

VIA ELECTRONIC SUBMITTAL

August 10, 2017

Mr. Randy Bayliss
New Mexico Oil Conservation Division
1220 S. Francis Street
Santa Fe, New Mexico 87505

RE: Groundwater Monitoring Report and Request for Site Closure
Lindrith B#24 Site
NMOCD Case No. 3RP-214-0
METER CODE: 94967
T24N, R3W, Sec9, Unit N
Latitude: 36.319794 Longitude: -107.166008

Dear Mr. Bayliss:

MWH now part of Stantec (Stantec), on behalf of El Paso CGP Company, LLC (EPCGP), requests regulatory closure of the Lindrith B#24 site (NMOCD Case No. 3RP-214-0). This correspondence documents the analytical results from the final site monitoring event, completed in accordance with the Remediation Work Plan approved by the New Mexico Oil Conservation Division (OCD) on November 30, 1995. EPCGP is requesting closure of the Lindrith B#24 site (the Site) based on the data obtained and the closure criteria outlined in the Remediation Plan.

Site Background

The Site is located on Private/Fee land. The Site was formerly operated by Conoco Phillips, and the production well has been plugged and abandoned. Monitoring wells were installed in 1997 (MW-1), 1999 (MW-2 and MW-3), 2014 (MW-4 through MW-7), and 2016 (MW-1R). Soil borings DP-1 through DP-4 were also advanced at locations adjacent to MW-1 in 2016. The monitoring well construction logs are provided in Attachment A.

Free product has been encountered periodically in the past, but has not been encountered since 2015. Soil sampling (DP-1 through DP-5) was completed in April 2016. Soil boring DP-1 was completed near MW-1 to evaluate remaining soil impacts inside the former pit. DP-2 through DP-5 were completed around the perimeter of the former pit. The soil sample results are summarized on Table 1. In response to results of total petroleum hydrocarbon (TPH) exceedances in soil samples collected during advancement of DP-4, a groundwater sample was collected from monitoring well MW-1R in May 2017 and analyzed for polynuclear aromatic hydrocarbons (PAHs). PAH results at MW-1R were below the NMWQCC standards, as summarized in Table 2.

Groundwater monitoring has been conducted at the Site on a quarterly basis beginning in the fourth quarter of 2016. Benzene, toluene, ethylbenzene, and total xylene (BTEX) concentrations in the site wells have been below the New Mexico Water Quality Control Commission (NMWQCC) standards in the past four calendar quarters. BTEX concentrations have not exceeded NMWQCC standards in groundwater samples collected from the Site since February 2002. The results of the first quarterly groundwater sampling event, completed in the fourth calendar quarter of 2016, was presented in the Annual Groundwater Sampling Report, submitted in March 2017.

2017 Groundwater Monitoring Data

Quarterly groundwater monitoring events were completed on March 28, June 7, and July 28, 2017. Prior to collecting groundwater samples, the site monitoring wells were gauged with an oil-water interface probe to verify the absence of free product and determine groundwater elevations. Measureable free product was not detected in any of the monitoring wells gauged, as presented on Table 3. The groundwater elevation data indicate a groundwater flow direction to the west, as presented on Figures 2, 4, and 6, which is consistent with previous gauging data.

Since June 2013, groundwater samples have been collected using HydraSleeve™ no-purge groundwater sampling devices (HydraSleeves). HydraSleeve sampling devices provide no-purge groundwater samples from the undisturbed water column, and have been proven in independent testing to provide groundwater quality data comparable to low-flow groundwater sampling methods. The HydraSleeves were set during the previous sampling events approximately 0.5 foot above termination depth of the monitoring wells, using a suspension tether and stainless steel weights. On the following sample event, field personnel returned to the Site and collected a direct, undisturbed sample from the water column in the screened interval of each well by pulling the HydraSleeve from the well. Groundwater samples were placed into laboratory-supplied sample containers, packed on ice, and shipped under standard chain-of-custody protocols to TestAmerica Laboratories, Inc. in Pensacola, Florida where they were analyzed for BTEX constituents. The groundwater results are summarized on Table 4, and depicted in Figures 1, 3, and 5. The laboratory analytical reports for the three sampling events are provided in Attachment B. Purged groundwater generated during the 2017 sampling events was disposed at Basin Disposal, Inc. in Bloomfield, New Mexico. Disposal documentation is provided in Attachment C.

Request for Site Closure

Groundwater samples have been obtained at concentrations below the NMOCD standards for four consecutive quarters, as required in the Remediation Work Plan. Based on the results of previous assessment, corrective action, and monitoring activities, EPCGP respectfully requests the NMOCD grant site closure for this case.

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.



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cc: Joseph Wiley, EPCGP
Brandon Powell, NMOCD
Jillian Aragon, BLM

Tables:

- Table 1 – Soil Analytical Results
- Table 2 – Soil PAH Analytical Results
- Table 3 – Groundwater Elevation Results
- Table 4 – Groundwater BTEX Analytical Results

Figures:

- Figure 1 – Groundwater Analytical Results March 28, 2017
- Figure 2 – Groundwater Elevation Map March 28, 2017
- Figure 3 – Groundwater Analytical Results June 7, 2017
- Figure 4 – Groundwater Elevation Map June 7, 2017
- Figure 5 – Groundwater Analytical Results July 28, 2017
- Figure 6 – Groundwater Elevation Map July 28, 2017

Attachments:

- Attachment A – Soil Boring Logs and Monitoring Well Construction Reports
- Attachment B – Laboratory Analytical Reports
- Attachment C – Groundwater Disposal Documentation

TABLES

Table 1 – Soil Analytical Results

Table 2 – Soil PAH Analytical Results

Table 3 – Groundwater Elevation Results

Table 4 – Groundwater BTEX Analytical Results

TABLE 1 - SOIL ANALYTICAL RESULTS

Lindrith B#24											
Location (depth in feet bgs)	Date (mm/dd/yy)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Total Xylenes (mg/kg)	BTEX Total (mg/kg)	GRO C6-10 (mg/kg)	DRO C10-28 (mg/kg)	MRO C28-35 (mg/kg)	TPH (mg/kg)	Chloride (mg/kg)
NMOCD Criteria:		10	NE	NE	NE	50	NE	NE	NE	100	600
MW-4 (20-22')	08/28/14	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-5 (23-25')	08/28/14	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-6 (23-25')	08/28/14	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-7 (23-25')	08/28/14	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DP-1 (22-23)	05/24/16	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL
DP-1 (24-25)	05/24/16	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL
DP-1 (29-30)	05/24/16	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL
DP-2 (23-24)	05/24/16	BRL	BRL	BRL	BRL	BRL	BRL	39	24	63	BRL
DP-3 (22.5-23.5)	05/24/16	BRL	BRL	BRL	BRL	BRL	BRL	53	24	77	BRL
DP-4 (22-23)	05/24/16	BRL	BRL	BRL	BRL	BRL	BRL	73	36	109	BRL
DP-5 (22-23)	05/24/16	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL
Notes:											
mg/kg	Milligrams per kilogram										
BRL	Below Reporting Limits										
NE	New Mexico Oil Conservation Division (NMOCD) Standard Not Established										
NA	Not Analyzed . Samples were received out of temperature.										
BTEX	Benzene, toluene, ethylbenzene, xylenes										
GRO	Gasoline range organics										
DRO	Diesel range organics										
MRO	Motor oil range organics										
Total BTEX	Sum of the detectable concentrations of individual BTEX constituents										
TPH	Total Petroleum Hydrocarbon concentration is calculated by adding GRO, DRO, and MRO and rounded to the nearest mg/kg.										
NMOCD Criteria	New Mexico Oil Conservation Division closure criteria for groundwater ≤50 feet below bottom of pit to groundwater less than 10,000 mg/L TDS										
	Results bolded and highlighted yellow exceed their respective NMOCD Standards										

Table 2 - SOIL PAH ANALYTICAL RESULTS

Lindrith B#24 PAHs						
Location	Date	1-Methylnaphthalene (µg/L)	2-Methylnaphthalene (µg/L)	Naphthalenes (µg/L)	Total Naphthalenes (µg/L)	Benzo(a)pyrene (µg/L)
NMWQCC Standards:		-	-	-	30	0.7
MW-1R	03/28/17	BRL	BRL	BRL	BRL	BRL

Notes:

"µg/L" = micrograms per liter

"NMWQCC" = New Mexico Water Quality Control Commission (NMWQCC)

"-" NMWQCC Standard is not established

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

TABLE 3 - GROUNDWATER ELEVATION RESULTS

Lindrith B #24						
Location	Date	TOC	Depth to Water (ft.)	Depth to LNAPL (ft.)	LNAPL Thickness (ft.)	GW Elevation (ft.)
MW-1	05/27/97	6886.46	23.90	NR		6862.56
MW-1	08/07/97	6886.46	24.46	NR		6862.00
MW-1	11/14/97	6886.46	24.43	NR		6862.03
MW-1	02/04/98	6886.46	24.58	NR		6861.88
MW-1	05/11/98	6886.46	24.27	NR		6862.19
MW-1	08/05/98	6886.46	24.48	NR		6861.98
MW-1	11/16/98	6886.46	24.21	NR		6862.25
MW-1	02/04/99	6886.46	24.43	NR		6862.03
MW-1	05/03/99	6886.46	24.64	NR		6861.82
MW-1	08/17/99	6886.46	23.96	NR		6862.50
MW-1	11/10/99	6886.46	24.24	NR		6862.22
MW-1	02/24/00	6886.46	24.64	NR		6861.82
MW-1	05/18/00	6886.46	24.40	NR		6862.06
MW-1	08/03/00	6886.46	24.87	NR		6861.59
MW-1	11/07/00	6886.46	25.14	NR		6861.32
MW-1	02/13/01	6886.46	25.29	25.26	0.03	6861.19
MW-1	06/06/01	6886.46	25.31	NR		6861.15
MW-1	08/06/01	6886.46	26.02	25.43	0.59	6860.88
MW-1	08/31/01	6886.46	25.50	25.43	0.07	6861.01
MW-1	11/29/01	6886.46	25.93	NR		6860.53
MW-1	02/26/02	6886.46	25.79	NR		6860.67
MW-1	05/20/02	6886.46	25.98	NR		6860.48
MW-1	02/26/03	6886.46	26.15	ND		6860.31
MW-1	05/22/03	6886.46	26.25	ND		6860.21
MW-1	08/18/03	6886.46	26.80	26.51	0.29	6859.88
MW-1	11/26/03	6886.46	25.90	25.89	0.01	6860.57
MW-1	02/23/04	6886.46	26.09	ND		6860.37
MW-1	06/03/04	6886.46	25.73	ND		6860.73
MW-1	08/19/04	6886.46	26.34	ND		6860.12
MW-1	11/29/04	6886.46	26.56	ND		6859.90
MW-1	04/01/14	6886.46	27.68	27.60	0.08	6858.84
MW-1	10/22/14	6886.46	26.89	Trace	Trace	6859.57
MW-1	05/28/15	6886.46	26.67	Trace	Trace	6859.79
MW-1	11/21/15	6886.46	27.31	Trace	Trace	6859.15
MW-1	04/14/16	6886.46	27.10	ND		6859.36
MW-1 was abandoned and replaced with MW-1R on May 20, 2016						
MW-1R	10/13/16	6886.30	27.48	ND		6858.82
MW-1R	03/28/17	6886.30	26.16	ND		6860.14
MW-1R	06/07/17	6886.30	26.24	ND		6860.06
MW-1R	07/28/17	6886.30	26.63	ND		6859.67

TABLE 3 - GROUNDWATER ELEVATION RESULTS

Lindrith B #24						
Location	Date	TOC	Depth to Water (ft.)	Depth to LNAPL (ft.)	LNAPL Thickness (ft.)	GW Elevation (ft.)
MW-2	10/19/99	6885.56	21.45	ND		6864.11
MW-2	10/20/00	6885.56	22.08	ND		6863.48
MW-2	11/29/04	6885.56	25.39	ND		6860.17
MW-2	04/01/14	6885.56	DRY	ND		DRY
MW-2	10/22/14	6885.56	DRY	ND		DRY
MW-2	05/28/15	6885.56	DRY	ND		DRY
MW-2	11/21/15	6885.56	DRY	ND		DRY
MW-2	04/14/16	6885.56	DRY	ND		DRY
MW-2	10/13/16	6885.56	DRY	ND		DRY
MW-2	03/28/17	6885.56	DRY	ND		DRY
MW-2	06/07/17	6885.56	DRY	ND		DRY
MW-2	07/28/17	6885.56	DRY	ND		DRY
MW-3	10/19/99	6885.17	21.20	ND		6863.97
MW-3	10/20/00	6885.17	22.37	ND		6862.80
MW-3	11/29/04	6885.17	25.79	ND		6859.38
MW-3	04/01/14	6885.17	DRY	ND		DRY
MW-3	10/22/14	6885.17	DRY	ND		DRY
MW-3	05/28/15	6885.17	DRY	ND		DRY
MW-3	11/21/15	6885.17	DRY	ND		DRY
MW-3	04/14/16	6885.17	DRY	ND		DRY
MW-3	10/13/16	6885.17	DRY	ND		DRY
MW-3	03/28/17	6885.17	DRY	ND		DRY
MW-3	06/07/17	6885.17	DRY	ND		DRY
MW-3	07/28/17	6885.17	DRY	ND		DRY
MW-4	10/22/14	6883.50	23.94	ND		6859.56
MW-4	05/28/15	6883.50	23.72	ND		6859.78
MW-4	11/21/15	6883.50	24.35	ND		6859.15
MW-4	04/14/16	6883.50	24.12	ND		6859.38
MW-4	10/13/16	6883.50	24.79	ND		6858.71
MW-4	03/28/17	6883.50	24.44	ND		6859.06
MW-4	06/07/17	6883.50	24.53	ND		6858.97
MW-4	07/28/17	6883.50	24.95	ND		6858.55

TABLE 3 - GROUNDWATER ELEVATION RESULTS

Lindrith B #24						
Location	Date	TOC	Depth to Water (ft.)	Depth to LNAPL (ft.)	LNAPL Thickness (ft.)	GW Elevation (ft.)
MW-5	10/22/14	6885.99	26.17	ND		6859.82
MW-5	05/28/15	6885.99	25.96	ND		6860.03
MW-5	11/21/15	6885.99	26.57	ND		6859.42
MW-5	04/14/16	6885.99	26.34	ND		6859.65
MW-5	10/13/16	6885.99	27.02	ND		6858.97
MW-5	03/28/17	6885.99	26.67	ND		6859.32
MW-5	06/07/17	6885.99	26.75	ND		6859.24
MW-5	07/28/17	6885.99	27.18	ND		6858.81
MW-6	10/22/14	6886.30	26.71	ND		6859.59
MW-6	05/28/15	6886.30	26.50	ND		6859.80
MW-6	11/21/15	6886.30	27.13	ND		6859.17
MW-6	04/14/16	6886.30	26.91	ND		6859.39
MW-6	10/13/16	6886.30	27.58	ND		6858.72
MW-6	03/28/17	6886.30	27.23	ND		6859.07
MW-6	06/07/17	6886.30	27.31	ND		6858.99
MW-6	07/28/17	6886.30	27.73	ND		6858.57
MW-7	10/22/14	6885.29	25.95	ND		6859.34
MW-7	05/28/15	6885.29	25.74	ND		6859.55
MW-7	11/21/15	6885.29	26.38	ND		6858.91
MW-7	04/14/16	6885.29	26.15	ND		6859.14
MW-7	10/13/16	6885.29	26.83	ND		6858.46
MW-7	03/28/17	6885.29	26.46	ND		6858.83
MW-7	06/07/17	6885.29	26.55	ND		6858.74
MW-7	07/28/17	6885.29	26.97	ND		6858.32

Notes:

"ft" = feet

"TOC" = Top of casing

"LNAPL" = Light non-aqueous phase liquid

"ND" = LNAPL not detected

"NR" = LNAPL not recorded

TABLE 4 - GROUNDWATER BTEX ANALYTICAL RESULTS

Lindrith B #24					
Location	Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)
NMWQCC Standards:		10	750	750	620
MW-1	05/27/97	90.4	428	97.8	822
MW-1	08/07/97	69.8	437	85.5	785
MW-1	11/14/97	53.8	151	59.2	564
MW-1	02/04/98	67.5	282	122	1350
MW-1	05/11/98	63.9	65.6	66	575
MW-1	08/05/98	61.2	156	84.8	874
MW-1	11/16/98	60.2	87.7	79.2	788
MW-1	02/04/99	48.7	23.1	62.4	668
MW-1	05/03/99	56.4	94.8	64.7	849
MW-1	08/17/99	70.3	69	56.8	595
MW-1	11/10/99	48	22	40	260
MW-1	02/24/00	120	39	78	830
MW-1	05/18/00	52	5.6	53	320
MW-1	08/03/00	41	< 1.0	52	420
MW-1	11/07/00	11	12	25	160
MW-1	02/13/01	18	< 1.0	23	110
MW-1	06/06/01	9.8	0.5	16	47
MW-1	08/06/01	110	39	180	1700
MW-1	08/31/01	NS	NS	NS	NS
MW-1	11/29/01	280	< 1.0	< 1.0	3500
MW-1	02/26/02	13	14	46	720
MW-1	05/20/02	< 1.0	< 1.0	8.9	140
MW-1	02/26/03	4.3	0.8	4.7	22.5
MW-1	05/22/03	< 1.0	< 1.0	19.7	86.2
MW-1	08/18/03	NS	NS	NS	NS
MW-1	11/26/03	NS	NS	NS	NS
MW-1	02/23/04	< 1.0	< 1.0	23.9	81.5
MW-1	06/03/04	7.1	8.7	48.6	20.4
MW-1	08/19/04	< 1.0	< 1.0	14.8	45.2
MW-1	11/29/04	< 1.0	< 1.0	5.7	10
MW-1	04/01/14	NS	NS	NS	NS
MW-1	10/22/14	NS	NS	NS	NS
MW-1	05/28/15	<1.0	<5.0	<1.0	<5.0
MW-1	11/21/15	NS	NS	NS	NS
MW-1	04/14/16	<1.0	<5.0	<1.0	<5.0
MW-1 was abandoned and replaced with MW-1R on May 20, 2016					
MW-1R	10/13/16	<1.0	<5.0	<1.0	<5.0
MW-1R	03/28/17	<1.0	<5.0	<1.0	<5.0
MW-1R	06/07/17	<1.0	<5.0	<1.0	<5.0
MW-1R	07/28/17	<1.0	<5.0	<1.0	<5.0

