: [ ] Drilling [ ] Workover
[ ] Permanent [ ] Emergency [ ] Cavitation [ ] P&A
[ ] Lined [ ] Unlined Liner type: Thickness _____mil [ ] LLDPE [ ] HDPE [ ] PVC [ ] Other _____
[ ] String-Reinforced
Liner Seams: [ ] Welded [ ] Factory [ ] Other _____ Volume: _____bbl Dimensions: L_____ x W_____ x D_____

3.
[ ] **Closed-loop System:** Subsection H of 19.15.17.11 NMAC
Type of Operation: [ ] P&A [ ] Drilling a new well [ ] Workover or Drilling (Applies to activities which require prior approval of a permit or notice of intent)
[ ] Drying Pad [ ] Above Ground Steel Tanks [ ] Haul-off Bins [ ] Other _____
[ ] Lined [ ] Unlined Liner type: Thickness _____mil [ ] LLDPE [ ] HDPE [ ] PVC [ ] Other _____
Liner Seams: [ ] Welded [ ] Factory [ ] Other _____

4.
[x] **Below-grade tank:** Subsection I of 19.15.17.11 NMAC **Tank ID:** A
Volume: 95.0 bbl Type of fluid: Produced Water
Tank Construction material: Steel
[ ] Secondary containment with leak detection [ ] Visible sidewalls, liner, 6-inch lift and automatic overflow shut-off
[ ] Visible sidewalls and liner [x] Visible sidewalls only [ ] Other SINGLE WALLED DOUBLE BOTTOMED
Liner type: Thickness _____mil [ ] HDPE [ ] PVC [ ] Other _____

5.
[ ] **Alternative Method:**
Submittal of an exception request is required. Exceptions must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.

6.
Fencing: Subsection D of 19.15.17.11 NMAC *(Applies to permanent pits, temporary pits, and below-grade tanks)*

☐ Chain link, six feet in height, two strands of barbed wire at top *(Required if located within 1000 feet of a permanent residence, school, hospital, institution or church)*

☐ Four foot height, four strands of barbed wire evenly spaced between one and four feet

☒ Alternate. Please specify 4' Hogwire with single barbed wire

7.
Netting: Subsection E of 19.15.17.11 NMAC *(Applies to permanent pits and permanent open top tanks)*

☐ Screen ☐ Netting ☐ Other_____

☐ Monthly inspections (If netting or screening is not physically feasible)

8.
Signs: Subsection C of 19.15.17.11 NMAC

☐ 12"x 24", 2" lettering, providing Operator's name, site location, and emergency telephone numbers

☒ Signed in compliance with 19.15.16.8 NMAC

9.
Administrative Approvals and Exceptions:
Justifications and/or demonstrations of equivalency are required. Please refer to 19.15.17 NMAC for guidance.

Please check a box if one or more of the following is requested, if not leave blank:

☒ Administrative approval(s): Requests must be submitted to the appropriate division district or the Santa Fe Environmental Bureau office for consideration of approval.

☐ Exception(s): Requests must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.

10.
Siting Criteria (regarding permitting): 19.15.17.10 NMAC

Instructions: The applicant must demonstrate compliance for each siting criteria below in the application. Recommendations of acceptable source material are provided below. Requests regarding changes to certain siting criteria may require administrative approval from the appropriate district office or may be considered an exception which must be submitted to the Santa Fe Environmental Bureau office for consideration of approval. Applicant must attach justification for request. Please refer to 19.15.17.10 NMAC for guidance. **Siting criteria does not apply to drying pads or above-grade tanks associated with a closed-loop system.**

Ground water is less than 50 feet below the bottom of the temporary pit, permanent pit, or below-grade tank. - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	☒ Yes ☐ No
Within 300 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse or lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark). - Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☒ No
Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. *(Applies to temporary, emergency, or cavitation pits and below-grade tanks)* - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	☒ Yes ☐ No ☐ NA
Within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. *(Applies to permanent pits)* - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	☐ Yes ☐ No ☒ NA
Within 500 horizontal feet of a private, domestic fresh water well or spring that less than five households use for domestic or stock watering purposes, or within 1000 horizontal feet of any other fresh water well or spring, in existence at the time of initial application. - NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site	☒ Yes ☐ No
Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance adopted pursuant to NMSA 1978, Section 3-27-3, as amended. - Written confirmation or verification from the municipality; Written approval obtained from the municipality	☐ Yes ☒ No
Within 500 feet of a wetland. - US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☒ No
Within the area overlying a subsurface mine. - Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division	☐ Yes ☒ No
Within an unstable area. - Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map	☐ Yes ☒ No
Within a 100-year floodplain. - FEMA map	☐ Yes ☒ No

11.
Temporary Pits, Emergency Pits, and Below-grade Tanks Permit Application Attachment Checklist: Subsection B of 19.15.17.9 NMAC
Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached.

- [x] Hydrogeologic Report (Below-grade Tanks) - based upon the requirements of Paragraph (4) of Subsection B of 19.15.17.9 NMAC
- [ ] Hydrogeologic Data (Temporary and Emergency Pits) - based upon the requirements of Paragraph (2) of Subsection B of 19.15.17.9 NMAC
- [x] Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC
- [x] Design Plan - based upon the appropriate requirements of 19.15.17.11 NMAC
- [x] Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC
- [x] Closure Plan (Please complete Boxes 14 through 18, if applicable) - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC

☐ Previously Approved Design (attach copy of design) API Number: _____ or Permit Number: _____

12.
Closed-loop Systems Permit Application Attachment Checklist: Subsection B of 19.15.17.9 NMAC
Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached.

- [ ] Geologic and Hydrogeologic Data (only for on-site closure) - based upon the requirements of Paragraph (3) of Subsection B of 19.15.17.9
- [ ] Siting Criteria Compliance Demonstrations (only for on-site closure) - based upon the appropriate requirements of 19.15.17.10 NMAC
- [ ] Design Plan - based upon the appropriate requirements of 19.15.17.11 NMAC
- [ ] Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC
- [ ] Closure Plan (Please complete Boxes 14 through 18, if applicable) - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC

☐ Previously Approved Design (attach copy of design) API Number: _____

☐ Previously Approved Operating and Maintenance Plan API Number: _____ *(Applies only to closed-loop system that use above ground steel tanks or haul-off bins and propose to implement waste removal for closure)*

13.
Permanent Pits Permit Application Checklist: Subsection B of 19.15.17.9 NMAC
Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached.

- [ ] Hydrogeologic Report - based upon the requirements of Paragraph (1) of Subsection B of 19.15.17.9 NMAC
- [ ] Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC
- [ ] Climatological Factors Assessment
- [ ] Certified Engineering Design Plans - based upon the appropriate requirements of 19.15.17.11 NMAC
- [ ] Dike Protection and Structural Integrity Design - based upon the appropriate requirements of 19.15.17.11 NMAC
- [ ] Leak Detection Design - based upon the appropriate requirements of 19.15.17.11 NMAC
- [ ] Liner Specifications and Compatibility Assessment - based upon the appropriate requirements of 19.15.17.11 NMAC
- [ ] Quality Control/Quality Assurance Construction and Installation Plan
- [ ] Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC
- [ ] Freeboard and Overtopping Prevention Plan - based upon the appropriate requirements of 19.15.17.11 NMAC
- [ ] Nuisance or Hazardous Odors, including H_2S, Prevention Plan
- [ ] Emergency Response Plan
- [ ] Oil Field Waste Stream Characterization
- [ ] Monitoring and Inspection Plan
- [ ] Erosion Control Plan
- [ ] Closure Plan - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC

14.
Proposed Closure: 19.15.17.13 NMAC
Instructions: Please complete the applicable boxes, Boxes 14 through 18, in regards to the proposed closure plan.

Type: ☐ Drilling ☐ Workover ☐ Emergency ☐ Cavitation ☐ P&A ☐ Permanent Pit ☒ Below-grade Tank ☐ Closed-loop System ☐ Alternative

Proposed Closure Method: ☒ Waste Excavation and Removal
☐ Waste Removal (Closed-loop systems only)
☐ On-site Closure Method (Only for temporary pits and closed-loop systems)
☐ In-place Burial ☐ On-site Trench Burial
☐ Alternative Closure Method (Exceptions must be submitted to the Santa Fe Environmental Bureau for consideration)

15.
Waste Excavation and Removal Closure Plan Checklist: (19.15.17.13 NMAC) ***Instructions: Each of the following items must be attached to the closure plan. Please indicate, by a check mark in the box, that the documents are attached.***

- [x] Protocols and Procedures - based upon the appropriate requirements of 19.15.17.13 NMAC
- [x] Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of Subsection F of 19.15.17.13 NMAC
- [x] Disposal Facility Name and Permit Number (for liquids, drilling fluids and drill cuttings)
- [x] Soil Backfill and Cover Design Specifications - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC
- [x] Re-vegetation Plan - based upon the appropriate requirements of Subsection I of 19.15.17.13 NMAC
- [x] Site Reclamation Plan - based upon the appropriate requirements of Subsection G of 19.15.17.13 NMAC

16.
Waste Removal Closure For Closed-loop Systems That Utilize Above Ground Steel Tanks or Haul-off Bins Only: (19.15.17.13.D NMAC)
Instructions: Please indentify the facility or facilities for the disposal of liquids, drilling fluids and drill cuttings. Use attachment if more than two facilities are required.

Disposal Facility Name: _____ Disposal Facility Permit Number: _____

Disposal Facility Name: _____ Disposal Facility Permit Number: _____

Will any of the proposed closed-loop system operations and associated activities occur on or in areas that *will not* be used for future service and operations?
☐ Yes (If yes, please provide the information below) ☐ No

Required for impacted areas which will not be used for future service and operations:
☐ Soil Backfill and Cover Design Specifications - - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC
☐ Re-vegetation Plan - based upon the appropriate requirements of Subsection I of 19.15.17.13 NMAC
☐ Site Reclamation Plan - based upon the appropriate requirements of Subsection G of 19.15.17.13 NMAC

17.
Siting Criteria (regarding on-site closure methods only): 19.15.17.10 NMAC
Instructions: Each siting criteria requires a demonstration of compliance in the closure plan. Recommendations of acceptable source material are provided below. Requests regarding changes to certain siting criteria may require administrative approval from the appropriate district office or may be considered an exception which must be submitted to the Santa Fe Environmental Bureau office for consideration of approval. Justifications and/or demonstrations of equivalency are required. Please refer to 19.15.17.10 NMAC for guidance.

Ground water is less than 50 feet below the bottom of the buried waste. - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	☐ Yes ☐ No ☐ NA
Ground water is between 50 and 100 feet below the bottom of the buried waste - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	☐ Yes ☐ No ☐ NA
Ground water is more than 100 feet below the bottom of the buried waste. - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	☐ Yes ☐ No ☐ NA
Within 300 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse or lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark). - Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	☐ Yes ☐ No
Within 500 horizontal feet of a private, domestic fresh water well or spring that less than five households use for domestic or stock watering purposes, or within 1000 horizontal feet of any other fresh water well or spring, in existence at the time of initial application. - NM Office of the State Engineer - iWATERS database; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance adopted pursuant to NMSA 1978, Section 3-27-3, as amended. - Written confirmation or verification from the municipality; Written approval obtained from the municipality	☐ Yes ☐ No
Within 500 feet of a wetland. - US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Within the area overlying a subsurface mine. - Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division	☐ Yes ☐ No
Within an unstable area. - Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map	☐ Yes ☐ No
Within a 100-year floodplain. - FEMA map	☐ Yes ☐ No

18.
On-Site Closure Plan Checklist: (19.15.17.13 NMAC) ***Instructions: Each of the following items must be attached to the closure plan. Please indicate, by a check mark in the box, that the documents are attached.***
☐ Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC
☐ Proof of Surface Owner Notice - based upon the appropriate requirements of Subsection F of 19.15.17.13 NMAC
☐ Construction/Design Plan of Burial Trench (if applicable) based upon the appropriate requirements of 19.15.17.11 NMAC
☐ Construction/Design Plan of Temporary Pit (for in-place burial of a drying pad) - based upon the appropriate requirements of 19.15.17.11 NMAC
☐ Protocols and Procedures - based upon the appropriate requirements of 19.15.17.13 NMAC
☐ Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of Subsection F of 19.15.17.13 NMAC
☐ Waste Material Sampling Plan - based upon the appropriate requirements of Subsection F of 19.15.17.13 NMAC
☐ Disposal Facility Name and Permit Number (for liquids, drilling fluids and drill cuttings or in case on-site closure standards cannot be achieved)
☐ Soil Cover Design - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC
☐ Re-vegetation Plan - based upon the appropriate requirements of Subsection I of 19.15.17.13 NMAC
☐ Site Reclamation Plan - based upon the appropriate requirements of Subsection G of 19.15.17.13 NMAC

19.
Operator Application Certification:
I hereby certify that the information submitted with this application is true, accurate and complete to the best of my knowledge and belief.

Name (Print): Jeffrey Peace Title: Field Environmental Advisor

Signature: Jeffrey H. Peace Date: 06/14/2010

e-mail address: Peace.Jeffrey@bp.com Telephone: 505-326-9479

20.
OCD Approval: ☐ Permit Application (including closure plan) ☒ Closure Plan (only) ☐ OCD Conditions (see attachment)

OCD Representative Signature: [signature] **Approval Date:** 6/21/11

Title: Environmental Engineer **OCD Permit Number:**

21.
Closure Report (required within 60 days of closure completion): Subsection K of 19.15.17.13 NMAC
Instructions: Operators are required to obtain an approved closure plan prior to implementing any closure activities and submitting the closure report. The closure report is required to be submitted to the division within 60 days of the completion of the closure activities. Please do not complete this section of the form until an approved closure plan has been obtained and the closure activities have been completed.

☐ **Closure Completion Date:**

22.
Closure Method:
☐ Waste Excavation and Removal ☐ On-Site Closure Method ☐ Alternative Closure Method ☐ Waste Removal (Closed-loop systems only)
☐ If different from approved plan, please explain.

23.
Closure Report Regarding Waste Removal Closure For Closed-loop Systems That Utilize Above Ground Steel Tanks or Haul-off Bins Only:
Instructions: Please indentify the facility or facilities for where the liquids, drilling fluids and drill cuttings were disposed. Use attachment if more than two facilities were utilized.

Disposal Facility Name: Disposal Facility Permit Number:

Disposal Facility Name: Disposal Facility Permit Number:

Were the closed-loop system operations and associated activities performed on or in areas that *will not* be used for future service and operations?
☐ Yes (If yes, please demonstrate compliance to the items below) ☐ No

Required for impacted areas which will not be used for future service and operations:
☐ Site Reclamation (Photo Documentation)
☐ Soil Backfilling and Cover Installation
☐ Re-vegetation Application Rates and Seeding Technique

24.
Closure Report Attachment Checklist: ***Instructions: Each of the following items must be attached to the closure report. Please indicate, by a check mark in the box, that the documents are attached.***
☐ Proof of Closure Notice (surface owner and division)
☐ Proof of Deed Notice (required for on-site closure)
☐ Plot Plan (for on-site closures and temporary pits)
☐ Confirmation Sampling Analytical Results (if applicable)
☐ Waste Material Sampling Analytical Results (required for on-site closure)
☐ Disposal Facility Name and Permit Number
☐ Soil Backfilling and Cover Installation
☐ Re-vegetation Application Rates and Seeding Technique
☐ Site Reclamation (Photo Documentation)
On-site Closure Location: Latitude Longitude NAD: ☐1927 ☐ 1983

25.
Operator Closure Certification:
I hereby certify that the information and attachments submitted with this closure report is true, accurate and complete to the best of my knowledge and belief. I also certify that the closure complies with all applicable closure requirements and conditions specified in the approved closure plan.

Name (Print): Title:

Signature: Date:

e-mail address: Telephone:

SITING AND HYDRO-GEOLOGICAL REPORT FOR GALLEGOS CANYON UNIT COM A 142E

Siting Criteria 19.15.17.10 NMAC

Depth to groundwater at the site is estimated to be less than 50 feet. This estimation is based on data from Stone and others (1983), and depth to groundwater data obtained from water wells permitted by the New Mexico State Engineer's Office (OSE, Figure 1). Local topography and proximity to adjacent water features are also considered. A topographic map of the site is provided as Figure 2 and demonstrates that the below grade tank (BGT) is not within 300 feet of any continuously flowing watercourse or within 200 feet of any other significant watercourse, lakebed, sinkhole or playa lake as measured from the ordinary high water mark. Figure 3 demonstrates that the BGT is within 300 feet of a permanent residence, school, hospital, institution or church. Figure 4 demonstrates, based on a search of the OSE database and USGS topographic maps, that there are freshwater wells or springs within 1000 feet of the BGT. Figure 5 demonstrates that the BGT is not within a municipal boundary or a defined municipal freshwater well field. Figure 6 demonstrates that the BGT is not within 500 feet of a wetland. Figure 7 demonstrates that the BGT is not in an area overlying a subsurface mine. The BGT is not located in an unstable area. Figure 8 demonstrates that the BGT is not within the mapped FEMA 100-year floodplain.

The BGT subject to the attached application for a permit under 19.15.17 NMAC (New Mexico Administrative Code) was in existence prior to promulgation of 19.15.17 NMAC. A review of the best available data and a visual inspection of the siting criteria of 19.15.17 NMAC specific to the BGT in question demonstrate that the BGT does not appear to pose an imminent threat to public health and the environment.

Local Geology and Hydrology

This particular site is located north of the San Juan River, northwest of the racetrack. Topography is dominated by the main channel of the river, its floodplain and terrace deposits. Moving away from the San Juan River, eroded surfaces of the Nacimiento Formation form slopes that are capped by the resistant sandstones of the San Jose Formation.

Regional Geology and Hydrology

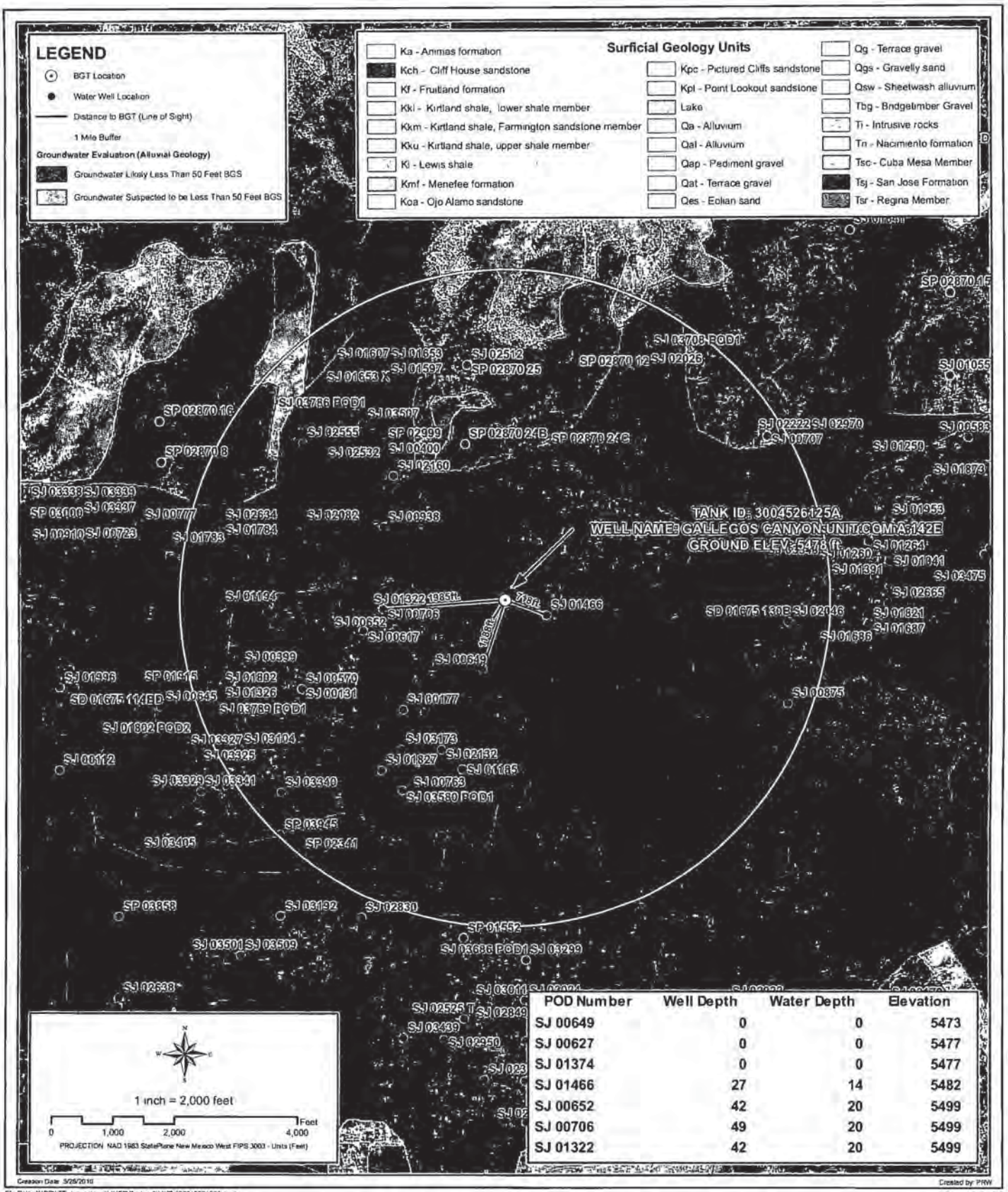
The San Juan Basin is situated in the Navajo section of the Colorado Plateau and is characterized by broad open valleys, mesas, buttes and hogbacks. Away from major valleys and canyons topographic relief is generally low. Native vegetation is sparse and shrubby. Drainage is mainly by the San Juan River, the only permanent stream in the Navajo Section of the Colorado Plateau. The San Juan River is a tributary of the Colorado River. Major tributaries include the Animas, Chaco and La Plata Rivers. Flow of the San Juan River across the basin is regulated by the Navajo Dam, located about 30 miles northeast of Farmington, New Mexico. The climate is arid to semiarid with an average annual precipitation of 8 to 10 inches. Soils within the basin consist of weathered parent rock derived from predominantly physical means mostly from eolian depositional system with fluvial having a lesser impact.

Cretaceous and Tertiary sandstones, as well as Quaternary Alluvial deposits, serve as the primary aquifers in the San Juan Basin (Stone et al., 1983). The predominant geologic formation this close to the San Juan River is Quaternary alluvium. Alluvial valley fill consists of gravel, sand, silt and clay (Stone et al., 1983). In the valleys of the San Juan River and its tributaries, the alluvium does not exceed 100 feet in thickness. Terrace deposits consist of boulder gravel resting on benches cut into the Tertiary bedrock of the area. Numerous shallow wells produce water from valley fill for stock and domestic uses along the river and transmissivities are generally high. Much of the water in the valley fill of the San Juan River comes from drainage of irrigated lands, as well as from underlying and adjacent bedrock units.

References

Circular 154—Guidebook to coal geology of northwest New Mexico By E. C. Beaumont, J. W. Shomaker, W. J. Stone, and others, 1976

Stone, et al., 1983, Hydrogeology and Water Resources of the San Juan Basin, New Mexico, Socorro, New Mexico Bureau of Mines and Mineral Resources Hydrologic Report 6, 70 p



POD Number	Well Depth	Water Depth	Elevation
SJ 00649	0	0	5473
SJ 00627	0	0	5477
SJ 01374	0	0	5477
SJ 01466	27	14	5482
SJ 00652	42	20	5499
SJ 00706	49	20	5499
SJ 01322	42	20	5499

Creation Date: 3/29/2016 Created by: PRW
File Path: X:\BPLTE_Inspections\LINES\Sector_9\MXDs\3004526125A.mxd Reviewed by: AGH

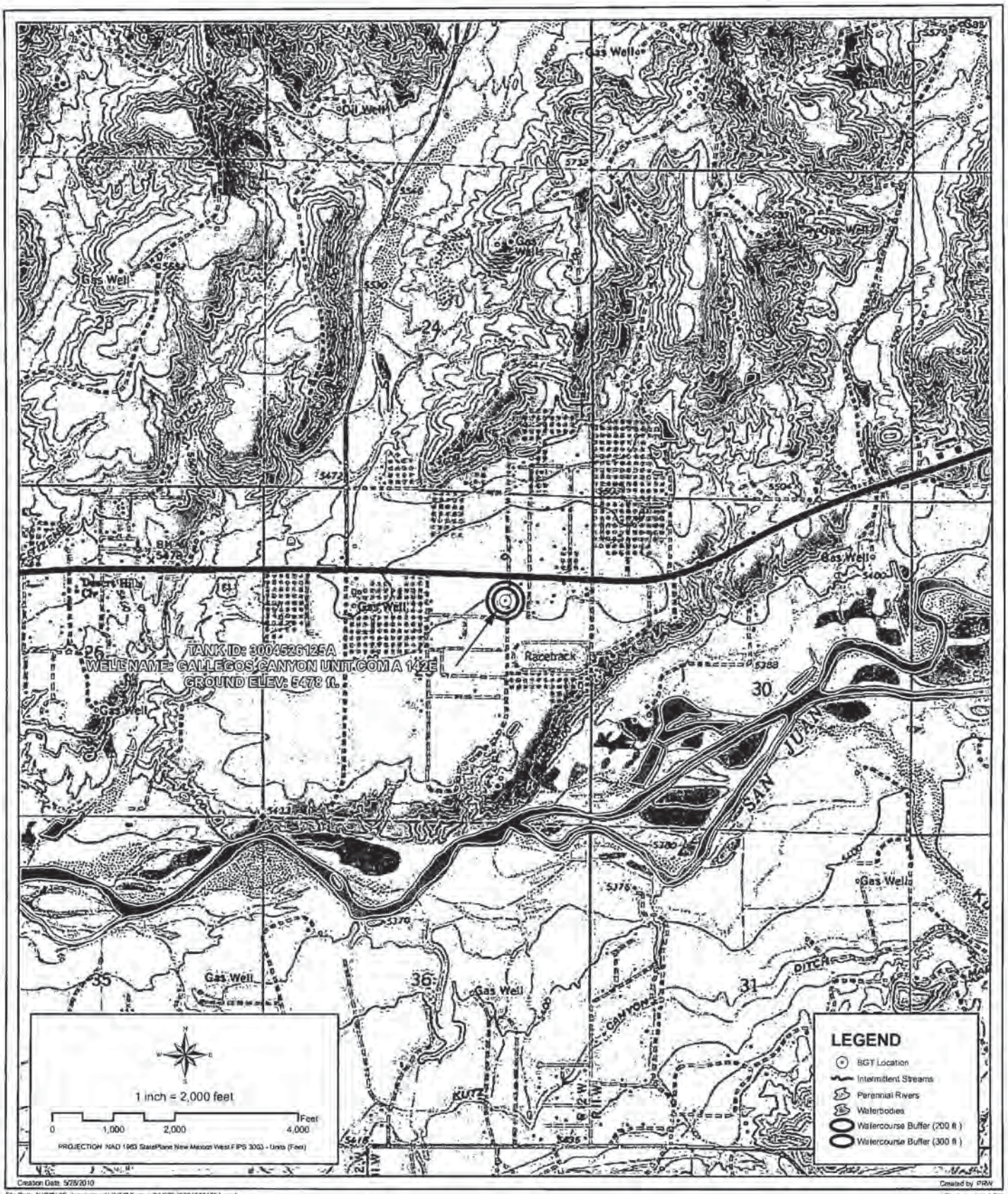
GROUNDWATER LESS THAN 50 FT.