TABLE 4 - GROUNDWATER BTEX ANALYTICAL RESULTS

Lindrith B #24					
Location	Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)
NMWQCC Standards:		10	750	750	620
MW-2	10/19/99	< 1.0	< 1.0	< 1.0	< 1.0
MW-2	10/20/00	< 1.0	< 1.0	< 1.0	< 1.0
MW-2	11/29/04	< 1.0	< 1.0	< 1.0	< 2.0
MW-2	04/01/14	NS	NS	NS	NS
MW-2	10/22/14	NS	NS	NS	NS
MW-2	05/28/15	NS	NS	NS	NS
MW-2	11/21/15	NS	NS	NS	NS
MW-2	04/14/16	NS	NS	NS	NS
MW-2	10/13/16	NS	NS	NS	NS
MW-2	03/28/17	NS	NS	NS	NS
MW-2	06/07/17	NS	NS	NS	NS
MW-2	07/28/17	NS	NS	NS	NS
MW-3	10/19/99	< 1.0	< 1.0	< 1.0	< 1.0
MW-3	10/20/00	< 1.0	< 1.0	< 1.0	< 1.0
MW-3	11/29/04	< 1.0	< 1.0	< 1.0	< 2.0
MW-3	04/01/14	NS	NS	NS	NS
MW-3	10/22/14	NS	NS	NS	NS
MW-3	05/28/15	NS	NS	NS	NS
MW-3	11/21/15	NS	NS	NS	NS
MW-3	04/14/16	NS	NS	NS	NS
MW-3	10/13/16	NS	NS	NS	NS
MW-3	03/28/17	NS	NS	NS	NS
MW-3	06/07/17	NS	NS	NS	NS
MW-3	07/28/17	NS	NS	NS	NS
MW-4	10/22/14	<0.38	<0.70	<0.50	<1.6
MW-4	05/28/15	<1.0	<5.0	<1.0	<5.0
MW-4	11/21/15	<1.0	<1.0	<1.0	<3.0
MW-4	04/14/16	<1.0	<5.0	<1.0	<5.0
MW-4	10/13/16	<1.0	<5.0	<1.0	<5.0
MW-4	03/28/17	<1.0	<5.0	<1.0	<5.0
MW-4	06/07/17	<1.0	<5.0	<1.0	<5.0
MW-4	07/28/17	<1.0	<5.0	<1.0	<5.0

TABLE 4 - GROUNDWATER BTEX ANALYTICAL RESULTS

Lindrith B #24					
Location	Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)
NMWQCC Standards:		10	750	750	620
MW-5	10/22/14	<0.38	<0.70	<0.50	<1.6
MW-5	05/28/15	<1.0	<5.0	<1.0	<5.0
MW-5	11/21/15	<1.0	<1.0	<1.0	<3.0
MW-5	04/14/16	<1.0	<5.0	<1.0	<5.0
MW-5	10/13/16	<1.0	<5.0	<1.0	<5.0
MW-5	03/28/17	<1.0	<5.0	<1.0	<5.0
MW-5	06/07/17	<1.0	<5.0	<1.0	<5.0
MW-5	07/28/17	<1.0	<5.0	<1.0	<5.0
MW-6	10/22/14	<0.38	<0.70	<0.50	<1.6
MW-6	05/28/15	<1.0	<5.0	<1.0	<5.0
MW-6	11/21/15	<1.0	<1.0	<1.0	<3.0
MW-6	04/14/16	<1.0	<5.0	<1.0	<5.0
MW-6	10/13/16	<1.0	<5.0	<1.0	<5.0
MW-6	03/28/17	<1.0	<5.0	<1.0	<5.0
MW-6	06/07/17	<1.0	<5.0	<1.0	<5.0
MW-6	07/28/17	<1.0	<5.0	<1.0	<5.0
MW-7	10/22/14	<0.38	<0.70	<0.50	<1.6
MW-7	05/28/15	<1.0	<5.0	<1.0	<5.0
MW-7	11/21/15	<1.0	<1.0	<1.0	<3.0
MW-7	04/14/16	<1.0	<5.0	<1.0	<5.0
MW-7	10/13/16	<1.0	<5.0	<1.0	<5.0
MW-7	03/28/17	<1.0	<5.0	<1.0	<5.0
MW-7	06/07/17	<1.0	<5.0	<1.0	<5.0
MW-7	07/28/17	<1.0	<5.0	<1.0	<5.0

Notes:

"µg/L" = micrograms per liter

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

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

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

"NS" = Monitoring well not sampled

FIGURES

FIGURE 1 - GROUNDWATER ANALYTICAL RESULTS MARCH 28, 2017

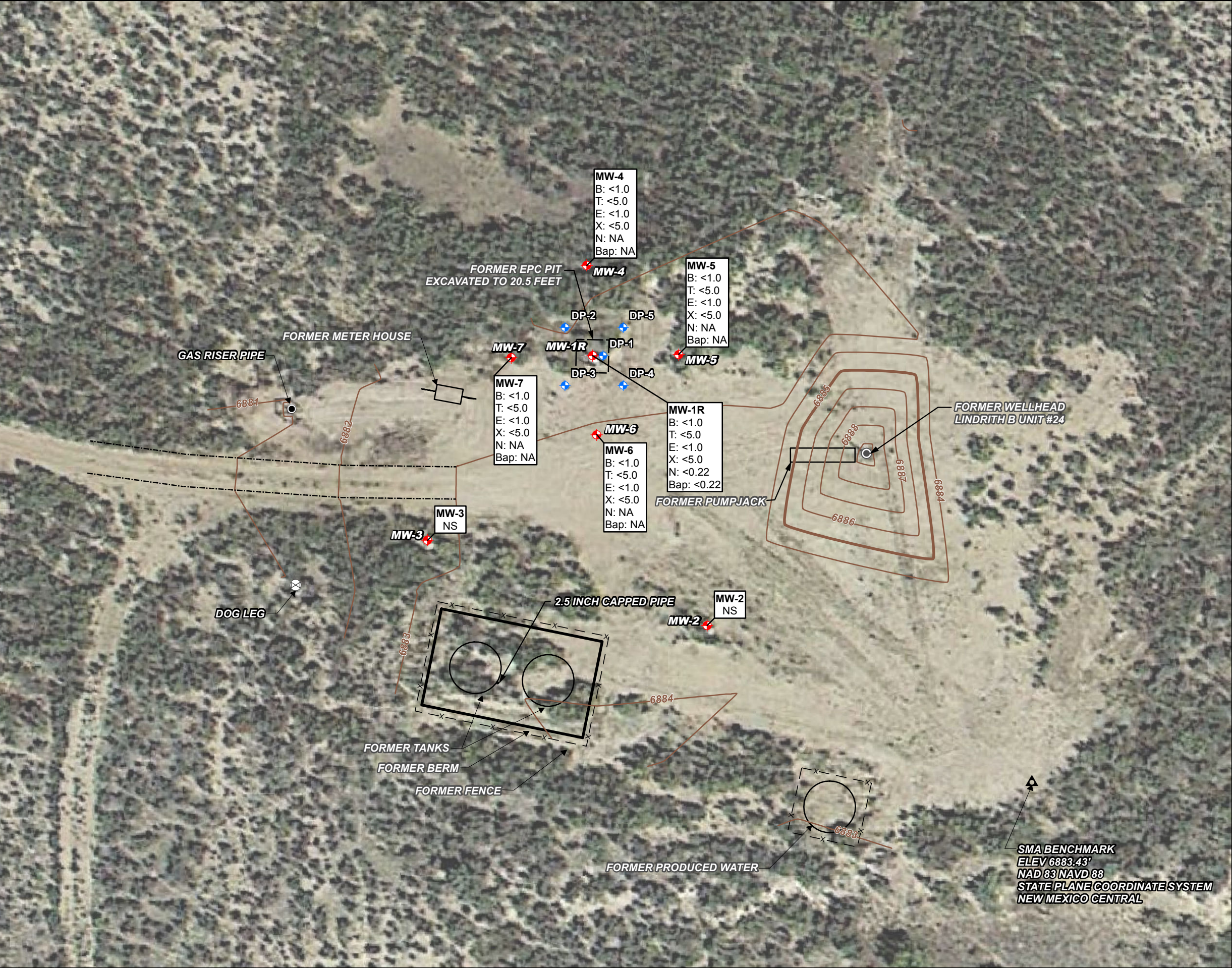
FIGURE 2 - GROUNDWATER ELEVATION MAP MARCH 28, 2017

FIGURE 3 - GROUNDWATER ANALYTICAL RESULTS JUNE 7, 2017

FIGURE 4 - GROUNDWATER ELEVATION MAP JUNE 7, 2017

FIGURE 5 - GROUNDWATER ANALYTICAL RESULTS JULY 28, 2017

FIGURE 6 - GROUNDWATER ELEVATION MAP JULY 28, 2017



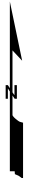
LEGEND:

- APPROXIMATE GROUND SURFACE CONTOUR AND ELEVATION, FEET
- ACCESS ROAD
- FORMER FENCE
- DOGLEG
- FORMER WELLHEAD
- MONITORING WELL
- SOIL BORING
- SMA BENCHMARK

EXPLANATION OF ANALYTES AND APPLICABLE STANDARDS:
RESULTS IN **BOLDFACE** TYPE INDICATE CONCENTRATION IN EXCESS OF THE STANDARD FOR THAT ANALYTE.

NS = NOT SAMPLED
NA = NOT ANALYZED
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 = Total Naphthalenes	30 µg/L
Bap = Benzo(a)pyrene	0.7 µg/L



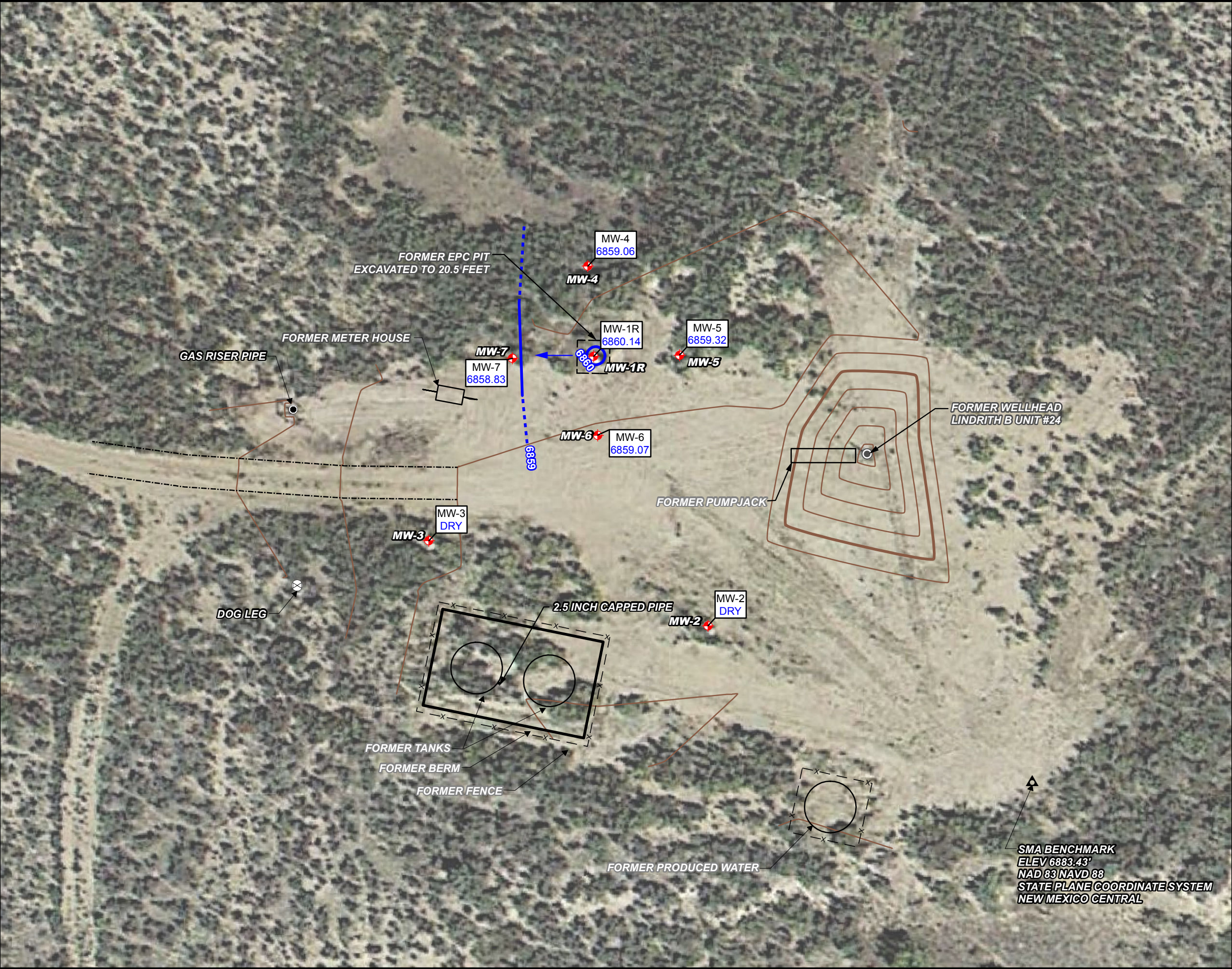
REVISION	DATE	DESIGN BY	DRAWN BY	REVIEWED BY
	4/28/2017	SLG	SLG	SRV

TITLE:
**GROUNDWATER ANALYTICAL RESULTS
MARCH 28, 2017**

PROJECT: **LINDRITH B#24
SAN JUAN RIVER BASIN
RIO ARriba COUNTY, NEW MEXICO**



Figure No.:
1

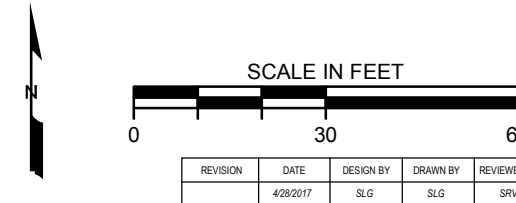


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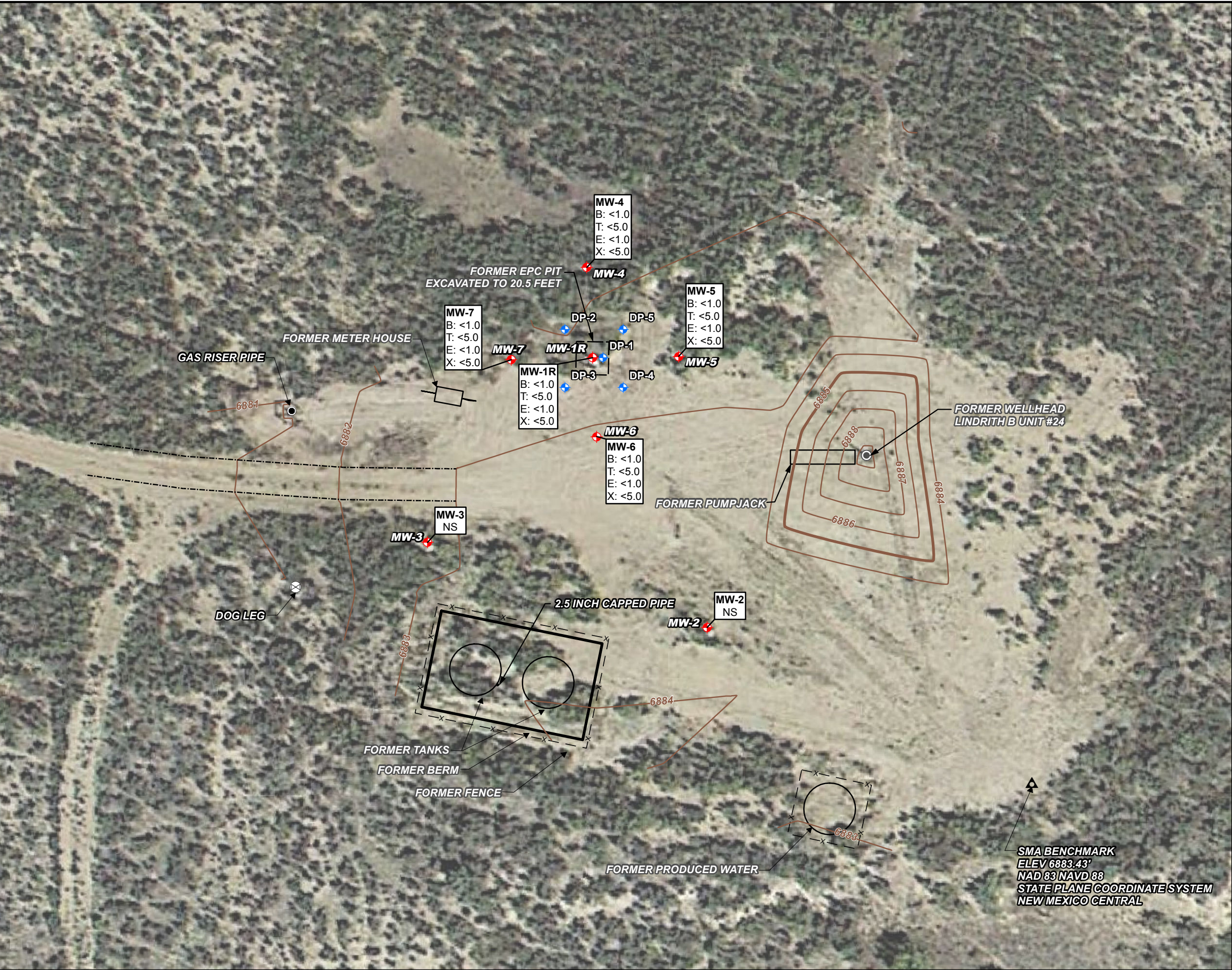
- APPROXIMATE GROUND SURFACE CONTOUR AND ELEVATION, FEET
- ACCESS ROAD
- FORMER FENCE
- DOGLEG
- FORMER WELLHEAD
- MONITORING WELL
- SMA BENCHMARK

NOTES:

- 6859.42 GROUNDWATER ELEVATION CORRECTED FOR PRODUCT THICKNESS. FEET ABOVE MEAN SEA LEVEL
- 6859.42 CORRECTED WATER LEVEL ELEVATION CONTOUR DASHED WHERE INFERRED (FEET ABOVE MEAN SEA LEVEL)
- 6859.42 DIRECTION OF APPARENT GROUNDWATER FLOW



TITLE:		GROUNDWATER ELEVATION MAP MARCH 28, 2017		
PROJECT:		LINDRITH B#24 SAN JUAN RIVER BASIN RIO ARriba COUNTY, NEW MEXICO		
		Figure No.: 2		



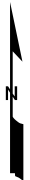
LEGEND:

- APPROXIMATE GROUND SURFACE CONTOUR AND ELEVATION, FEET
- ACCESS ROAD
- FORMER FENCE
- DOGLEG
- FORMER WELLHEAD
- MONITORING WELL
- SOIL BORING
- SMA BENCHMARK

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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 = Total Naphthalenes	30 µg/L
Bap = Benzo(a)pyrene	0.7 µg/L



REVISION	DATE	DESIGN BY	DRAWN BY	REVIEWED BY
	7/19/2017	SLG	SLG	SRV

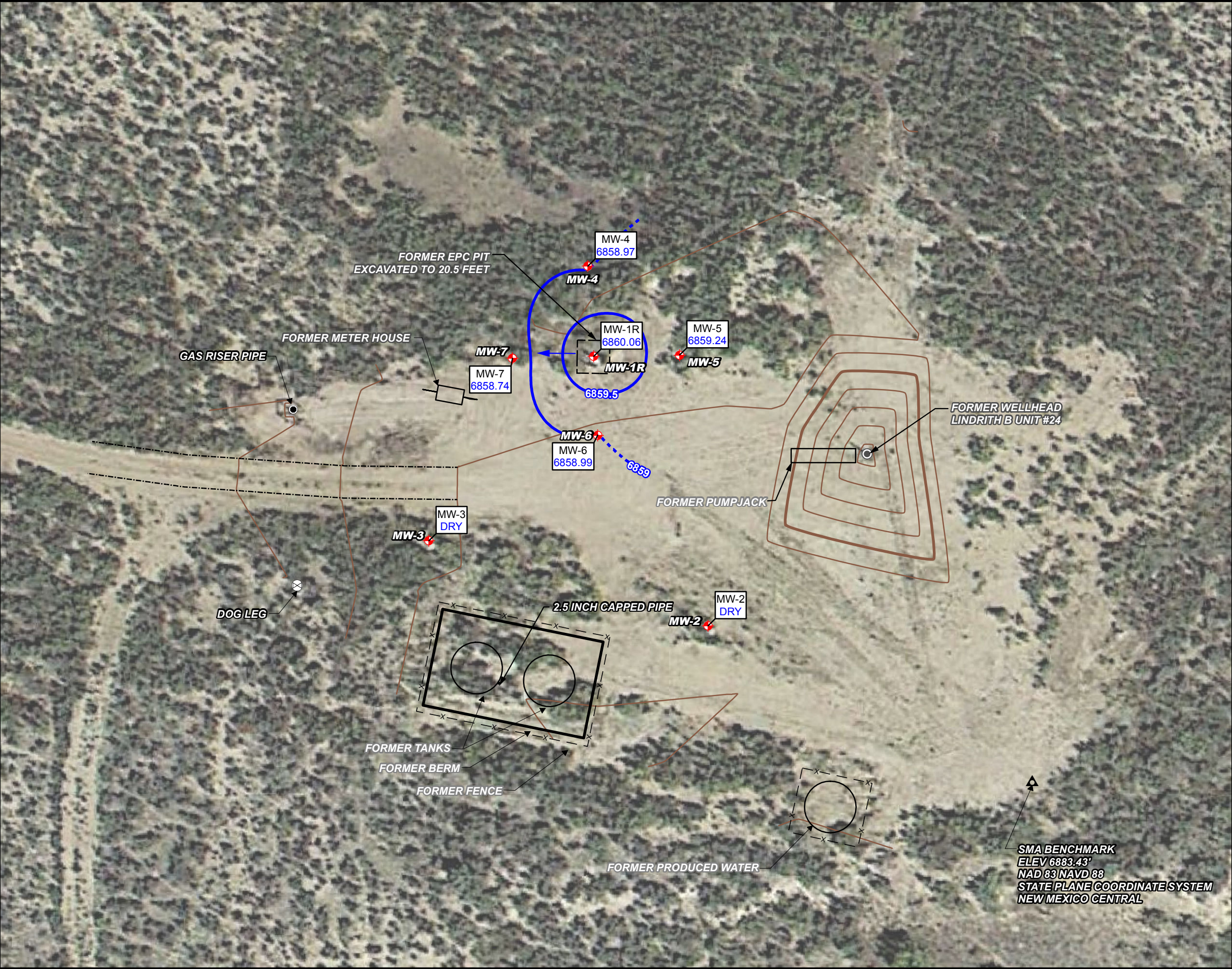
TITLE:
**GROUNDWATER ANALYTICAL RESULTS
JUNE 7, 2017**

PROJECT: **LINDRITH B#24
SAN JUAN RIVER BASIN
RIO ARRIBA COUNTY, NEW MEXICO**



Figure No.:

3

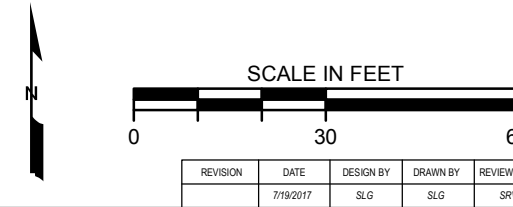


LEGEND:

- 6882 APPROXIMATE GROUND SURFACE CONTOUR AND ELEVATION, FEET
- ACCESS ROAD
- X- FORMER FENCE
- ⊗ DOGLEG
- FORMER WELLHEAD
- MONITORING WELL
- ▲ SMA BENCHMARK

NOTES:

- 6859.42 GROUNDWATER ELEVATION CORRECTED FOR PRODUCT THICKNESS. FEET ABOVE MEAN SEA LEVEL
- 6859.4 CORRECTED WATER LEVEL ELEVATION CONTOUR DASHED WHERE INFERRED (FEET ABOVE MEAN SEA LEVEL)
- DIRECTION OF APPARENT GROUNDWATER FLOW



TITLE:

**GROUNDWATER ELEVATION MAP
JUNE 7, 2017**

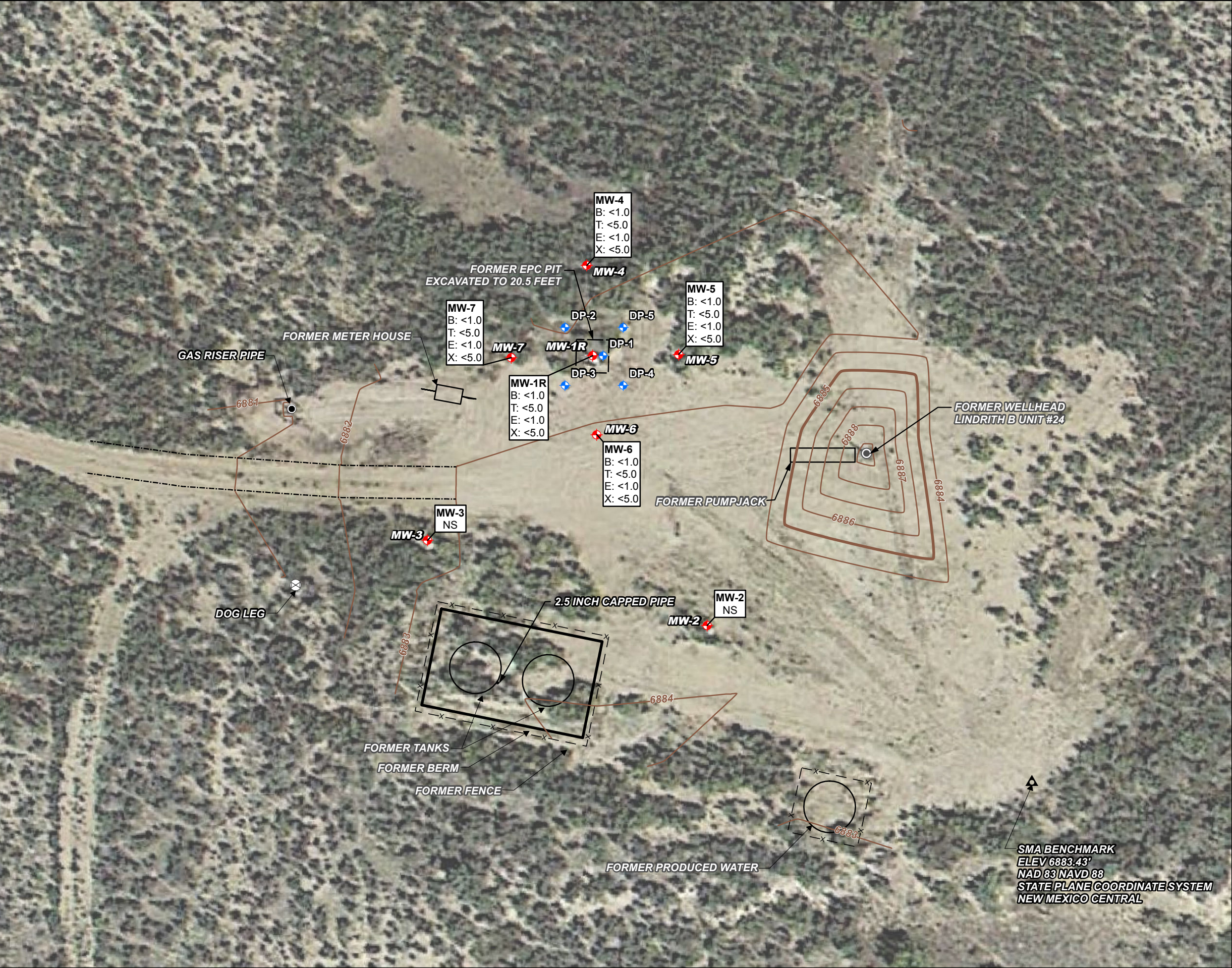
PROJECT:

**LINDRITH B#24
SAN JUAN RIVER BASIN
RIO ARriba COUNTY, NEW MEXICO**

Figure No.:

4

 **Stantec**

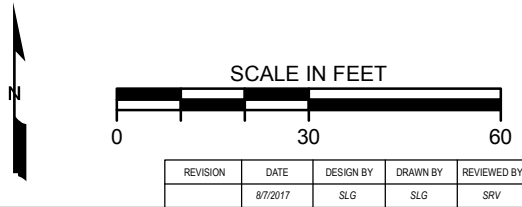


LEGEND:

- APPROXIMATE GROUND SURFACE CONTOUR AND ELEVATION, FEET
- ACCESS ROAD
- FORMER FENCE
- DOGLEG
- FORMER WELLHEAD
- MONITORING WELL
- SOIL BORING
- SMA BENCHMARK

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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 = Total Naphthalenes	30 µg/L
Bap = Benzo(a)pyrene	0.7 µg/L

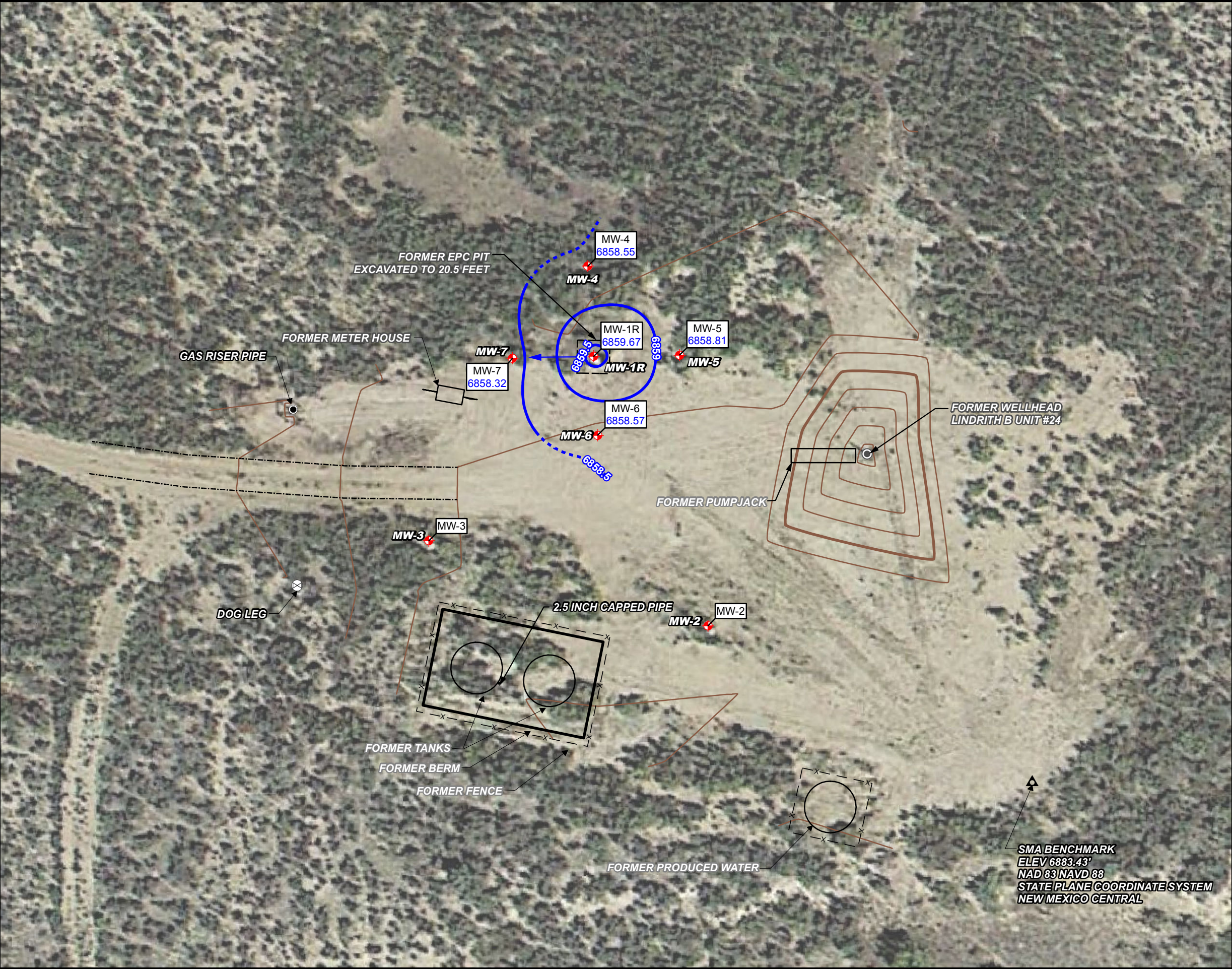


TITLE:
GROUNDWATER ANALYTICAL RESULTS
JULY 28, 2017

PROJECT:
LINDRITH B#24
SAN JUAN RIVER BASIN
RIO ARriba COUNTY, NEW MEXICO



Figure No.:
5

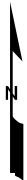


LEGEND:

- APPROXIMATE GROUND SURFACE CONTOUR AND ELEVATION, FEET
- ACCESS ROAD
- FORMER FENCE
- DOGLEG
- FORMER WELLHEAD
- MONITORING WELL
- SMA BENCHMARK

NOTES:

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



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

TITLE:
**GROUNDWATER ELEVATION MAP
JULY 28, 2017**

PROJECT: **LINDRITH B#24
SAN JUAN RIVER BASIN
RIO ARriba COUNTY, NEW MEXICO**



Figure No.:

6

SMA BENCHMARK
ELEV 6883.43'
NAD 83 NAVD 88
STATE PLANE COORDINATE SYSTEM
NEW MEXICO CENTRAL

ATTACHMENT A

SOIL BORING LOGS AND MONITORING WELL CONSTRUCTION REPORTS

RECORD OF SUBSURFACE EXPLORATION

PHILIP ENVIRONMENTAL

4000 Monroe Road
Farmington, New Mexico 87401
(505) 326-2262 FAX (505) 326-2388

Borehole # BH-1
Well # _____
Page 1 of 1

Project Name EPNG PITS
Project Number 14509 Phase 6000 / 77
Project Location Lindcith B#24 94967

Elevation _____
Borehole Location _____
GWL Depth _____
Logged By CM CHANCE
Drilled By M. DONOHUE R. Padilla
Date/Time Started 6/7/95-1045
Date/Time Completed 6/7/95-1150

Well Logged By CM Chance
Personnel On-Site K. Padilla, E. Rivero, D. Tsalar
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			Drilling Conditions & Blow Counts
							BZ	BH	HS	
0				Backfill to 12'						
5										
10										
15	1	15-17	8"	Reddish Br silty SAND, vF-F sand, loose, sl moist, odor			0	200	955 642	10546
20	2	20-22	4"	Br silty SAND, vF-F sand, trace sand, loose, saturated, strong odor. yellow liquid			0	460	754 795	GW @ 19.4' 1102
25				TDB 22'						
30										
35										
40										

Comments:

Hit groundwater @ 19.7'. Water level rose to 19.4' after 10 min. Yellow liquid on
tape. Backfilled BH w/ 4' Enviroclay & grout to surface. No sample
due to poor recovery & high PID.

Geologist Signature _____

RECORD OF SUBSURFACE EXPLORATION

PHILIP ENVIRONMENTAL

4000 Monroe Road
Farmington, New Mexico 87401
(505) 326-2262 FAX (505) 326-2388

Borehole # BH 1
Well # MW1
Page 1 of 1

Project Name EPFS GW PITS
Project Number 17520 Phase 6002.77
Project Location Lindrich R 24 94967

Elevation _____
Borehole Location Ln N-S9-T24-R3
GWL Depth 20.5'
Logged By CM Chance
Drilled By R. Padilla
Date/Time Started 5/27/97-1000
Date/Time Completed 5/27/97-1125

Well Logged By CM Chance
Personnel On-Site D. Charley, R. Thompson
Contractors On-Site _____
Client Personnel On-Site _____
Drilling Method 6 1/4 ID HSA
Air Monitoring Method P10

Depth (Feet)	Sample Number	Sample Interval	Sample Type & Recovery (inches)	Sample Description Classification System: USCS	USCS Symbol	Depth Lithology Change (feet)	Air Monitoring Units: NDU			Drilling Conditions & Blow Counts
							BZ	BH	S	
0										
5										
10										
15										
20				Backfill to 21'						
25				Br-gry clayey SAND, rF-F, saturated						GW @ 20.5'
30				Br SAND, F-med, saturated						
35				TDB 30'						
40										

Comments: No sample collected (backfill to GW). GW @ 20.5' BBS. TAB 30'
Set well

Geologist Signature Corey Chance

MONITORING WELL INSTALLATION RECORD

Philip Environmental Services, Inc.