WELL NAME: GALLEGOS CANYON UNIT COM A 142E

API NUMBER: 3004526125 TANK ID: 3004526125A

SECTION 25, TOWNSHIP 29.0N, RANGE 12W, P.M. NM23

FIGURE 1



bp

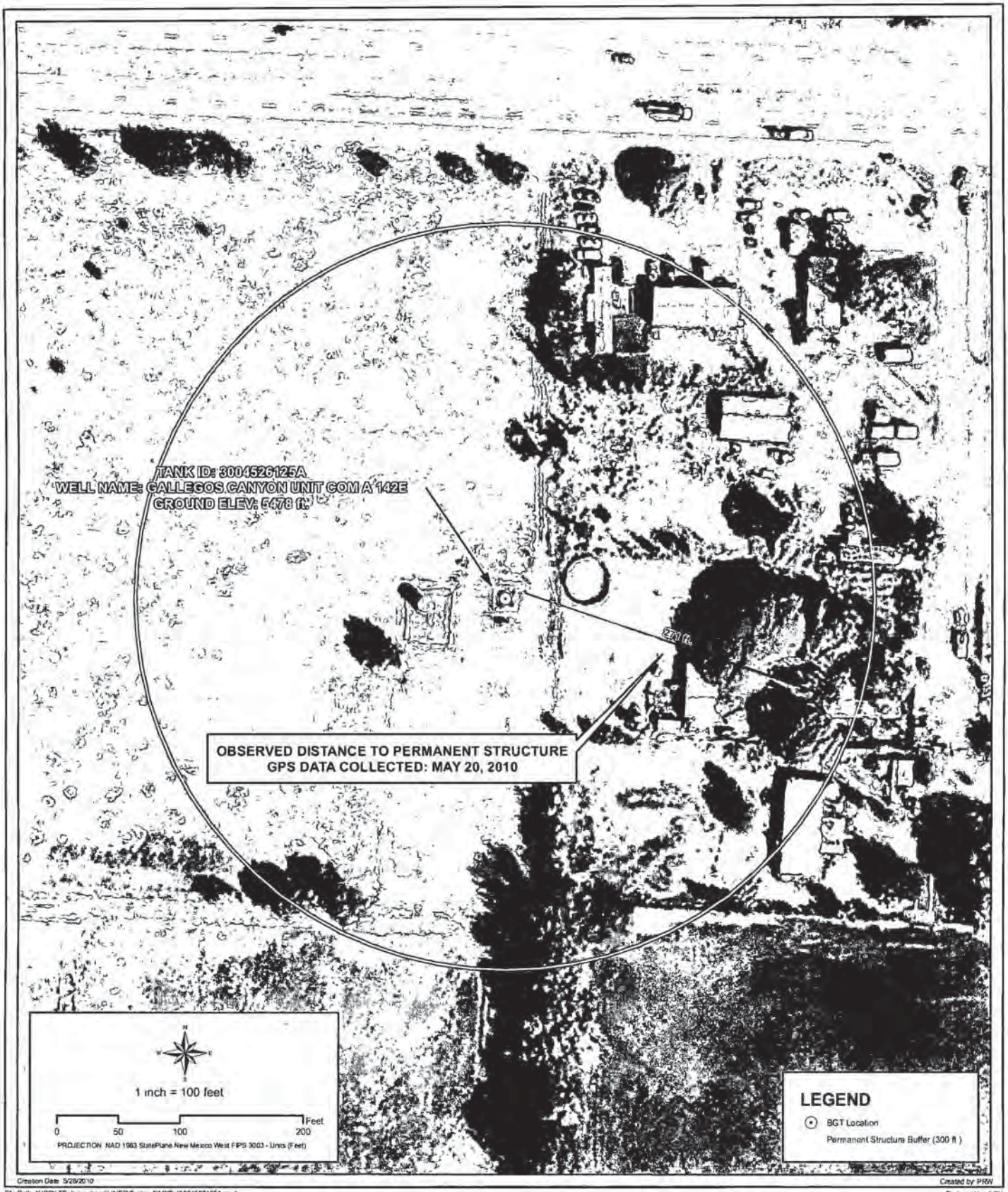
PROXIMITY TO WATERCOURSES

WELL NAME: GALLEGOS CANYON UNIT COM A 142E

API NUMBER: 3004526125 TANK ID: 3004526125A

SECTION 25, TOWNSHIP 29.0N, RANGE 12W, P.M. NM23

FIGURE 2



bp

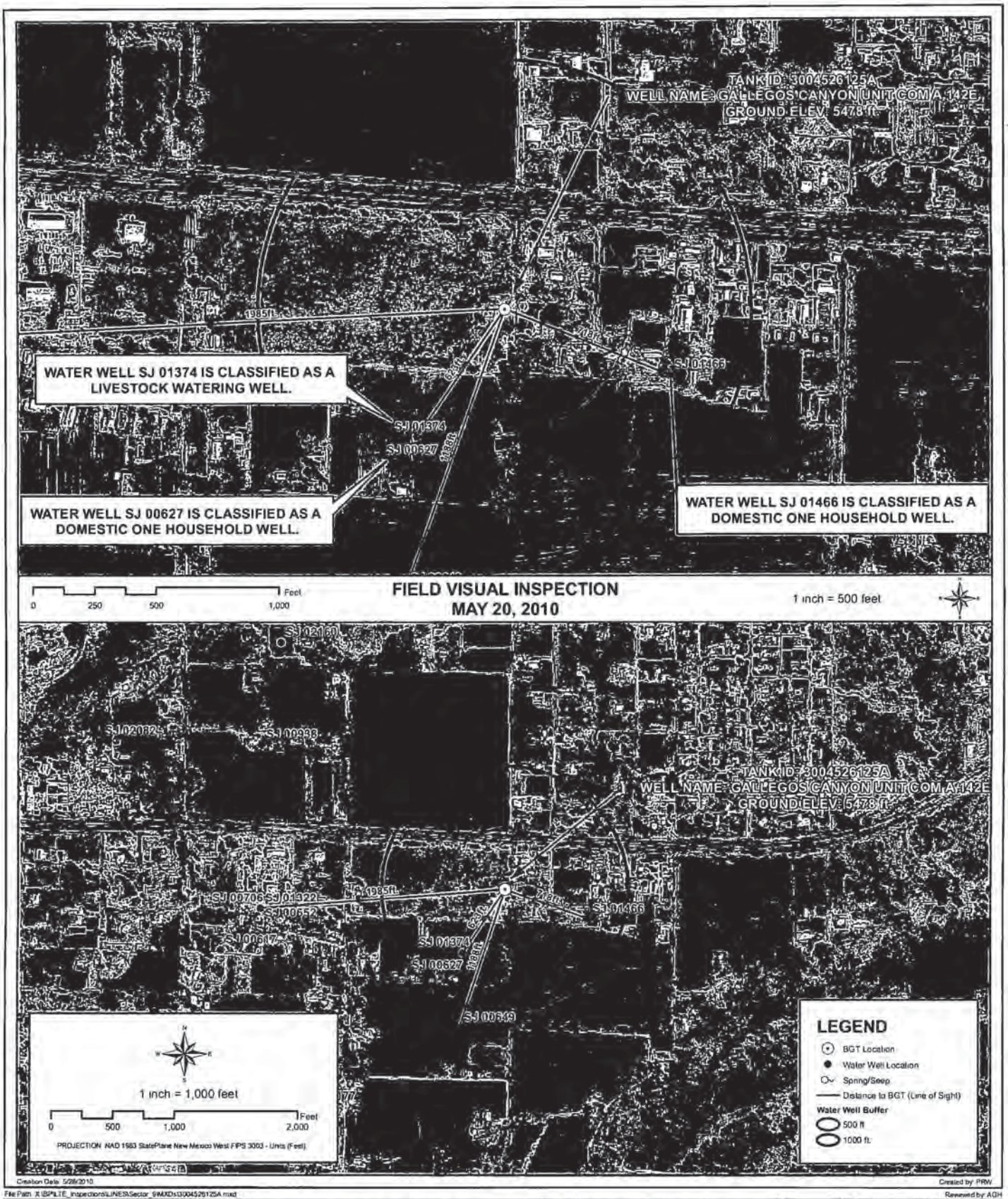
PROXIMITY TO PERMANENT STRUCTURE

WELL NAME: GALLEGOS CANYON UNIT COM A 142E

API NUMBER: 3004526125 TANK ID: 3004526125A

SECTION 25, TOWNSHIP 29.0N, RANGE 12W, P.M. NM23

FIGURE 3



bp

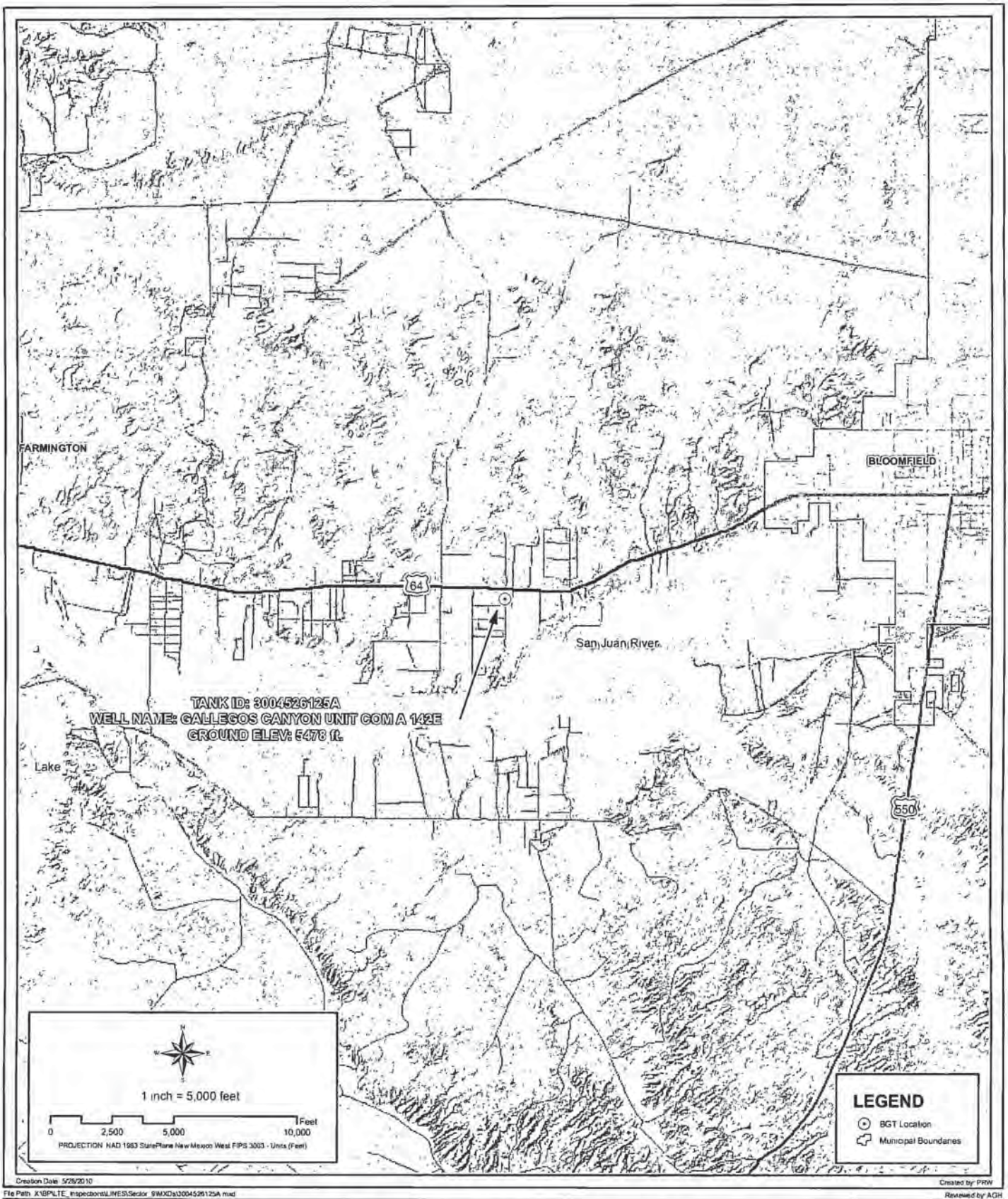
PROXIMITY TO WATER WELLS

WELL NAME: GALLEGOS CANYON UNIT COM A 142E

API NUMBER: 3004526125 TANK ID: 3004526125A

SECTION 25, TOWNSHIP 29.0N, RANGE 12W, P.M. NM23

FIGURE 4



bp

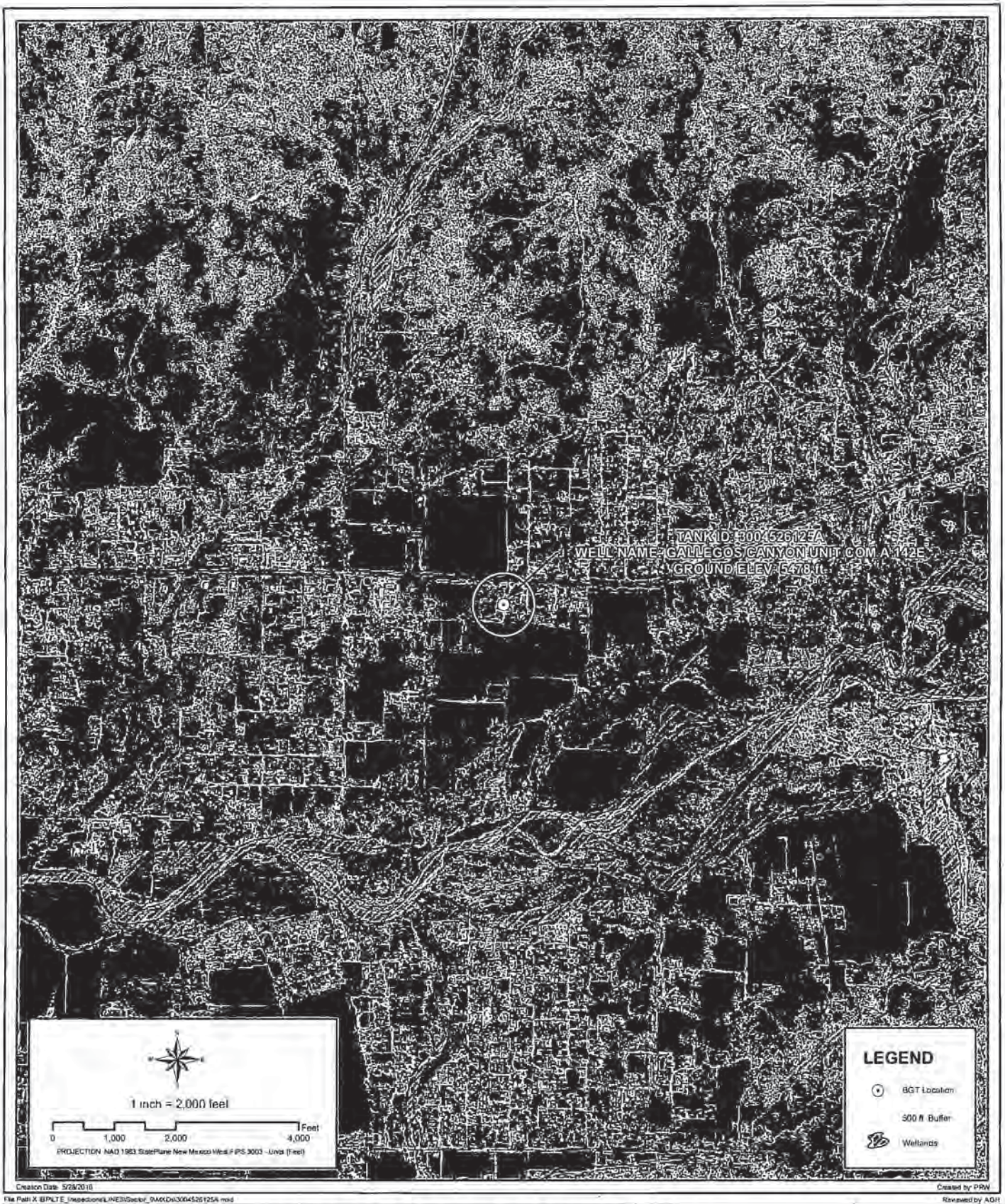
PROXIMITY TO MUNICIPAL BOUNDARY

WELL NAME: GALLEGOS CANYON UNIT COM A 142E

API NUMBER: 3004526125 TANK ID: 3004526125A

SECTION 25, TOWNSHIP 29.0N, RANGE 12W, P.M. NM23

FIGURE 5



bp

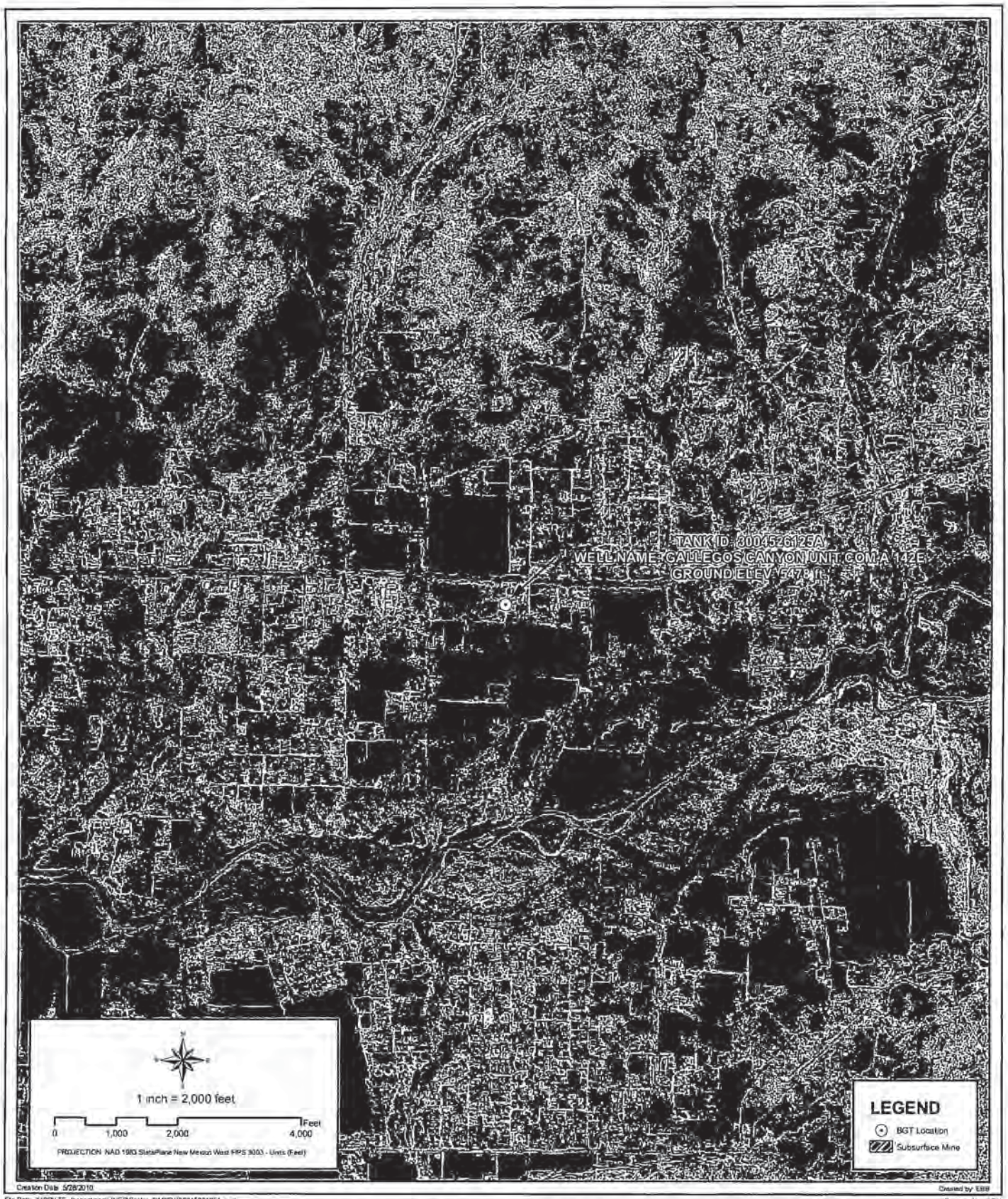
PROXIMITY TO WETLANDS

WELL NAME: GALLEGOS CANYON UNIT COM A 142E

API NUMBER: 3004526125 TANK ID: 3004526125A

SECTION 25, TOWNSHIP 29.0N, RANGE 12W, P.M. NM23

FIGURE 6



bp

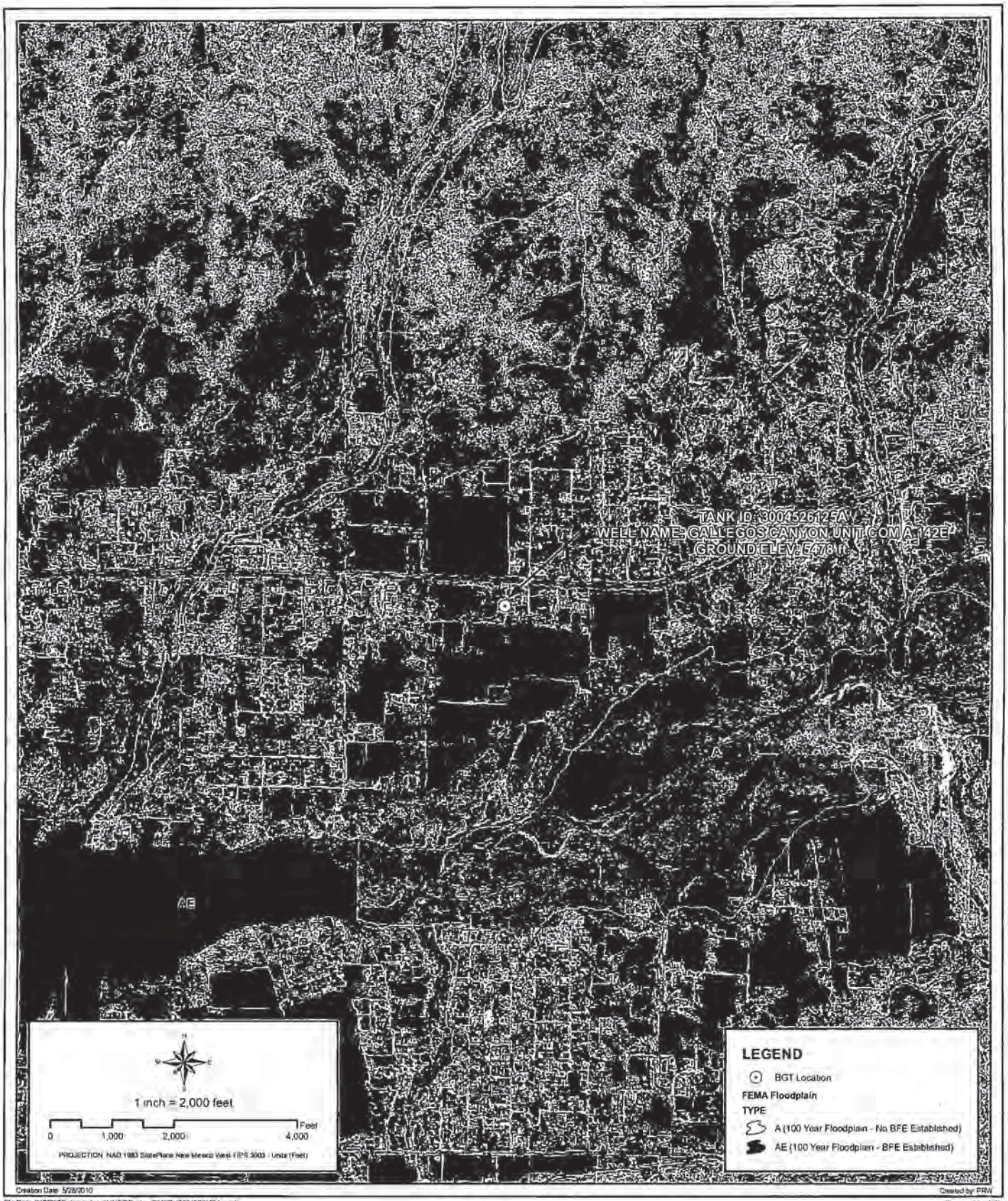
PROXIMITY TO SUBSURFACE MINES

WELL NAME: GALLEGOS CANYON UNIT COM A 142E

API NUMBER: 3004526125 TANK ID: 3004526125A

SECTION 25, TOWNSHIP 29.0N, RANGE 12W, P.M.NM23

FIGURE 7



bp

PROXIMITY TO FLOODPLAIN

WELL NAME: GALLEGOS CANYON UNIT COM A 142E

API NUMBER: 3004526125 TANK ID: 3004526125A

SECTION 25, TOWNSHIP 29.0N, RANGE 12W, P.M. NM23

FIGURE 8

SOUTHERN SAN JUAN BASIN (SSJB)

Figure Citation List

March 2010

Figure 1: Groundwater Less Than 50 ft.

Layers:

Water Wells: **iWaters Database: NMOSE/ISC (Dec. 2009)**

New Mexico Office of the State Engineer (OSE) /ISC iWaters database. (Data updated: 12/2009. Data received: 03/09/2010). Data available from: http://www.ose.state.nm.us/waters_db_index.html.

Cathodic Wells: **Tierra Corrosion Control, Inc. (Aug. 2008)**

Tierra Corrosion Control, Inc. 1700 Schofield Ln. Farmington, NM 87401. Driller's Data Log. (Data collected: All data are associated with cathodic protection wells installed at BP facilities between 2008-2009. Data received: 05/06/2010).

Hydrogeological Evaluation: **Wright Water Engineers, Inc. (2008)**

Evaluation completed by Wright Water Engineers, Inc. Durango Office. Data created using digital statewide geology at 1:500,000 from USGS in combination with 10m Digital Elevation Model (DEM) from NRCS. (Data compiled: 2008.)

Results: Spatial Polygons representing "Groundwater likely to be less than 50 ft." and "Groundwater suspected to be less than 50 ft.".

Surficial Geology: **USGS (1963/1987)**

Data digitized and rectified by Geospatial Consultants. (Data digitized: 03/23/ 2010). Original hard copy maps sourced from United States Geological Survey (USGS). Data available from: http://pubs.er.usgs.gov/.

Geology, Structure and Uranium Deposits of the Shiprock Quadrangle, New Mexico and Arizonia. 1:250,000. I - 345. Compiled by Robert B. O'Sullivan and Helen M. Beikman. 1963.

Geologic Map of the Aztec 1 x 2 Quadrangle, Northwestern New Mexico and Southern Colorado. 1:250,000. I - 1730. Compiled by Kim Manley, Glenn R. Scott, and Reinhard A. Wobus. 1987.

Aerial Imagery: **Conoco (Summer 2009)**

ConocoPhillips Company. (Flown: Summer 2009). 12 in. High Resolution Orthoimagery. Projected coordinate system name: NAD_1983_StatePlane_New_Mexico_West_FIPS_3003_Feet.

Provided as tiled .tiff images and indexed using polygon index layer.

Figure 2: Proximity to Watercourses

Layers:

Perennial Streams: **NHD, USGS (2010)**

National Hydrography Dataset (NHD). U.S. Geological Survey. (Data last updated: 02/19/2010. Data received: 03/09/2010). High-resolution: 1:24,000. Digital Representation of USGS 24k Topographic map series with field updates as required. Data available from: http://nhd.usgs.gov/.

Intermittent Streams: **NHD, USGS (2010)**

National Hydrography Dataset (NHD). U.S. Geological Survey. (Data last updated: 02/19/2010. Data received: 03/09/2010). High-resolution: 1:24,000. Digital Representation of USGS 24k Topographic map series with field updates as required. Data available from: http://nhd.usgs.gov/.

Water Bodies: **NHD, USGS (2010)**

National Hydrography Dataset (NHD). U.S. Geological Survey. (Data last updated: 02/19/2010. Data received: 03/09/2010). High-resolution: 1:24,000. Digital representation of USGS 24k Topographic map series with field updates as required. Data available from: http://nhd.usgs.gov/.

USGS Topographic Maps: **USGS (2007)**

USGS 24k Topographic map series. 1:24000. Maps are seamless, scanned images of USGS paper topographic maps. Data available from: http://store.usgs.gov.

Figure 3: Proximity to Permanent Structure

Layers:

Aerial Imagery: **Conoco (Summer 2009)**

ConocoPhillips Company. (Flown: Summer 2009). 12 in. High Resolution Orthoimagery. Projected coordinate system name: NAD_1983_StatePlane_New_Mexico_West_FIPS_3003_Feet.

Provided as tiled .tiff images and indexed using polygon index layer.

Figure 4: Proximity to Water Wells

Layers:

Water Wells: **iWaters Database: NMOSE/ISC (Dec. 2009)**

New Mexico Office of the State Engineer (OSE) /ISC iWaters database. (Data updated: 12/2009. Data received: 03/09/2010). Data available from: http://www.ose.state.nm.us/waters_db_index.html.

Springs/Seeps: **NHD, USGS (2010)**

National Hydrography Dataset (NHD). U.S. Geological Survey. (Data last updated: 02/19/2010. Data received: 03/09/2010). High-resolution: 1:24,000. Digital representation of USGS 24k Topographic map series with field updates as required. Data available from: http://nhd.usgs.gov/.

Aerial Imagery: **Conoco (Summer 2009)**

ConocoPhillips Company. (Flown: Summer 2009). 12 in. High Resolution Orthoimagery. Projected coordinate system name: NAD_1983_StatePlane_New_Mexico_West_FIPS_3003_Feet.

Provided as tiled .tiff images and indexed using polygon index layer.

Figure 5: Proximity to Municipal Boundary

Layers:

Municipal Boundary: **San Juan County, New Mexico (2010)**

Data provided by San Juan County GIS Division. (Data received: 03/25/2010).

Shaded Relief: **NED, USGS (1999)**

National Elevation Dataset (NED). U.S. Geological Survey, EROS Data Center. (Data created: 1999. Data downloaded: April, 2010). Resolution: 10 meter (1/3 arc-second). Data available from: http://ned.usgs.gov/.

StreetMap North America: **Tele Atlas North America, Inc., ESRI (2008)**

Data derived from Tele Atlas Dynamap/Transportation North America, version 5.2. (Data updated: annually. Data series issue: 2008).

Figure 6: Proximity to Wetlands

Layers:

Wetlands: **NWI (2010)**

National Wetlands Inventory (NWI). U.S Fish and Wildlife Service. (Data last updated: 09/25/2009. Data received: 03/21/2010). Data available from: http://www.fws.gov/wetlands/.

Aerial Imagery: **Conoco (Summer 2009)**

ConocoPhillips Company. (Flown: Summer 2009). 12 in. High Resolution Orthoimagery. Projected coordinate system name:
NAD_1983_StatePlane_New_Mexico_West_FIPS_3003_Feet.

Provided as tiled .tiff images and indexed using polygon index layer.

Figure 7: Proximity to Subsurface Mine

Layers:

Subsurface Mine: **NM Mining and Minerals Division (2010)**

New Mexico Mining and Minerals Division. (Data received: 03/12/2010). Contact: Susan Lucas Kamat, Geologist. Provided PLSS NM locations (Sections) for the two subsurface mines located in San Juan and Rio Arriba counties.

Aerial Imagery: **Conoco (Summer 2009)**

ConocoPhillips Company. (Flown: Summer 2009). 12 in. High Resolution Orthoimagery. Projected coordinate system name:
NAD_1983_StatePlane_New_Mexico_West_FIPS_3003_Feet.

Provided as tiled .tiff images and indexed using polygon index layer.

Figure 8: Proximity to FEMA Floodplain

Layers:

FEMA Floodplain: **FEMA (varying years)**

Data digitized and rectified by Wright Water Engineers, Inc. (Data digitized: August 2008). Digitized from hard copy Flood Insurance Rate Maps (FIRMs) (varying years) of San Juan County.

Aerial Imagery: **Conoco (Summer 2009)**

ConocoPhillips Company. (Flown: Summer 2009). 12 in. High Resolution Orthoimagery. Projected coordinate system name:
NAD_1983_StatePlane_New_Mexico_West_FIPS_3003_Feet.

Provided as tiled .tiff images and indexed using polygon index layer.