4000 Monroe Rd.

Farmington, NM 87401

(505) 326-2262 FAX (505) 326-2388

Borehole # BH-1

Well # MW-1

Page 1 of 1

Project Name EPFS GW

Project Number 17520

Phase 6002

Site Location Lindahl B24 94967

On-Site Geologist CM CHANCE

Personnel On-Site D CHARLEY, R Thompson

Contractors On-Site

Client Personnel On-Site

Elevation

Well Location T24 R3 S9 LTRN

GWL Depth 20.5' BGS

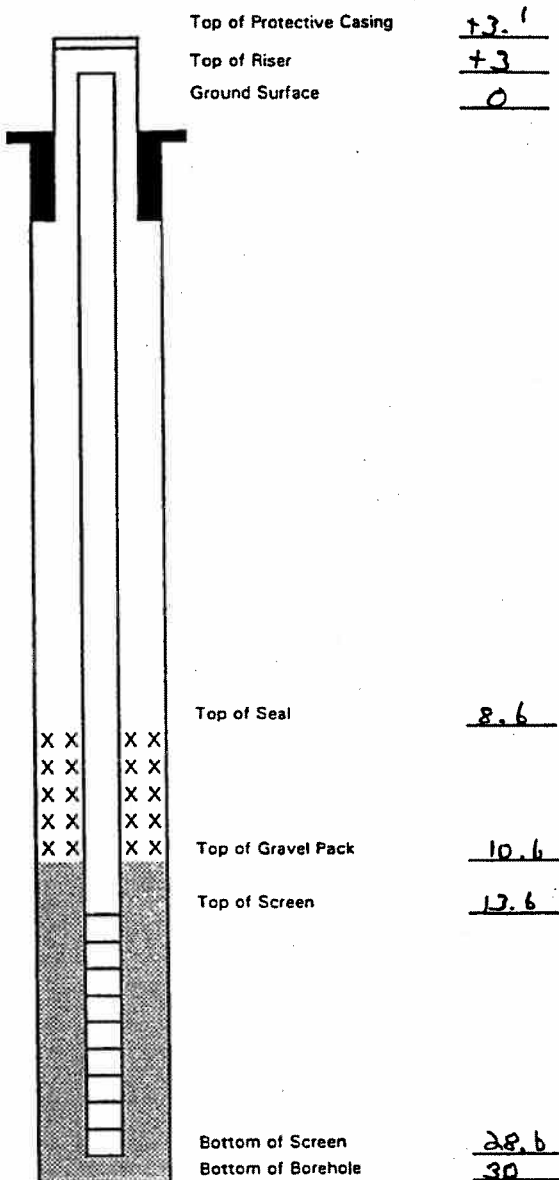
Installed By K Padilla

Date/Time Started 5/27/97-1125

Date/Time Completed 5/27/97-1320

Depths in Reference to Ground Surface

Item	Material	Depth (feet)
Top of Protective Casing	8" steel well vault	73.1
Bottom of Protective Casing		1.9
Top of Permanent Borehole Casing		N/A
Bottom of Permanent Borehole Casing		N/A
Top of Concrete		N/A
Bottom of Concrete		N/A
Top of Grout	Type I/II Portland cement	0
Bottom of Grout	Powder Bentonite	8.6
Top of Well Riser	4" SCH 40 PVC	13
Bottom of Well Riser	FLUSH THREAD	12.6
Top of Well Screen	4" SCH 40 PVC	12.6
Bottom of Well Screen	0.01 SLOT FLUSH THREAD	28.6
Top of Peltonite Seal	ENVIROPLUG	8.6
Bottom of Peltonite Seal		10.6
Top of Gravel Pack	10-20 SILICA SAND	10.6
Bottom of Gravel Pack		28.6
Top of Natural Cave-In		28.6
Bottom of Natural Cave-In		30
Top of Groundwater		20.5
Total Depth of Borehole		30



Comments: Seal hydrated w Seal potable water. Locking well cap & padlock placed on well.

ORD OF SUBSURFACE EXPLORATIO.

Environmental Services Corp.

Monroe Road

New Mexico 87401

282 FAX (505) 326-2388

Borehole #

Well #

Page

1

MW2

1 of 2

Project Name

Project Number

Project Location

EPAS GROUNDWATER

62800018 Phase 35

LINDAITH B24

Well Logged By

Personnel On-Site

Contractors On-Site

Client Personnel On-Site

C. CULLICOTT

F. PADILLA D. PADILLA

Drilling Method

Air Monitoring Method

AUGER

DLO

Elevation

Borehole Location

WL Depth

Logged By

Drilled By

Date/Time Started

Date/Time Completed

T24N R3W S9N

20.68'

C. CULLICOTT

K. PADILLA D. PADILLA

10/5/99 10am

10/5/99 11:30am

MOJAVE 94562

Depth (Feet)	Sample Interval	Sample Type & Recovery (Inches)	Sample Description Classification System: USCS	USCS Symbol	Depth Lithology Change (feet)	Air Monitoring Units: NDU			Drilling Conditions & Blow Counts
0			① SURFACE - GRAVELLY SAND - PAD MATERIAL			BZ	BH	S	
5	① 5-7'		① 12" RECOVERY LOOSE, POORLY SORTED SAND (FINE - COARSE). WHITE W/ ORANGE STAIN IN PLACES. CLEAN						① 14 BLOWS SS 0.0 PPM
10	② 10-11 1/2'		② FULL RECOVERY MOSTLY ORANGE LOOSE, POORLY SORTED SAND. 2 patches (a few inches each) w/ higher SILT CONTENT. CLEAN						② 9 BLOWS SS 0.0 PPM
15	③ 15-17'		③ 18" RECOVERY LOOSE, POORLY SORTED (BUT 60% COARSE) REDDISH BROWN SAND - CLEAN						③ 14 BLOWS SS 0.0 PPM
20	④ 20-22'		④ 12" RECOVERY. FIRST 6" SATURATED REDDISH BROWN MEDIUM SAND BOTTOM 12" SATURATED REDDISH BROWN POORLY SORTED SAND FINE - COARSE WT 21'						④ 10 BLOWS SS 0.0 PPM
25									
30									
35									
40			TD 30'						

ments:

SUNNY, COOL

DTW in MW1 = 21.4'

@ BOTTOM OF HOLE; WHEN AUGERS WERE DISCONNECTED FROM

RIG THEY SAW ~ 1 foot.

Geologist Signature

Cathy Cullcott

MONITORING WELL INSTALLATION RECORD

Environmental Services Corp.

Read

San Jose, Mexico 87401

326-2262 FAX (506) 326-2388

Borehole # 1

Well # MW 2

Page 2 of 2

Project Name EPFS GROUND WATER

Project Number 62800018 Phase 35

Project Location LINDRITH B#24

On-Site Geologist C. CULLICOTT

Personnel On-Site R. PADILLA & D. PADILLA

Contractors On-Site 0

Client Personnel On-Site 0

Location

T24N R3W S9N

Well Depth 20.68'

Installed By R. PADILLA & D. PADILLA

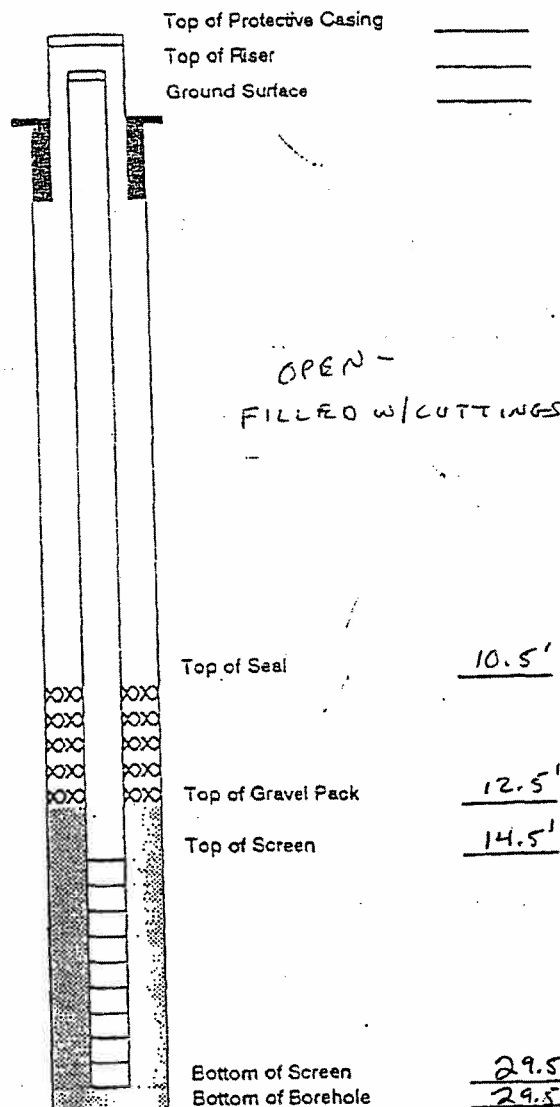
Start/Time Started 10/5/99 10am

Stop/Time Completed 10/5/99 11:30am

meter 94967

Depths in Reference to Ground Surface

Item	Material	Depth
Top of Protective Casing		
Bottom of Protective Casing		
Top of Permanent Borehole Casing		
Bottom of Permanent Borehole Casing		
Top of Concrete		
Bottom of Concrete		
Top of Grout		
Bottom of Grout		
Top of Well Riser	2"	+
Bottom of Well Riser	2"	14.5'
Top of Well Screen	2"	14.5'
Bottom of Well Screen	2"	24.5'
Top of Peltonite Seal	BENT.	10.5'
Bottom of Peltonite Seal	CHIPS	12.5'
Top of Gravel Pack	CO	12.5'
Bottom of Gravel Pack	SAND	24.5'
Top of Natural Cave-in		
Bottom of Natural Cave-in		
Top of Groundwater		20.68'
Total Depth of Borehole		24.5'



Notes: HOLE WAS DRILLED TO 30' BUT SEDIMENT BACK FILLED
AUGERS WELL SET @ 29 1/2' TO

Geologist Signature

Cathy Cullicott

WELL DEVELOPED WITH 8 gallons

Removed 12:30 - 12:50 pm. Well is good

Produced water was very turbid the entire time (REDDISH BROWN SEDIMENT)

DEWATERED
 Bailing
 20.78'

RECORD OF SUBSURFACE EXPLORATION

Philip Environmental Services Corp.

4000 Monroe Road

Albuquerque, New Mexico 87401

505-2282 FAX (505) 328-2388

Borehole #

Well #

Page

2

MW 3

1 of 2

Project Name

Project Number

Project Location

EPFS GROUNDWATER

62800018 Phase 35

LINDRITH B#24

Well Logged By

Personnel On-Site

Contractors On-Site

Client Personnel On-Site

C. CULLICOTT

K. PADILLA & D. PADILLA

0

0

Drilling Method

Air Monitoring Method

AUGER

PID

Elevation

Borehole Location

GWL Depth

Logged By

Drilled By

Date/Time Started

Date/Time Completed

T24N R3W S9N

21.1

C. CULLICOTT

K. PADILLA & D. PADILLA

10/5/99 11:30am

10/5/99 1:00pm

note - 94567

Depth (Feet)	Sample Interval	Sample Type & Recovery (Inches)	Sample Description Classification System: USCS	USCS Symbol	Depth Lithology Change (feet)	Air Monitoring Units: NDU			Drilling Conditions & Blow Counts
						BZ	BH	S	
0			SURFACE-GRAVELLY SAND PAD MATERIAL						
5	① 5-7'		① 8" RECOVERY LOOSE, TAN, SILTY FINE SAND, CLEAN. BROWNISH RED SILT IN VERY BOTTOM OF SPLIT SPOON						① 9 BLOWS SS 0.8ppm
10	② 10-11 1/2'		② 12" RECOVERY LOOSE BROWNISH RED POORLY SORTED SAND. SMALL TO SILT @ TOP FEW INCHES OF SAMPLE						② 12 BLOWS SS 0.6ppm
15	③ 15-16 1/2'		③ 12" RECOVERY UPPER 6" BROWNISH RED BROWN MEDIUM SAND LOWER 6" BROWNISH RED POORLY SORTED SAND (FINE TO COARSE.						③ 16 BLOWS SS 0.7ppm
20	④ 20-21 1/2'		④ 6" RECOVERY SATURATED POORLY SORTED SAND, 75% COARSE. WT 211						④ 9 BLOWS SS ppm
25									
30									
35									
40									

Comments:

SUNNY, BREEZY, WARM

Geologist Signature

Cathy Cullcott

MONITORING WELL INSTALLATION RECORD

Environmental Services Corp.
 Road
 New Mexico 87401
 326-2262 FAX (506) 326-2388

Borehole # 2
 Well # MW3
 Page 2 of 2

Project Name EPFS GROUNDWATER

Project Number 028000 Phase 35
 Project Location LINDRITH A#

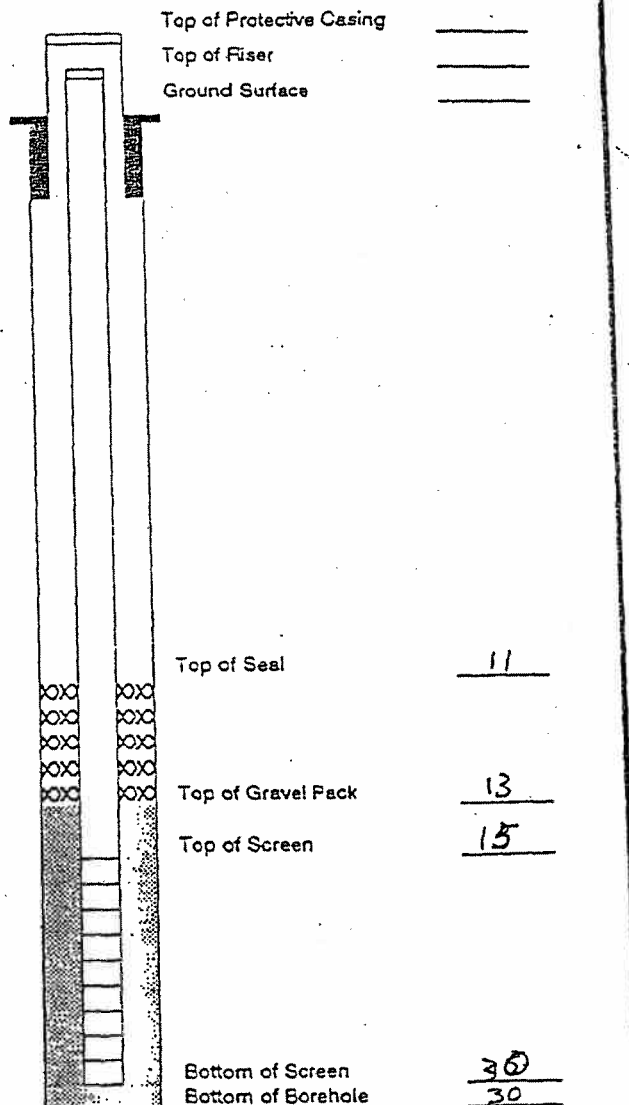
On-Site Geologist C. CULLICOTT
 Personnel On-Site R. PADILLA R. PADILLA
 Contractors On-Site Ø
 Client Personnel On-Site Ø

Location T24N 123W S9N
 Well Depth 21.1'
 Installed By R. PADILLA
R. PADILLA
 Date/Time Started 10/5/99 11:30am
 Date/Time Completed 10/5/99 1pm

meter 94967

Depths in Reference to Ground Surface

Item	Material	Depth
Top of Protective Casing		
Bottom of Protective Casing		
Top of Permanent Borehole Casing		
Bottom of Permanent Borehole Casing		
Top of Concrete		
Bottom of Concrete		
Top of Grout		
Bottom of Grout		
Top of Well Riser	2"	0
Bottom of Well Riser	2"	15
Top of Well Screen	2"	15
Bottom of Well Screen	2"	30
Top of Peltonite Seal	BENT.	11
Bottom of Peltonite Seal	CHRS	13
Top of Gravel Pack	CO	13
Bottom of Gravel Pack	SAND	30
Top of Natural Cave-In		
Bottom of Natural Cave-In		
Top of Groundwater		21.1'
Total Depth of Borehole		30'



Notes: SOME SEDIMENT FLOW INTO AUGERS

DTW AFTER PUMPING = 21.1' Geologist Signature Cathy Cullicott
 WELL DEVELOPED w/ 8 gallons
 removed 1.05-1.25 pm. WELL IS EXCELLENT PRODUCER.
 ATTENTION THROUGHOUT BAILING. BROWN SED.



MWH

Drilling Log

Monitoring Well

MW-1R

Page: 1 of 1

Project Lindrith B#24 Owner El Paso CGP Company, LLC
 Location Rio Arriba County, New Mexico Project Number 10509728
 Surface Elev. 6882.90 ft North NA East NA
 Top of Casing 6885.55 ft Water Level Initial 6859.08 09/29/16 00:00 Static ▼
 Hole Depth 32.5 ft Screen: Diameter 4 in Length 15.0 ft Type/Size PVC/0.01 in
 Hole Diameter 18.25 in Casing: Diameter 4 in Length 18.6 ft Type PVC
 Drill Co. National EWP Drilling Method Hollow Stem Auger Sand Pack 10/20
 Driller Gary Whitley Driller Reg. # WD-1210 Log By Brad Barton
 Start Date 9/29/2016 Completion Date 9/29/2016 Checked By S. Varsa

COMMENTS

Overdrill of MW-1. Surface is dirt with minimal gravel, minor vegetation (sagebrush).

☒ Bentonite Chips ☒ Bentonite Granules ☐ Grout ☐ Bentonite Pellets ☐ Sand Pack ☐ PP 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						Note: Lithology and field screening data can be found on the log for soil boring SB-1, advanced 4 feet to the west of MW-1R.	
5							
10							
15							
20							
25							
30							



MWH

Drilling Log

Monitoring Well

MW-4**FINAL**

Page: 1 of 1

Project Lindrith B#24Owner EPCGPCLocation San Juan County, New MexicoProject Number 10504833.010701Surface Elev. 6880.33 ftNorth 1937005.115East 1370516.773Top of Casing 6883.50 ftWater Level Initial 6861.508/28/14
00:00Static 6862.5708/29/14
00:00Hole Depth 37.0ftScreen: Diameter 2 inLength 20.0 ftType/Size PVC/0.01 inHole Diameter 8.25 inCasing: Diameter 2 inLength 15.0 ftType PVCDrill Co. National EWPDrilling Method Hollow Stem AugerSand Pack 10-20Driller Matt Cain/Bryan Nydoske Driller Reg. # WD-1210Log By Brad BartonStart Date 8/28/2014Completion Date 8/29/2014Checked By Jeff Bechtel

Bentonite Grout



Bentonite Granules



Grout



Portland Cement



Sand Pack



Sand Pack

COMMENTS

Drilling Log LINDRITH B#24.GPJ MWH I.A.GDT 12/11/14

Depth (ft)	PID (ppm)	% Recovery	Blow Count Recovery	Graphic Log	USCS	Description (Color, Moisture, Texture, Structure, Odor) Geologic Descriptions are Based on the USCS.	Well Completion
0	0.0	100%			SM	Silty SAND, brown, very fine grained sand, loose, no cementation, dry, no hydrocarbon odor; (hand augered from 0-5' bgs).	
5	0.0	82%			SC	Clayey SAND, dark brown, very fine grained sand, soft, low plasticity, moist, no hydrocarbon odor.	
	0.0				SP	SAND, poorly graded, reddish-brown (5 YR 4/4), fine to medium grained sand, loose, no to weak cementation, dry, no hydrocarbon odor.	
10	0.0	84%			SP	No recovery.	
	0.0				CL	SAND, poorly graded, reddish-brown (5 YR 4/4), fine to medium grained sand, loose, no to weak cementation, dry, no hydrocarbon odor.	
	0.0				SP	CLAY with silt, brown, medium stiffness to stiff, medium to low plasticity, dry to slightly moist, no hydrocarbon odor.	
15	0.0	70%			SW	SAND, poorly graded, light brown, very fine grained sand, trace silt, loose, no cementation, no hydrocarbon odor.	
	0.0				SW	No recovery.	
20	0.0	MW-4 20-22' 52%			SW	SAND, well graded, reddish brown (5 YR 4/4), fine to coarse grained sand, trace gravel (sub-angular to angular), loose, no to weak cementation, dry, no hydrocarbon odor.	
	0.0				SW	No recovery.	
	0.0				SW	SAND, well graded, reddish brown (5 YR 4/4), fine to coarse grained sand, trace gravel (sub-angular to angular), loose, no to weak cementation, dry to wet at 22', no hydrocarbon odor.	
25	0.0	44%			SW	No recovery.	
	0.0				SW	SAND, well graded, reddish brown (5 YR 4/4), fine to coarse grained sand, trace gravel (sub-angular to angular), loose, no to weak cementation, dry, no hydrocarbon odor.	
30	0.0	80%			SW	No recovery.	
	0.0				SW	SAND, well graded, reddish brown (5 YR 4/4), fine to coarse grained sand, trace gravel (sub-angular to angular), loose, no to weak cementation, dry, no hydrocarbon odor.	
35	0.0	60%			SW	No recovery.	
	0.0				SW	SAND, well graded, reddish brown (5 YR 4/4), fine to coarse grained sand, trace gravel (sub-angular to angular), loose, no to weak cementation, dry, no hydrocarbon odor.	
40						No recovery. Well set at 35.5' Hole depth = 37'	



MWH

Drilling Log

Monitoring Well

MW-5**FINAL**

Page: 1 of 1

Project Lindrith B#24 Owner EPCGPC

Location San Juan County, New Mexico Project Number 10504833.010701

Surface Elev. 6883.26 ft North 1936977.535 East 1370545.212

Top of Casing 6885.99 ft Water Level Initial 6860.99 08/29/14 00:00 Static 6863 08/29/14 00:00

Hole Depth 37.0ft Screen: Diameter 2 in Length 20.0 ft Type/Size PVC/0.01 in

Hole Diameter 8.25 in Casing: Diameter 2 in Length 15.0 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 8/28/2014 Completion Date 8/29/2014 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	0.0	100%			SM	Silty SAND, brown, very fine grained sand, loose, dry, no hydrocarbon odor; (hand augered from 0-5' bgs).	
5	0.0	68%			SM	Silty SAND, brown, very fine grained sand, loose, dry, no hydrocarbon odor.	
10	0.0				SM	No recovery.	
15	0.0	82%			SW SP	Silty SAND, brown, very fine grained sand, loose, dry, no hydrocarbon odor. SAND, well graded, fine to coarse grained sand.	
20	0.0	78%			SP	SAND, poorly graded, reddish brown, fine grained to minor amount of medium grained sand, loose to weak cementation, dry, no hydrocarbon odor.	
25	0.0	60% MW-5 23-25'			SW	No recovery. SAND, poorly graded, reddish brown, fine grained to minor amount of medium grained sand, loose to weak cementation, dry, no hydrocarbon odor.	
30	0.0	44%			SW	SAND, graded to well graded, reddish brown, fine to coarse grained sand (sub-angular to angular), loose to weak cementation, moist to wet, no hydrocarbon odor.	
35	0.0	84%			SW	No recovery. SAND, graded to well graded, reddish brown, fine to coarse grained sand (sub-angular to angular), loose, weak to no cementation, wet, no hydrocarbon odor.	
40	0.0	100%			SW	No recovery. SAND, graded to well graded, reddish brown, fine to coarse grained sand (sub-angular to angular), loose to weak cementation, moist to wet, no hydrocarbon odor. Well set at 35.5'	

Drilling Log LINDRITH B#24.GPJ MWH I.A.GDT 12/11/14



MWH

Drilling Log

Monitoring Well

MW-6**FINAL**

Page: 1 of 1

Project Lindrith B#24Owner EPCGPCLocation San Juan County, New MexicoProject Number 10504833.010701Surface Elev. 6883.15 ftNorth 1936952.7East 1370519.815Top of Casing 6886.30 ftWater Level Initial 6861.308/28/14
00:00Static 6865.6908/28/14
00:00Hole Depth 37.0ftScreen: Diameter 2 inLength 20.0 ftType/Size PVC/0.01 inHole Diameter 8.25 inCasing: Diameter 2 inLength 15.0 ftType PVCDrill Co. National EWPDrilling Method Hollow Stem AugerSand Pack 10-20Driller Matt Cain/Bryan Nydoske Driller Reg. # WD-1210Log By Brad BartonStart Date 8/28/2014Completion Date 8/28/2014Checked By Jeff Bechtel

Bentonite Grout



Bentonite Granules



Grout



Portland Cement



Sand Pack



Sand Pack

COMMENTS

Drilling Log LINDRITH B#24.GPJ MWH I.A.GDT 12/11/14

Depth (ft)	PID (ppm)	% Recovery	Blow Count Recovery	Graphic Log	USCS	Description (Color, Moisture, Texture, Structure, Odor) Geologic Descriptions are Based on the USCS.	Well Completion
0	0.0	100%			SM	Silty SAND, light brown, very fine grained sand, loose, dry, no hydrocarbon odor; (hand augered from 0-5' bgs).	
5	N/R	100%			SM	Silty SAND, light brown, very fine grained sand, loose, dry, no hydrocarbon odor; (logged from cuttings 5-10').	
10	0.0	64%			SM	Silty SAND, light brown, very fine grained sand, loose, dry, no hydrocarbon odor.	
15	0.0					No recovery.	
15	0.0	82%			SP	SAND, poorly graded, reddish brown (5 YR 4/4), fine grained to minor amount of medium grained sand, loose to weak cementation, dry, no hydrocarbon odor.	
20	0.0				SW	SAND, well graded, reddish brown, fine to coarse grained sand (sub-angular to angular), loose to weak cementation, dry, no hydrocarbon odor.	
20	0.0				SW	No recovery.	
25	0.0	60% MW-6 23-25'				SAND, well graded, reddish brown, fine to coarse grained sand (sub-angular to angular), loose to weak cementation, dry, no hydrocarbon odor.	
25	0.0				SW	No recovery.	
30	0.0	40%			SW	SAND, well graded, reddish brown, fine to coarse grained sand (sub-angular to angular), loose, no cementation, wet.	
30	0.0					No recovery.	
35	0.0	64%			SW	SAND, well graded, reddish brown, fine to coarse grained sand (sub-angular to angular), minor gravel.	
35	0.0					No recovery.	
40	0.0	100%			SW	SAND, well graded, reddish brown, fine to coarse grained sand (sub-angular to angular), minor gravel.	
40						Well set at 35.5'	
40						Hole depth = 37'.	



MWH

Drilling Log

Monitoring Well

MW-7**FINAL**

Page: 1 of 1

Project Lindrith B#24 Owner EPCGPC

Location San Juan County, New Mexico Project Number 10504833.010701

Surface Elev. 6882.87 ft North 1936976.53 East 1370493.374

Top of Casing 6885.29 ft Water Level Initial 6860.29 08/29/14 00:00 Static 6862.14 08/29/14 00:00

Hole Depth 37.0ft Screen: Diameter 2 in Length 20.0 ft Type/Size PVC/0.01 in

Hole Diameter 8.25 in Casing: Diameter 2 in Length 15.0 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 8/28/2014 Completion Date 8/29/2014 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	0.0	100%			SM	Silty SAND, light brown, very fine grained sand, loose, dry, no hydrocarbon odor; (hand augered from 0-5' bgs).	
5	0.0	82%			SM	Silty SAND, light brown, very fine grained sand, loose, dry, no hydrocarbon odor; (logged from cuttings).	
10	0.0	64%			SP	No recovery. SAND, poorly graded, reddish-brown (5 YR 4/4), fine grained sand with minor amount of medium grained sand, loose to weak cementation, dry, no hydrocarbon odor.	
15	0.0	68%			SW	No recovery. SAND, well graded, reddish brown (5 YR 4/4), fine to coarse grained sand (angular to sub-angular), weak to no cementation, dry, no hydrocarbon odor.	
20	0.0	82% MW-7 23-25'			CH	Fat CLAY, brown, high plasticity, no dilatancy, medium stiffness to stiff, slightly moist, no hydrocarbon odor.	
25	0.0	48%			SW	No recovery. SAND, well graded, reddish brown (5 YR 4/4), fine to coarse grained sand, loose, slightly moist to moist, no hydrocarbon odor.	
30	0.0	54%			SW	No recovery. SAND, well graded, reddish brown (5 YR 4/4), fine to coarse grained sand, loose, wet, no cementation, no hydrocarbon odor.	
35	0.0	100%			SW	No recovery. SAND, well graded, reddish brown (5 YR 4/4), fine to coarse grained sand, loose, wet, no cementation, no hydrocarbon odor.	
40						Well set at 35.5' Hole depth = 37'.	

Drilling Log LINDRITH B#24.GPJ MWH I.A.GDT 12/11/14



MWH

Drilling Log

Soil Boring **DP-1**

Page: 1 of 2

Project Lindrith B#24 Owner El Paso CGP Company, LLC
 Location Rio Arriba County, New Mexico Project Number 10509728
 Surface Elev. NA North NA East NA
 Top of Casing NA Water Level Initial 23.0ft 05/24/16 00:00 Static ▼
 Hole Depth 35.0 ft Screen: Diameter NA Length NA Type/Size NA
 Hole Diameter 2.875 in Casing: Diameter NA Length NA Type NA
 Drill Co. Vista Geoscience Drilling Method Direct Push/Dual-tube Sand Pack NA
 Driller Chase Cain Driller Reg. # WD-1705 Log By Brad Barton
 Start Date 5/24/2016 Completion Date 5/24/2016 Checked By S. Varsa

COMMENTS

5' due east of MW-1. Water level at MW-1 = 27.12 ft. below TOC, ~23.8 ft. below GS. Surface is dirt with minimal gravel, minor vegetation (sagebrush).

☒ Bentonite Chips ☒ Bentonite Granules ☐ Grout ☐ Bentonite Pellets ☐ Sand Pack ☐ PP 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						Poorly-graded sand, brown, dry, loose, fine sand, no cementation, no hydrocarbon odor, soil compacted in the core liner in the 10-15' interval. (0-8' cleared with a hydro-vac).
2						
4		100%				
6						
8						
10		100%			SP	
12		100%				
14						
16						
18		100%			CH	Fat clay seam, dark brown, soft to stiff, slightly moist, high plasticity, soil compacted in the core liner in the 15-20' interval.
20					SP	Poorly-graded sand (continued), becoming soft, light brown, soil compacted in the core liner in the 20-25' interval.

Drilling Log 2016 LINDRITH LOGS.GPJ MWH I.A.GDT 12/19/16

Continued Next Page



MWH

Drilling Log

Soil Boring **DP-1**

Page: 2 of 2

Project Lindrith B#24 Owner El Paso CGP Company, LLC
 Location Rio Arriba County, New Mexico Project Number 10509728

Depth (ft)	PID (ppm)	% Recovery	Blow Count Recovery	Graphic Log	USCS	Description (Color, Moisture, Texture, Structure, Odor) Geologic Descriptions are Based on the USCS.
20	0.0				SP	<i>Continued</i>
22	0.0	DP1 22-23'				Well-graded sand, brown, loose, slightly moist, all sand sizes, subangular to subrounded, trace gravels;
	0.0	100%				thin, fat clay seam at 23', very moist, dark brown, soft, high plasticity, water at 23',
24	0.0	DP1 24-25'				
	0.0					
26	0.0					
	0.0					
28	0.0	100%			SW	
	0.0	DP1 29-30'				minor black discoloration in sandy matrix at 29-30', no hydrocarbon odor, possible organics.
30	0.0					
	0.0					
32	0.0					
	0.0	100%				
34	0.0	DP1 34-35' (not analyzed)				
	0.0					
36						Total depth = 35'.
38						
40						
42						
44						
46						



MWH

Drilling Log

Soil Boring **DP-2**

Page: 1 of 2

Project Lindrith B#24 Owner El Paso CGP Company, LLC
 Location Rio Arriba County, New Mexico Project Number 10509728
 Surface Elev. NA North NA East NA
 Top of Casing NA Water Level Initial 24.0ft 05/24/16 00:00 Static NA
 Hole Depth 25.0 ft Screen: Diameter NA Length NA Type/Size NA
 Hole Diameter 2.875 in Casing: Diameter NA Length NA Type NA
 Drill Co. Vista Geoscience Drilling Method Direct Push/Dual-tube Sand Pack NA
 Driller Chase Cain Driller Reg. # WD-1705 Log By Brad Barton
 Start Date 5/24/2016 Completion Date 5/24/2016 Checked By S. Varsa

COMMENTS

11' NW of MW-1. Water level at MW-1 = 27.12 ft. below TOC, ~23.8 ft. below GS. Surface is dirt with minimal gravel, minor vegetation (sagebrush).

☒ Bentonite Chips ☒ Bentonite Granules ☐ Grout ☐ Bentonite Pellets ☐ Sand Pack ☐ PP 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						Poorly-graded sand, loose, dry, fine sand, no cementation, no hydrocarbon odor, subangular sand, brown. (0-8' cleared with a hydro-vac).
0.0						
2						
0.0						
0.0						
4		100%				
0.0						
6						
0.0						
0.0						
8					SP	
0.0						
0.0		100%				
10						
0.0						
0.0						
12						
0.0		100%				
0.0						
14						
0.0						

Drilling Log 2016 LINDRITH LOGS.GPJ MWH I.A.GDT 12/19/16

Continued Next Page



MWH

Drilling Log

Soil Boring

DP-2

Page: 2 of 2

Project Lindrith B#24Owner El Paso CGP Company, LLCLocation Rio Arriba County, New MexicoProject Number 10509728

Depth (ft)	PID (ppm)	% Recovery	Blow Count Recovery	Graphic Log	USCS	Description (Color, Moisture, Texture, Structure, Odor) Geologic Descriptions are Based on the USCS.
Continued						
16	0.0	100%			SP	
18	0.0					
20	0.0					
22	0.0					
24	0.0					
20	0.0	100% DP2 23- 24'			SW	Well-graded sand, brown, loose, all sand sizes, no cementation, no hydrocarbon odor.
21	0.0				CH	Fat clay seam, dark brown, tight, soft, high plasticity, slightly moist.
22	0.0				SW	Well-graded sand (continues), water at 24'.
23	0.0					
24	0.0					
26						Total depth = 25'.
28						
30						
32						
34						



MWH

Drilling Log

Soil Boring **DP-3**

Page: 1 of 2

Project Lindrith B#24 Owner El Paso CGP Company, LLC
 Location Rio Arriba County, New Mexico Project Number 10509728
 Surface Elev. NA North NA East NA
 Top of Casing NA Water Level Initial 23.5ft 05/24/16 00:00 Static NA
 Hole Depth 25.0 ft Screen: Diameter NA Length NA Type/Size NA
 Hole Diameter 2.875 in Casing: Diameter NA Length NA Type NA
 Drill Co. Vista Geoscience Drilling Method Direct Push/Dual-tube Sand Pack NA
 Driller Chase Cain Driller Reg. # WD-1705 Log By Brad Barton
 Start Date 5/24/2016 Completion Date 5/24/2016 Checked By S. Varsa

COMMENTS

11' SW of MW-1. Water level at MW-1 = 27.12 ft. below TOC, ~23.8 ft. below GS. Surface is dirt with minimal gravel, minor vegetation (sagebrush).

☒ Bentonite Chips ☒ Bentonite Granules ☐ Grout ☐ Bentonite Pellets ☐ Sand Pack ☐ PP 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						Poorly-graded sand, brown, dry, loose, fine sand, no cementation, no hydrocarbon odor, soil compacted in the core liner in the 8-10', 10-15', and 15-20' intervals. (0-8' cleared with a hydro-vac).
0.0						
2						
0.0						
0.0						
4		100%				
0.0						
6						
0.0						
0.0						
8					SP	
0.0						
0.0		100%				
10						
0.0						
0.0						
12						
0.0		100%				
0.0						
14						
0.0						

Drilling Log 2016 LINDRITH LOGS.GPJ MWH I.A.GDT 12/19/16

Continued Next Page



MWH

Drilling Log

Soil Boring

DP-3

Page: 2 of 2

Project Lindrith B#24

Owner El Paso CGP Company, LLC

Location Rio Arriba County, New Mexico

Project Number 10509728

Depth (ft)	PID (ppm)	% Recovery	Blow Count Recovery	Graphic Log	USCS	Description (Color, Moisture, Texture, Structure, Odor) Geologic Descriptions are Based on the USCS.
						<i>Continued</i>
16	0.0				SP	
18	0.0	100%				
20	0.0					
22	0.0	DP3 22.5-23.5'			SW	Well-graded sand, brown, dry, water at 23.5', loose, all sand sizes, no cementation, no hydrocarbon odor, minor clay seam at 23.4', soil compacted in the core liner in the 20-25' interval.
24	0.0	100%				
26	0.0					Total depth = 25'.
28						
30						
32						
34						



MWH

Drilling Log

Soil Boring **DP-4**

Page: 1 of 2

Project Lindrith B#24 Owner El Paso CGP Company, LLC
 Location Rio Arriba County, New Mexico Project Number 10509728
 Surface Elev. NA North NA East NA
 Top of Casing NA Water Level Initial 23.0ft 05/24/16 00:00 Static ▼
 Hole Depth 25.0 ft Screen: Diameter NA Length NA Type/Size NA
 Hole Diameter 2.875 in Casing: Diameter NA Length NA Type NA
 Drill Co. Vista Geoscience Drilling Method Direct Push/Dual-tube Sand Pack NA
 Driller Chase Cain Driller Reg. # WD-1705 Log By Brad Barton
 Start Date 5/24/2016 Completion Date 5/24/2016 Checked By S. Varsa

COMMENTS

11' SE of MW-1. Water level at MW-1 = 27.12 ft. below TOC, ~23.8 ft. below GS. Surface is dirt with minimal gravel, minor vegetation (sagebrush).