BP AMERICA PRODUCTION COMPANY
SAN JUAN BASIN, NORTHWEST NEW MEXICO

BELOW-GRADE TANK CLOSURE PLAN

This plan will address the standard protocols and procedures for closure of below-grade tanks (BGTs) on BP America Production Company (BP) well sites. As stipulated in Paragraph A of 19.15.17.13 NMAC, BP shall close a BGT within the time periods provided in 19.15.17.13 NMAC, or by an earlier date that the New Mexico Oil Conservation Division (NMOCD) requires because of imminent danger to fresh water, public health, safety or the environment. If deviations from this plan are necessary, any specific changes will be included on form C-144 and approved by the NMOCD. BP shall close an existing BGT that does not meet the requirements of Paragraphs (1) through (4) of Subsection I of 19.15.17.11 NMAC or is not included in Paragraph (5) of Subsection I of 19.15.17.11 NMAC within five years after June 16, 2008, if not retrofit with a BGT that complies with the BP NMOCD approved BGT design attached to the BP Design and Construction Plan. BP shall close an existing BGT that does not meet the requirements of Paragraphs (1) through (4) of Subsection I of 19.15.17.11 NMAC, if not previously retrofitted to comply with the BP NMOCD approve BGT Design attached to the BP Design and Construction Plan, prior to any sale or change in operator pursuant to 19.15.9.9 NMAC. BP shall close the permitted BGT within 60 days of cessation of the BGTs operation or as required by the transitional provisions of Subsection B, D, or E of 19.15.17.17 NMAC.

General Closure Plan

1. BP shall notify the surface owner by certified mail that it plans to close a BGT. Evidence of mailing of the notice to the address of the surface owner shown in the county tax records demonstrates compliance with this requirement.
2. BP shall notify the division District III office verbally or by other means at least 72 hours, but not more than one (1) week, prior to any closure operation. The notice shall include the operator's name, and the location to be closed by unit letter, section, township and range. If the BGT closure is associated with a particular well, then the notice shall also include the well's name, number and API number.
3. BP shall remove liquids and sludge from the BGT prior to implementing a closure method and dispose of the liquids and sludge in a NMOCD's division-approved facility. The facilities to be used are:
    a. BP Crouch Mesa Landfarm, Permit NM-02-003 (Solids)
    b. JFJ Landfarm, Permit NM-01-010(B) (Solids and Sludge)
    c. Basin Disposal, Permit NM-01-0005 (Liquids)
    d. Envirotech Inc Soil Remediation Facility, Permit NM-01-0011 (Solids and Sludge)
    e. BP Operated E.E. Elliott SWD #1, API 30-045-27799 (Liquids)
    f. BP Operated 13 GCU SWD #1, API 30-045-28601 (Liquids)
    g. BP Operated GCU 259 SWD, API 30-045-20006 (Liquids)
    h. BP Operated GCU 306 SWD, API 30-045-24286 (Liquids)
    i. BP Operated GCU 307 SWD, API 30-045-24248 (Liquids)
    j. BP Operated GCU 328 SWD, API 30-045-24735 (Liquids)
    k. BP Operated Pritchard SWD #1, API 30-045-28351 (Liquids)

4. BP shall remove the BGT and dispose of it in a NMOCD approved facility or recycle, reuse, or reclaim it in a manner that the NMOCD approves. If a liner is present and must be disposed of it will be cleaned by scraping any soils or other attached materials on the liner to a de minimus amount and disposed at a permitted solid waste facility, pursuant to Subparagraph (m) of Paragraph (1) of Subsection C of 19.15.35.8 NMAC. Documentation as to the final disposition of the removed BGT will be provided in the final closure report.
5. BP shall remove any on-site equipment associated with a BGT unless the equipment is required for well production.
6. BP shall test the soils beneath the BGT to determine whether a release has occurred. BP shall collect at a minimum: a five (5) point composite sample and individual grab samples from any area that is wet, discolored or showing other evidence of a release and analyze for BTEX, TPH and chlorides. The testing methods for those constituents are as follows;

Constituents	Testing Method	Release Verification (mg/Kg)
Benzene	US EPA Method SW-846 8021B or 8260B	0.2
Total BTEX	US EPA Method SW-846 8021B or 8260B	50
TPH	US EPA Method SW-846 418.1	100
Chlorides	US EPA Method 300.0 or 4500B	250 or background

Notes: mg/Kg = milligram per kilogram, BTEX = benzene, toluene, ethylbenzene, and total xylenes, TPH = total petroleum hydrocarbons. Other EPA methods that the division approves may be applied to all constituents listed. Chloride closure standards will be determined by which ever concentration level is greatest.

7. BP shall notify the division District III office of its results on form C-141.
8. If it is determined that a release has occurred, then BP will comply with 19.15.30 NMAC and 19.15.29 NMAC, as appropriate.
9. If the sampling demonstrates that a release has not occurred or that any release does not exceed the concentrations specified above, then BP shall backfill the excavation, with compacted, non-waste containing, earthen material; construct a division-prescribed soil cover, re-contour and re-vegitate the location. The location will be reclaimed if it is not with in the active process area.
10. BP shall reclaim the BGT location and all areas associated with the BGT including associated access roads to a safe and stable condition that blends with the surrounding undisturbed area. BP shall substantially restore the impacted surface area to the condition that existed prior to oil and gas operations by placement of the soil cover as provided in Subsection H of 19.15.17.13 NMAC, re-contour the location and associated areas to a contour that approximates the original contour and blends with the surrounding topography and re-vegetate according to Subsection I of 19.15.17.13 NMAC.
11. The soil cover for closures where the BGT has been removed or remediated to the NMOCD's satisfaction shall consist of the background thickness of topsoil or one foot of suitable material to establish vegetation at the site, whichever is greater. The soil

12. BP shall seed the disturbed area the first growing season after closure of the BGT. Seeding will be accomplished by drilling on the contour whenever practical or by other division-approved methods. Vegetative cover will be, at a minimum, 70% of the native perennial vegetative cover (un-impacted by overgrazing, fire or other intrusion damaging to native vegetation), consisting of at least three native plant species, including at least one grass, but not including noxious weeds, and maintenance of that cover through two successive growing seasons. During the two growing seasons that prove viability, there shall be no artificial irrigation of the vegetation.
13. BP shall seed, plant and re-seed pursuant to Paragraph (3) of Subsection I of 19.15.17.13 NMAC, until the location successfully achieves the required vegetative cover.
14. Pursuant to Paragraph (5) of Subsection I of 19.15.17.13 NMAC, BP shall notify the NMOCD when it has seeded or planted and when it successfully achieves re-vegetation.
15. Within 60 days of closure completion, BP shall submit a closure report on NMOCD's form C-144, and will include the following;
    a. proof of closure notification (surface owner and NMOCD)
    b. sampling analytical reports; information required by 19.15.17 NMAC;
    c. disposal facility name and permit number
    d. details on back-filling, capping, covering, and where applicable re-vegetation application rates and seeding techniques and
    e. site reclamation, photo documentation.Disposal Facility Name and Permit Number
16. BP shall certify that all information in the report and attachments is accurate, truthful, and compliant with all applicable closure requirements and conditions specified in the approved closure plan.

BP AMERICA PRODUCTION COMPANY

San Juan Basin in Northwest New Mexico
Below-Grade Tank Design and Construction Plan

Pursuant to Rule 19.15.17.11 NMAC, BP America Production Company (BP) shall construct a below-grade tank (BGT) or modify an existing permitted BGT according to the following plan. Any deviations from this plan will be addressed on the New Mexico Oil Conservation Division's (NMCOD) form C-144 at the time of submittal.

Design and Construction Plan

1. BP will design and construct a BGT which will be constructed to contain liquids and prevent contamination of fresh water and protect public health and the environment.

2. BP is the well operator and shall install and maintain a well sign that is in compliance with 19.15.16.8 NMAC. The sign will be posted at the well site to address, at a minimum;
   a. Well Number
   b. Property name
   c. Operators name
   d. Location by footage, quarter-quarter section, township and range (or unit letter)
   e. API number
   f. Emergency contact information

3. BP will fence or enclose its BGTs in a manner that prevents unauthorized access and shall maintain its fence in good repair.

4. BP will fence or enclose a BGT located within 1,000 feet of a permanent residence, school, hospital, institution or church with, at a minimum a chain link security fence at least six (6) feet in height with at least two (2) strands of barbed wire at the top. BP will ensure that all gates associated with the fence are closed and locked when responsible personnel are not on-site.

5. BP is requesting NMOCD's approval for an alternative fence design that provides, at a minimum, equivalent protection to the design specified in Paragraph 3 of Subsection D of 19.15.17.11 NMAC for BGTs beyond the stated distance in paragraph 4 of this document. BP's proposed design for its BGTs will utilize 48" steel mesh field-fence (hogwire) with a metal or steel top rail. Perimeter T-post will be installed roughly every 10 feet.

6. BP will construct an expanded metal covering that completely covers the top of the BGT. The covering will be constructed such that it will prevent hazardous conditions to wildlife, including migratory birds

7. BP shall construct the BGT of materials that are resistant to produced water, any contained liquids, and damage from sunlight. BP's BGTs will be constructed of carbon steel that meets the requirements of ASTM A36.

8. BP's BGTs shall have a properly constructed earthen foundation consisting of a level base free of rocks, debris, sharp edges, or irregularities as to prevent punctures, cracks or indentations to the tank bottom as demonstrated on the design drawing.

9. BP will construct and operate the BGT to prevent surface water run-on by using both earthen

berms and leaving a portion of the BGT above the original grade as demonstrated on the design drawing.

10. BP will construct and operate the BGT to prevent overflow and overfilling of the BGT. Overflow will be prevented by use of an electronic high fluid level detector that will automatically engage an electronic shut-off valve when a 1 foot freeboard is reached. The Hi-level automatic alarm notifies well optimizers when liquid level has reached within a pre-set distance to the top of the BGT. The Hi Hi alarm will trigger the Hi-level automatic shutdown valve which will close in the well until the liquid level can be lowered.

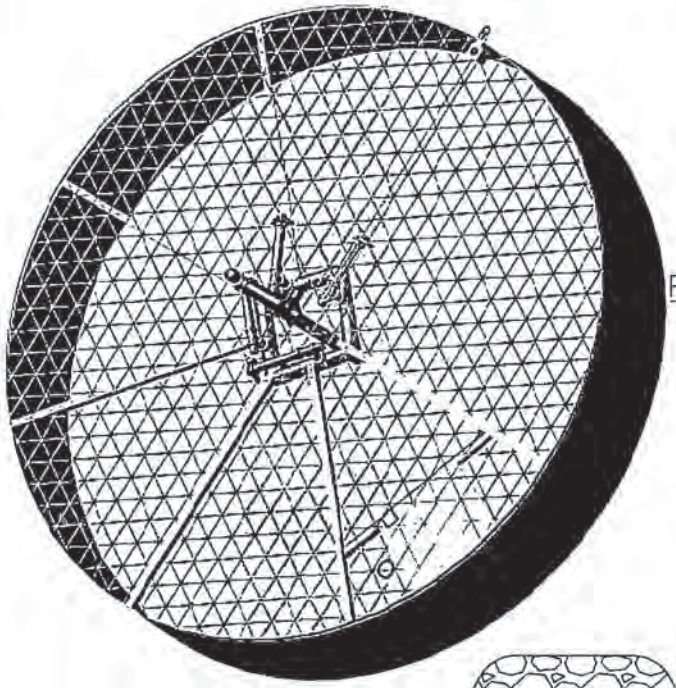
11. BP will construct and install a double-walled tank design per Subparagraph (b) of Paragraph (4) of Subsection I of19.15.17.11 NMAC with a two (2) inch diameter leak detection port. The floor supports located in the annular space of the tank bottom will be channeled to allow outward movement of liquid between the walls. Leak detection will be monitored per BP's Operating and Maintenance Plan. The walls of the BGT will be constructed of carbon steel that meets the ASTM A36 standard. BP's BGT design will insure containment of tank contents and protect underlying groundwater. The production equipment line drain is an automated drain that allows water level in production equipment (generally the separator) to be maintained within the equipment's operating parameters. The environmental drain is a manually operated drain that is used to drain liquids off of equipment. The tank drain is a manually operated drain, typically in the closed position that is used to rid the condensate tank of any water accumulation. The vent drain is a manually operated drain off the discharge of production equipment (usually the separator) and is used to blowdown the wellsite. The swab drain line is a manually operated drain originating between the wellhead and separator and is used during well workovers when large amounts of liquid are removed from the well and sent straight to the BGT.

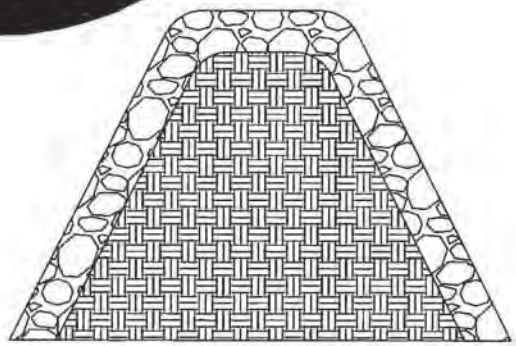
12. BP owned and operated BGTs that were constructed and installed prior to June 16, 2008 that do not meet all the requirements of Paragraphs (1) through (4) of Subsection I of 19.15.17.11 NMAC and are not included in Paragraph (6) of Subsection I of 19.15.17.11 NMAC are not required to equip or be retrofit to comply with Paragraphs (1) through (4) of Subsection I of 19.15.17.11 NMAC so long as the BGT demonstrates integrity. If the existing BP BGT does not demonstrate integrity, BP shall promptly remove the BGT and install a BGT that complies with the BP NMOCD approved BGT design attached to the Design and Construction Plan. BP shall comply with the operational requirements of 19.15.17.12 NMAC.

13. BP owned and operated BGTs that were constructed and installed prior to June 16, 2008 that are single walled and where any portion of the tank side wall is below ground surface and not visible shall be retrofit or replaced to comply with Paragraphs (1) through (4) of Subsection I of 19.15.17.11 NMAC or shall be closed within 5 years of June 16, 2008. If the existing BP owned and operated BGT does not demonstrate integrity, BP shall promptly remove the BGT and install a BGT that complies with the BP NMOCD approved BGT design attached to the Design and Construction Plan. BP shall comply with the operational requirements of 19.15.17.12 NMAC.

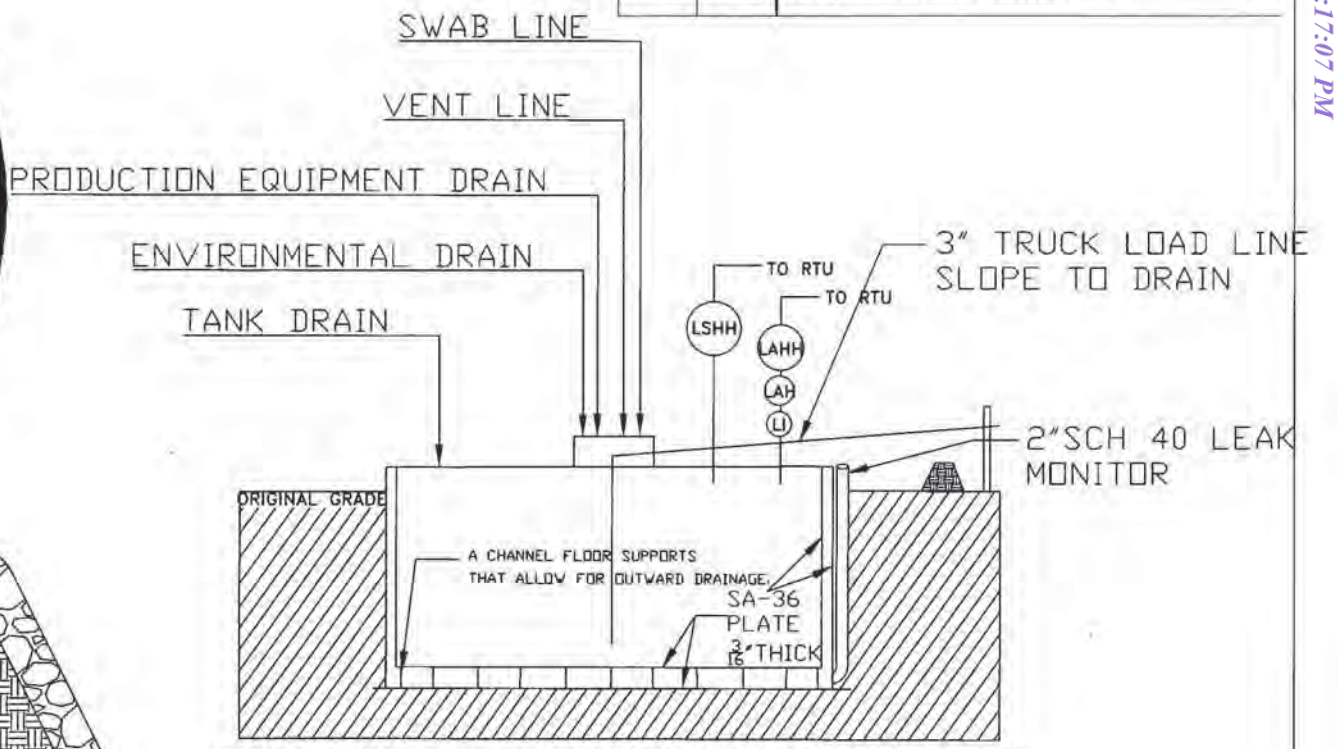
14. The general specifications for the design and construction of the BGT have been provided in the attached BP design and construction schematic.

DOUBLE WALLED BGT





MANUAL OPERATION	
1.)	PRODUCTION TANK DRAIN LINE
2.)	SWAB LINE
3.)	ENVIRONMENTAL DRAIN
AUTOMATED OPERATION	
1.)	VENT LINE DRAIN LINE
2.)	SEPARATOR DRAIN LINE
3.)	AUTOMATIC SHUT OFF LSHH ACTIVATES AT 12" FROM TOP OF TANK



PROPERLY CONSTRUCTED FOUNDATION CONSISTING OF A LEVEL BASE FREE OF ROCKS, DEBRIS, SHARP EDGES OR IRREGULARITIES TO PREVENT PUNCTURES CRACKS OR INDENTATIONS TO THE TANK BOTTOM.

bp

SAN JUAN OPERATIONS CENTER
FARMINGTON, NEW MEXICO
BP AMERICA PRODUCTION COMPANY

FACILITIES LAYOUT
DOUBLE WALLED BELOW GRADE TANK

BP AMERICA PRODUCTION COMPANY

San Juan Basin in Northwest New Mexico
Below-Grade Tank Operating and Maintenance Plan

Pursuant to Rule 19.15.17.12 NMAC, BP America Production Company (BP) shall maintain and operate a below-grade tank (BGT) with the following requirements. Deviations from this plan will be addressed with a submittal to the New Mexico Oil Conservation Division's (NMOCD) using form C-144 at the time of the BGT permit or modification to an existing permitted BGT application.

Operating and Maintenance Plan

1. BP's BGTs will be operated and maintained to contain liquids and solids and promptly identify a release or potential release. BP's BGTs will be operated and maintained to prevent contamination to freshwater and protect public health and the environment. BP will use automated high fluid level alarms and automated shut-off valves to insure that liquids are contained within the vessel and that the vessel does not overflow. These alarms and shut-off valves will be consistent with those demonstrated in the design plan. BP will perform and document inspections of the BGTs on a monthly basis to confirm the integrity of the vessel.

2. BP will not knowingly discharge or store any hazardous waste into a BGT

3. If a BGT develops a leak, or a release occurs due to mechanical failure or vandalism, or if a penetration of the BGT occurs below the liquid's surface, BP shall: 1) evacuate liquids from the BGT to a level below the damage or leak line within 48 hours; and 2) notify the NMOCD's District III office within 48 hours of the discovery. BP will review #4 of the BP Operating and Maintenance plan prior to any repair or replacement to determine if the BGT and location will require closure. If appropriate BP shall repair or replace the BGT with the BP NMOCD approved design. If a release from the BGT occurs BP shall follow the release reporting procedures of 19.15.29 NMAC. If closure of the BGT is required, BP shall implement the approved closure plan for the BGT.

4. If a BP operated BGT that was constructed and installed prior to June 16, 2008 that does not meet the requirements of Paragraphs (1) through (4) of Subsection I of 19.15.17.11 NMAC does not demonstrate integrity or if the BGT develops any of the conditions identified in Paragraph (5) of Subsection A of 19.15.17.12 NMAC, BP shall close the existing BGT pursuant to the closure requirements of 19.15.17.13 NMAC and will install a BGT that complies with BP NMOCD approved BGT design attached to the Design and Construction Plan.

5. If a BP operated BGT that was constructed and installed prior to June 16, 2008 that does not comply with Paragraphs (1) through (4) of Subsection I of 19.15.17.11 NMAC is equipped or retrofit to comply with Paragraphs (1) through (4) of Subsection I of 19.15.17.11 NMAC, BP shall visually inspect the area beneath the BGT during the retrofit and shall document any areas that are wet, discolored or showing other evidence of a release on Form C-141. BP shall demonstrate to the division whether evidence of contamination indicates that an imminent threat to fresh water, public health, safety or the environment exists. If the division

6. BP will install and construct the BGT following the BP NMOCD approved Design and Construction Plan, and will control surface water run on by the use of a berm or leaving a portion of the tank wall exposed. BP will use high level shot-off devices to insure that the BGT does not overflow.

7. The following requirements adhere to Subsection D of 19.15.17.12 NMAC.

    a. BP will remove any visible or measurable layer of oil from the fluid surface of the BGT.
    b. BP will inspect the BGT monthly. The monthly inspection will consist of the following:
        i. Personnel will conduct a walk-around of the BGT to observe any abnormalities or signs of corrosion on the vessel. Personnel will inspect the surface run-on berm. Where applicable, inspection of the BGT's double wall – double bottom inspection port, tank flanges and valves for signs of leakage or spills will be conducted. Personnel will record any BGT deficiencies, repair as necessary and report to BP Dispatch Office immediately if an imminent danger to fresh water, public heath, or to the environment is observed. BP will maintain a written record of the monthly inspections on the BP inspection from referred to as the San Juan Lease Inspection Form. BP will maintain these written records for at least five (5) years. A copy of the San Juan Lease Inspection Form is attached.

8. BP will maintain sufficient freeboard of one foot in the BGT to prevent overtopping.

Managed Form NOP-5878 Revision 1

San Juan Lease Inspection

Custodian: Field Environmental Coordinator

Date: **Run:** ***Location:*** ***Name of Inspector:***

Yes	Action	N/A	
			Required Signs
			Does location have Well Sign and emergency phone number?
			Do compressor engines have Hearing Protection signs?
			Hydrogen Sulfide Signs (where applicable)
			Chemical containers and tanks have proper Hazcom label or BP Multi-Product Hazcom numbers?
Yes	Action	N/A	**Location- General**
			Housekeeping satisfactory?
			Tripping or falling hazards are absent? **If NO, identify and report to FSC.**
			Rig anchors/Deadmen adequately marked and visible if they present a hazard to drivers?
			Driving hazards such as risers are marked or flagged?
			Painting meets safety standards?
			Cattleguards/gates properly maintained?
			Tarps in good repair?
			Seeps, drips, or leaks are absent?
			Is weed control adequate?
			Stains on ground are absent? **If NO, remediate immediately, identify and report to FEC.**
			Are there any open ended valves that are not plugged?
Yes	Action	N/A	**Vessel/Tank**
			Adequate fencing around below grade tank?
			Are the dike/berm walkover in place, used and stable?
			Are dikes/berms in good condition?
			Is there adequate and safe access to pit for gauging?
			Does the pit have a high level alarm?
			Are stairways and catwalks properly maintained and in good condition?
			Toprail, midrail and toeboard in place?
			Are thief hatches in good condition, seal properly, and in the closed position?
			Is tank vent line equipped with a PV valve? (Enardo)
			Does the tank have a high level alarm?
			Are open ended load lines and pipes capped?
			Is soil around load lines clean of oil stains?
			Is tank area free of any evidence of seeps or leaks (including manway cover)?
			Are there proper seals on sales and drain valves?
			Are all suspected dump lines well supported?
			Are above ground dump lines marked with t-posts and plastic covers?
			Have all fiberglass drip pits been removed?
Yes	Action	N/A	**Treaters/Separators/Compressors/Pump Jacks**
			If there is a block valve upstream of the relief valve, is the block valve secured in the open position?
			Are relief valve discharge and blow downs piped to a safe area and secured against movement?
			Has flame arrestor been inspected within the last 5 years?
			Is flame port closed?
			Do all lines pass through a super muffler or swirl pot to the pit/tank? If not, are all lines secured?
			Is starting gas vented to a safe area, at least 10' vertically?
			No excessive vibration, knocking or unusual noises anywhere on unit or piping?
			Are site glasses in operating condition?
			Are environmental rails piped to a pit in a dedicated line?
			Do all blow downs, relief valve discharges, and risers have rain caps?
			Stuffing box leaks are absent?
			Are the weight guards and belt guard in place?
			Are skids in good condition?
			Are concrete bases / foundations in good condition?
			Are concrete bases free from erosion or settlement problems?
			Is secondary containment in place for day tanks?

Comments:

Signature of Inspector:

My signature assures that this location is SAFE, is in compliance with the LAW, and exhibits high standards of Pride, Ownership and Excellence.

Jones, Brad A., EMNRD

From: Shaw, Buddy D [buddy.shaw@bp.com]
Sent: Friday, June 17, 2011 10:49 AM
To: Jones, Brad A., EMNRD
Cc: Peace, Jeffrey; Schwab, Lorinda A
Subject: BP BGT CLOSURES

Please process closure permit for the following sites:

GCU Com A 142E	3004526125	Tank A	Sector 9
Tapp LS 7	3004520322	Tank A	Sector 7

THANKS
Buddy

(505) 320-0401

ATTACHMENT J

MONITORING WELL INSTALLATION RECORD

Borehole # 2
Well # 1
Page 1 of 1

Philip Environmental Services, Inc.
4000 Monroe Rd.
Farmington, NM 87401
(505) 326-2262 FAX (505) 326-2388

Project Name EPFS GW PITS
Project Number 17520 Phase 6002.77
Site Location GCU COM A #142E-DB906

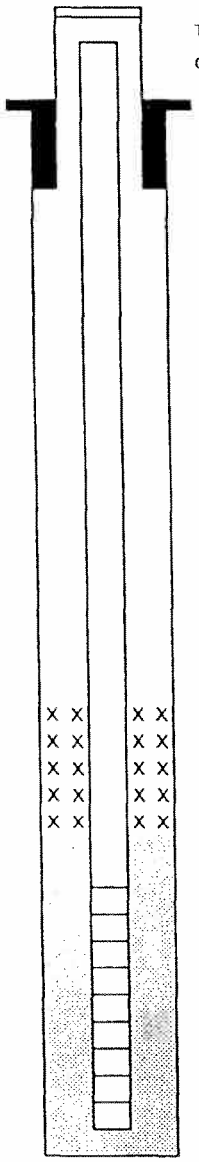
Elevation
Well Location T29N-R12W-S25-L'G'
GWL Depth 12'
Installed By M DONOHUE

On-Site Geologist D CESARK
Personnel On-Site D CHARLEY
Contractors On-Site
Client Personnel On-Site

Date/Time Started 2/26/97 — 1000
Date/Time Completed " — 1200

Depths in Reference to Ground Surface

Item	Material	Depth (feet)
Top of Protective Casing		
Bottom of Protective Casing		
Top of Permanent Borehole Casing		N/A
Bottom of Permanent Borehole Casing		N/A
Top of Concrete		
Bottom of Concrete		
Top of Grout		
Bottom of Grout		
Top of Well Riser	SCHED 40 PVC	+3'
Bottom of Well Riser	"	-3.5'
Top of Well Screen	.010 SCREEN	-3.5'
Bottom of Well Screen	"	-18.5'
Top of Peltonite Seal	ENVIROPLUG	0'
Bottom of Peltonite Seal	"	-2'
Top of Gravel Pack	10-20 SAND	-2'
Bottom of Gravel Pack	"	-18.5'
Top of Natural Cave-In		-18.5'
Bottom of Natural Cave-In		~~20'~~
Top of Groundwater		12'
Total Depth of Borehole		20'



Top of Protective Casing N/A
Top of Riser +3'
Ground Surface -0'

Top of Seal -0'
Top of Gravel Pack -2'
Top of Screen -3.5'
Bottom of Screen -18.5'
Bottom of Borehole -20'

Comments:

Geologist Signature

RECORD OF SUBSURFACE EXPLORATION

Borehole # BH- 2
Well #
Page 1 of 1

PHILIP ENVIRONMENTAL SERVICES INC.
4000 Monroe Road
Farmington, New Mexico 87401
(505) 326-2262 FAX (505) 326-2388

Project Name EPFS GW PITS
Project Number 17520 Phase 6001.77
Project Location GCU COM A # 142E - 03906

Elevation
Borehole Location T29 R12 S25 Ltr G
GWL Depth 17.5' → 12'+
Logged By D CESARIC
Drilled By M DONOHUE
Date/Time Started 2/26/97 - 0900
Date/Time Completed " - 1000

Well Logged By D CESARIC
Personnel On-Site D CHARLEY
Contractors On-Site
Client Personnel On-Site

Drilling Method 4 1/4" ID HSA
Air Monitoring Method PID, CGI

Depth (Feet)	Sample Number	Sample Interval	Sample Type & Recovery (inches)	Sample Description Classification System: USCS	USCS Symbol	Depth Lithology Change (feet)	Air Monitoring Units: PPM BZ	BH	S/	Drilling Conditions & Blow Counts <TIME>
0									11	
5				BACKFILL TD 9' +12'						
10	1	9'-10'	(18")	VERY STIFF SILTY CLAY, CONS PEBBLE, DK. BROWN, NO HC STAIN/ODOR	CL				1/2	<0920>
15	2	13'-15'	24"	(SAME AS ABOVE) BUT HIGHLY CONTAMINATED (STAIN/ODOR)	CL				110/467	<0930>
20	GWC 17.5'			COBBLES/GRAVELS (NO SAMPLE) TD = 20'						
25										
30										
35										
40										

Comments: TD=20' GRAVEL/COBBLE ZONE ENC. @ 15.5' BGS. LAST RETREIVABLE SAMPLE WAS HIGHLY CONTAM. SO NOT SUBMITTED TO LAB. GW ENCOUNTERED @ 17.5' BGS. SET WELL - PLEASE REFER TO WELL COMPLETION DIAGRAM.

Geologist Signature

MONITORING WELL INSTALLATION RECORD

Borehole # 1
Well # MW-2
Page 1 of 1

AESE/GEM
906 San Juan Blvd. Ste. D
Farmington, New Mexico 87401
(505) 566-9116 FAX (505) 566-9120

Project Name EPFS 5 Monitoring Wells
Project Number 6164 Cost Code
Project Location Gallegos Canyon Unit Com A 142E Meter 03906

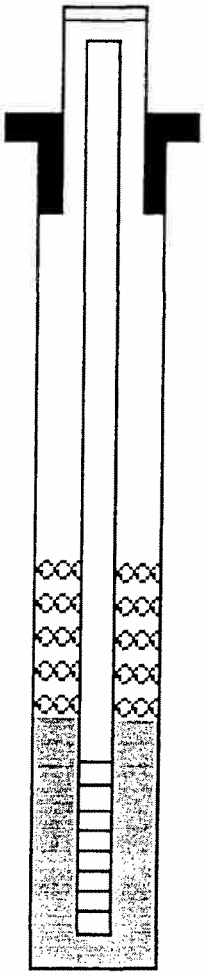
Elevation ~5500'
Well Location MW-2 T29N, R12W, Sec 25, G
GWL Depth 11.7' BGS
Installed By ACPI / HSA

On-Site Geologist NBB
Personnel On-Site
Contractors On-Site ACPI K Bodine, TJ Valdez
Client Personnel On-Site L Bemally

Date/Time Started 12/12/01 1030
Date/Time Completed 12/12/01 1511

Depths in Reference to Ground Surface

Item	Material	Depth (feet)
Top of Protective Casing	6" steel	2.46
Bottom of Protective Casing	6" steel	-1.54
Top of Permanent Borehole Casing	NA	
Bottom of Permanent Borehole Casing	NA	
Top of Concrete	Quickcrete	+0.33
Bottom of Concrete	Quickcrete	-0.33
Top of Grout	Type I/II portland w/ 2% bentonite gel	-0.33
Bottom of Grout		-4.00
Top of Well Riser	2" D PVC	2.21
Bottom of Well Riser	2" Diam. PVC	-7.77
Top of Well Screen	2" D Sch 40 .010 slot PVC, 15'	-7.77
Bottom of Well Screen		-22.65
Top of Peltonite Seal	3/8 chip bent. Hole plug Bardid	-4.00
Bottom of Peltonite Seal		-5.10
Top of Gravel Pack	10 bags 10-20 Colorado silica Sand	-5.10
Bottom of Gravel Pack		-17.50
Top of Natural Cave-In		-17.50
Bottom of Natural Cave-In		-23.00
Top of Groundwater		-11.70
Total Depth of Borehole		-23.00



Top of Protective Casing 2.46
Top of Riser 2.21
Ground Surface 0
Top of Seal -4.00
Top of Gravel Pack -5.10
Top of Screen -7.77
Bottom of Screen -22.65
Bottom of Borehole -23.00

Comments:

Geologist Signature

C:\000\Admin\Forms\MONWELL.doc

RECORD OF SUBSURFACE EXPLORATION

Golden Environmental Management, Inc
an AESE Company
906 San Juan Boulevard, Suite D
Farmington, New Mexico 87401
(505) 566-9116 FAX (505) 566-9120

Page of

Project Name EPFS 5mw
Project Number 6169 Phase
Project Location Eastern San Juan Unit com A 142E
Meter 03609
Well Logged By NEE
Personnel On-Site
Contractors On-Site ACPI K Padilla TJ Valdez
Client Personnel On-Site L Benally

Elevation ≈ 5500'
Borehole Location MW-2 ± 45' NW MW-1
GWL Depth ~7.77 BGS
Logged By NEE
Drilled By ACPI
Date/Time Started 12-12-01 1030
Date/Time Completed 12-12-01 1511

Drilling Method HSA
Air Monitoring Method steeter

Depth (Feet)	Sample Interval	Sample Type & Recovery (inches)	Sample Description Classification System: USCS	USCS Symbol	Depth Lithology Change (feet)	Air Monitoring Units: NDU BZ	BH	S	Drilling Conditions & Blow Counts
0			0-1 fill w/cobbles			0			
5			1-15 Sandy, silty clay. Mod. yellowish brown sand is 90% minor, very fine, moderately consolidated			0			21
10			90% 3" sand stringers in SS @ 10' then back to clay, greyish			0			24
15			20% orange. HC staining on vertical parting surfaces			0			slight 1' in 36
20			15-23 cobbles and gravel HC odor in SS sample @ 15'						
25									
30									
35									
40			TD 23' BGS in cobbles						

Comments:

Geologist Signature

12/18/01\Drillog

MWH

Drilling Log

FINAL

Monitoring Well **MW-3**

Page: 1 of 1

Project *GCU#142E* Owner *EPCGPC*

Location *San Juan County, New Mexico* Project Number *10504833.010301*

Surface Elev. *5478.78 ft* North *2073983.652* East *2660533*

Top of Casing *5481.87 ft* Water Level Initial ▽ Static ▼ *5471.72* 08/24/14 00:00

Hole Depth *27.5ft* Screen: Diameter *2 in* Length *20.0 ft* Type/Size *PVC/0.01 in*

Hole Diameter *8.25 in* Casing: Diameter *2 in* Length *5.0 ft* Type *PVC*

Drill Co. *National EWP* Drilling Method *Hollow Stem Auger* Sand Pack *10-20*

Driller *Matt Cain/Bryan Nydoske* Driller Reg. # *WD-1210* Log By *Brad Barton*

Start Date *8/23/2014* Completion Date *8/24/2014* Checked By *Jeff Bechtel*

COMMENTS

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							
5	0.0	0%			CL	CLAY, yellowish-brown, with fine grained sand and silt, low plasticity, slightly moist, no hydrocarbon odor; (hydro-vac from 0-10' bgs; logged from cuttings).	
						Cobbles up to 4" diameter present.	
10	0.0				SC	Clayey SAND, yellowish brown (10 YR 5/4), fine to medium grained sand, trace gravel (up to 1.5" in diameter), low plasticity, loose, wet (due to use of water during drilling), no hydrocarbon odor.	
		26%				No recovery	
	0.0						
15	109	MW-3 16-18'			SC	Clayey SAND, yellowish brown (10 YR 5/4), fine to medium grained sand, increasing amount of gravel, low plasticity, loose, wet (due to use of water during drilling), moderate hydrocarbon odor.	
		36%				No recovery	
	20.9						
20					SP	SAND with gravel, dark gray, (gravel rounded to sub-rounded, up to 2.5" in diameter), poorly graded, poorly graded, loose, wet, slight hydrocarbon odor.	
	14.3					No recovery	
		22%					
	10.4						
25					GW	Gravel.	
	0.1	35%				No recovery.	
						Well set at 25.5'	
						Hole depth = 27'.	
30							

Drilling Log GCU#142E.GPJ MWH IA.GDT 11/29/14

MWH

Drilling Log

FINAL

Soil Boring **MW-4**

Page: 1 of 1

Project *GCU#142E* Owner *EPCGPC*

Location *San Juan County, New Mexico* Project Number *10504833.010301*

Surface Elev. *5478.90 ft* North *2074023.671* East *2660627.624*

Top of Casing *NA* Water Level Initial ▽ Static ▼

Hole Depth *22.0ft* Screen: Diameter *NA* Length *NA* Type/Size *NA*

Hole Diameter *8.25 in* Casing: Diameter *NA* Length *NA* Type *NA*

Drill Co. *National EWP* Drilling Method *Hollow Stem Auger* Sand Pack *NA*

Driller *Matt Cain/Bryan Nydoske* Driller Reg. # *WD-1210* Log By *Brad Barton*

Start Date *8/23/2014* Completion Date *8/25/2014* Checked By *Jeff Bechtel*

COMMENTS

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						
5	0.0	0%			SM	Silty SAND, yellowish-brown, fine grained sand, trace gravel, loose, slightly moist, no hydrocarbon odor; (hydro-vac from 0-10' bgs; logged from cuttings).
10	0.6	100% MW-4 13-15'			CH	Fat CLAY, brown, medium stiffness, high plasticity, no dilatancy, moist, no hydrocarbon odor. Color changes to dark gray, moderate hydrocarbon odor, moist to very moist.
15	267					Slight hydrocarbon odor, wet.
	6.7	30%			SW	No recovery. SAND with gravel, brown, well graded, gravel up to 1.5" diameter (rounded), loose, no cementation, wet, very slight hydrocarbon odor (logged from cuttings).
20	1.6	0%				No recovery, driller reports very hard drilling.
						Hole depth = 22', refusal. Borehole abandoned with portland cement-bentonite grout.
25						
30						

Drilling Log GCU#142E.GPJ MWH IA.GDT 11/29/14

MWH

Drilling Log

FINAL

Monitoring Well **MW-5**

Page: 1 of 1

Project *GCU#142E* Owner *EPCGPC*

Location *San Juan County, New Mexico* Project Number *10504833.010301*

Surface Elev. *5478.96 ft* North *2074012.99* East *2660661.174*

Top of Casing *5482.04 ft* Water Level Initial ▽ Static ▼ *5471.8* 08/24/14 00:00

Hole Depth *27.0ft* Screen: Diameter *2 in* Length *20.0 ft* Type/Size *PVC/0.01 in*

Hole Diameter *8.25 in* Casing: Diameter *2 in* Length *5.0 ft* Type *PVC*

Drill Co. *National EWP* Drilling Method *Hollow Stem Auger* Sand Pack *10-20*

Driller *Matt Cain/Bryan Nydoske* Driller Reg. # *WD-1210* Log By *Brad Barton*

Start Date *8/23/2014* Completion Date *8/24/2014* Checked By *Jeff Bechtel*

COMMENTS

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							
5	0.0	0%			SM	Silty SAND, yellowish-brown, fine grained sand, loose, slightly moist, no hydrocarbon odor; (hydro-vac from 0-10' bgs; logged from cuttings).	
10	0.0	90%			CH	Fat CLAY, brown, high plasticity, medium stiffness, moist, no hydrocarbon odor. Color changes to dark gray, moderate hydrocarbon odor, minor black staining.	
	798					No recovery.	
15	944				CH	Fat CLAY, brown, high plasticity, medium stiffness, moist, no hydrocarbon odor. No recovery.	
	1164	32% MW-5 18-20'					
20					SP	SAND with gravel, poorly graded, black, fine to medium grained sand, gravel up to 1.5" in diameter, loose, no cementation, wet, hydrocarbon staining, moderate hydrocarbon odor.	
	16	18%				No recovery.	
25	2.2	35%			SW	SAND with gravel, well graded, light brown, gravel up to 1.5" in diameter, loose, no cementation, wet, slight hydrocarbon odor. No recovery.	
30						Well set at 25.5' Hole depth = 27'.	

Drilling Log GCU#142E.GPJ MWH IA.GDT 11/29/14

MWH

Drilling Log

FINAL

Monitoring Well **MW-6**

Page: 1 of 1

Project *GCU#142E* Owner *EPCGPC*

Location *San Juan County, New Mexico* Project Number *10504833.010301*

Surface Elev. *5478.71 ft* North *2073965.4* East *2660660.186*

Top of Casing *5481.45 ft* Water Level Initial ▽ Static ▼ *5466.55* 08/25/14 00:00

Hole Depth *27.0ft* Screen: Diameter *2 in* Length *20.0 ft* Type/Size *PVC/0.01 in*

Hole Diameter *8.25 in* Casing: Diameter *2 in* Length *5.0 ft* Type *PVC*

Drill Co. *National EWP* Drilling Method *Hollow Stem Auger* Sand Pack *10-20*

Driller *Matt Cain/Bryan Nydoske* Driller Reg. # *WD-1210* Log By *Brad Barton*

Start Date *8/23/2014* Completion Date *8/25/2014* Checked By *Jeff Bechtel*

COMMENTS

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							
5	0.0	0%			SM	Silty SAND, yellowish-brown, fine grained sand, loose, dry to slightly moist, no hydrocarbon odor; (hydro-vac from 0-10' bgs; logged from cuttings).	
10	0.4	52%			CH	Fat CLAY, brown to dark gray with depth, trace gravel, medium stiffness, high plasticity, moist, moderate hydrocarbon odor at ~13'.	
	973					No recovery.	
15	1533	MW-6 16-18'			CH	Fat CLAY, brown to dark gray with depth, trace gravel, medium stiffness, high plasticity.	
	488	38%			SC	No recovery. Clayey SAND, dark gray, low plasticity, loose, wet, strong hydrocarbon odor (logged from cuttings).	
20	55.4				SW	SAND with gravel, well graded, dark gray, fine to medium grained sand, gravel up to 1.5" diameter (rounded), loose, slight to moderate hydrocarbon odor.	
	4.3	65%				No recovery.	
						No recovery.	
25		0%					
						Well set at 25.5' Hole depth = 27'.	
30							

Drilling Log GCU#142E.GPJ MWH IA.GDT 11/29/14

MWH

Drilling Log

Monitoring Well **MW-7**

FINAL

Page: 1 of 1

Project *GCU#142E* Owner *EPCGPC*

Location *San Juan County, New Mexico* Project Number *10504833.010301*

Surface Elev. *5478.83 ft* North *2073963.477* East *2660603.577*

Top of Casing *5481.80 ft* Water Level Initial ▽ Static ▼ *5471.45* 08/24/14 00:00

Hole Depth *27.0ft* Screen: Diameter *2 in* Length *20.0 ft* Type/Size *PVC/0.01 in*

Hole Diameter *8.25 in* Casing: Diameter *2 in* Length *5.0 ft* Type *PVC*

Drill Co. *National EWP* Drilling Method *Hollow Stem Auger* Sand Pack *10-20*

Driller *Matt Cain/Bryan Nydoske* Driller Reg. # *WD-1210* Log By *Brad Barton*

Start Date *8/23/2014* Completion Date *8/24/2014* Checked By *Jeff Bechtel*

COMMENTS

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							
5	0.0	0%			SM	Silty SAND, cobbles, yellowish brown, very fine grained sand, trace gravel, moist to slightly moist, no hydrocarbon odor (hydro-vac from 0-10' bgs; logged from cuttings).	
10	60.8	100%			CH	Fat CLAY, brown, high plasticity, medium stiffness, moist, slight hydrocarbon odor. Color changes to dark gray, moderate hydrocarbon odor.	
	1170					Minor black hydrocarbon staining.	
15	954				SP	SAND with gravel, poorly graded, black hydrocarbon staining, gravel up to 1.5" in diameter, fine grained sand, loose, no cementation, wet, strong hydrocarbon odor.	
	1159	30% MW-7 18-20'				No recovery.	
20	1.3	20%			SW	SAND with gravel, graded to well graded, gravel up to 1.5" in diameter (sub-round to sub-angular), fine to medium grained sand, loose, no cementation, wet, slight hydrocarbon odor. No recovery.	
25	1.9	30%			SW	SAND with gravel, graded to well graded, gravel up to 1.5" in diameter (sub-round to sub-angular), fine to medium grained sand, loose, no cementation, wet, slight hydrocarbon odor. No recovery. Well set at 25.5' Hole depth = 27'.	
30							

Drilling Log GCU#142E.GPJ MWH IA.GDT 11/29/14

MWH

Drilling Log

FINAL

Monitoring Well **MW-8**

Page: 1 of 1

Project *GCU#142E* Owner *EPCGPC*

Location *San Juan County, New Mexico* Project Number *10504833.010301*

Surface Elev. *5479.00 ft* North *2073986.099* East *2660582.676*

Top of Casing *5481.83 ft* Water Level Initial ▽ Static ▼ *5471.6* 08/24/14 00:00

Hole Depth *26.5ft* Screen: Diameter *2 in* Length *20.0 ft* Type/Size *PVC/0.01 in*

Hole Diameter *8.25 in* Casing: Diameter *2 in* Length *5.0 ft* Type *PVC*

Drill Co. *National EWP* Drilling Method *Hollow Stem Auger* Sand Pack *10-20*

Driller *Matt Cain/Bryan Nydoske* Driller Reg. # *WD-1210* Log By *Brad Barton*

Start Date *8/23/2014* Completion Date *8/24/2014* Checked By *Jeff Bechtel*

COMMENTS

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					SM	Silty SAND with cobbles; (hydro-vac from 0-2'; logged from cuttings).	
						CLAY, with silt and sand, yellowish brown, trace gravel, fine grained sand, low plasticity, moist to slightly moist, no hydrocarbon odor; (hydro-vac from 2-10'; logged from cuttings).	
5	0.0	0%			CL		
10	0.0				CH	Fat CLAY, dark yellowish brown (10 YR 5/6), trace gravel, soft, high plasticity, no dilatancy, moist, no hydrocarbon odor.	
						No recovery.	
	0.0	32% MW-8 13-15'					
15						No recovery.	
	N/R						
		0%					
	N/R						
20					SP	SAND with gravel, poorly graded, brown, fine grained sand, loose, poor recovery, hydrocarbon odor.	
	4.0					No recovery.	
		8%					
	N/R						
25					GW	GRAVEL and cobbles with sand, poor recovery.	
	0.0	20%				No recovery.	
						Well set at 25.5'	
						Hole depth = 26.5'; refusal.	
30							

Drilling Log GCU#142E.GPJ MWH IA.GDT 11/29/14

TEMPORARY PIEZOMETER INSTALLATION

Borehole #
Well # PZ- 1
Pag 1 of 1

Philip Services Corp.
4000 Monroe Rd.
Farmington, NM 87401
(505) 326-2262 FAX (505) 326-2388

Project Name EPFS GW PITS
Project Numbe 17520 Phase 6006
Site Location Gallegos Canyon Unit A142E
02986

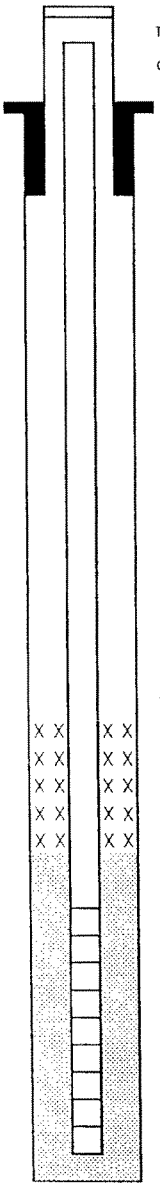
Elevation
Well Location Ltr G -S25-T29-R12
GWL Depth 14.93' TOR
Installed By M Donahue

On-Site Geologist C CHANCE
Personnel On-Site C Gomez
Contractors On-Site
Client Personnel On-Site

Date/Time Started 9/25/97
Date/Time Complete 9/25/97

COMMENTS

- PZ1 is @18° & 32' from MW1
- Collect soil sample From 8-10' BGS: Br sandy CLAY, vf sand, soFt, med-hi plastic, moist, odor
- Install piezometer & collect GW sample (CMC254) & send to lab. Cobbles @ 16.5'
- PID = 1014 ppm



Top of Protective Casing NA
Top of Riser (survey elev.) 85.14
Ground Surface 0
Top of Seal NA
Top of Gravel Pack NA
Top of Screen 5'
Bottom of Screen 15'
Bottom of Borehole 16.5

MW1 Survey 85.17

MWINSTAL.wk1

Geologist Signature Cory Chance

TEMPORARY PIEZOMETER INSTALLATION

Borehole #
Well # PZ-2
Pag 1 of 1

Philip Services Corp.
4000 Monroe Rd.
Farmington, NM 87401
(505) 326-2262 FAX (505) 326-2388

Project Name EPFS GW PITS
Project Numbe 17520 Phase 6006
Site Location Galleges Canyon Unit A142E
03906

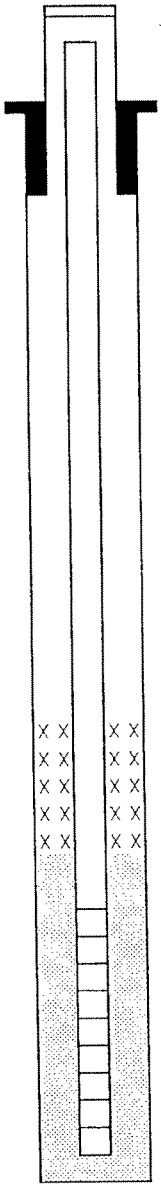
Elevation
Well Location Ltr G -S25 -T29 -R12
GWL Depth 15.24 TOR
Installed By M. Donahue

On-Site Geologist C CHANCE
Personnel On-Site C Gomez
Contractors On-Site
Client Personnel On-Site

Date/Time Started 9/26/97
Date/Time Complete 9/26/97

COMMENTS

PZ2 is 275° & 52' from MW1
Collect soil sample 8-10' BGS:
Br sandy CLAY, vf sand, soft
high plastic, dry.
PID = 44 ppm
Install temp. piezo & collect GW sample (CMC 255)



MW1 survey 85.17

MWINSTAL.wkt

Geologist Signature

TEMPORARY PIEZOMETER INSTALLATION

Borehole #
Well # PZ-3
Pag 1 of 1

Philip Services Corp.
4000 Monroe Rd.
Farmington, NM 87401
(505) 326-2262 FAX (505) 326-2388

Project Name EPFS GW PITS
Project Numbe 17520 Phase 6006
Site Location Gallegos Canyon Unit A142E
03906

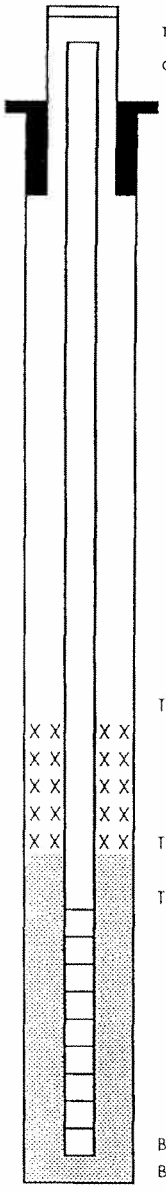
Elevation
Well Location Ltr G -S25-T29-R12
GWL Depth
Installed By M. Donahue

Date/Time Started 9/26/97
Date/Time Complete 9/26/97

On-Site Geologist C CHANCE
Personnel On-Site G Gomez
Contractors On-Site
Client Personnel On-Site

COMMENTS

- PZ3 is 165° & 45' From MW1
- Soil sample 8-10' BGS: Br sandy CLAY, vF sand, soft, high plastic, dry
  PID = 1357 ppm
- Install well pt & collect GW sample (CMC356).
- Pull well pt & grout BH



Top of Protective Casing NA
Top of Riser (survey elev.) NA
Ground Surface NA
Top of Seal NA
Top of Gravel Pack NA
Top of Screen 11'
Bottom of Screen 16'
Bottom of Borehole 17'

MWINSTAL.wk1

Geologist Signature Conn C Chance

TEMPORARY PIEZOMETER INSTALLATION

Borehole #
Well # PZ-4
Pag 1 of 1

Philip Services Corp.
4000 Monroe Rd.
Farmington, NM 87401
(505) 326-2262 FAX (505) 326-2388

Project Name EPFS GW PITS
Project Numbe 17520 Phase 6006
Site Location Gallegos Canyon Unit A142E
D3906

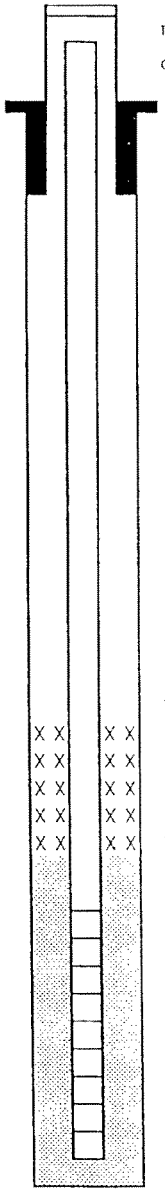
Elevation
Well Location Ltr G -S25-T29-R12
GWL Depth
Installed By M. Donahue

Date/Time Started 9/26/97
Date/Time Complete 9/26/97

On-Site Geologist C CHANCE
Personnel On-Site C Gomez
Contractors On-Site
Client Personnel On-Site

COMMENTS

PZ4 is 95° & 25' from MW1
No soil sample collected.
Drilling in backfill
Install well pt & collect GW sample (CMC357)
Pull well pt & grout BH



Top of Protective Casing NA
Top of Riser (survey elev.) NA
Ground Surface NA
Top of Seal NA
Top of Gravel Pack NA
Top of Screen 11'
Bottom of Screen 16'
Bottom of Borehole 17'

MW-INSTAL.WK1

TEMPORARY PIEZOMETER INSTALLATION

Borehole #
Well # PZ- 5
Pag 1 of 1

Philip Services Corp.
4000 Monroe Rd.
Farmington, NM 87401
(505) 326-2262 FAX (505) 326-2388

Project Name EPFS GW PITS
Project Numbe 17520 Phase 6006
Site Location Galleges Canyon Unit A142E
D3906

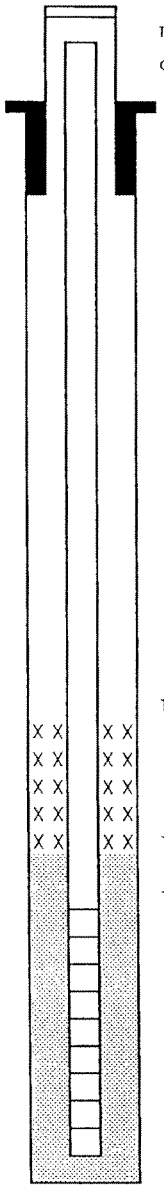
Elevation
Well Location Ltr G -S25-T29-R12
GWL Depth
Installed By ~~M Donahue~~ K. Pad.llg

On-Site Geologist C CHANCE
Personnel On-Site C Gomez, D Charley
Contractors On-Site
Client Personnel On-Site

Date/Time Started 9/29/97
Date/Time Complete

COMMENTS

PZ5 is 175° & 119' From MW1
Collect soil sample 8-10' BGS:
Br silty CLAY, soft, hi plastic
abt V f sand, dry
PID = 1150 ppm
Install temp. well pt & collect GW sample (CMC 358)
Pull well pt & grout BH



Top of Protective Casing NA
Top of Riser (survey elev.) NA
Ground Surface NA
Top of Seal NA
Top of Gravel Pack NA
Top of Screen 9
Bottom of Screen 14
Bottom of Borehole 15

MWINSTAL.wk1

Geologist Signature

TEMPORARY PIEZOMETER INSTALLATION

Philip Services Corp.
4000 Monroe Rd.
Farmington, NM 87401
(505) 326-2262 FAX (505) 326-2388

Borehole #
Well # PZ- 6
Pag 1 of 1

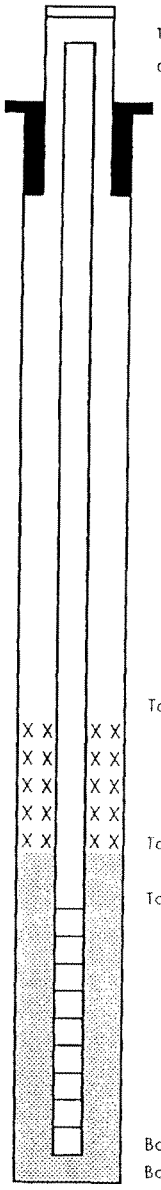
Project Name EPFS GW PITS
Project Numbe 17520 Phase 6006
Site Location Gallegos Canyon Unit #142E
Q1906
On-Site Geologist C CHANCE
Personnel On-Site C Gomez D Chavez
Contractors On-Site
Client Personnel On-Site

Elevation
Well Location Ltr G -S25-T29-R12
GWL Depth
Installed By K. Padilla

Date/Time Started 9/29/97
Date/Time Complete 9/29/97

COMMENTS

- PZ6 is 30° & 44' from MW1
- Collect soil sample 8-10'
- BGS: Br silty CLAY, med stiff, high plastic, mod v f sand, dry PID = 1059 ppm
- Install well pt & collect GW sample (CMC359)
- Pull well pt & grout
- BH



Top of Protective Casing NA
Top of Riser (survey elev.) NA
Ground Surface NA
Top of Seal NA
Top of Gravel Pack NA
Top of Screen 9
Bottom of Screen 14
Bottom of Borehole 15

MWINSTAL.WK1

Geologist Signature Cam Chavez

MONITORING WELL INSTALLATION RECORD

Borehole # 1
Well # TMW-1
Page 1 of 1

Lodestar Services, Inc
PO Box 3861
Farmington, New Mexico 87499
(505) 334-2791

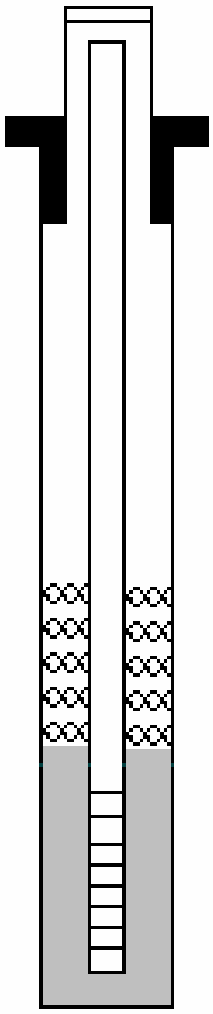
Project Name El Paso Ground Water
Project Number _____ Cost Code _____
Project Location T29N, R12W Sec. 25, Unit G

Elevation
Well Location Gallegos Canyon Unit Com A 142 E
GWL Depth -15.29 BTOC
Installed By Lodestar (Geologist)
Direct Push (Geoprobe)
Date/Time Started 1/6/06 0925
Date/Time Completed 1/6/06 1136

On-Site Geologist M. Nee
Personnel On-Site
Contractors On-Site D. Bromley M. Porter
Client Personnel On-Site

Depths in Reference to Ground Surface

Item	Material	Depth (feet)
Top of Protective Casing	na	
Bottom of Protective Casing	na	
Top of Permanent Borehole Casing	na	
Bottom of Permanent Borehole Casing	na	
Top of Concrete	na	
Bottom of Concrete	na	
Top of Grout	na	
Bottom of Grout	na	
Top of Well Riser	1-inch ID PVC	2.00
Bottom of Well Riser	1-inch ID PVC	20.08
Top of Well Screen	1-inch ID .010 slotted PVC	-10.38
Bottom of Well Screen	1-inch ID PVC	-19.29
Top of Peltonite Seal	3/8-inch bentonite chips	0.0
Bottom of Peltonite Seal	3/8-inch bentonite chips	-8.0
Top of Gravel Pack	10-20 silica sand	-8.0
Bottom of Gravel Pack	10-20 silica sand	-20.00
Top of Natural Cave-In	na	
Bottom of Natural Cave-In	na	
Top of Groundwater	na	-13.29
Total Depth of Borehole	na	-20.00



Top of Protective Casing __na___
Top of Riser __2.0___
Ground Surface __0.0___
Top of Seal __0.0___
Top of Gravel Pack __-8.0__
Top of Screen _-10.38_
Bottom of Screen _-19.29_
Bottom of Borehole _-20.00_

Comments: ___Set rocks around well and painted them orange to protect casing_____

__MW-1, MW-2 and TMW-1 form an equilatteral triangle with 43 foot sides_____

Geologist Signature __Martin Nee

ATTACHMENT K

L:\San Juan River Basin\SJRB GENERAL\GIS-NEW_MXDs\GALLEGOS CAYON UNIT #142E\2018 MAPS\GCU#142E_X-SEC_2018_REPORT.mxd

LEGEND:

- 5795 — APPROX. GROUND SURFACE CONTOUR AND ELEVATION, FEET
- ACCESS ROAD
- UNKNOWN LINE (POTENTIALLY ABANDONED)
- LOCATION OF FORMER 95 BARREL UST REMOVED 7/19/2011
- FENCE
- PW — PRODUCED WATER LINE
- UGC — UNDERGROUND CABLE
- G — UNDERGROUND GAS LINE
- APPROXIMATE FORMER DITCH
- A — A' CROSS SECTION TRACE
- APPROXIMATE EXTENT OF 10/1996 EPNG SOIL EXCAVATION (EXCAVATED TO 15.5 FEET)
- MONITORING WELL
- SOIL BORING
- ABANDONED MONITORING WELL
- MONITORING WELL ASSOCIATED WITH UNRELATED BP RELEASE
- NEW BP WELL (10/29/2018)
- WELLHEAD
- SMA BENCHMARK
- RIG ANCHOR

NOTES:

UTILITY LOCATIONS ARE APPROXIMATE.