☒ Bentonite Chips ☒ Bentonite Granules ☐ Grout ☐ Bentonite Pellets ☐ Sand Pack ☐ PP 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						Poorly-graded sand, brown, loose, dry, fine sand, no cementation, no hydrocarbon odor, soil compacted in the core liner in the 8-10' and 10-15' intervals. (0-8' cleared with a hydro-vac).
0.0						
2						
0.0						
0.0						
4		100%				
0.0						
6						
0.0						
0.0						
8					SP	
0.0						
0.0		100%				
10						
0.0						
0.0						
12						
0.0		100%				
0.0						
14						
0.0						

Continued Next Page



MWH

Drilling Log

Soil Boring

DP-4

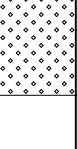
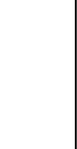
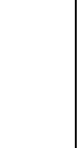
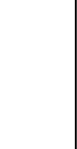
Page: 2 of 2

Project Lindrith B#24

Owner El Paso CGP Company, LLC

Location Rio Arriba County, New Mexico

Project Number 10509728

Depth (ft)	PID (ppm)	% Recovery	Blow Count Recovery	Graphic Log	USCS	Description (Color, Moisture, Texture, Structure, Odor) Geologic Descriptions are Based on the USCS.
						<i>Continued</i>
16	0.0				CH	Fat clay seam, soft to medium stiff, slightly moist, high plasticity, no hydrocarbon odor, dark brown.
	0.0				SP	Poorly-graded sand (continues).
18	0.0	100%				Well-graded sand, brown, loose, all sand sizes, no cementation, trace rounded gravel, subangular to subrounded sand, no hydrocarbon odor, soil compacted in the core liner in the 15-20' and 20-25' intervals;
20	0.0					
	0.0				SW	thin, dark brown clay seams intermittently from 21-23'; water at 23'.
22	0.0	DP4 22-23' 100%				
	0.0					
24	0.0					
	0.0					
26						Total depth = 25'.
28						
30						
32						
34						



MWH

Drilling Log

Soil Boring **DP-5**

Page: 1 of 2

Project Lindrith B#24 Owner El Paso CGP Company, LLC
 Location Rio Arriba County, New Mexico Project Number 10509728
 Surface Elev. NA North NA East NA
 Top of Casing NA Water Level Initial 23.0ft 05/24/16 00:00 Static NA
 Hole Depth 25.0 ft Screen: Diameter NA Length NA Type/Size NA
 Hole Diameter 2.875 in Casing: Diameter NA Length NA Type NA
 Drill Co. Vista Geoscience Drilling Method Direct Push/Dual-tube Sand Pack NA
 Driller Chase Cain Driller Reg. # WD-1705 Log By Brad Barton
 Start Date 5/24/2016 Completion Date 5/24/2016 Checked By S. Varsa

COMMENTS

11' NE of MW-1. Water level at MW-1 = 27.12 ft. below TOC, ~23.8 ft. below GS. Surface is dirt with minimal gravel, minor vegetation (sagebrush).

☒ Bentonite Chips ☒ Bentonite Granules ☐ Grout ☐ Bentonite Pellets ☐ Sand Pack ☐ PP 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						Poorly-graded sand, brown, dry, loose, fine sand, no cementation, no hydrocarbon odor, soil compacted in the core liner in the 8-10', 10-15', and 15-20' intervals.
0.0						
2						
0.0						
0.0						
4		100%				
0.0						
0.0						
6						
0.0						
0.0						
8					SP	
0.0						
0.0		100%				
10						
0.0						
0.0						
12						
0.0		100%				
0.0						
14						
0.0						

Drilling Log 2016 LINDRITH LOGS.GPJ MWH I.A.GDT 12/19/16

Continued Next Page



MWH

Drilling Log

Soil Boring

DP-5

Page: 2 of 2

Project Lindrith B#24

Owner El Paso CGP Company, LLC

Location Rio Arriba County, New Mexico

Project Number 10509728

Depth (ft)	PID (ppm)	% Recovery	Blow Count Recovery	Graphic Log	USCS	Description (Color, Moisture, Texture, Structure, Odor) Geologic Descriptions are Based on the USCS.
Continued						
16	0.0	100%			SP	Well-graded sand, brown, dry, slightly moist at 21', water at 23', loose, all sand sizes, no cementation, no hydrocarbon odor, soil compacted in the core liner in the 20-25' interval.
18	0.0					
20	0.0					
22	0.0					
24	0.0	DP5 22-23' 100%			SW	Total depth = 25'.
26	0.0					
28	0.0					
30	0.0					
32	0.0					
34	0.0					

ATTACHMENT B

LABORATORY ANALYTICAL REPORTS

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

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

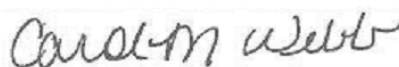
TestAmerica Job ID: 400-135864-1

Client Project/Site: El Paso CGP Company, LLC-Lindrith B #24
Revision: 1

For:

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

Attn: Ms. Sarah Gardner



Authorized for release by:
4/13/2017 4:47:17 PM

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

LINKS

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results through

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www.testamericainc.com

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

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

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

Table of Contents

Cover Page	1
Table of Contents	2
Definitions	3
Case Narrative	4
Detection Summary	5
Sample Summary	6
Client Sample Results	7
QC Association	13
QC Sample Results	14
Chronicle	16
Certification Summary	18
Method Summary	19
Chain of Custody	20
Receipt Checklists	21



Definitions/Glossary

Client: Stantec Consulting Services Inc
Project/Site: El Paso CGP Company, LLC-Lindrith B #24

TestAmerica Job ID: 400-135864-1

Glossary

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

Case Narrative

Client: Stantec Consulting Services Inc
Project/Site: El Paso CGP Company, LLC-Lindrith B #24

TestAmerica Job ID: 400-135864-1

Job ID: 400-135864-1

Laboratory: TestAmerica Pensacola

Narrative

Job Narrative
400-135864-1

Comments

No additional comments.

Receipt

The samples were received on 3/30/2017 8:47 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.2° C.

GC/MS Semi VOA

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

GC VOA

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

Organic Prep

Method 3520C: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate/sample duplicate (MS/MSD/DUP) associated with preparation batch 400-348396.

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

VOA Prep

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

Detection Summary

Client: Stantec Consulting Services Inc
Project/Site: El Paso CGP Company, LLC-Lindrith B #24

TestAmerica Job ID: 400-135864-1

Client Sample ID: MW-1R

Lab Sample ID: 400-135864-1

☐ No Detections.

Client Sample ID: MW-4

Lab Sample ID: 400-135864-2

☐ No Detections.

Client Sample ID: MW-5

Lab Sample ID: 400-135864-3

☐ No Detections.

Client Sample ID: MW-6

Lab Sample ID: 400-135864-4

☐ No Detections.

Client Sample ID: MW-7

Lab Sample ID: 400-135864-5

☐ No Detections.

Client Sample ID: TRIP BLANK (3/28/17)

Lab Sample ID: 400-135864-6

☐ No Detections.

This Detection Summary does not include radiochemical test results.

TestAmerica Pensacola

Sample Summary

Client: Stantec Consulting Services Inc
Project/Site: El Paso CGP Company, LLC-Lindrith B #24

TestAmerica Job ID: 400-135864-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-135864-1	MW-1R	Water	03/28/17 10:55	03/30/17 08:47
400-135864-2	MW-4	Water	03/28/17 11:02	03/30/17 08:47
400-135864-3	MW-5	Water	03/28/17 11:10	03/30/17 08:47
400-135864-4	MW-6	Water	03/28/17 11:18	03/30/17 08:47
400-135864-5	MW-7	Water	03/28/17 11:24	03/30/17 08:47
400-135864-6	TRIP BLANK (3/28/17)	Water	03/28/17 10:40	03/30/17 08:47

Client Sample Results

Client: Stantec Consulting Services Inc
Project/Site: El Paso CGP Company, LLC-Lindrith B #24

TestAmerica Job ID: 400-135864-1

Client Sample ID: MW-1R

Date Collected: 03/28/17 10:55

Date Received: 03/30/17 08:47

Lab Sample ID: 400-135864-1

Matrix: Water

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]pyrene	<0.22		0.22	ug/L		04/04/17 16:10	04/05/17 20:10	1
1-Methylnaphthalene	<0.22		0.22	ug/L		04/04/17 16:10	04/05/17 20:10	1
2-Methylnaphthalene	<0.22		0.22	ug/L		04/04/17 16:10	04/05/17 20:10	1
Naphthalene	<0.22		0.22	ug/L		04/04/17 16:10	04/05/17 20:10	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	88		15 - 122	04/04/17 16:10	04/05/17 20:10	1
Nitrobenzene-d5	96		19 - 130	04/04/17 16:10	04/05/17 20:10	1
Terphenyl-d14	98		33 - 138	04/04/17 16:10	04/05/17 20:10	1

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0	ug/L			04/05/17 23:09	1
Ethylbenzene	<1.0		1.0	ug/L			04/05/17 23:09	1
Toluene	<5.0		5.0	ug/L			04/05/17 23:09	1
Xylenes, Total	<5.0		5.0	ug/L			04/05/17 23:09	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (pid)	109		78 - 124		04/05/17 23:09	1

Client Sample Results

Client: Stantec Consulting Services Inc
Project/Site: El Paso CGP Company, LLC-Lindrith B #24

TestAmerica Job ID: 400-135864-1

Client Sample ID: MW-4

Date Collected: 03/28/17 11:02

Date Received: 03/30/17 08:47

Lab Sample ID: 400-135864-2

Matrix: Water

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0	ug/L			04/05/17 21:10	1
Ethylbenzene	<1.0		1.0	ug/L			04/05/17 21:10	1
Toluene	<5.0		5.0	ug/L			04/05/17 21:10	1
Xylenes, Total	<5.0		5.0	ug/L			04/05/17 21:10	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (pid)	110		78 - 124				04/05/17 21:10	1

Client Sample Results

Client: Stantec Consulting Services Inc
Project/Site: El Paso CGP Company, LLC-Lindrith B #24

TestAmerica Job ID: 400-135864-1

Client Sample ID: MW-5
Date Collected: 03/28/17 11:10
Date Received: 03/30/17 08:47

Lab Sample ID: 400-135864-3
Matrix: Water

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0	ug/L			04/06/17 02:07	1
Ethylbenzene	<1.0		1.0	ug/L			04/06/17 02:07	1
Toluene	<5.0		5.0	ug/L			04/06/17 02:07	1
Xylenes, Total	<5.0		5.0	ug/L			04/06/17 02:07	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (pid)	111		78 - 124				04/06/17 02:07	1

Client Sample Results

Client: Stantec Consulting Services Inc
Project/Site: El Paso CGP Company, LLC-Lindrith B #24

TestAmerica Job ID: 400-135864-1

Client Sample ID: MW-6

Date Collected: 03/28/17 11:18

Date Received: 03/30/17 08:47

Lab Sample ID: 400-135864-4

Matrix: Water

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0	ug/L			04/06/17 03:06	1
Ethylbenzene	<1.0		1.0	ug/L			04/06/17 03:06	1
Toluene	<5.0		5.0	ug/L			04/06/17 03:06	1
Xylenes, Total	<5.0		5.0	ug/L			04/06/17 03:06	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
<i>a,a,a-Trifluorotoluene (pid)</i>	110		78 - 124				04/06/17 03:06	1

Client Sample Results

Client: Stantec Consulting Services Inc
Project/Site: El Paso CGP Company, LLC-Lindrith B #24

TestAmerica Job ID: 400-135864-1

Client Sample ID: MW-7
Date Collected: 03/28/17 11:24
Date Received: 03/30/17 08:47

Lab Sample ID: 400-135864-5
Matrix: Water

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0	ug/L			04/06/17 04:05	1
Ethylbenzene	<1.0		1.0	ug/L			04/06/17 04:05	1
Toluene	<5.0		5.0	ug/L			04/06/17 04:05	1
Xylenes, Total	<5.0		5.0	ug/L			04/06/17 04:05	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (pid)	109		78 - 124				04/06/17 04:05	1

Client Sample Results

Client: Stantec Consulting Services Inc
Project/Site: El Paso CGP Company, LLC-Lindrith B #24

TestAmerica Job ID: 400-135864-1

Client Sample ID: TRIP BLANK (3/28/17)

Lab Sample ID: 400-135864-6

Date Collected: 03/28/17 10:40

Matrix: Water

Date Received: 03/30/17 08:47

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0	ug/L			04/05/17 20:11	1
Ethylbenzene	<1.0		1.0	ug/L			04/05/17 20:11	1
Toluene	<5.0		5.0	ug/L			04/05/17 20:11	1
Xylenes, Total	<5.0		5.0	ug/L			04/05/17 20:11	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (pid)	111		78 - 124		04/05/17 20:11	1

QC Association Summary

Client: Stantec Consulting Services Inc
Project/Site: El Paso CGP Company, LLC-Lindrith B #24

TestAmerica Job ID: 400-135864-1

GC/MS Semi VOA

Prep Batch: 348396

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-135864-1	MW-1R	Total/NA	Water	3520C	
MB 400-348396/1-A	Method Blank	Total/NA	Water	3520C	
LCS 400-348396/2-A	Lab Control Sample	Total/NA	Water	3520C	
LCSD 400-348396/3-A	Lab Control Sample Dup	Total/NA	Water	3520C	

Analysis Batch: 348523

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-135864-1	MW-1R	Total/NA	Water	8270C LL	348396
MB 400-348396/1-A	Method Blank	Total/NA	Water	8270C LL	348396
LCS 400-348396/2-A	Lab Control Sample	Total/NA	Water	8270C LL	348396
LCSD 400-348396/3-A	Lab Control Sample Dup	Total/NA	Water	8270C LL	348396

GC VOA

Analysis Batch: 348498

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-135864-1	MW-1R	Total/NA	Water	8021B	
400-135864-2	MW-4	Total/NA	Water	8021B	
400-135864-3	MW-5	Total/NA	Water	8021B	
400-135864-4	MW-6	Total/NA	Water	8021B	
400-135864-5	MW-7	Total/NA	Water	8021B	
400-135864-6	TRIP BLANK (3/28/17)	Total/NA	Water	8021B	
MB 400-348498/3	Method Blank	Total/NA	Water	8021B	
LCS 400-348498/1002	Lab Control Sample	Total/NA	Water	8021B	
400-135864-1 MS	MW-1R	Total/NA	Water	8021B	
400-135864-1 MSD	MW-1R	Total/NA	Water	8021B	

QC Sample Results

Client: Stantec Consulting Services Inc
Project/Site: El Paso CGP Company, LLC-Lindrith B #24

TestAmerica Job ID: 400-135864-1

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

Lab Sample ID: MB 400-348396/1-A

Matrix: Water

Analysis Batch: 348523

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 348396

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]pyrene	<0.20		0.20	ug/L		04/04/17 16:10	04/05/17 19:01	1
1-Methylnaphthalene	<0.20		0.20	ug/L		04/04/17 16:10	04/05/17 19:01	1
2-Methylnaphthalene	<0.20		0.20	ug/L		04/04/17 16:10	04/05/17 19:01	1
Naphthalene	<0.20		0.20	ug/L		04/04/17 16:10	04/05/17 19:01	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	103		15 - 122	04/04/17 16:10	04/05/17 19:01	1
Nitrobenzene-d5	114		19 - 130	04/04/17 16:10	04/05/17 19:01	1
Terphenyl-d14	113		33 - 138	04/04/17 16:10	04/05/17 19:01	1

Lab Sample ID: LCS 400-348396/2-A

Matrix: Water

Analysis Batch: 348523

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 348396

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Benzo[a]pyrene	20.0	17.9		ug/L		90	52 - 120
1-Methylnaphthalene	20.0	19.0		ug/L		95	41 - 120
2-Methylnaphthalene	20.0	19.2		ug/L		96	32 - 124
Naphthalene	20.0	17.6		ug/L		88	39 - 125

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2-Fluorobiphenyl	94		15 - 122
Nitrobenzene-d5	107		19 - 130
Terphenyl-d14	97		33 - 138

Lab Sample ID: LCSD 400-348396/3-A

Matrix: Water

Analysis Batch: 348523

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 348396

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzo[a]pyrene	20.0	17.0		ug/L		85	52 - 120	5	50
1-Methylnaphthalene	20.0	18.0		ug/L		90	41 - 120	5	55
2-Methylnaphthalene	20.0	18.2		ug/L		91	32 - 124	6	57
Naphthalene	20.0	16.6		ug/L		83	39 - 125	6	56

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
2-Fluorobiphenyl	87		15 - 122
Nitrobenzene-d5	102		19 - 130
Terphenyl-d14	93		33 - 138

TestAmerica Pensacola

QC Sample Results

Client: Stantec Consulting Services Inc
Project/Site: El Paso CGP Company, LLC-Lindrith B #24

TestAmerica Job ID: 400-135864-1

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 400-348498/3

Matrix: Water

Analysis Batch: 348498

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			04/05/17 12:17	1
Ethylbenzene	<1.0		1.0	ug/L			04/05/17 12:17	1
Toluene	<5.0		5.0	ug/L			04/05/17 12:17	1
Xylenes, Total	<5.0		5.0	ug/L			04/05/17 12:17	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (pid)	108		78 - 124		04/05/17 12:17	1

Lab Sample ID: LCS 400-348498/1002

Matrix: Water

Analysis Batch: 348498

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	20.0	20.8		ug/L		104	85 - 115
Ethylbenzene	20.0	21.6		ug/L		108	85 - 115
Toluene	20.0	21.3		ug/L		107	85 - 115
Xylenes, Total	60.0	66.2		ug/L		110	85 - 115

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

Lab Sample ID: 400-135864-1 MS

Matrix: Water

Analysis Batch: 348498

Client Sample ID: MW-1R

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	48.2		ug/L		96	44 - 150
Ethylbenzene	<1.0		50.0	48.9		ug/L		98	70 - 142
Toluene	<5.0		50.0	48.8		ug/L		98	69 - 136
Xylenes, Total	<5.0		150	149		ug/L		99	68 - 142