MW-4 WAS A SOIL BORING ONLY (NO WELL CONSTRUCTED)

BP FORMER PIT AND EXCAVATION PERIMETER INFORMATION OBTAINED FROM 06/24/2011 FIGURE FROM BLAGG ENGINEERING.

BP PROPOSED MONITORING WELL LOCATIONS OBTAINED FROM 4/5/2018 GROUNDWATER DELINEATION PLAN FROM BLAGG ENGINEERING.

N

SCALE IN FEET

0 30 60

REVISION	DATE	DESIGN BY	DRAWN BY	REVIEWED BY
	12/12/2018	SLG	SLG	SRV

TITLE:

CROSS SECTION TRACE

PROJECT:

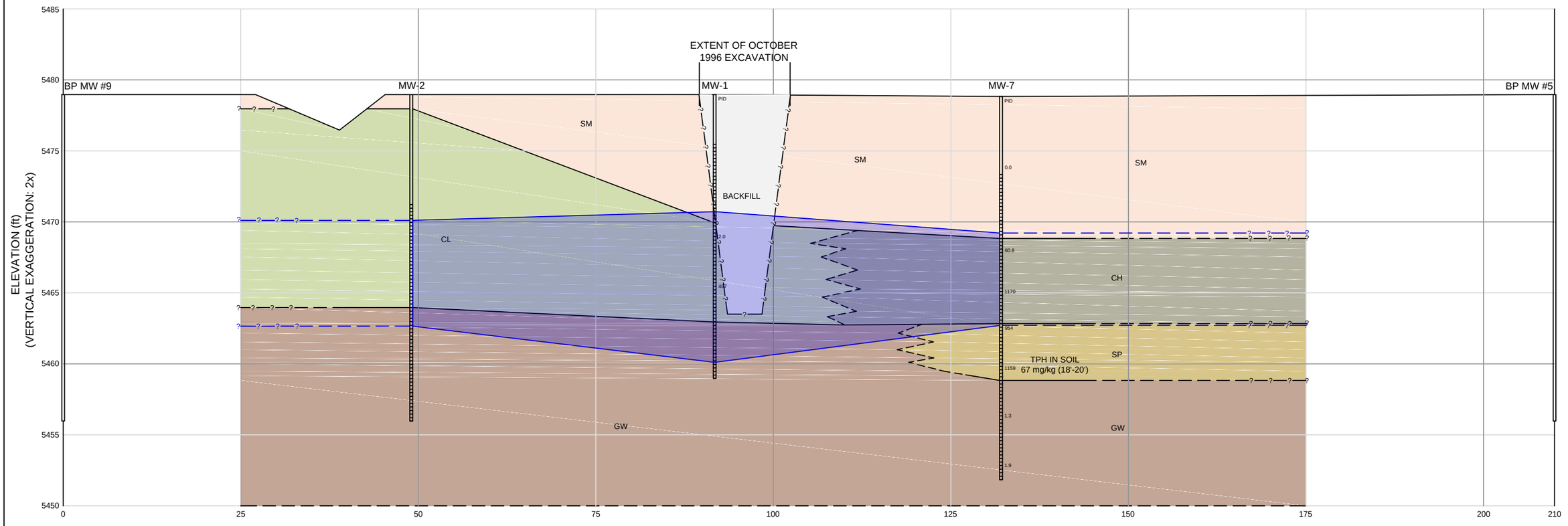
GALLEGOS CANYON UNIT COM A #142E
SAN JUAN COUNTY, NEW MEXICO

Stantec

Figure No.: **2**

A

A'



Legend

- USCS CLAY (CL)
- USCS HIGH PLASTICITY CLAY (CH)
- USCS CLAYEY SAND (SC)
- USCS GRAVEL/COBBLES (GW)
- USCS POORLY-GRADED SAND (SP)
- USCS SILTY SAND (SM)
- RECORDED RANGE OF GROUNDWATER FLUCTUATION
- INFERRED INTERFACE
- MONITORING WELL SCREENED INTERVAL

Stantec

Project Location
SAN JUAN COUNTY
NEW MEXICO

Client/Project 193710238
STATE GAS COM
GALLEGOS CANYON UNIT #142E

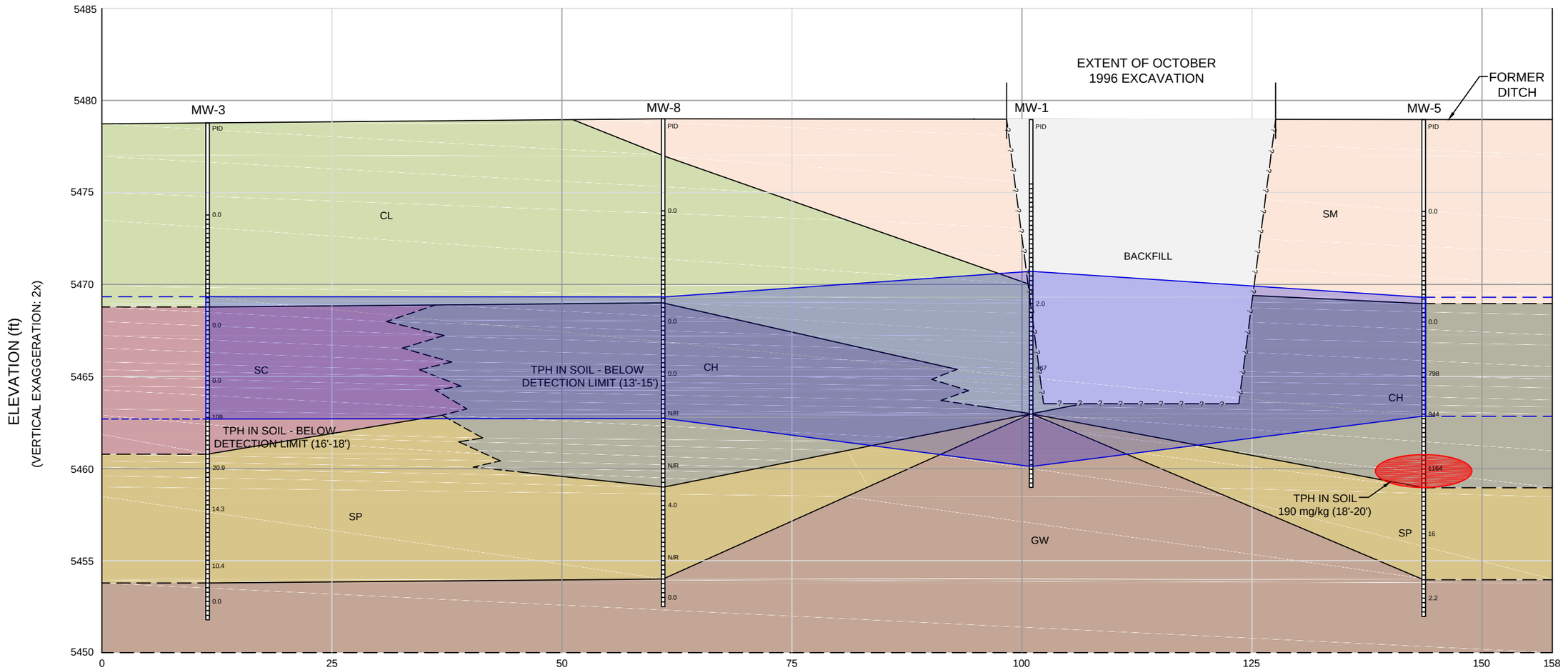
Figure No.
2.0

Title
CROSS SECTION A-A'

Prepared by

B

B'



Legend

- USCS CLAY (CL)
- USCS HIGH PLASTICITY CLAY (CH)
- USCS CLAYEY SAND (SC)
- USCS GRAVEL/COBBLES (GW)
- USCS POORLY-GRADED SAND (SP)
- USCS SILTY SAND (SM)
- RECORDED RANGE OF GROUNDWATER FLUCTUATION
- INFERRED INTERFACE
- MONITORING WELL SCREENED INTERVAL

Stantec

Project Location
SAN JUAN COUNTY
NEW MEXICO

Client/Project 193710238
STATE GAS COM
GALLEGOS CANYON UNIT #142E

Figure No.
3.0

Title
CROSS SECTION B-B'

Prepared by

ATTACHMENT L

TABLE 2 - GROUNDWATER ELEVATION RESULTS

Gallegos Canyon Unit #142E						
Location	Date	TOC	Depth to Water (ft.)	Depth to LNAPL (ft.)	LNAPL Thickness (ft.)	GW Elevation (ft.)
MW-1	03/10/97	5481.83	16.78	NR		5465.05
MW-1	08/06/97	5481.83	14.46	NR		5467.37
MW-1	11/05/97	5481.83	15.02	NR		5466.81
MW-1	02/13/98	5481.83	18.18	NR		5463.65
MW-1	05/06/98	5481.83	18.69	NR		5463.14
MW-1	05/04/99	5481.83	17.61	NR		5464.22
MW-1	05/25/00	5481.83	16.44	NR		5465.39
MW-1	06/01/01	5481.83	17.08	NR		5464.75
MW-1	05/14/02	5481.83	14.70	NR		5467.13
MW-1	03/07/03	5481.83	15.32	ND		5466.52
MW-1	09/17/03	5481.83	DRY	ND		5460.12
MW-1	03/22/04	5481.83	17.38	ND		5464.45
MW-1	03/17/05	5481.83	18.15	ND		5463.69
MW-1	06/23/05	5481.83	14.72	ND		5467.11
MW-1	09/26/05	5481.83	11.95	ND		5469.88
MW-1	12/14/05	5481.83	14.67	ND		5467.16
MW-1	01/09/06	5481.83	15.67	ND		5466.16
MW-1	01/18/06	5481.83	15.97	ND		5465.86
MW-1	03/28/06	5481.83	18.16	ND		5463.67
MW-1	06/14/06	5481.83	13.08	ND		5468.75
MW-1	06/28/07	5481.83	16.18	ND		5465.65
MW-1	06/23/08	5481.83	15.45	ND		5466.38
MW-1	06/02/09	5481.83	17.80	ND		5464.03
MW-1	12/30/09	5481.83	16.82	ND		5465.01
MW-1	01/25/10	5481.83	17.61	ND		5464.22
MW-1	05/25/10	5481.83	18.45	ND		5463.38
MW-1	09/24/10	5481.83	14.59	ND		5467.24
MW-1	11/09/10	5481.83	14.86	ND		5466.97
MW-1	02/01/11	5481.83	17.46	ND		5464.37
MW-1	05/03/11	5481.83	19.22	ND		5462.61
MW-1	09/27/11	5481.83	11.12	ND		5470.71
MW-1	11/16/11	5481.83	12.75	ND		5469.08
MW-1	02/16/12	5481.83	15.47	ND		5466.36
MW-1	05/07/12	5481.83	16.21	ND		5465.62
MW-1	06/07/13	5481.83	14.06	ND		5467.77
MW-1	09/11/13	5481.83	12.61	ND		5469.22
MW-1	12/13/13	5481.83	14.22	ND		5467.61
MW-1	04/03/14	5481.83	17.66	ND		5464.17
MW-1	10/25/14	5481.83	12.69	ND		5469.14
MW-1	05/30/15	5481.83	16.29	ND		5465.54

TABLE 2 - GROUNDWATER ELEVATION RESULTS

Gallegos Canyon Unit #142E						
Location	Date	TOC	Depth to Water (ft.)	Depth to LNAPL (ft.)	LNAPL Thickness (ft.)	GW Elevation (ft.)
MW-1	11/18/15	5481.83	14.52	ND		5467.31
MW-1	04/18/16	5481.83	19.06	ND		5462.77
MW-1	10/14/16	5481.83	15.54	ND		5466.29
MW-1	06/11/17	5481.83	17.44	ND		5464.39
MW-1	11/13/17	5481.83	14.65	ND		5467.18
MW-1	05/17/18	5481.83	16.74	ND		5465.09
MW-1	10/28/18	5481.83	12.31	ND		5469.52
MW-2	12/13/01	5481.56	14.52	NR		5467.04
MW-2	05/14/02	5481.56	14.37	NR		5467.19
MW-2	09/17/03	5481.56	DRY	ND		5463.56
MW-2	03/22/04	5481.56	17.06	ND		5464.50
MW-2	03/17/05	5481.56	17.83	ND		5463.73
MW-2	09/14/05	5481.56	11.45	ND		5470.11
MW-2	01/09/06	5481.56	15.35	ND		5466.21
MW-2	01/18/06	5481.56	15.65	ND		5465.91
MW-2	06/14/06	5481.56	12.64	ND		5468.92
MW-2	06/28/07	5481.56	16.86	ND		5464.70
MW-2	06/23/08	5481.56	15.15	ND		5466.41
MW-2	06/02/09	5481.56	17.84	17.42	0.42	5464.04
MW-2	12/30/09	5481.56	16.48	16.45	0.03	5465.10
MW-2	01/25/10	5481.56	17.45	17.27	0.18	5464.25
MW-2	05/25/10	5481.56	18.55	18.05	0.50	5463.39
MW-2	09/24/10	5481.56	14.25	ND		5467.31
MW-2	11/09/10	5481.56	14.50	14.49	0.01	5467.07
MW-2	02/01/11	5481.56	17.15	ND		5464.41
MW-2	05/03/11	5481.56	18.91	ND		5462.65
MW-2	09/27/11	5481.56	12.65	ND		5468.91
MW-2	11/16/11	5481.56	12.37	ND		5469.19
MW-2	02/16/12	5481.56	15.13	ND		5466.43
MW-2	05/07/12	5481.56	16.91	ND		5464.65
MW-2	06/07/13	5481.56	13.63	ND		5467.93
MW-2	09/11/13	5481.56	12.18	ND		5469.38
MW-2	12/13/13	5481.56	13.92	ND		5467.64
MW-2	04/03/14	5481.56	17.42	17.31	0.11	5464.22
MW-2	10/25/14	5481.56	12.14	ND		5469.42
MW-2	05/30/15	5481.56	15.92	ND		5465.64
MW-2	11/18/15	5481.56	14.26	ND		5467.30
MW-2	04/18/16	5481.56	18.99	18.69	0.30	5462.80
MW-2	10/14/16	5481.56	15.26	ND		5466.30

TABLE 2 - GROUNDWATER ELEVATION RESULTS

Gallegos Canyon Unit #142E						
Location	Date	TOC	Depth to Water (ft.)	Depth to LNAPL (ft.)	LNAPL Thickness (ft.)	GW Elevation (ft.)
MW-2	06/11/17	5481.56	17.23	17.09	0.14	5464.44
MW-2	11/13/17	5481.56	14.28	ND		5467.28
MW-2	05/17/18	5481.56	16.43	16.39	0.04	5465.16
MW-2	10/28/18	5481.56	11.67	ND		5469.89
MW-3	10/25/14	5481.87	12.53	ND		5469.34
MW-3	05/30/15	5481.87	16.32	ND		5465.55
MW-3	11/18/15	5481.87	14.65	ND		5467.22
MW-3	04/18/16	5481.87	19.18	ND		5462.69
MW-3	10/14/16	5481.87	15.64	ND		5466.23
MW-3	06/11/17	5481.87	17.57	17.40	0.17	5464.43
MW-3	11/13/17	5481.87	14.64	ND		5467.23
MW-3	05/17/18	5481.87	16.60	ND		5465.27
MW-3	10/28/18	5481.87	11.93	ND		5469.94
MW-5	10/25/14	5482.04	12.73	ND		5469.31
MW-5	05/30/15	5482.04	16.50	ND		5465.54
MW-5	11/18/15	5482.04	14.80	ND		5467.24
MW-5	04/18/16	5482.04	19.20	ND		5462.84
MW-5	10/14/16	5482.04	15.78	ND		5466.26
MW-5	06/11/17	5482.04	17.65	ND		5464.39
MW-5	11/13/17	5482.04	14.81	ND		5467.23
MW-5	05/17/18	5482.04	16.95	ND		5465.09
MW-5	10/28/18	5482.04	12.31	ND		5469.73
MW-6	10/25/14	5481.45	12.31	ND		5469.14
MW-6	05/30/15	5481.45	16.01	ND		5465.44
MW-6	11/18/15	5481.45	14.36	ND		5467.09
MW-6	04/18/16	5481.45	18.73	ND		5462.72
MW-6	10/14/16	5481.45	15.35	ND		5466.10
MW-6	06/11/17	5481.45	17.14	ND		5464.31
MW-6	11/13/17	5481.45	14.39	ND		5467.06
MW-6	05/17/18	5481.45	16.37	ND		5465.08
MW-6	10/28/18	5481.45	11.85	ND		5469.60
MW-7	10/25/14	5481.80	12.59	ND		5469.21
MW-7	05/30/15	5481.80	16.32	ND		5465.48
MW-7	11/18/15	5481.80	14.67	ND		5467.13
MW-7	04/18/16	5481.80	19.09	ND		5462.71
MW-7	10/14/16	5481.80	15.66	ND		5466.14
MW-7	06/11/17	5481.80	17.44	ND		5464.36

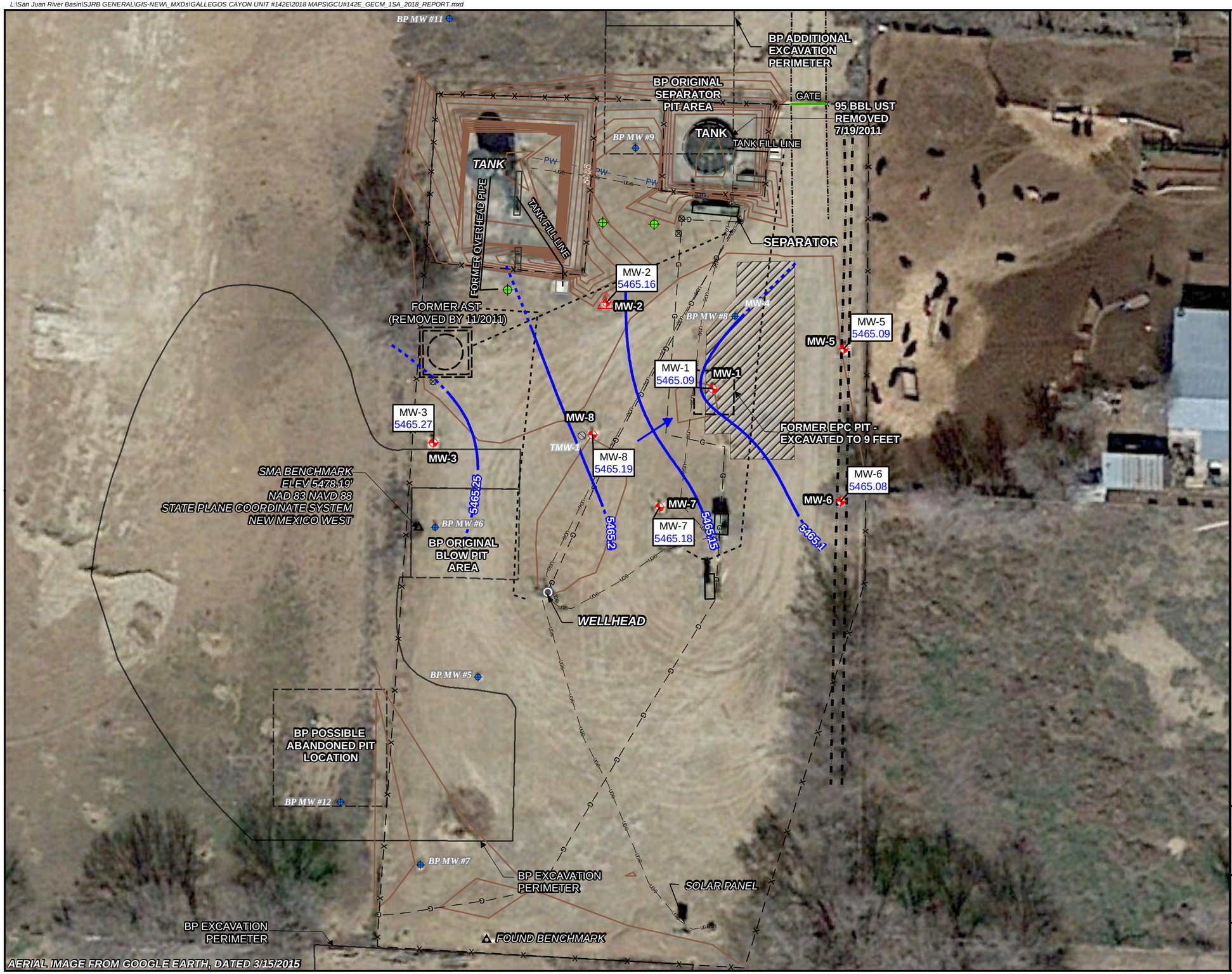
TABLE 2 - GROUNDWATER ELEVATION RESULTS

Gallegos Canyon Unit #142E						
Location	Date	TOC	Depth to Water (ft.)	Depth to LNAPL (ft.)	LNAPL Thickness (ft.)	GW Elevation (ft.)
MW-7	11/13/17	5481.80	14.67	ND		5467.13
MW-7	05/17/18	5481.80	16.62	ND		5465.18
MW-7	10/28/18	5481.80	12.01	ND		5469.79
TMW-1	01/06/06	5481.43	15.29	ND		5466.14
TMW-1	01/09/06	5481.43	15.27	ND		5466.16
TMW-1	01/18/06	5481.43	15.57	ND		5465.87
TMW-1	06/23/08	5481.43	15.04	ND		5466.39
TMW-1	12/30/09	5481.43	NA	ND		NA
TMW-1	01/25/10	5481.43	17.23	ND		5464.20
TMW-1	05/25/10	5481.43	18.70	17.80		5463.41
TMW-1	09/24/10	5481.43	14.45	14.10		5467.25
TMW-1	11/09/10	5481.43	14.62	14.37		5467.00
TMW-1	02/01/11	5481.43	17.45	17.00		5464.32
TMW-1	05/03/11	5481.43	19.76	18.55		5462.58
TMW-1	09/27/11	5481.43	12.43	12.03		5469.30
TMW-1	11/16/11	5481.43	12.44	12.31		5469.09
TMW-1	02/16/12	5481.43	14.25	12.03		5468.85
TMW-1	05/07/12	5481.43	14.20	14.18		5467.25
TMW-1	06/07/13	5481.43	13.65	ND		5467.78
TMW-1	09/11/13	5481.43	12.14	ND		5469.29
TMW-1	12/13/13	5481.43	13.90	ND		5467.53
TMW-1	04/03/14	5481.43	17.36	17.25		5464.16
TMW-1 abandoned on September 8, 2014, and replaced with MW-8						
MW-8	10/25/14	5481.83	12.50	ND		5469.33
MW-8	05/30/15	5481.83	16.28	ND		5465.55
MW-8	11/18/15	5481.83	14.60	ND		5467.23
MW-8	04/18/16	5481.83	19.11	ND		5462.72
MW-8	10/14/16	5481.83	15.61	ND		5466.22
MW-8	06/11/17	5481.83	18.09	17.20	0.89	5464.41
MW-8	11/13/17	5481.83	14.63	ND		5467.20
MW-8	05/17/18	5481.83	16.64	ND		5465.19
MW-8	10/28/18	5481.83	11.97	ND		5469.86

Notes:
"ft" = feet
"TOC" = Top of casing
LNAPL = light non-aqueous phase liquid
"ND" = LNAPL not detected
"NR" = Presence or Absence of LNAPL not recorded

ATTACHMENT M

L:\San Juan River Basin\SJRB GENERAL\GIS-NEW_MXDs\GALLEGOS CANYON UNIT #142E\2018 MAPS\GCU#142E_GECM_1SA_2018_REPORT.mxd



LEGEND:

- 5795 — APPROX. GROUND SURFACE CONTOUR AND ELEVATION, FEET
- ACCESS ROAD
- UNKNOWN LINE (POTENTIALLY ABANDONED)
- LOCATION OF FORMER 95 BARREL UST REMOVED 7/19/2011
- FENCE
- PW — PRODUCED WATER LINE
- UGC — UNDERGROUND CABLE
- G — UNDERGROUND GAS LINE
- APPROXIMATE FORMER DITCH
- APPROXIMATE EXTENT OF 10/1996 EPNG SOIL EXCAVATION (EXCAVATED TO 15.5 FEET)
- MONITORING WELL
- MONITORING WELL WITH MEASUREABLE FREE PRODUCT
- ABANDONED MONITORING WELL
- MONITORING WELL ASSOCIATED WITH UNRELATED BP RELEASE
- NEW BP WELL (10/29/2018)
- WELLHEAD
- SMA BENCHMARK
- RIG ANCHOR

NOTES:

- 5467.31 — GROUNDWATER ELEVATION (FEET ABOVE MEAN SEA LEVEL)
- 5467.3 — WATER LEVEL ELEVATION CONTOUR (DASHED WHERE INFERRED, FEET ABOVE MEAN SEA LEVEL)
- DIRECTION OF APPARENT GROUNDWATER FLOW

UTILITY LOCATIONS ARE APPROXIMATE.
MW-4 WAS A SOIL BORING ONLY (NO WELL CONSTRUCTED)
BP FORMER PIT AND EXCAVATION PERIMETER INFORMATION OBTAINED FROM 06/24/2011 FIGURE FROM BLAGG ENGINEERING.

N

SCALE IN FEET
0 30 60

REVISION	DATE	DESIGN BY	DRAWN BY	REVIEWED BY
	12/11/2018	SLG	SLG	SRV

TITLE:

GROUNDWATER ELEVATION MAP
MAY 17, 2018

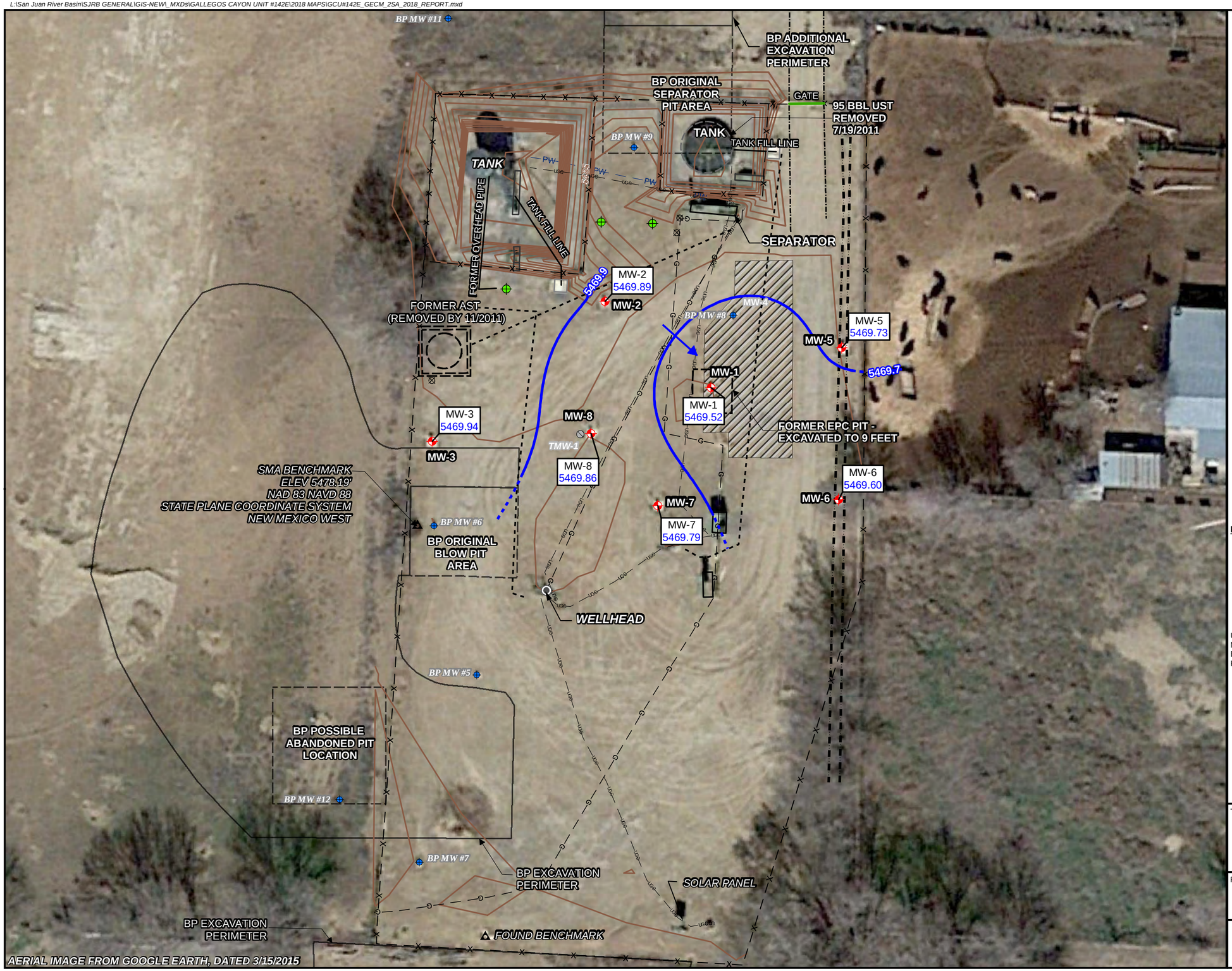
PROJECT:

GALLEGOS CANYON UNIT COM A #142E
SAN JUAN COUNTY, NEW MEXICO

Stantec

Figure No.: 4

L:\San Juan River Basin\SJRB GENERAL\GIS-NEW_MXDs\GALLEGOS CANYON UNIT #142E\2018 MAPS\GCU#142E_GECM_2SA_2018_REPORT.mxd



LEGEND:

- 5795 — APPROX. GROUND SURFACE CONTOUR AND ELEVATION, FEET
- ACCESS ROAD
- UNKNOWN LINE (POTENTIALLY ABANDONED)
- LOCATION OF FORMER 95 BARREL UST REMOVED 7/19/2011
- FENCE
- PW — PRODUCED WATER LINE
- UGC — UNDERGROUND CABLE
- G — UNDERGROUND GAS LINE
- APPROXIMATE FORMER DITCH
- APPROXIMATE EXTENT OF 10/1996 EPNG SOIL EXCAVATION (EXCAVATED TO 15.5 FEET)
- MONITORING WELL
- ABANDONED MONITORING WELL
- MONITORING WELL ASSOCIATED WITH UNRELATED BP RELEASE
- NEW BP WELL (10/29/2018)
- WELLHEAD
- SMA BENCHMARK
- RIG ANCHOR

NOTES:

5467.31 — GROUNDWATER ELEVATION (FEET ABOVE MEAN SEA LEVEL)

5467.3 — WATER LEVEL ELEVATION CONTOUR (DASHED WHERE INFERRED, FEET ABOVE MEAN SEA LEVEL)

DIRECTION OF APPARENT GROUNDWATER FLOW

UTILITY LOCATIONS ARE APPROXIMATE.
MW-4 WAS A SOIL BORING ONLY (NO WELL CONSTRUCTED)
BP FORMER PIT AND EXCAVATION PERIMETER INFORMATION OBTAINED FROM 06/24/2011 FIGURE FROM BLAGG ENGINEERING.

N

SCALE IN FEET
0 30 60

REVISION	DATE	DESIGN BY	DRAWN BY	REVIEWED BY
	12/12/2018	SLG	SLG	SRV

TITLE:

GROUNDWATER ELEVATION MAP
OCTOBER 28, 2018

PROJECT:

GALLEGOS CANYON UNIT COM A #142E
SAN JUAN COUNTY, NEW MEXICO

Stantec

Figure No.: 4

ATTACHMENT N

TABLE 1 - SOIL ANALYTICAL RESULTS

Gallegos Canyon Unit #142E											
Location	Date	Benzene (mg/kg)		Toluene (mg/kg)		Ethylbenzene (mg/kg)	Total Xylenes (mg/kg)	BTEX Total (mg/kg)	TPH (mg/kg)	Chloride (mg/kg)	
NMOCD Criteria:		10		NE		NE	NE	50	100	600	
MW-3 (16-18)	08/24/14	0.0407		0.019	J	0.0647	BDL	0.12	BDL	150	B
MW-4 (13-15)	08/25/14	1.89		BDL		2.92	17.4	22.2	46	69.5	B
MW-5 (18-20)	08/24/14	1.47		2.17		2.90	21.1	27.6	**190**	61.4	B
MW-6 (16-18)	08/25/14	4.75		BDL		3.51	37.3	45.6	**160**	62.5	B
MW-7 (18-20)	08/24/14	0.212		2.21		0.413	2.83	5.7	67	67.8	B
MW-8 (13-15)	08/24/14	0.00682	J	0.0268		BDL	BDL	0.03	BDL	64.9	B

Notes:

J	Result is less than the Reporting Limit but greater than or equal to the Method Detection Limit and the concentration is an approximate value.
B	Compound was found in the blank and sample.
TPH	Total Petroleum Hydrocarbon, concentration is calculated by adding GRO, DRO, and MRO and rounded to the nearest mg/kg.
mg/kg	Milligrams per kilogram
BDL	Below Detection Limit
NE	New Mexico Oil Conservation Division (NMOCD) Standard Not Established
BTEX	Benzene, toluene, ethylbenzene, xylenes
Total BTEX	Sum of the detectable concentrations of individual BTEX constituents
NMOCD Criteria	New Mexico Oil Conservation Division closure criteria for groundwater ≤50 feet below bottom of pit to groundwater less than 10,000 mg/L
	Results bolded and highlighted yellow exceed their respective NMOCD Standards

L:\San Juan River Basin\SJRB GENERAL\GIS-NEW_MXDs\GALLEGOS CAYON UNIT #142E\2018 MAPS\GCU#142E_SARM_2018_REPORT.mxd

LEGEND:

- 5795 — APPROX. GROUND SURFACE CONTOUR AND ELEVATION, FEET
- ACCESS ROAD
- UNKNOWN LINE (POTENTIALLY ABANDONED)
- LOCATION OF FORMER 95 BARREL UST REMOVED 7/19/2011
- FENCE
- PW — PRODUCED WATER LINE
- UGC — UNDERGROUND CABLE
- G — UNDERGROUND GAS LINE
- APPROXIMATE FORMER DITCH
- APPROXIMATE EXTENT OF 10/1996 EPNG SOIL EXCAVATION (EXCAVATED TO 15.5 FEET)
- MONITORING WELL
- SOIL BORING
- ABANDONED MONITORING WELL
- MONITORING WELL ASSOCIATED WITH UNRELATED BP RELEASE
- NEW BP WELL (10/29/2018)
- WELLHEAD
- SMA BENCHMARK
- RIG ANCHOR

NOTES:
MW-3, MW-5, MW-7 AND MW-8 SAMPLES COLLECTED 8/24/2014;
MW-4 AND MW-6 8/25/2018.
ft. bgs = FEET BELOW GROUND SURFACE
NS = NOT SAMPLED
UTILITY LOCATIONS ARE APPROXIMATE.
MW-4 WAS A SOIL BORING ONLY (NO WELL CONSTRUCTED)
BP FORMER PIT AND EXCAVATION PERIMETER INFORMATION OBTAINED FROM 06/24/2011 FIGURE FROM BLAGG ENGINEERING.

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 LIMIT
BDL = BELOW DETECTION LIMIT

ANALYTE	NMOCD 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

N

SCALE IN FEET
0 30 60

REVISION	DATE	DESIGN BY	DRAWN BY	REVIEWED BY
	12/12/2018	SLG	SLG	SRV

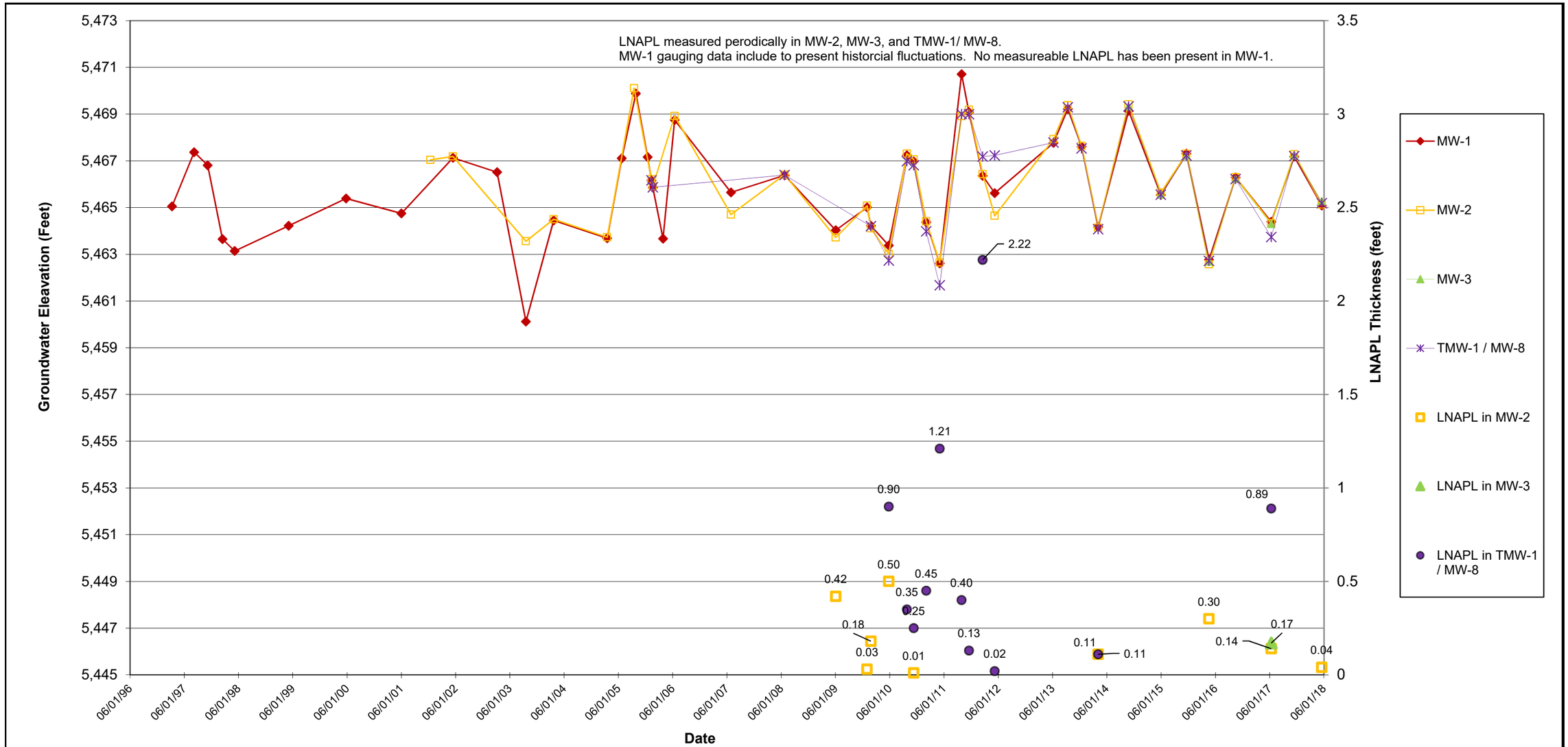
TITLE:
SOIL ANALYTICAL RESULTS

PROJECT:
GALLEGOS CANYON UNIT COM A #142E
SAN JUAN COUNTY, NEW MEXICO

Stantec

Figure No.: **5**

ATTACHMENT O



Stantec	GALLEGOS CANYON UNIT #142E SAN JUAN RIVER BASIN SAN JUAN COUNTY, NEW MEXICO	GROUNDWATER ELEVATION (Groundwater elevation not adjusted for LNAPL)	FIGURE 12

ATTACHMENT P

TABLE 1 - GROUNDWATER ANALYTICAL RESULTS

Gallegos Canyon Unit #142E					
Location	Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)
NMWQCC Standards:		10	750	750	620
MW-1	03/10/97	4010	7960	213	2050
MW-1	08/06/97	1040	1310	49.4	647
MW-1	11/05/97	543	719	33.9	342
MW-1	02/13/98	343	354	27.6	394
MW-1	05/06/98	429	216	13.6	176
MW-1	05/04/99	143	20.4	7.78	63.3
MW-1	05/25/00	230	4.4	6	450
MW-1	06/01/01	130	0.5	3.5	6.1
MW-1	05/14/02	34	4.9	1	3.3
MW-1	03/07/03	270	36.8	8.3	21.1
MW-1	09/17/03	150	77	1.9	12.8
MW-1	03/22/04	1.4	<0.14	<0.029	<0.082
MW-1	03/17/05	169	1.3	2.7	6.6
MW-1	06/23/05	810	1.9	0.62	8.1
MW-1	09/26/05	232	14.9	4	15.1
MW-1	12/14/05	354	10.6	5.9	25.6
MW-1	03/28/06	362	0.37J	15	15.7
MW-1	06/14/06	210	6.5	2.3	6.1
MW-1	06/28/07	109	12.6	1.1	5.5
MW-1	06/23/08	2320	305	140	934
MW-1	06/02/09	35.3	<1	0.75J	1.4J
MW-1	12/30/09	597	10.7J	26.5	159
MW-1	11/09/10	8610	2770	348	2810
MW-1	11/16/11	229	36.2	5.3	39.3
MW-1	06/07/13	810	<0.30	<0.20	4.3J
MW-1	09/11/13	25	<0.30	<0.20	0.39J
MW-1	12/13/13	330	<0.90	6.9	20
MW-1	04/03/14	560	<3.8	<2.0	<6.5
MW-1	10/25/14	57	<0.70	1.9	3J
MW-1	05/30/15	270	<5.0	1.6	32
MW-1	11/18/15	990	1.6	26	250
MW-1	04/18/16	22	<5.0	<1.0	<5.0
MW-1	10/14/16	520	<10	<2.0	<10
MW-1	06/11/17	190	<10	<2.0	<10
MW-1	11/13/17	45	<1.0	<1.0	<10
MW-1	05/17/18	8.6	<1.0	<1.0	<10
DP-01(MW-1)*	05/17/18	8.4	<1.0	<1.0	<10
MW-1	10/28/18	1.5	<1.0	<1.0	<10

TABLE 1 - GROUNDWATER ANALYTICAL RESULTS

Gallegos Canyon Unit #142E					
Location	Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)
NMWQCC Standards:		10	750	750	620
MW-2	12/13/01	22000	25000	500	4300
MW-2	09/17/03	6890	4760	219	1770
MW-2	03/22/04	13000	8880	321	2850
MW-2	03/17/05	2800	1640	125	978
MW-2	09/14/05	1980	915	63.8	391
MW-2	06/14/06	2140	811	83.5	610
MW-2	06/28/07	2100	492	140	1050
MW-2	06/23/08	221	1.5J	3.9	5.8
MW-2	12/30/09	6660	6750	764	6210
MW-2	11/09/10	3900	2450	342	2660
MW-2	11/16/11	2040	1020	231	1520
MW-2	06/07/13	6000	1100	500	3800
MW-2	09/11/13	2200	470	240	1900
MW-2	12/13/13	5500	830	510	3700
MW-2	05/30/15	3300	140	570	3400
MW-2	11/18/15	4000	120	520	1500
MW-2	11/13/17	2100	77	220	1800
MW-3	10/25/14	<0.38	<0.70	<0.50	<1.6
MW-3	05/30/15	<1.0	<5.0	<1.0	<5.0
MW-3	11/18/15	<1.0	<1.0	<1.0	<3.0
MW-3	11/13/17	69	7.8	6.8	160
MW-3	05/17/18	11	6.4	18	200
MW-3	10/28/18	<1.0	<1.0	<1.0	<10
MW-5	10/25/14	1.8	<0.70	0.89J	11
MW-5	05/30/15	<1.0	<5.0	<1.0	<5.0
MW-5	11/18/15	<1.0	<1.0	<1.0	<3.0
MW-5	04/18/16	22	<5.0	<1.0	5.9
MW-5	10/14/16	<1.0	<5.0	<1.0	<5.0
MW-5	06/11/17	13	<5.0	1.9	15
MW-5	11/13/17	<1.0	<1.0	<1.0	<10
MW-5	05/17/18	<1.0	<1.0	<1.0	<10
MW-5	10/28/18	<1.0	<1.0	<1.0	<10
MW-5(DUP-1)*	10/28/18	<1.0	<1.0	<1.0	<10
MW-6	10/25/14	1.1	<0.70	<0.50	<1.6
MW-6	05/30/15	190	<25	<5.0	110
MW-6	11/18/15	<1.0	<1.0	<1.0	<3.0
MW-6	04/18/16	47	<5.0	20	6.4
MW-6	10/14/16	<1.0	<5.0	<1.0	<5.0

TABLE 1 - GROUNDWATER ANALYTICAL RESULTS

Gallegos Canyon Unit #142E					
Location	Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)
NMWQCC Standards:		10	750	750	620
MW-6	06/11/17	2.2	<5.0	<1.0	<5.0
MW-6	11/13/17	<1.0	<1.0	<1.0	<10
MW-6	05/17/18	<1.0	<1.0	<1.0	<10
MW-6	10/28/18	<1.0	<1.0	<1.0	<10
MW-7	10/25/14	4.7	0.7J	1.7	5.7J
MW-7	05/30/15	6.5	<5.0	<1.0	1.8J
MW-7	11/18/15	4.3	<1.0	<1.0	<3.0
MW-7	04/18/16	480	350	31	200
MW-7	10/14/16	<1.0	<5.0	<1.0	<5.0
MW-7	06/11/17	120	11	1.9	18
MW-7	11/13/17	7.4	<1.0	<1.0	<10
MW-7	05/17/18	15	<1.0	<1.0	<10
MW-7	10/28/18	<1.0	<1.0	<1.0	<10
TMW-1	12/30/09	3660	1550	520	4110
TMW-1	11/09/10	8880	14400	956	9040
TMW-1	11/16/11	3890	6250	420	3610
TMW-1	06/07/13	5100	1100	190	2600
TMW-1	09/11/13	6600	960	190	2600
TMW-1	12/13/13	6500	2200	410	4000
TMW-1 abandoned on September 8, 2014, and replaced with MW-8					
MW-8	10/25/14	0.77J	<0.70	<0.50	<1.6
MW-8	05/30/15	36	<5.0	3.1	19
MW-8	11/18/15	6.6	<1.0	<1.0	<3.0
MW-8	04/18/16	3	<5.0	<1.0	<5.0
MW-8	10/14/16	4.8	<5.0	<1.0	<5.0
MW-8	11/13/17	1900	65	190	1600
MW-8	05/17/18	96	3.4	5.2	74
MW-8	10/28/18	<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 in an approximate value.
"<" = analyte was not detected at the indicated reporting limit (some historic data were reported at the detection limit).
*Field Duplicate (DP) results presented immediately below primary sample result

ATTACHMENT Q

L:\San Juan River Basin\SJRB GENERAL\GIS-NEW_MXDs\GALLEGOS CAYON UNIT #142E\2018 MAPS\GCU#142E_GARM_1SA_2018_REPORT.mxd

LEGEND:

- 5795 — APPROX. GROUND SURFACE CONTOUR AND ELEVATION, FEET
- ACCESS ROAD
- UNKNOWN LINE (POTENTIALLY ABANDONED)
- LOCATION OF FORMER 95 BARREL UST REMOVED 7/19/2011
- FENCE
- PW — PRODUCED WATER LINE
- UGC — UNDERGROUND CABLE
- G — UNDERGROUND GAS LINE
- APPROXIMATE FORMER DITCH
- APPROXIMATE EXTENT OF 10/1996 EPNG SOIL EXCAVATION (EXCAVATED TO 15.5 FEET)
- MONITORING WELL
- MONITORING WELL WITH MEASUREABLE FREE PRODUCT
- ABANDONED MONITORING WELL
- MONITORING WELL ASSOCIATED WITH UNRELATED BP RELEASE
- NEW BP WELL (10/29/2018)
- WELLHEAD
- SMA BENCHMARK
- RIG ANCHOR

NOTES:

UTILITY LOCATIONS ARE APPROXIMATE.
MW-4 WAS A SOIL BORING ONLY (NO WELL CONSTRUCTED)
BP FORMER PIT AND EXCAVATION PERIMETER INFORMATION OBTAINED FROM 06/24/2011 FIGURE FROM BLAGG ENGINEERING.

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 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
	12/12/2018	SLG	SLG	SRV

TITLE:

GROUNDWATER ANALYTICAL RESULTS MAY 17, 2018

PROJECT:

GALLEGOS CANYON UNIT COM A #142E SAN JUAN COUNTY, NEW MEXICO

Stantec

Figure No.: 6

L:\San Juan River Basin\SJRB GENERAL\GIS-NEW_MXDs\GALLEGOS CAYON UNIT #142E\2018 MAPS\GCU#142E_GARM_2SA_2018_REPORT.mxd

LEGEND:

- 5795 — APPROX. GROUND SURFACE CONTOUR AND ELEVATION, FEET
- ACCESS ROAD
- UNKNOWN LINE (POTENTIALLY ABANDONED)
- LOCATION OF FORMER 95 BARREL UST REMOVED 7/19/2011
- FENCE
- PW — PRODUCED WATER LINE
- UGC — UNDERGROUND CABLE
- G — UNDERGROUND GAS LINE
- APPROXIMATE FORMER DITCH
- APPROXIMATE EXTENT OF 10/1996 EPNG SOIL EXCAVATION (EXCAVATED TO 15.5 FEET)
- MONITORING WELL
- ABANDONED MONITORING WELL
- MONITORING WELL ASSOCIATED WITH UNRELATED BP RELEASE
- NEW BP WELL (10/29/2018)
- WELLHEAD
- SMA BENCHMARK
- RIG ANCHOR

NOTES:

UTILITY LOCATIONS ARE APPROXIMATE.
MW-4 WAS A SOIL BORING ONLY (NO WELL CONSTRUCTED)
BP FORMER PIT AND EXCAVATION PERIMETER INFORMATION OBTAINED FROM 06/24/2011 FIGURE FROM BLAGG ENGINEERING.

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 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
	12/12/2018	SLG	SLG	SRV

TITLE:

GROUNDWATER ANALYTICAL RESULTS
OCTOBER 28, 2018

PROJECT:

GALLEGOS CANYON UNIT COM A #142E
SAN JUAN COUNTY, NEW MEXICO

Stantec

Figure No.: 7

ATTACHMENT R

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: 400-154073-1
Client Project/Site: ElPaso CGP Company, LLC - GCU 142E

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

Attn: Ms. Sarah Gardner

Carol M Webb

Authorized for release by:
5/31/2018 4:23:40 PM

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

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 15
QC Sample Results 16
Chronicle 18
Certification Summary 20
Method Summary 21
Chain of Custody 22
Receipt Checklists 23

Definitions/Glossary

Client: Stantec Consulting Services Inc
Project/Site: ElPaso CGP Company, LLC - GCU 142E

TestAmerica Job ID: 400-154073-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
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 - GCU 142E

TestAmerica Job ID: 400-154073-1

Job ID: 400-154073-1

Laboratory: TestAmerica Pensacola

Narrative

Job Narrative
400-154073-1

Comments
No additional comments.

Receipt
The samples were received on 5/22/2018 9:19 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 0.3º C.

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: ElPaso CGP Company, LLC - GCU 142E

TestAmerica Job ID: 400-154073-1

Client Sample ID: MW-1 — Lab Sample ID: 400-154073-1

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Benzene	8.6		1.0		ug/L	1		8260C	Total/NA

Client Sample ID: MW-3 — Lab Sample ID: 400-154073-2

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Benzene	11		1.0		ug/L	1		8260C	Total/NA
Toluene	6.4		1.0		ug/L	1		8260C	Total/NA
Ethylbenzene	18		1.0		ug/L	1		8260C	Total/NA
Xylenes, Total	200		10		ug/L	1		8260C	Total/NA

Client Sample ID: MW-5 — Lab Sample ID: 400-154073-3

No Detections.

Client Sample ID: MW-6 — Lab Sample ID: 400-154073-4

No Detections.

Client Sample ID: MW-7 — Lab Sample ID: 400-154073-5

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Benzene	15		1.0		ug/L	1		8260C	Total/NA

Client Sample ID: MW-8 — Lab Sample ID: 400-154073-6

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Benzene	96		1.0		ug/L	1		8260C	Total/NA
Toluene	3.4		1.0		ug/L	1		8260C	Total/NA
Ethylbenzene	5.2		1.0		ug/L	1		8260C	Total/NA
Xylenes, Total	74		10		ug/L	1		8260C	Total/NA

Client Sample ID: DP-01 — Lab Sample ID: 400-154073-7

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Benzene	8.4		1.0		ug/L	1		8260C	Total/NA

Client Sample ID: TB (5/17/18) — Lab Sample ID: 400-154073-8

No Detections.

This Detection Summary does not include radiochemical test results.

Sample Summary

Client: Stantec Consulting Services Inc
Project/Site: ElPaso CGP Company, LLC - GCU 142E

TestAmerica Job ID: 400-154073-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-154073-1	MW-1	Water	05/17/18 16:50	05/22/18 09:19
400-154073-2	MW-3	Water	05/17/18 17:00	05/22/18 09:19
400-154073-3	MW-5	Water	05/17/18 16:30	05/22/18 09:19
400-154073-4	MW-6	Water	05/17/18 16:35	05/22/18 09:19
400-154073-5	MW-7	Water	05/17/18 16:45	05/22/18 09:19
400-154073-6	MW-8	Water	05/17/18 17:05	05/22/18 09:19
400-154073-7	DP-01	Water	05/17/18 00:00	05/22/18 09:19
400-154073-8	TB (5/17/18)	Water	05/17/18 16:20	05/22/18 09:19

Client Sample Results

Client: Stantec Consulting Services Inc
Project/Site: ElPaso CGP Company, LLC - GCU 142E

TestAmerica Job ID: 400-154073-1

Client Sample ID: MW-1
Date Collected: 05/17/18 16:50
Date Received: 05/22/18 09:19

Lab Sample ID: 400-154073-1
Matrix: Water

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**8.6**		1.0		ug/L			05/28/18 14:14	1
Toluene	<1.0		1.0		ug/L			05/28/18 14:14	1
Ethylbenzene	<1.0		1.0		ug/L			05/28/18 14:14	1
Xylenes, Total	<10		10		ug/L			05/28/18 14:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*93*		*78 - 118*		*05/28/18 14:14*	*1*
Dibromofluoromethane	*103*		*81 - 121*		*05/28/18 14:14*	*1*
1,2-Dichloroethane-d4 (Surr)	*84*		*67 - 134*		*05/28/18 14:14*	*1*

Client Sample Results

Client: Stantec Consulting Services Inc
Project/Site: ElPaso CGP Company, LLC - GCU 142E

TestAmerica Job ID: 400-154073-1

Client Sample ID: MW-3
Date Collected: 05/17/18 17:00
Date Received: 05/22/18 09:19

Lab Sample ID: 400-154073-2
Matrix: Water

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	11		1.0		ug/L			05/28/18 14:40	1
Toluene	6.4		1.0		ug/L			05/28/18 14:40	1
Ethylbenzene	18		1.0		ug/L			05/28/18 14:40	1
Xylenes, Total	200		10		ug/L			05/28/18 14:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*99*		*78 - 118*		*05/28/18 14:40*	*1*
Dibromofluoromethane	*100*		*81 - 121*		*05/28/18 14:40*	*1*
1,2-Dichloroethane-d4 (Surr)	*80*		*67 - 134*		*05/28/18 14:40*	*1*

Client Sample Results

Client: Stantec Consulting Services Inc
Project/Site: ElPaso CGP Company, LLC - GCU 142E

TestAmerica Job ID: 400-154073-1

Client Sample ID: MW-5
Date Collected: 05/17/18 16:30
Date Received: 05/22/18 09:19

Lab Sample ID: 400-154073-3
Matrix: Water

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0		ug/L			05/28/18 15:05	1
Toluene	<1.0		1.0		ug/L			05/28/18 15:05	1
Ethylbenzene	<1.0		1.0		ug/L			05/28/18 15:05	1
Xylenes, Total	<10		10		ug/L			05/28/18 15:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*93*		*78 - 118*		*05/28/18 15:05*	*1*
Dibromofluoromethane	*103*		*81 - 121*		*05/28/18 15:05*	*1*
1,2-Dichloroethane-d4 (Surr)	*85*		*67 - 134*		*05/28/18 15:05*	*1*

Client Sample Results

Client: Stantec Consulting Services Inc
Project/Site: ElPaso CGP Company, LLC - GCU 142E

TestAmerica Job ID: 400-154073-1

Client Sample ID: MW-6
Date Collected: 05/17/18 16:35
Date Received: 05/22/18 09:19

Lab Sample ID: 400-154073-4
Matrix: Water

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0		ug/L			05/28/18 15:31	1
Toluene	<1.0		1.0		ug/L			05/28/18 15:31	1
Ethylbenzene	<1.0		1.0		ug/L			05/28/18 15:31	1
Xylenes, Total	<10		10		ug/L			05/28/18 15:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*90*		*78 - 118*		*05/28/18 15:31*	*1*
Dibromofluoromethane	*101*		*81 - 121*		*05/28/18 15:31*	*1*
1,2-Dichloroethane-d4 (Surr)	*83*		*67 - 134*		*05/28/18 15:31*	*1*

Client Sample Results

Client: Stantec Consulting Services Inc
Project/Site: ElPaso CGP Company, LLC - GCU 142E

TestAmerica Job ID: 400-154073-1

Client Sample ID: MW-7
Date Collected: 05/17/18 16:45
Date Received: 05/22/18 09:19

Lab Sample ID: 400-154073-5
Matrix: Water

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**15**		1.0		ug/L			05/28/18 15:56	1
Toluene	<1.0		1.0		ug/L			05/28/18 15:56	1
Ethylbenzene	<1.0		1.0		ug/L			05/28/18 15:56	1
Xylenes, Total	<10		10		ug/L			05/28/18 15:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*89*		*78 - 118*		*05/28/18 15:56*	*1*
Dibromofluoromethane	*98*		*81 - 121*		*05/28/18 15:56*	*1*
1,2-Dichloroethane-d4 (Surr)	*81*		*67 - 134*		*05/28/18 15:56*	*1*

Client Sample Results

Client: Stantec Consulting Services Inc
Project/Site: ElPaso CGP Company, LLC - GCU 142E

TestAmerica Job ID: 400-154073-1

Client Sample ID: MW-8
Date Collected: 05/17/18 17:05
Date Received: 05/22/18 09:19

Lab Sample ID: 400-154073-6
Matrix: Water

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	96		1.0		ug/L			05/28/18 16:22	1
Toluene	3.4		1.0		ug/L			05/28/18 16:22	1
Ethylbenzene	5.2		1.0		ug/L			05/28/18 16:22	1
Xylenes, Total	74		10		ug/L			05/28/18 16:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*93*		*78 - 118*		*05/28/18 16:22*	*1*
Dibromofluoromethane	*98*		*81 - 121*		*05/28/18 16:22*	*1*
1,2-Dichloroethane-d4 (Surr)	*81*		*67 - 134*		*05/28/18 16:22*	*1*

Client Sample Results

Client: Stantec Consulting Services Inc
Project/Site: ElPaso CGP Company, LLC - GCU 142E

TestAmerica Job ID: 400-154073-1

Client Sample ID: DP-01
Date Collected: 05/17/18 00:00
Date Received: 05/22/18 09:19

Lab Sample ID: 400-154073-7
Matrix: Water

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**8.4**		1.0		ug/L			05/28/18 16:47	1
Toluene	<1.0		1.0		ug/L			05/28/18 16:47	1
Ethylbenzene	<1.0		1.0		ug/L			05/28/18 16:47	1
Xylenes, Total	<10		10		ug/L			05/28/18 16:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*90*		*78 - 118*		*05/28/18 16:47*	*1*
Dibromofluoromethane	*100*		*81 - 121*		*05/28/18 16:47*	*1*
1,2-Dichloroethane-d4 (Surr)	*82*		*67 - 134*		*05/28/18 16:47*	*1*

Client Sample Results

Client: Stantec Consulting Services Inc
Project/Site: ElPaso CGP Company, LLC - GCU 142E

TestAmerica Job ID: 400-154073-1

Client Sample ID: TB (5/17/18)

Date Collected: 05/17/18 16:20
Date Received: 05/22/18 09:19

Lab Sample ID: 400-154073-8

Matrix: Water

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0		ug/L			05/28/18 11:41	1
Toluene	<1.0		1.0		ug/L			05/28/18 11:41	1
Ethylbenzene	<1.0		1.0		ug/L			05/28/18 11:41	1
Xylenes, Total	<10		10		ug/L			05/28/18 11:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*94*		*78 - 118*		*05/28/18 11:41*	*1*
Dibromofluoromethane	*100*		*81 - 121*		*05/28/18 11:41*	*1*
1,2-Dichloroethane-d4 (Surr)	*82*		*67 - 134*		*05/28/18 11:41*	*1*

QC Association Summary

Client: Stantec Consulting Services Inc
Project/Site: ElPaso CGP Company, LLC - GCU 142E

TestAmerica Job ID: 400-154073-1

GC/MS VOA

Analysis Batch: 399152

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-154073-1	MW-1	Total/NA	Water	8260C	
400-154073-2	MW-3	Total/NA	Water	8260C	
400-154073-3	MW-5	Total/NA	Water	8260C	
400-154073-4	MW-6	Total/NA	Water	8260C	
400-154073-5	MW-7	Total/NA	Water	8260C	
400-154073-6	MW-8	Total/NA	Water	8260C	
400-154073-7	DP-01	Total/NA	Water	8260C	
400-154073-8	TB (5/17/18)	Total/NA	Water	8260C	
MB 400-399152/4	Method Blank	Total/NA	Water	8260C	
LCS 400-399152/1002	Lab Control Sample	Total/NA	Water	8260C	
400-154149-A-1 MS	Matrix Spike	Total/NA	Water	8260C	
400-154149-A-1 MSD	Matrix Spike Duplicate	Total/NA	Water	8260C	

QC Sample Results

Client: Stantec Consulting Services Inc
Project/Site: ElPaso CGP Company, LLC - GCU 142E

TestAmerica Job ID: 400-154073-1

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

Lab Sample ID: MB 400-399152/4
Matrix: Water
Analysis Batch: 399152

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

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0		ug/L			05/28/18 09:34	1
Toluene	<1.0		1.0		ug/L			05/28/18 09:34	1
Ethylbenzene	<1.0		1.0		ug/L			05/28/18 09:34	1
Xylenes, Total	<10		10		ug/L			05/28/18 09:34	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*91*		*78 - 118*		*05/28/18 09:34*	*1*
Dibromofluoromethane	*99*		*81 - 121*		*05/28/18 09:34*	*1*
1,2-Dichloroethane-d4 (Surr)	*80*		*67 - 134*		*05/28/18 09:34*	*1*

Lab Sample ID: LCS 400-399152/1002
Matrix: Water
Analysis Batch: 399152

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	46.5		ug/L		93	70 - 130		
Toluene			50.0	43.1		ug/L		86	70 - 130		
Ethylbenzene			50.0	42.7		ug/L		85	70 - 130		
Xylenes, Total			100	85.6		ug/L		86	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*92*		*78 - 118*
Dibromofluoromethane	*102*		*81 - 121*
1,2-Dichloroethane-d4 (Surr)	*81*		*67 - 134*

Lab Sample ID: 400-154149-A-1 MS
Matrix: Water
Analysis Batch: 399152

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	45.4		ug/L		91	56 - 142		
Toluene	<1.0		50.0	40.0		ug/L		80	65 - 130		
Ethylbenzene	<1.0		50.0	39.3		ug/L		79	58 - 131		
Xylenes, Total	<10		100	78.8		ug/L		79	59 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene	*91*		*78 - 118*
Dibromofluoromethane	*102*		*81 - 121*
1,2-Dichloroethane-d4 (Surr)	*80*		*67 - 134*

Lab Sample ID: 400-154149-A-1 MSD
Matrix: Water
Analysis Batch: 399152

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	42.9		ug/L		86	56 - 142	6	30
Toluene	<1.0		50.0	37.1		ug/L		74	65 - 130	8	30

QC Sample Results

Client: Stantec Consulting Services Inc
Project/Site: ElPaso CGP Company, LLC - GCU 142E

TestAmerica Job ID: 400-154073-1

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

Lab Sample ID: 400-154149-A-1 MSD
Matrix: Water
Analysis Batch: 399152

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	34.6		ug/L		69	58 - 131	13	30
Xylenes, Total	<10		100	69.5		ug/L		70	59 - 130	12	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene	*90*		*78 - 118*
Dibromofluoromethane	*103*		*81 - 121*
1,2-Dichloroethane-d4 (Surr)	*80*		*67 - 134*

Lab Chronicle

Client: Stantec Consulting Services Inc
Project/Site: ElPaso CGP Company, LLC - GCU 142E

TestAmerica Job ID: 400-154073-1

Client Sample ID: MW-1
Date Collected: 05/17/18 16:50
Date Received: 05/22/18 09:19

Lab Sample ID: 400-154073-1
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	399152	05/28/18 14:14	CAR	TAL PEN
	Instrument ID: CH_WASP									

Client Sample ID: MW-3
Date Collected: 05/17/18 17:00
Date Received: 05/22/18 09:19

Lab Sample ID: 400-154073-2
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	399152	05/28/18 14:40	CAR	TAL PEN
	Instrument ID: CH_WASP									

Client Sample ID: MW-5
Date Collected: 05/17/18 16:30
Date Received: 05/22/18 09:19

Lab Sample ID: 400-154073-3
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	399152	05/28/18 15:05	CAR	TAL PEN
	Instrument ID: CH_WASP									

Client Sample ID: MW-6
Date Collected: 05/17/18 16:35
Date Received: 05/22/18 09:19

Lab Sample ID: 400-154073-4
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	399152	05/28/18 15:31	CAR	TAL PEN
	Instrument ID: CH_WASP									

Client Sample ID: MW-7
Date Collected: 05/17/18 16:45
Date Received: 05/22/18 09:19

Lab Sample ID: 400-154073-5
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	399152	05/28/18 15:56	CAR	TAL PEN
	Instrument ID: CH_WASP									

Client Sample ID: MW-8
Date Collected: 05/17/18 17:05
Date Received: 05/22/18 09:19

Lab Sample ID: 400-154073-6
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	399152	05/28/18 16:22	CAR	TAL PEN
	Instrument ID: CH_WASP									

Lab Chronicle

Client: Stantec Consulting Services Inc
Project/Site: ElPaso CGP Company, LLC - GCU 142E

TestAmerica Job ID: 400-154073-1

Client Sample ID: DP-01

Date Collected: 05/17/18 00:00
Date Received: 05/22/18 09:19

Lab Sample ID: 400-154073-7

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	399152	05/28/18 16:47	CAR	TAL PEN
	Instrument ID: CH_WASP									

Client Sample ID: TB (5/17/18)

Date Collected: 05/17/18 16:20
Date Received: 05/22/18 09:19

Lab Sample ID: 400-154073-8

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	399152	05/28/18 11:41	CAR	TAL PEN
	Instrument ID: CH_WASP									

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 - GCU 142E

TestAmerica Job ID: 400-154073-1

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
ANAB	ISO/IEC 17025		L2471	02-22-20
Arizona	State Program	9	AZ0710	01-12-19
Arkansas DEQ	State Program	6	88-0689	09-01-18
California	ELAP	9	2510	06-30-18
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	10-31-18
Kentucky (UST)	State Program	4	53	06-30-18
Kentucky (WW)	State Program	4	98030	12-31-18
Louisiana	NELAP	6	30976	06-30-18
Louisiana (DW)	NELAP	6	LA170005	12-31-18
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	12-31-18
Oklahoma	State Program	6	9810	08-31-18
Pennsylvania	NELAP	3	68-00467	01-31-19
Rhode Island	State Program	1	LAO00307	12-30-18
South Carolina	State Program	4	96026	06-30-18
Tennessee	State Program	4	TN02907	06-30-18
USDA	Federal		P330-16-00172	05-24-19
Virginia	NELAP	3	460166	06-14-18
Washington	State Program	10	C915	05-15-19

Method Summary

Client: Stantec Consulting Services Inc
Project/Site: ElPaso CGP Company, LLC - GCU 142E

TestAmerica Job ID: 400-154073-1

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

Protocol References:

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

Laboratory References:

TAL PEN = 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

400-154073 COC

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: S. Gardner / S. Hansen	Lab PM: Webb, Carol M	Carrier Tracking No(s):	COC No: 400-74078-29200.1
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
City: Denver	TAT Requested (days): Standard	
State, Zip: CO, 80202	PO #: See Project Notes	
Phone: 303-291-2239(Tel)	WO #:	
Email: sarah.gardner@mwhglobal.com	Project #: 40005479	
Project Name: GCU Com A #142E Q2 2018	SSOW#:	
Site: GCU 142E		

Preservation Codes:

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

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260C - BTEX 8260	Total Number of containers	Special Instructions/Note:
			Preservation Code:				A		
MW-1	5/17/18	1650	G	W			3	3	
MW-3	5/17/18	1700	G	W			3	3	
MW-5	5/17/18	1630	G	W			3	3	
MW-6	5/17/18	1635	G	W			3	3	
MW-7	5/17/18	1645	G	W			3	3	
MW-8	5/17/18	1705	G	W			3	3	
DP-01	5/17/18	—	G	W			3	3	
TB (5/17/18)	5/17/18	1620	—	W			3	3	

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

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

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

Special Instructions/QC Requirements:

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

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
[signature]	5/21/2018 800	Stantec	[signature]	5/22/18 0919	TA
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 0.3°C IR7

Ver: 08/04/2016

Login Sample Receipt Checklist

Client: Stantec Consulting Services Inc Job Number: 400-154073-1

Login Number: 154073 **List Source: TestAmerica Pensacola**
List Number: 1
Creator: Perez, Trina M

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	0.3°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 <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: 400-161292-1
Client Project/Site: ElPaso CGP Company, LLC - GCU Com A#142E

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

Attn: Ms. Sarah Gardner

Carol M Webb

Authorized for release by:
11/5/2018 12:56:13 PM

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

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 15
QC Sample Results 16
Chronicle 18
Certification Summary 20
Method Summary 21
Chain of Custody 22
Receipt Checklists 24

Definitions/Glossary

Client: Stantec Consulting Services Inc
Project/Site: ElPaso CGP Company, LLC - GCU Com A#142E

TestAmerica Job ID: 400-161292-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
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 - GCU Com A#142E

TestAmerica Job ID: 400-161292-1

Job ID: 400-161292-1

Laboratory: TestAmerica Pensacola

Narrative

Job Narrative
400-161292-1

Comments
No additional comments.

Receipt
The samples were received on 10/30/2018 9:38 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 4.6º C.

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: ElPaso CGP Company, LLC - GCU Com A#142E

TestAmerica Job ID: 400-161292-1

Client Sample ID: MW-1 — Lab Sample ID: 400-161292-1

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Benzene	1.5		1.0		ug/L	1		8260C	Total/NA

Client Sample ID: MW-3 — Lab Sample ID: 400-161292-3

No Detections.

Client Sample ID: MW-5 — Lab Sample ID: 400-161292-4

No Detections.

Client Sample ID: MW-6 — Lab Sample ID: 400-161292-5

No Detections.

Client Sample ID: MW-7 — Lab Sample ID: 400-161292-6

No Detections.

Client Sample ID: MW-8 — Lab Sample ID: 400-161292-7

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Benzene	4.0		1.0		ug/L	1		8260C	Total/NA

Client Sample ID: DUP-01 — Lab Sample ID: 400-161292-8

No Detections.

Client Sample ID: TB-01 — Lab Sample ID: 400-161292-9

No Detections.

This Detection Summary does not include radiochemical test results.

Sample Summary

Client: Stantec Consulting Services Inc
Project/Site: ElPaso CGP Company, LLC - GCU Com A#142E

TestAmerica Job ID: 400-161292-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-161292-1	MW-1	Water	10/28/18 13:50	10/30/18 09:38
400-161292-3	MW-3	Water	10/28/18 14:00	10/30/18 09:38
400-161292-4	MW-5	Water	10/28/18 13:30	10/30/18 09:38
400-161292-5	MW-6	Water	10/28/18 13:45	10/30/18 09:38
400-161292-6	MW-7	Water	10/28/18 14:10	10/30/18 09:38
400-161292-7	MW-8	Water	10/28/18 14:20	10/30/18 09:38
400-161292-8	DUP-01	Water	10/28/18 13:25	10/30/18 09:38
400-161292-9	TB-01	Water	10/28/18 13:20	10/30/18 09:38

Client Sample Results

Client: Stantec Consulting Services Inc
Project/Site: ElPaso CGP Company, LLC - GCU Com A#142E

TestAmerica Job ID: 400-161292-1

Client Sample ID: MW-1
Date Collected: 10/28/18 13:50
Date Received: 10/30/18 09:38

Lab Sample ID: 400-161292-1
Matrix: Water

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**1.5**		1.0		ug/L			11/03/18 15:23	1
Toluene	<1.0		1.0		ug/L			11/03/18 15:23	1
Ethylbenzene	<1.0		1.0		ug/L			11/03/18 15:23	1
Xylenes, Total	<10		10		ug/L			11/03/18 15:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*108*		*78 - 118*		*11/03/18 15:23*	*1*
Dibromofluoromethane	*91*		*81 - 121*		*11/03/18 15:23*	*1*
1,2-Dichloroethane-d4 (Surr)	*106*		*67 - 134*		*11/03/18 15:23*	*1*

Client Sample Results

Client: Stantec Consulting Services Inc
Project/Site: ElPaso CGP Company, LLC - GCU Com A#142E

TestAmerica Job ID: 400-161292-1

Client Sample ID: MW-3
Date Collected: 10/28/18 14:00
Date Received: 10/30/18 09:38

Lab Sample ID: 400-161292-3
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			11/03/18 15:49	1
Toluene	<1.0		1.0		ug/L			11/03/18 15:49	1
Ethylbenzene	<1.0		1.0		ug/L			11/03/18 15:49	1
Xylenes, Total	<10		10		ug/L			11/03/18 15:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*110*		*78 - 118*		*11/03/18 15:49*	*1*
Dibromofluoromethane	*92*		*81 - 121*		*11/03/18 15:49*	*1*
1,2-Dichloroethane-d4 (Surr)	*108*		*67 - 134*		*11/03/18 15:49*	*1*

Client Sample Results

Client: Stantec Consulting Services Inc
Project/Site: ElPaso CGP Company, LLC - GCU Com A#142E

TestAmerica Job ID: 400-161292-1

Client Sample ID: MW-5
Date Collected: 10/28/18 13:30
Date Received: 10/30/18 09:38

Lab Sample ID: 400-161292-4
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			11/03/18 13:21	1
Toluene	<1.0		1.0		ug/L			11/03/18 13:21	1
Ethylbenzene	<1.0		1.0		ug/L			11/03/18 13:21	1
Xylenes, Total	<10		10		ug/L			11/03/18 13:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*111*		*78 - 118*		*11/03/18 13:21*	*1*
Dibromofluoromethane	*89*		*81 - 121*		*11/03/18 13:21*	*1*
Toluene-d8 (Surr)	*102*		*80 - 120*		*11/03/18 13:21*	*1*
1,2-Dichloroethane-d4 (Surr)	*105*		*67 - 134*		*11/03/18 13:21*	*1*

Client Sample Results

Client: Stantec Consulting Services Inc
Project/Site: ElPaso CGP Company, LLC - GCU Com A#142E

TestAmerica Job ID: 400-161292-1

Client Sample ID: MW-6
Date Collected: 10/28/18 13:45
Date Received: 10/30/18 09:38

Lab Sample ID: 400-161292-5
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			11/03/18 16:13	1
Toluene	<1.0		1.0		ug/L			11/03/18 16:13	1
Ethylbenzene	<1.0		1.0		ug/L			11/03/18 16:13	1
Xylenes, Total	<10		10		ug/L			11/03/18 16:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*109*		*78 - 118*		*11/03/18 16:13*	*1*
Dibromofluoromethane	*90*		*81 - 121*		*11/03/18 16:13*	*1*
1,2-Dichloroethane-d4 (Surr)	*106*		*67 - 134*		*11/03/18 16:13*	*1*

Client Sample Results

Client: Stantec Consulting Services Inc
Project/Site: ElPaso CGP Company, LLC - GCU Com A#142E

TestAmerica Job ID: 400-161292-1

Client Sample ID: MW-7
Date Collected: 10/28/18 14:10
Date Received: 10/30/18 09:38

Lab Sample ID: 400-161292-6
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			11/03/18 16:38	1
Toluene	<1.0		1.0		ug/L			11/03/18 16:38	1
Ethylbenzene	<1.0		1.0		ug/L			11/03/18 16:38	1
Xylenes, Total	<10		10		ug/L			11/03/18 16:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*110*		*78 - 118*		*11/03/18 16:38*	*1*
Dibromofluoromethane	*91*		*81 - 121*		*11/03/18 16:38*	*1*
1,2-Dichloroethane-d4 (Surr)	*106*		*67 - 134*		*11/03/18 16:38*	*1*

Client Sample Results

Client: Stantec Consulting Services Inc
Project/Site: ElPaso CGP Company, LLC - GCU Com A#142E

TestAmerica Job ID: 400-161292-1

Client Sample ID: MW-8
Date Collected: 10/28/18 14:20
Date Received: 10/30/18 09:38

Lab Sample ID: 400-161292-7
Matrix: Water

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**4.0**		1.0		ug/L			11/03/18 17:02	1
Toluene	<1.0		1.0		ug/L			11/03/18 17:02	1
Ethylbenzene	<1.0		1.0		ug/L			11/03/18 17:02	1
Xylenes, Total	<10		10		ug/L			11/03/18 17:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*110*		*78 - 118*		*11/03/18 17:02*	*1*
Dibromofluoromethane	*91*		*81 - 121*		*11/03/18 17:02*	*1*
1,2-Dichloroethane-d4 (Surr)	*103*		*67 - 134*		*11/03/18 17:02*	*1*

Client Sample Results

Client: Stantec Consulting Services Inc
Project/Site: ElPaso CGP Company, LLC - GCU Com A#142E

TestAmerica Job ID: 400-161292-1

Client Sample ID: DUP-01
Date Collected: 10/28/18 13:25
Date Received: 10/30/18 09:38

Lab Sample ID: 400-161292-8
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			11/03/18 17:28	1
Toluene	<1.0		1.0		ug/L			11/03/18 17:28	1
Ethylbenzene	<1.0		1.0		ug/L			11/03/18 17:28	1
Xylenes, Total	<10		10		ug/L			11/03/18 17:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*110*		*78 - 118*		*11/03/18 17:28*	*1*
Dibromofluoromethane	*92*		*81 - 121*		*11/03/18 17:28*	*1*
1,2-Dichloroethane-d4 (Surr)	*108*		*67 - 134*		*11/03/18 17:28*	*1*

Client Sample Results

Client: Stantec Consulting Services Inc
Project/Site: ElPaso CGP Company, LLC - GCU Com A#142E

TestAmerica Job ID: 400-161292-1

Client Sample ID: TB-01
Date Collected: 10/28/18 13:20
Date Received: 10/30/18 09:38

Lab Sample ID: 400-161292-9
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			11/03/18 09:16	1
Toluene	<1.0		1.0		ug/L			11/03/18 09:16	1
Ethylbenzene	<1.0		1.0		ug/L			11/03/18 09:16	1
Xylenes, Total	<10		10		ug/L			11/03/18 09:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*109*		*78 - 118*		*11/03/18 09:16*	*1*
Dibromofluoromethane	*90*		*81 - 121*		*11/03/18 09:16*	*1*
1,2-Dichloroethane-d4 (Surr)	*105*		*67 - 134*		*11/03/18 09:16*	*1*

QC Association Summary

Client: Stantec Consulting Services Inc
Project/Site: ElPaso CGP Company, LLC - GCU Com A#142E

TestAmerica Job ID: 400-161292-1

GC/MS VOA

Analysis Batch: 418202

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-161292-1	MW-1	Total/NA	Water	8260C	
400-161292-3	MW-3	Total/NA	Water	8260C	
400-161292-4	MW-5	Total/NA	Water	8260C	
400-161292-5	MW-6	Total/NA	Water	8260C	
400-161292-6	MW-7	Total/NA	Water	8260C	
400-161292-7	MW-8	Total/NA	Water	8260C	
400-161292-8	DUP-01	Total/NA	Water	8260C	
400-161292-9	TB-01	Total/NA	Water	8260C	
MB 400-418202/4	Method Blank	Total/NA	Water	8260C	
LCS 400-418202/1002	Lab Control Sample	Total/NA	Water	8260C	
400-161287-A-10 MS	Matrix Spike	Total/NA	Water	8260C	
400-161287-A-10 MSD	Matrix Spike Duplicate	Total/NA	Water	8260C	

QC Sample Results

Client: Stantec Consulting Services Inc
Project/Site: ElPaso CGP Company, LLC - GCU Com A#142E

TestAmerica Job ID: 400-161292-1

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

Lab Sample ID: MB 400-418202/4
Matrix: Water
Analysis Batch: 418202

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			11/03/18 07:58	1
Toluene	<1.0		1.0		ug/L			11/03/18 07:58	1
Ethylbenzene	<1.0		1.0		ug/L			11/03/18 07:58	1
Xylenes, Total	<10		10		ug/L			11/03/18 07:58	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*110*		*78 - 118*		*11/03/18 07:58*	*1*
Dibromofluoromethane	*92*		*81 - 121*		*11/03/18 07:58*	*1*
Toluene-d8 (Surr)	*102*		*80 - 120*		*11/03/18 07:58*	*1*
1,2-Dichloroethane-d4 (Surr)	*103*		*67 - 134*		*11/03/18 07:58*	*1*

Lab Sample ID: LCS 400-418202/1002
Matrix: Water
Analysis Batch: 418202

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			50.0	42.9		ug/L		86	70 - 130		
Toluene			50.0	46.8		ug/L		94	70 - 130		
Ethylbenzene			50.0	48.0		ug/L		96	70 - 130		
Xylenes, Total			100	96.0		ug/L		96	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*107*		*78 - 118*
Dibromofluoromethane	*91*		*81 - 121*
Toluene-d8 (Surr)	*102*		*80 - 120*
1,2-Dichloroethane-d4 (Surr)	*103*		*67 - 134*

Lab Sample ID: 400-161287-A-10 MS
Matrix: Water
Analysis Batch: 418202

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	4.8		50.0	46.8		ug/L		84	56 - 142		
Toluene	<1.0		50.0	45.7		ug/L		91	65 - 130		
Ethylbenzene	<1.0		50.0	46.4		ug/L		93	58 - 131		
Xylenes, Total	<10		100	93.6		ug/L		94	59 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene	*109*		*78 - 118*
Dibromofluoromethane	*90*		*81 - 121*
Toluene-d8 (Surr)	*103*		*80 - 120*
1,2-Dichloroethane-d4 (Surr)	*103*		*67 - 134*

QC Sample Results

Client: Stantec Consulting Services Inc
Project/Site: ElPaso CGP Company, LLC - GCU Com A#142E

TestAmerica Job ID: 400-161292-1

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

Lab Sample ID: 400-161287-A-10 MSD
Matrix: Water
Analysis Batch: 418202

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	4.8		50.0	47.5		ug/L		85	56 - 142	1	30
Toluene	<1.0		50.0	45.8		ug/L		92	65 - 130	0	30
Ethylbenzene	<1.0		50.0	46.1		ug/L		92	58 - 131	1	30
Xylenes, Total	<10		100	92.9		ug/L		93	59 - 130	1	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene	*108*		*78 - 118*
Dibromofluoromethane	*92*		*81 - 121*
Toluene-d8 (Surr)	*102*		*80 - 120*
1,2-Dichloroethane-d4 (Surr)	*103*		*67 - 134*

Lab Chronicle

Client: Stantec Consulting Services Inc
Project/Site: ElPaso CGP Company, LLC - GCU Com A#142E

TestAmerica Job ID: 400-161292-1

Client Sample ID: MW-1
Date Collected: 10/28/18 13:50
Date Received: 10/30/18 09:38

Lab Sample ID: 400-161292-1
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	418202	11/03/18 15:23	WPD	TAL PEN
	Instrument ID: CH_CONAN									

Client Sample ID: MW-3
Date Collected: 10/28/18 14:00
Date Received: 10/30/18 09:38

Lab Sample ID: 400-161292-3
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	418202	11/03/18 15:49	WPD	TAL PEN
	Instrument ID: CH_CONAN									

Client Sample ID: MW-5
Date Collected: 10/28/18 13:30
Date Received: 10/30/18 09:38

Lab Sample ID: 400-161292-4
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	418202	11/03/18 13:21	WPD	TAL PEN
	Instrument ID: CH_CONAN									

Client Sample ID: MW-6
Date Collected: 10/28/18 13:45
Date Received: 10/30/18 09:38

Lab Sample ID: 400-161292-5
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	418202	11/03/18 16:13	WPD	TAL PEN
	Instrument ID: CH_CONAN									

Client Sample ID: MW-7
Date Collected: 10/28/18 14:10
Date Received: 10/30/18 09:38

Lab Sample ID: 400-161292-6
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	418202	11/03/18 16:38	WPD	TAL PEN
	Instrument ID: CH_CONAN									

Client Sample ID: MW-8
Date Collected: 10/28/18 14:20
Date Received: 10/30/18 09:38

Lab Sample ID: 400-161292-7
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	418202	11/03/18 17:02	WPD	TAL PEN
	Instrument ID: CH_CONAN									

Lab Chronicle

Client: Stantec Consulting Services Inc
Project/Site: ElPaso CGP Company, LLC - GCU Com A#142E

TestAmerica Job ID: 400-161292-1

Client Sample ID: DUP-01

Date Collected: 10/28/18 13:25
Date Received: 10/30/18 09:38

Lab Sample ID: 400-161292-8
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	418202	11/03/18 17:28	WPD	TAL PEN
	Instrument ID: CH_CONAN									

Client Sample ID: TB-01

Date Collected: 10/28/18 13:20
Date Received: 10/30/18 09:38

Lab Sample ID: 400-161292-9
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	418202	11/03/18 09:16	WPD	TAL PEN
	Instrument ID: CH_CONAN									

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: 400-161292-1
Project/Site: ElPaso CGP Company, LLC - GCU Com A#142E

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	06-30-19
ANAB	ISO/IEC 17025		L2471	02-22-20
Arizona	State Program	9	AZ0710	01-12-19
Arkansas DEQ	State Program	6	88-0689	09-01-19
California	State Program	9	2510	06-30-19
Florida	NELAP	4	E81010	06-30-19
Georgia	State Program	4	E81010 (FL)	06-30-19
Illinois	NELAP	5	200041	10-09-19
Iowa	State Program	7	367	08-01-20
Kansas	NELAP	7	E-10253	10-31-18 *
Kentucky (UST)	State Program	4	53	06-30-19
Kentucky (WW)	State Program	4	98030	12-31-18
Louisiana	NELAP	6	30976	06-30-19
Louisiana (DW)	NELAP	6	LA170005	12-31-18
Maryland	State Program	3	233	09-30-19
Massachusetts	State Program	1	M-FL094	06-30-19
Michigan	State Program	5	9912	06-30-19
New Jersey	NELAP	2	FL006	06-30-19
North Carolina (WW/SW)	State Program	4	314	12-31-18
Oklahoma	State Program	6	9810	08-31-19
Pennsylvania	NELAP	3	68-00467	01-31-19
Rhode Island	State Program	1	LAO00307	12-30-18
South Carolina	State Program	4	96026	06-30-19
Tennessee	State Program	4	TN02907	06-30-19
Texas	NELAP	6	T104704286-18-16	09-30-19
US Fish & Wildlife	Federal		LE058448-0	07-31-19
USDA	Federal		P330-18-00148	05-17-21
Virginia	NELAP	3	460166	06-14-19
Washington	State Program	10	C915	05-15-19
West Virginia DEP	State Program	3	136	06-30-19

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Method Summary

Client: Stantec Consulting Services Inc
Project/Site: ElPaso CGP Company, LLC - GCU Com A#142E

TestAmerica Job ID: 400-161292-1

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

Protocol References:

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

Laboratory References:

TAL PEN = 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

400-161292 COC

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: S. Gardner / S. Spiering	Lab PM: Webb, Carol M	Carrier Tracking No(s):	COC No: 400-77988-29200.1
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:			
City: Denver	TAT Requested (days): 7 days			
State, Zip: CO, 80202				
Phone: 303-291-2239(Tel)	PO #: See Project Notes			
Email: sarah.gardner@stantec.com	WO #:			
Project Name: GCU Com A #142E Q4 2018	Project #: 40005479			
Site: GCU Com A# 142E	SSOW#:			

Analysis Requested

Preservation Codes:

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

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260C - BTEX 8260	Total Number of containers	Special Instructions/Note:
			Preservation Code:				A		
MW-1	10/28/18	1350	G	W			3		
MW-2	10/28/18	1430	G	W			3		
MW-3	10/28/18	1400	G	W			3		
MW-5	10/28/18	1330	G	W			3		Unpreserved
MW-6	10/28/18	1345	G	W			3		
MW-7	10/28/18	1410	G	W			3		
MW-8	10/28/18	1420	G	W			3		
DUP-01	10/28/18	1325	G	W			3		
TB-01	10/28/18	1320	—	W			3		

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

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

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

Special Instructions/QC Requirements:

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

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
[signature]	10/29/2018 1200	Stantec	[signature]	10/30/18 0938	TAP
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:
		4.6 °C IR7

Ver: 08/04/2016

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Sample Control Checklist

Pensacola

PS-SC-FM-005, Rev. 0
Effective Date: 09/18/2018
Page 1 of 1

Inspected by: _____

Labeled by: _____

Delivered by: _____

Received by: _____

COC Signed/Dated: _____

COC Temp/IR Gun Listed: _____

Logged by: _____

Notes:

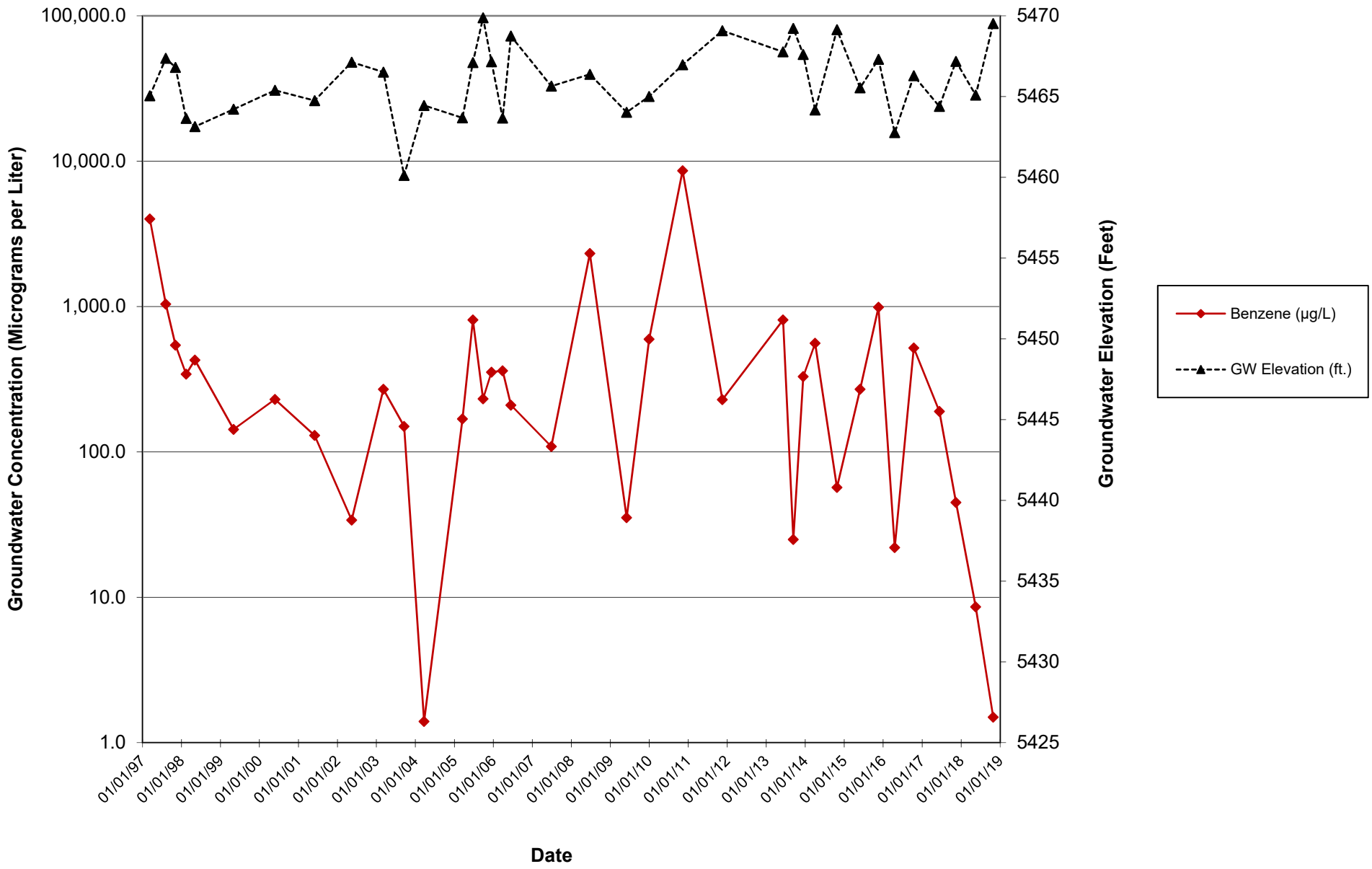
Login Sample Receipt Checklist

Client: Stantec Consulting Services Inc Job Number: 400-161292-1

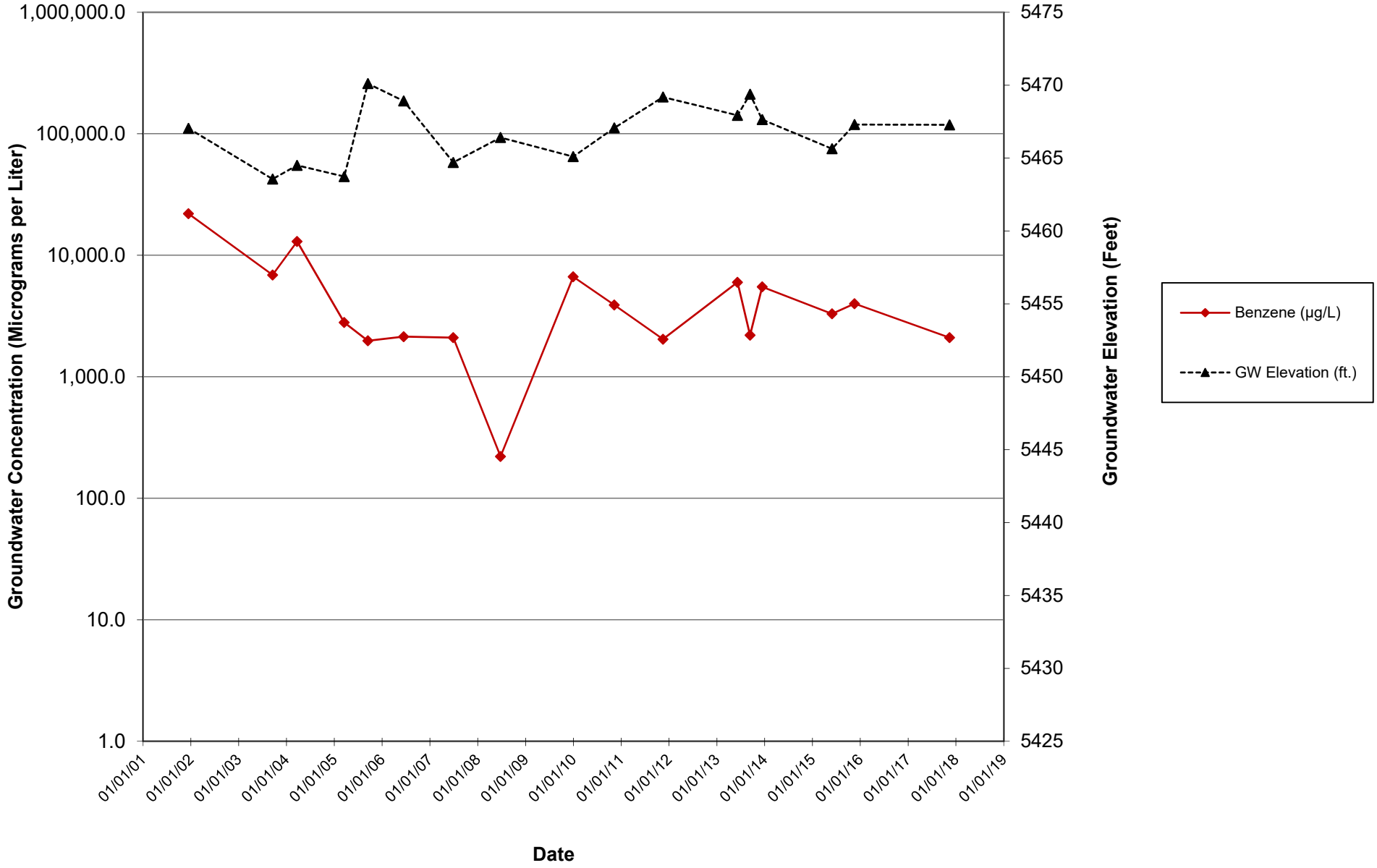
Login Number: 161292 **List Source: TestAmerica Pensacola**
List Number: 1
Creator: Perez, Trina M

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	3.4°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	

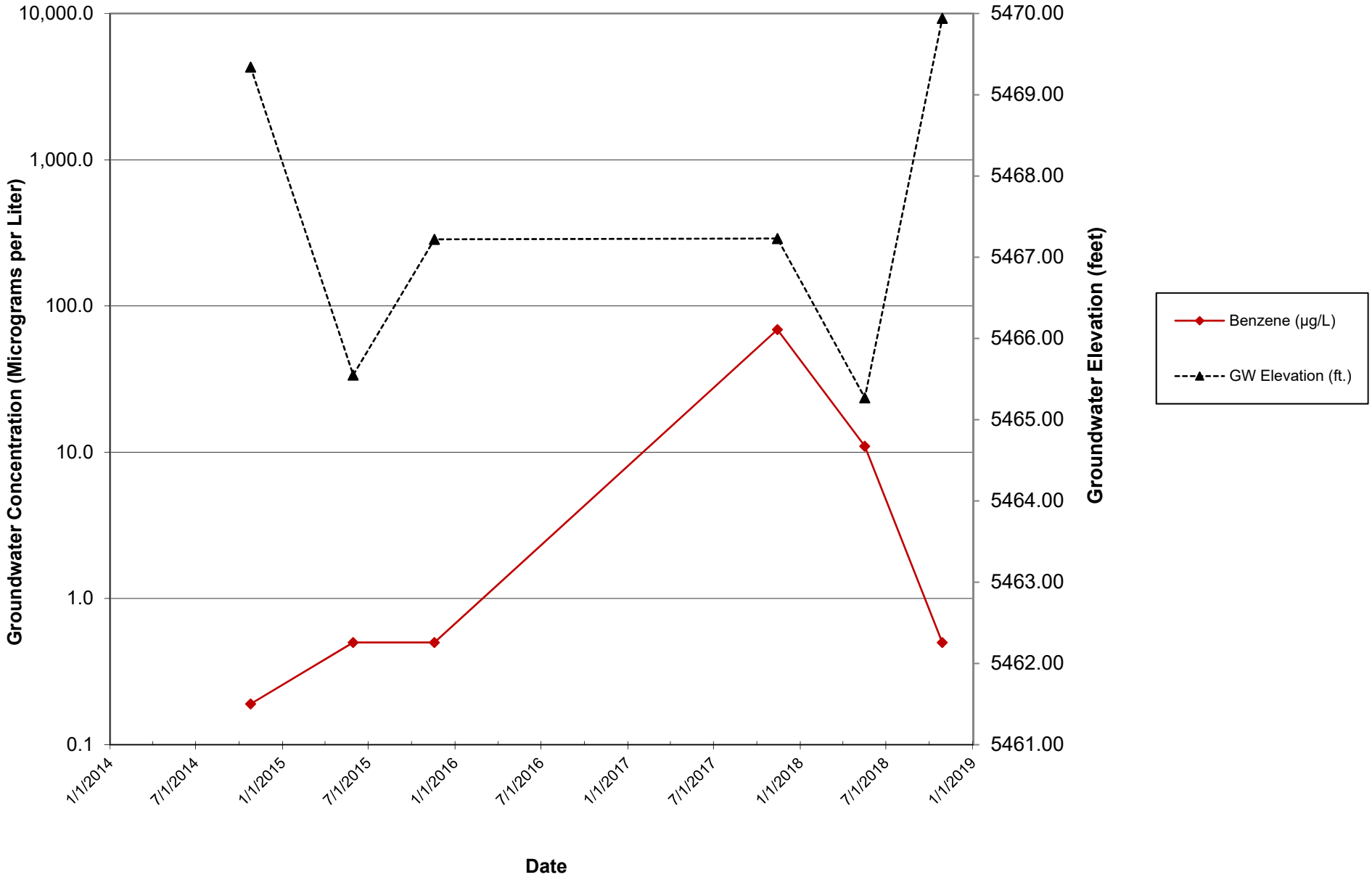
ATTACHMENT S



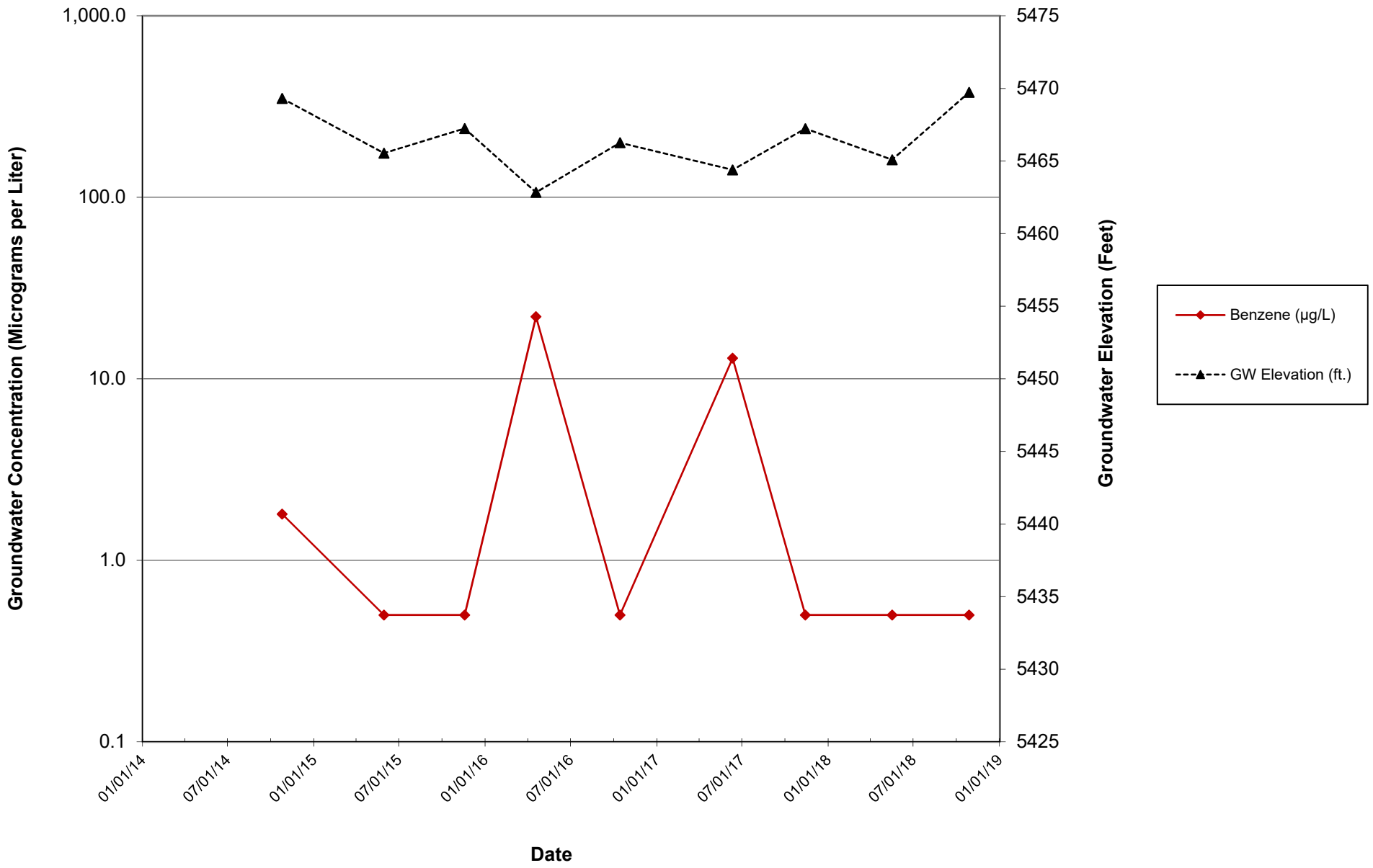
Stantec	GALLEGOS CANYON UNIT #142E SAN JUAN RIVER BASIN SAN JUAN COUNTY, NEW MEXICO	GROUNDWATER HYDROGRAPH (SAMPLED DATES ONLY) MW-1	FIGURE 1



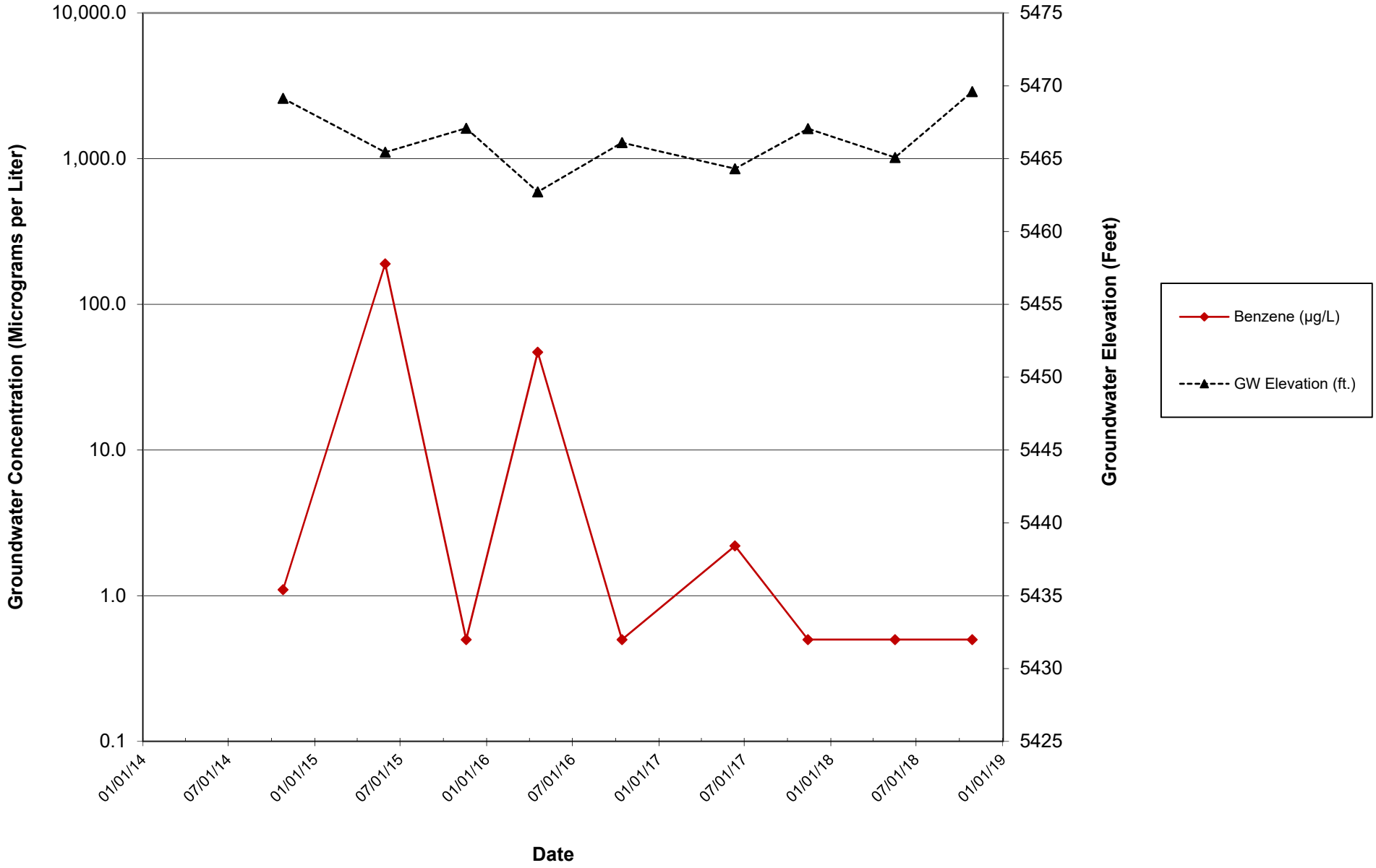
Stantec	GALLEGOS CANYON UNIT #142E SAN JUAN RIVER BASIN SAN JUAN COUNTY, NEW MEXICO	GROUNDWATER HYROGRAPH (SAMPLED DATES ONLY) MW-2	FIGURE 2



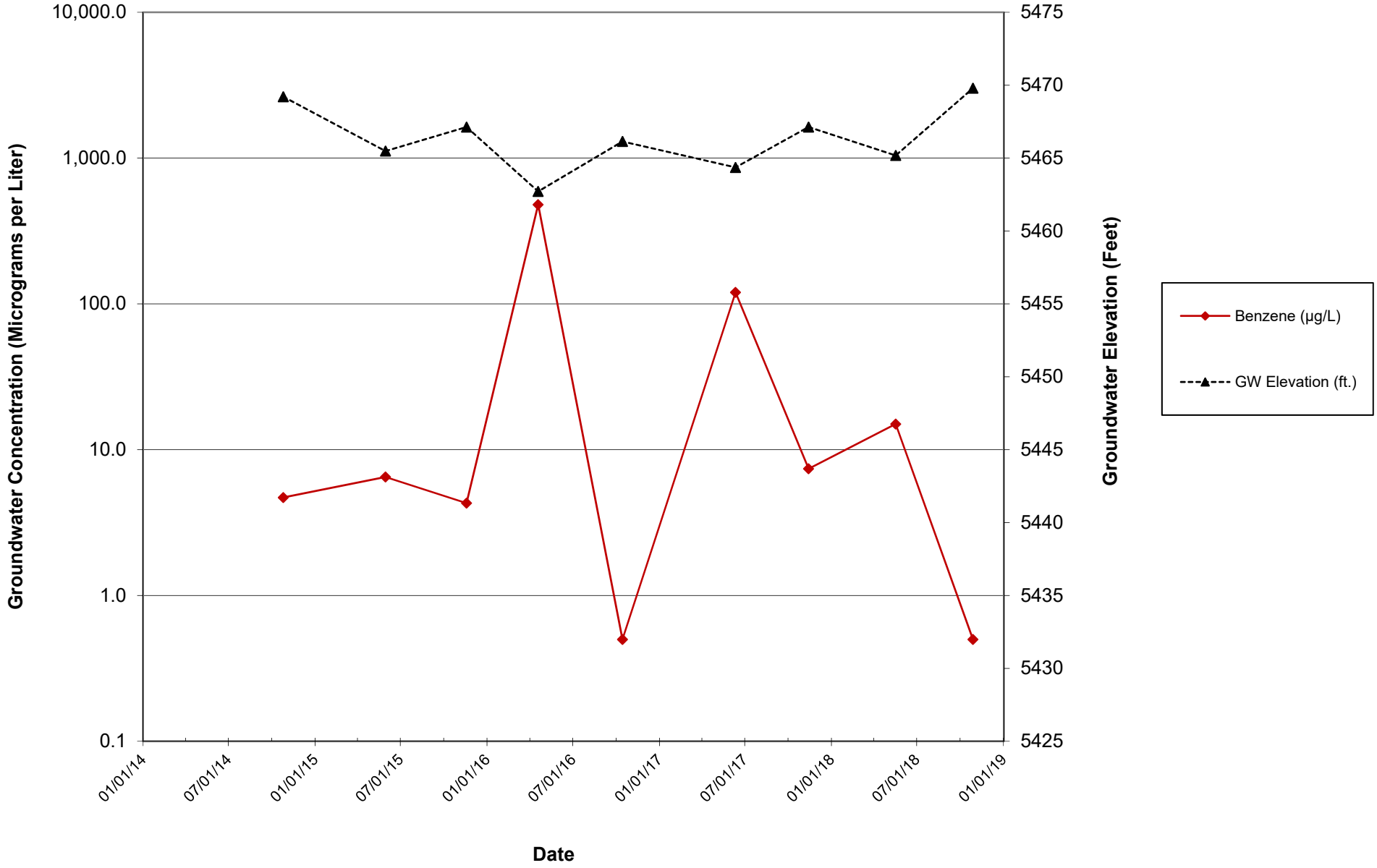
Stantec	GALLEGOS CANYON UNIT #142E SAN JUAN RIVER BASIN SAN JUAN COUNTY, NEW MEXICO	GROUNDWATER HYDROGRAPH (SAMPLED DATES ONLY) MW-3	FIGURE 3



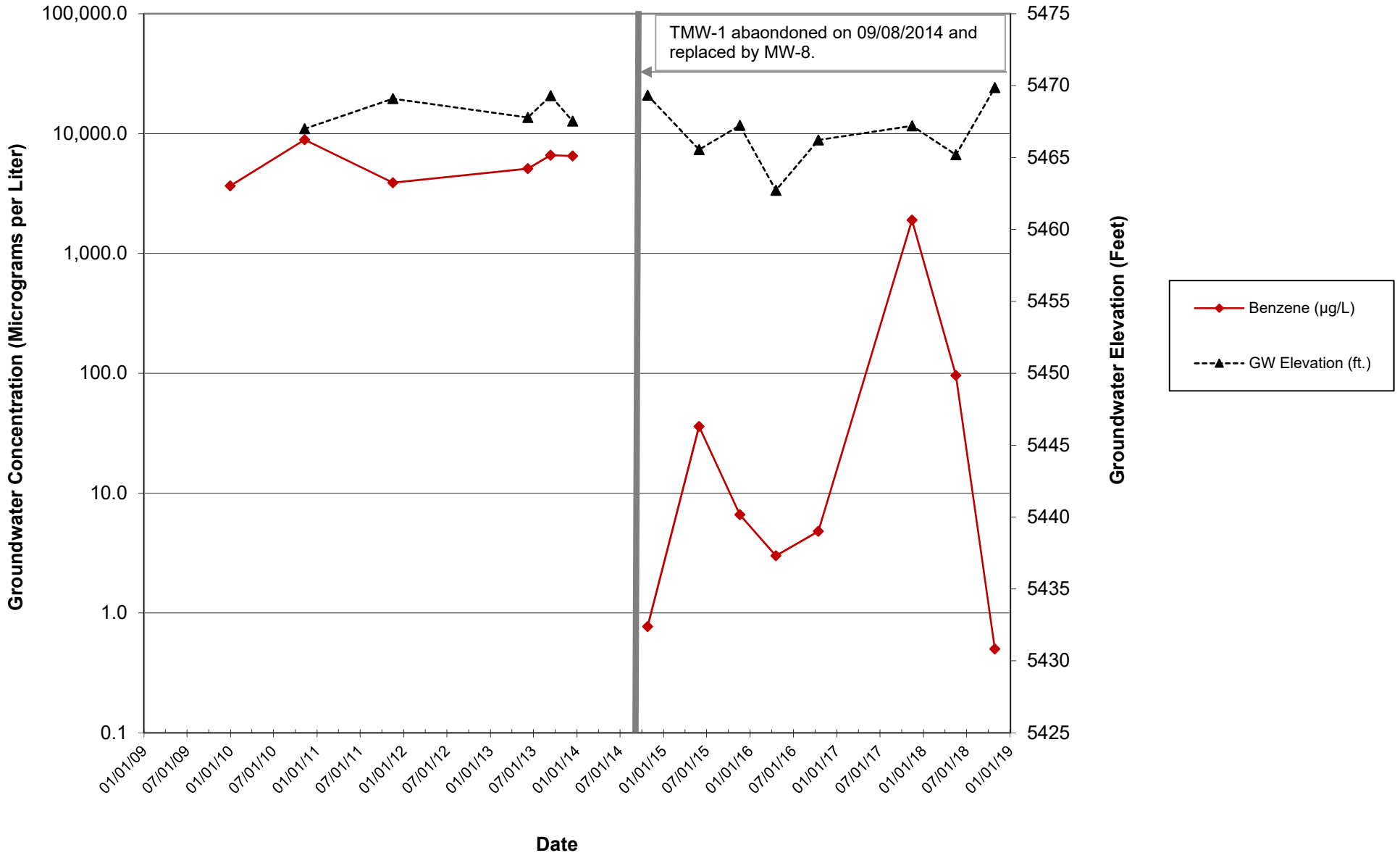
Stantec	GALLEGOS CANYON UNIT #142E SAN JUAN RIVER BASIN SAN JUAN COUNTY, NEW MEXICO	GROUNDWATER HYDROGRAPH MW-5	FIGURE 4



Stantec	GALLEGOS CANYON UNIT #142E SAN JUAN RIVER BASIN SAN JUAN COUNTY, NEW MEXICO	GROUNDWATER HYDROGRAPH MW-6	FIGURE 5



Stantec	GALLEGOS CANYON UNIT #142E SAN JUAN RIVER BASIN SAN JUAN COUNTY, NEW MEXICO	GROUNDWATER HYDROGRAPH MW-7	FIGURE 6



Stantec	GALLEGOS CANYON UNIT #142E SAN JUAN RIVER BASIN SAN JUAN COUNTY, NEW MEXICO	GROUNDWATER HYDROGRAPH (SAMPLED DATES ONLY) TMW-1 / MW-8	FIGURE 7

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

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

CONDITIONS

Action 94313

CONDITIONS

Operator:	OGRID:
El Paso Natural Gas Company, L.L.C 1001 Louisiana Street Houston, TX 77002	7046
	Action Number: 94313
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
michael.buchanan	2021 Annual Groundwater Report for GCU#142E is accepted for the record	4/30/2024