Surrogate	MS %Recovery	MS Qualifier	Limits
a,a,a-Trifluorotoluene (pid)	105		78 - 124

Lab Sample ID: 400-135864-1 MSD

Matrix: Water

Analysis Batch: 348498

Client Sample ID: MW-1R

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<1.0		50.0	45.7		ug/L		91	44 - 150	5	16
Ethylbenzene	<1.0		50.0	46.8		ug/L		94	70 - 142	4	16
Toluene	<5.0		50.0	46.5		ug/L		93	69 - 136	5	16
Xylenes, Total	<5.0		150	143		ug/L		95	68 - 142	4	15

Surrogate	MSD %Recovery	MSD Qualifier	Limits
a,a,a-Trifluorotoluene (pid)	105		78 - 124

TestAmerica Pensacola

Lab Chronicle

Client: Stantec Consulting Services Inc
Project/Site: El Paso CGP Company, LLC-Lindrith B #24

TestAmerica Job ID: 400-135864-1

Client Sample ID: MW-1R

Date Collected: 03/28/17 10:55

Date Received: 03/30/17 08:47

Lab Sample ID: 400-135864-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			225 mL	1 mL	348396	04/04/17 16:10	KLR	TAL PEN
Total/NA	Analysis	8270C LL		1			348523	04/05/17 20:10	CS	TAL PEN
		Instrument ID: Peanuts								
Total/NA	Analysis	8021B		1	5 mL	5 mL	348498	04/05/17 23:09	CMW	TAL PEN
		Instrument ID: ETHYL								

Client Sample ID: MW-4

Date Collected: 03/28/17 11:02

Date Received: 03/30/17 08:47

Lab Sample ID: 400-135864-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	5 mL	5 mL	348498	04/05/17 21:10	CMW	TAL PEN
		Instrument ID: ETHYL								

Client Sample ID: MW-5

Date Collected: 03/28/17 11:10

Date Received: 03/30/17 08:47

Lab Sample ID: 400-135864-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	5 mL	5 mL	348498	04/06/17 02:07	CMW	TAL PEN
		Instrument ID: ETHYL								

Client Sample ID: MW-6

Date Collected: 03/28/17 11:18

Date Received: 03/30/17 08:47

Lab Sample ID: 400-135864-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	5 mL	5 mL	348498	04/06/17 03:06	CMW	TAL PEN
		Instrument ID: ETHYL								

Client Sample ID: MW-7

Date Collected: 03/28/17 11:24

Date Received: 03/30/17 08:47

Lab Sample ID: 400-135864-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	5 mL	5 mL	348498	04/06/17 04:05	CMW	TAL PEN
		Instrument ID: ETHYL								

TestAmerica Pensacola

Lab Chronicle

Client: Stantec Consulting Services Inc
Project/Site: El Paso CGP Company, LLC-Lindrith B #24

TestAmerica Job ID: 400-135864-1

Client Sample ID: TRIP BLANK (3/28/17)

Lab Sample ID: 400-135864-6

Date Collected: 03/28/17 10:40

Matrix: Water

Date Received: 03/30/17 08:47

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	5 mL	5 mL	348498	04/05/17 20:11	CMW	TAL PEN
Instrument ID: ETHYL										

Laboratory References:

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

Accreditation/Certification Summary

Client: Stantec Consulting Services Inc
Project/Site: El Paso CGP Company, LLC-Lindrith B #24

TestAmerica Job ID: 400-135864-1

Laboratory: TestAmerica Pensacola

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

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

Method Summary

Client: Stantec Consulting Services Inc
Project/Site: El Paso CGP Company, LLC-Lindrith B #24

TestAmerica Job ID: 400-135864-1

Method	Method Description	Protocol	Laboratory
8270C LL	Semivolatile Organic Compounds by GCMS - Low Levels	SW846	TAL PEN
8021B	Volatile Organic Compounds (GC)	SW846	TAL PEN

Protocol References:

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

Laboratory References:

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

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

Chain of Custody Record

TestAmerica
 THE LEADER IN ENVIRONMENTAL TESTING

Client Information		Lab PM: Webb, Carol M		Carrier Tracking Note:		COC No: 400-64074-24009.1	
Client Contact: Ms. Sarah Gardner		E-Mail: carol.webb@testamerica.com				Page: Page 1 of 1	
Company: Startec Consulting Services Inc		Address: 1560 Broadway Suite 1800		Analysis Requested		Job #: 10510616.9102	
City: Denver		State, Zip: CO, 80202		Due Date Requested:		Preservation Codes:	
Phone: 303-291-2239 (Tel)		Email: sarah.gardner@mwglobal.com		TAT Requested (days):		A - HCL M - Hazards N - None O - Asph/O2 P - Noxious Q - Noxious R - Noxious S - H2SO4 T - TSP/Dichlorhydrate U - Acetone V - MCAA W - PH 4-5 X - EDTA Z - Other (specify)	
Project Name: Lindriith B		Purchase Order Requested WO #:		PO #:		Other:	
Site:		Project #: 40005479		SSON #:			

Sample Identification	Sample Date	Sample Time	Sample Type (C-comp, G-grab)	Matrix (Water, Soil, Sediment, Other)	Special Instructions/Note:
MW-1B	3/28/17	1053	G	Water	None
MW-4	3/28/17	1102	G	Water	None
MW-5		1110	G	Water	
MW-6		1118	G	Water	
MW-7		1124	G	Water	
Trip Blank		1040	G	Water	

Possible Hazard Identification		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)	
☒ Non-Hazard	☐ Skin Irritant	☒ Return To Client	☐ Archive For
Deliverable Requested: I, II, III, IV, Other (specify)		Special Instructions/OC Requirements:	
Empty Kit Relinquished by:		Method of Shipment:	
Relinquished by:	Date:	Relinquished by:	Date:
Relinquished by:	Date:	Relinquished by:	Date:
Relinquished by:	Date:	Relinquished by:	Date:
Custody Seals Intact: A Yes A No		Custody Seal No.:	

Login Sample Receipt Checklist

Client: Stantec Consulting Services Inc

Job Number: 400-135864-1

Login Number: 135864

List Source: TestAmerica Pensacola

List Number: 1

Creator: Perez, Trina M

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	3.2°C IR-7
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

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

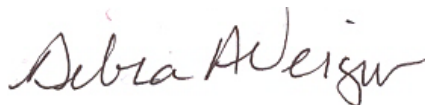
TestAmerica Job ID: 400-139057-1

Client Project/Site: ElPaso CGP Company, LLC - Lindrith B#24

For:

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

Attn: Ms. Sarah Gardner



Authorized for release by:

6/20/2017 5:03:07 PM

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

debra.vergin@testamericainc.com

Designee for

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

carol.webb@testamericainc.com

LINKS

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www.testamericainc.com

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

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

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

1
2
3
4
5
6
7
8
9
10
11
12
13
14

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	13
QC Sample Results	14
Chronicle	15
Certification Summary	17
Method Summary	18
Chain of Custody	19
Receipt Checklists	20



Definitions/Glossary

Client: Stantec Consulting Services Inc
Project/Site: ElPaso CGP Company, LLC - Lindriith B#24

TestAmerica Job ID: 400-139057-1

Glossary

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

Case Narrative

Client: Stantec Consulting Services Inc
Project/Site: ElPaso CGP Company, LLC - Lindrith B#24

TestAmerica Job ID: 400-139057-1

Job ID: 400-139057-1

Laboratory: TestAmerica Pensacola

Narrative

Job Narrative
400-139057-1

Comments

No additional comments.

Receipt

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

GC VOA

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

VOA Prep

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

Detection Summary

Client: Stantec Consulting Services Inc
Project/Site: ElPaso CGP Company, LLC - Lindrith B#24

TestAmerica Job ID: 400-139057-1

Client Sample ID: MW-1R

Lab Sample ID: 400-139057-1

No Detections.

Client Sample ID: MW-4

Lab Sample ID: 400-139057-2

No Detections.

Client Sample ID: MW-5

Lab Sample ID: 400-139057-3

No Detections.

Client Sample ID: MW-6

Lab Sample ID: 400-139057-4

No Detections.

Client Sample ID: MW-7

Lab Sample ID: 400-139057-5

No Detections.

Client Sample ID: TRIP BLANK

Lab Sample ID: 400-139057-6

No Detections.

This Detection Summary does not include radiochemical test results.

TestAmerica Pensacola

Sample Summary

Client: Stantec Consulting Services Inc
Project/Site: EIPaso CGP Company, LLC - Lindrith B#24

TestAmerica Job ID: 400-139057-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-139057-1	MW-1R	Water	06/07/17 09:40	06/09/17 11:11
400-139057-2	MW-4	Water	06/07/17 09:20	06/09/17 11:11
400-139057-3	MW-5	Water	06/07/17 09:10	06/09/17 11:11
400-139057-4	MW-6	Water	06/07/17 09:05	06/09/17 11:11
400-139057-5	MW-7	Water	06/07/17 09:00	06/09/17 11:11
400-139057-6	TRIP BLANK	Water	06/07/17 08:45	06/09/17 11:11

Client Sample Results

Client: Stantec Consulting Services Inc
Project/Site: EIPaso CGP Company, LLC - Lindrith B#24

TestAmerica Job ID: 400-139057-1

Client Sample ID: MW-1R

Lab Sample ID: 400-139057-1

Date Collected: 06/07/17 09:40

Matrix: Water

Date Received: 06/09/17 11:11

Method: 8021B - Volatile Organic Compounds (GC)

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (pid)	93		78 - 124		06/14/17 14:15	1

Client Sample Results

Client: Stantec Consulting Services Inc
Project/Site: EIPaso CGP Company, LLC - Lindrith B#24

TestAmerica Job ID: 400-139057-1

Client Sample ID: MW-4

Lab Sample ID: 400-139057-2

Date Collected: 06/07/17 09:20

Matrix: Water

Date Received: 06/09/17 11:11

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0	ug/L			06/14/17 14:51	1
Ethylbenzene	<1.0		1.0	ug/L			06/14/17 14:51	1
Toluene	<5.0		5.0	ug/L			06/14/17 14:51	1
Xylenes, Total	<5.0		5.0	ug/L			06/14/17 14:51	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (pid)	92		78 - 124		06/14/17 14:51	1

Client Sample Results

Client: Stantec Consulting Services Inc
Project/Site: EIPaso CGP Company, LLC - Lindrith B#24

TestAmerica Job ID: 400-139057-1

Client Sample ID: MW-5

Lab Sample ID: 400-139057-3

Date Collected: 06/07/17 09:10

Matrix: Water

Date Received: 06/09/17 11:11

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0	ug/L			06/14/17 15:27	1
Ethylbenzene	<1.0		1.0	ug/L			06/14/17 15:27	1
Toluene	<5.0		5.0	ug/L			06/14/17 15:27	1
Xylenes, Total	<5.0		5.0	ug/L			06/14/17 15:27	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (pid)	95		78 - 124				06/14/17 15:27	1

Client Sample Results

Client: Stantec Consulting Services Inc
Project/Site: EIPaso CGP Company, LLC - Lindrith B#24

TestAmerica Job ID: 400-139057-1

Client Sample ID: MW-6

Lab Sample ID: 400-139057-4

Date Collected: 06/07/17 09:05

Matrix: Water

Date Received: 06/09/17 11:11

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0	ug/L			06/14/17 17:51	1
Ethylbenzene	<1.0		1.0	ug/L			06/14/17 17:51	1
Toluene	<5.0		5.0	ug/L			06/14/17 17:51	1
Xylenes, Total	<5.0		5.0	ug/L			06/14/17 17:51	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (pid)	95		78 - 124		06/14/17 17:51	1

Client Sample Results

Client: Stantec Consulting Services Inc
Project/Site: EIPaso CGP Company, LLC - Lindrith B#24

TestAmerica Job ID: 400-139057-1

Client Sample ID: MW-7

Lab Sample ID: 400-139057-5

Date Collected: 06/07/17 09:00

Matrix: Water

Date Received: 06/09/17 11:11

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0	ug/L			06/14/17 18:26	1
Ethylbenzene	<1.0		1.0	ug/L			06/14/17 18:26	1
Toluene	<5.0		5.0	ug/L			06/14/17 18:26	1
Xylenes, Total	<5.0		5.0	ug/L			06/14/17 18:26	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (pid)	94		78 - 124				06/14/17 18:26	1

Client Sample Results

Client: Stantec Consulting Services Inc
Project/Site: EIPaso CGP Company, LLC - Lindrith B#24

TestAmerica Job ID: 400-139057-1

Client Sample ID: TRIP BLANK

Lab Sample ID: 400-139057-6

Date Collected: 06/07/17 08:45

Matrix: Water

Date Received: 06/09/17 11:11

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0	ug/L			06/14/17 13:40	1
Ethylbenzene	<1.0		1.0	ug/L			06/14/17 13:40	1
Toluene	<5.0		5.0	ug/L			06/14/17 13:40	1
Xylenes, Total	<5.0		5.0	ug/L			06/14/17 13:40	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (pid)	95		78 - 124				06/14/17 13:40	1

QC Association Summary

Client: Stantec Consulting Services Inc
Project/Site: ElPaso CGP Company, LLC - Lindrith B#24

TestAmerica Job ID: 400-139057-1

GC VOA

Analysis Batch: 356860

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-139057-1	MW-1R	Total/NA	Water	8021B	
400-139057-2	MW-4	Total/NA	Water	8021B	
400-139057-3	MW-5	Total/NA	Water	8021B	
400-139057-4	MW-6	Total/NA	Water	8021B	
400-139057-5	MW-7	Total/NA	Water	8021B	
400-139057-6	TRIP BLANK	Total/NA	Water	8021B	
MB 400-356860/34	Method Blank	Total/NA	Water	8021B	
LCS 400-356860/1033	Lab Control Sample	Total/NA	Water	8021B	
400-139057-1 MS	MW-1R	Total/NA	Water	8021B	
400-139057-1 MSD	MW-1R	Total/NA	Water	8021B	

QC Sample Results

Client: Stantec Consulting Services Inc
Project/Site: EIPaso CGP Company, LLC - Lindrith B#24

TestAmerica Job ID: 400-139057-1

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 400-356860/34

Matrix: Water

Analysis Batch: 356860

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0	ug/L			06/14/17 10:04	1
Ethylbenzene	<1.0		1.0	ug/L			06/14/17 10:04	1
Toluene	<5.0		5.0	ug/L			06/14/17 10:04	1
Xylenes, Total	<5.0		5.0	ug/L			06/14/17 10:04	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (pid)	94		78 - 124		06/14/17 10:04	1

Lab Sample ID: LCS 400-356860/1033

Matrix: Water

Analysis Batch: 356860

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	49.5		ug/L		99	85 - 115
Ethylbenzene	50.0	50.6		ug/L		101	85 - 115
Toluene	50.0	50.7		ug/L		101	85 - 115
Xylenes, Total	150	150		ug/L		100	85 - 115

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

Lab Sample ID: 400-139057-1 MS

Matrix: Water

Analysis Batch: 356860

Client Sample ID: MW-1R

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	49.5		ug/L		99	44 - 150
Ethylbenzene	<1.0		50.0	51.6		ug/L		103	70 - 142
Toluene	<5.0		50.0	50.9		ug/L		102	69 - 136
Xylenes, Total	<5.0		150	154		ug/L		103	68 - 142

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

Lab Sample ID: 400-139057-1 MSD

Matrix: Water

Analysis Batch: 356860

Client Sample ID: MW-1R

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	44 - 150	2	16
Ethylbenzene	<1.0		50.0	50.9		ug/L		102	70 - 142	1	16
Toluene	<5.0		50.0	50.8		ug/L		102	69 - 136	0	16
Xylenes, Total	<5.0		150	153		ug/L		102	68 - 142	1	15

Surrogate	MSD %Recovery	MSD Qualifier	Limits
a,a,a-Trifluorotoluene (pid)	95		78 - 124

TestAmerica Pensacola

Lab Chronicle

Client: Stantec Consulting Services Inc
Project/Site: EIPaso CGP Company, LLC - Lindrith B#24

TestAmerica Job ID: 400-139057-1

Client Sample ID: MW-1R

Date Collected: 06/07/17 09:40

Date Received: 06/09/17 11:11

Lab Sample ID: 400-139057-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	5 mL	5 mL	356860	06/14/17 14:15	GRK	TAL PEN
Instrument ID: CH_JOAN										

Client Sample ID: MW-4

Date Collected: 06/07/17 09:20

Date Received: 06/09/17 11:11

Lab Sample ID: 400-139057-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	5 mL	5 mL	356860	06/14/17 14:51	GRK	TAL PEN
Instrument ID: CH_JOAN										

Client Sample ID: MW-5

Date Collected: 06/07/17 09:10

Date Received: 06/09/17 11:11

Lab Sample ID: 400-139057-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	5 mL	5 mL	356860	06/14/17 15:27	GRK	TAL PEN
Instrument ID: CH_JOAN										

Client Sample ID: MW-6

Date Collected: 06/07/17 09:05

Date Received: 06/09/17 11:11

Lab Sample ID: 400-139057-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	5 mL	5 mL	356860	06/14/17 17:51	GRK	TAL PEN
Instrument ID: CH_JOAN										

Client Sample ID: MW-7

Date Collected: 06/07/17 09:00

Date Received: 06/09/17 11:11

Lab Sample ID: 400-139057-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	5 mL	5 mL	356860	06/14/17 18:26	GRK	TAL PEN
Instrument ID: CH_JOAN										

Client Sample ID: TRIP BLANK

Date Collected: 06/07/17 08:45

Date Received: 06/09/17 11:11

Lab Sample ID: 400-139057-6

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	5 mL	5 mL	356860	06/14/17 13:40	GRK	TAL PEN
Instrument ID: CH_JOAN										

TestAmerica Pensacola

Lab Chronicle

Client: Stantec Consulting Services Inc
Project/Site: EIPaso CGP Company, LLC - Lindrith B#24

TestAmerica Job ID: 400-139057-1

Laboratory References:

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

1
2
3
4
5
6
7
8
9
10
11
12
13
14

Accreditation/Certification Summary

Client: Stantec Consulting Services Inc
Project/Site: EIPaso CGP Company, LLC - Lindrith B#24

TestAmerica Job ID: 400-139057-1

Laboratory: TestAmerica Pensacola

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

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

Method Summary

Client: Stantec Consulting Services Inc
Project/Site: El Paso CGP Company, LLC - Lindrieth B#24

TestAmerica Job ID: 400-139057-1

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	TAL PEN

Protocol References:

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

Laboratory References:

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

TestAmerica Pensacola

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

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information Client Contact: Ms. Sarah Gardner Company: Startec Consulting Services Inc Address: 1560 Broadway Suite 1800 City: Denver State Zip: CO. 80202 Phone: 303-291-2239(Tel) Email: sarah.gardner@mwhglobal.com Project Name: Lindrith B Site: Lindrith B #24		Sample: S. Gardner/J. Garvey Lab PM: Webb, Carol M Phone: 303 291 2239 E-Mail: carol.webb@testamericainc.com		Carrier Tracking No(s): 400-65868-26943.1 Page: Page 1 of 1 Job #:	
Due Date Requested: TAT Requested (days): Standard PO #: Purchase Order Requested WO #: Project #: 40005479 SOW#:		Analysis Requested			
Preservation Codes: A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Amchlor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA Other:		Preservation Codes: M - Hexane N - None O - AsNaO2 P - Na2OHS Q - Na2SO3 R - Na2SO3 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4.5 Z - other (specify)			
Sample Identification		Sample Date		Sample Time	
MW-1P MW-2 MW-3 MW-4 MW-5 MW-6 MW-7 Trip Blank		June 7, 2017 June 7, 2017 June 7, 2017 June 7, 2017 June 7, 2017 June 7, 2017 June 7, 2017 June 7, 2017		940 920 910 905 900 845	
Matrix (W=water, S=solid, O=waste/oil, BT=leachate, A=air)		Sample Type (C=comp, G=grab)		Preservation Code:	
W W W W W W W W		G G G G G G G G		W W W W W W W W	
Field Filtered Sample (Yes or No)		Perform MS/MSD (Yes or No)		Total Number of containers	
X		X		X	
8021B - BTEX 8021		A		2 2 2 2 2 2 2 2	
Special Instructions/Note:		Not Sampled Not Sampled			
Possible Hazard Identification ☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological Deliverable Requested: I, II, III, IV, Other (specify)					
Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) ☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months					
Special Instructions/QC Requirements:					
Empty Kit Relinquished by:					
Relinquished by: <i>Sarah Gardner</i> Date/Time: 6/8/2017 845					
Relinquished by: Date/Time:					
Relinquished by: Date/Time:					
Custody Seals Intact: ☐ Yes ☐ No					
Custody Seal No.:					
Cooler Temperature(s) °C and Other Remarks: 31.8, 2.7, 1.2, 1.2					

Login Sample Receipt Checklist

Client: Stantec Consulting Services Inc

Job Number: 400-139057-1

Login Number: 139057

List Source: TestAmerica Pensacola

List Number: 1

Creator: Johnson, Jeremy N

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	3.1°C 2.7 IR2
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Pensacola

3355 McLemore Drive

Pensacola, FL 32514

Tel: (850)474-1001

TestAmerica Job ID: 400-141186-1

Client Project/Site: EIPaso CGP Company, LLC - Lindrith B #24

For:

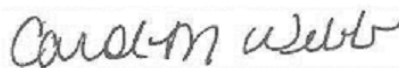
Stantec Consulting Services Inc

1560 Broadway

Suite 1800

Denver, Colorado 80202

Attn: Ms. Sarah Gardner



Authorized for release by:

8/4/2017 12:38:52 PM

Carol Webb, Project Manager II

(850)471-6250

carol.webb@testamericainc.com

LINKS

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www.testamericainc.com

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

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

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

Table of Contents

Cover Page 1

Table of Contents 2

Definitions 3

Case Narrative 4

Detection Summary 5

Sample Summary 6

Client Sample Results 7

QC Association 13

QC Sample Results 14

Chronicle 15

Certification Summary 17

Method Summary 18

Chain of Custody 19

Receipt Checklists 20



Definitions/Glossary

Client: Stantec Consulting Services Inc
Project/Site: ElPaso CGP Company, LLC - Lindrith B #24

TestAmerica Job ID: 400-141186-1

Glossary

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

Case Narrative

Client: Stantec Consulting Services Inc
Project/Site: ElPaso CGP Company, LLC - Lindrith B #24

TestAmerica Job ID: 400-141186-1

Job ID: 400-141186-1

Laboratory: TestAmerica Pensacola

Narrative

Job Narrative
400-141186-1

Comments

No additional comments.

Receipt

The samples were received on 7/29/2017 8:12 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.9° C.

GC VOA

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

VOA Prep

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

Detection Summary

Client: Stantec Consulting Services Inc
Project/Site: ElPaso CGP Company, LLC - Lindrith B #24

TestAmerica Job ID: 400-141186-1

Client Sample ID: MW-7

Lab Sample ID: 400-141186-1

☐ No Detections.

Client Sample ID: MW-6

Lab Sample ID: 400-141186-2

☐ No Detections.

Client Sample ID: MW-5

Lab Sample ID: 400-141186-3

☐ No Detections.

Client Sample ID: MW-4

Lab Sample ID: 400-141186-4

☐ No Detections.

Client Sample ID: MW-1R

Lab Sample ID: 400-141186-5

☐ No Detections.

Client Sample ID: TRIP BLANK

Lab Sample ID: 400-141186-6

☐ No Detections.

This Detection Summary does not include radiochemical test results.

TestAmerica Pensacola

Sample Summary

Client: Stantec Consulting Services Inc
Project/Site: ElPaso CGP Company, LLC - Lindrith B #24

TestAmerica Job ID: 400-141186-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-141186-1	MW-7	Water	07/28/17 10:40	07/29/17 08:12
400-141186-2	MW-6	Water	07/28/17 10:50	07/29/17 08:12
400-141186-3	MW-5	Water	07/28/17 10:55	07/29/17 08:12
400-141186-4	MW-4	Water	07/28/17 11:05	07/29/17 08:12
400-141186-5	MW-1R	Water	07/28/17 11:10	07/29/17 08:12
400-141186-6	TRIP BLANK	Water	07/28/17 10:40	07/29/17 08:12

Client Sample Results

Client: Stantec Consulting Services Inc
Project/Site: EIPaso CGP Company, LLC - Lindrith B #24

TestAmerica Job ID: 400-141186-1

Client Sample ID: MW-7
Date Collected: 07/28/17 10:40
Date Received: 07/29/17 08:12

Lab Sample ID: 400-141186-1
Matrix: Water

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0	ug/L			08/03/17 02:55	1
Ethylbenzene	<1.0		1.0	ug/L			08/03/17 02:55	1
Toluene	<5.0		5.0	ug/L			08/03/17 02:55	1
Xylenes, Total	<5.0		5.0	ug/L			08/03/17 02:55	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (pid)	105		78 - 124				08/03/17 02:55	1

Client Sample Results

Client: Stantec Consulting Services Inc
Project/Site: EIPaso CGP Company, LLC - Lindrith B #24

TestAmerica Job ID: 400-141186-1

Client Sample ID: MW-6

Date Collected: 07/28/17 10:50

Date Received: 07/29/17 08:12

Lab Sample ID: 400-141186-2

Matrix: Water

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0	ug/L			08/03/17 03:55	1
Ethylbenzene	<1.0		1.0	ug/L			08/03/17 03:55	1
Toluene	<5.0		5.0	ug/L			08/03/17 03:55	1
Xylenes, Total	<5.0		5.0	ug/L			08/03/17 03:55	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (pid)	105		78 - 124				08/03/17 03:55	1

Client Sample Results

Client: Stantec Consulting Services Inc
Project/Site: EIPaso CGP Company, LLC - Lindrith B #24

TestAmerica Job ID: 400-141186-1

Client Sample ID: MW-5

Date Collected: 07/28/17 10:55

Date Received: 07/29/17 08:12

Lab Sample ID: 400-141186-3

Matrix: Water

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0	ug/L			08/03/17 04:54	1
Ethylbenzene	<1.0		1.0	ug/L			08/03/17 04:54	1
Toluene	<5.0		5.0	ug/L			08/03/17 04:54	1
Xylenes, Total	<5.0		5.0	ug/L			08/03/17 04:54	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (pid)	105		78 - 124				08/03/17 04:54	1

Client Sample Results

Client: Stantec Consulting Services Inc
Project/Site: EIPaso CGP Company, LLC - Lindrith B #24

TestAmerica Job ID: 400-141186-1

Client Sample ID: MW-4
Date Collected: 07/28/17 11:05
Date Received: 07/29/17 08:12

Lab Sample ID: 400-141186-4
Matrix: Water

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0	ug/L			08/03/17 05:53	1
Ethylbenzene	<1.0		1.0	ug/L			08/03/17 05:53	1
Toluene	<5.0		5.0	ug/L			08/03/17 05:53	1
Xylenes, Total	<5.0		5.0	ug/L			08/03/17 05:53	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (pid)	105		78 - 124				08/03/17 05:53	1

Client Sample Results

Client: Stantec Consulting Services Inc
Project/Site: EIPaso CGP Company, LLC - Lindrith B #24

TestAmerica Job ID: 400-141186-1

Client Sample ID: MW-1R

Date Collected: 07/28/17 11:10

Date Received: 07/29/17 08:12

Lab Sample ID: 400-141186-5

Matrix: Water

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0	ug/L			08/03/17 06:53	1
Ethylbenzene	<1.0		1.0	ug/L			08/03/17 06:53	1
Toluene	<5.0		5.0	ug/L			08/03/17 06:53	1
Xylenes, Total	<5.0		5.0	ug/L			08/03/17 06:53	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (pid)	105		78 - 124				08/03/17 06:53	1

Client Sample Results

Client: Stantec Consulting Services Inc
Project/Site: EIPaso CGP Company, LLC - Lindrith B #24

TestAmerica Job ID: 400-141186-1

Client Sample ID: TRIP BLANK

Lab Sample ID: 400-141186-6

Date Collected: 07/28/17 10:40

Matrix: Water

Date Received: 07/29/17 08:12

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0	ug/L			08/03/17 07:52	1
Ethylbenzene	<1.0		1.0	ug/L			08/03/17 07:52	1
Toluene	<5.0		5.0	ug/L			08/03/17 07:52	1
Xylenes, Total	<5.0		5.0	ug/L			08/03/17 07:52	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (pid)	105		78 - 124				08/03/17 07:52	1

QC Association Summary

Client: Stantec Consulting Services Inc
Project/Site: ElPaso CGP Company, LLC - Lindrith B #24

TestAmerica Job ID: 400-141186-1

GC VOA

Analysis Batch: 362639

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-141186-1	MW-7	Total/NA	Water	8021B	
400-141186-2	MW-6	Total/NA	Water	8021B	
400-141186-3	MW-5	Total/NA	Water	8021B	
400-141186-4	MW-4	Total/NA	Water	8021B	
400-141186-5	MW-1R	Total/NA	Water	8021B	
400-141186-6	TRIP BLANK	Total/NA	Water	8021B	
MB 400-362639/3	Method Blank	Total/NA	Water	8021B	
LCS 400-362639/1002	Lab Control Sample	Total/NA	Water	8021B	
400-141188-A-1 MS	Matrix Spike	Total/NA	Water	8021B	
400-141188-A-1 MSD	Matrix Spike Duplicate	Total/NA	Water	8021B	

QC Sample Results

Client: Stantec Consulting Services Inc
Project/Site: ElPaso CGP Company, LLC - Lindrith B #24

TestAmerica Job ID: 400-141186-1

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 400-362639/3

Matrix: Water

Analysis Batch: 362639

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			08/02/17 12:05	1
Ethylbenzene	<1.0		1.0	ug/L			08/02/17 12:05	1
Toluene	<5.0		5.0	ug/L			08/02/17 12:05	1
Xylenes, Total	<5.0		5.0	ug/L			08/02/17 12:05	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (pid)	107		78 - 124		08/02/17 12:05	1

Lab Sample ID: LCS 400-362639/1002

Matrix: Water

Analysis Batch: 362639

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	50.0	51.2		ug/L		102	85 - 115
Ethylbenzene	50.0	51.8		ug/L		104	85 - 115
Toluene	50.0	51.3		ug/L		103	85 - 115
Xylenes, Total	150	157		ug/L		105	85 - 115

Surrogate	LCS %Recovery	LCS Qualifier	Limits
a,a,a-Trifluorotoluene (pid)	105		78 - 124

Lab Sample ID: 400-141188-A-1 MS

Matrix: Water

Analysis Batch: 362639

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	44.4		ug/L		89	44 - 150
Ethylbenzene	<1.0		50.0	45.0		ug/L		90	70 - 142
Toluene	<5.0		50.0	44.6		ug/L		89	69 - 136
Xylenes, Total	<5.0		150	137		ug/L		91	68 - 142

Surrogate	MS %Recovery	MS Qualifier	Limits
a,a,a-Trifluorotoluene (pid)	104		78 - 124

Lab Sample ID: 400-141188-A-1 MSD

Matrix: Water

Analysis Batch: 362639

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	44.6		ug/L		89	44 - 150	0	16
Ethylbenzene	<1.0		50.0	45.9		ug/L		92	70 - 142	2	16
Toluene	<5.0		50.0	45.2		ug/L		90	69 - 136	1	16
Xylenes, Total	<5.0		150	140		ug/L		93	68 - 142	2	15

Surrogate	MSD %Recovery	MSD Qualifier	Limits
a,a,a-Trifluorotoluene (pid)	104		78 - 124

TestAmerica Pensacola

Lab Chronicle

Client: Stantec Consulting Services Inc
Project/Site: ElPaso CGP Company, LLC - Lindrith B #24

TestAmerica Job ID: 400-141186-1

Client Sample ID: MW-7

Date Collected: 07/28/17 10:40

Date Received: 07/29/17 08:12

Lab Sample ID: 400-141186-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	5 mL	5 mL	362639	08/03/17 02:55	MKA	TAL PEN
Instrument ID: ETHYL										

Client Sample ID: MW-6

Date Collected: 07/28/17 10:50

Date Received: 07/29/17 08:12

Lab Sample ID: 400-141186-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	5 mL	5 mL	362639	08/03/17 03:55	MKA	TAL PEN
Instrument ID: ETHYL										

Client Sample ID: MW-5

Date Collected: 07/28/17 10:55

Date Received: 07/29/17 08:12

Lab Sample ID: 400-141186-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	5 mL	5 mL	362639	08/03/17 04:54	MKA	TAL PEN
Instrument ID: ETHYL										

Client Sample ID: MW-4

Date Collected: 07/28/17 11:05

Date Received: 07/29/17 08:12

Lab Sample ID: 400-141186-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	5 mL	5 mL	362639	08/03/17 05:53	MKA	TAL PEN
Instrument ID: ETHYL										

Client Sample ID: MW-1R

Date Collected: 07/28/17 11:10

Date Received: 07/29/17 08:12

Lab Sample ID: 400-141186-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	5 mL	5 mL	362639	08/03/17 06:53	MKA	TAL PEN
Instrument ID: ETHYL										

Client Sample ID: TRIP BLANK

Date Collected: 07/28/17 10:40

Date Received: 07/29/17 08:12

Lab Sample ID: 400-141186-6

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	5 mL	5 mL	362639	08/03/17 07:52	MKA	TAL PEN
Instrument ID: ETHYL										

TestAmerica Pensacola

Lab Chronicle

Client: Stantec Consulting Services Inc
Project/Site: ElPaso CGP Company, LLC - Lindrith B #24

TestAmerica Job ID: 400-141186-1

Laboratory References:

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

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Accreditation/Certification Summary

Client: Stantec Consulting Services Inc
Project/Site: EIPaso CGP Company, LLC - Lindrith B #24

TestAmerica Job ID: 400-141186-1

Laboratory: TestAmerica Pensacola

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

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

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

TestAmerica Pensacola

Method Summary

Client: Stantec Consulting Services Inc
Project/Site: ElPaso CGP Company, LLC - Lindrith B #24

TestAmerica Job ID: 400-141186-1

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	TAL PEN

Protocol References:

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

Laboratory References:

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

Chain of Custody Record

Client Information Company: Stantec Consulting Services Inc Address: 1560 Broadway Suite 1800 City: Denver State, Zip: CO, 80202 Phone: 303-291-2239 (Tel) Email: sarah.gardner@mwhglobal.com Project Name: Lindrith B #24 Site:		Sampler: <u>CS1</u> Lab PM: Webb, Carol M E-Mail: carol.webb@testamericainc.com Phone: <u>915-707-3276</u>		Carrier Tracking No(s): COC No: 400-67115-27357.1 Page: Page 1 of 1 Job #:	
Due Date Requested: TAT Requested (days): <u>5</u> PO #: <u>WD249331</u> Purchase Order Requested WO #: <u>40005479</u> Project #: <u>SSOW#:</u>		Analysis Requested  400-141186 COC			
Sample Identification MW-7 MW-6 MW-5 MW-4 MW-IR TRIP BUNK		Sample Date 7/25/17 	Sample Time 1040 1050 1055 1105 1110 1040	Sample Type G=grab 	Matrix (W=water, S=solid, O=oil, A=air) W
Field Filtered Sample (Yes or No) ☒ A Perform MS/MSD (Yes or No) ☒ A 8021B - BTEX 8021		Total Number of containers			
Special Instructions/Note: YES ALL W-804-5N-05-17-17 - SIG-14 LINGRITH B #24		Preservation Codes: A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Amchlor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA Other:			
Possible Hazard Identification ☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological Deliverable Requested: I, II, III, IV, Other (specify)					
Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) ☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months					
Special Instructions/QC Requirements:					
Empty Kit Relinquished by: <u>[Signature]</u> Relinquished by: <u>[Signature]</u> Relinquished by: <u>[Signature]</u> Relinquished by:		Date: <u>7/28/17</u> <u>1645</u> 		Method of Shipment: Received by: <u>[Signature]</u> Date/Time: <u>7/29/17</u> <u>0812</u> 	
Custody Seals Intact: ☒ Yes ☐ No		Cooler Temperature(s) °C and Other Remarks: <u>2.9°C</u> <u>IR2</u>			

Login Sample Receipt Checklist

Client: Stantec Consulting Services Inc

Job Number: 400-141186-1

Login Number: 141186

List Source: TestAmerica Pensacola

List Number: 1

Creator: Hughes, Nicholas T

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	2.9°C - IR2
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

ATTACHMENT C

GROUNDWATER DISPOSAL DOCUMENTATION

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

683462

NO.

NMOCDD PERMIT: NM -001-0005

Oil Field Waste Document, Form C138

INVOICE:

DATE 4-4-17

GENERATOR: El Paso Corp

HAULING CO. MWH

ORDERED BY: Joseph Wiley

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		Linclike 8424, Hammer 899A	1	.25			.25	
2		Hammer 89						
3								
4								
5								

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

☒ Approved

☐ Denied

ATTENDANT SIGNATURE

Stanley Grant

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

DATE 6-8-17
GENERATOR: EL PASO
HAULING CO. El Paso Consulting
ORDERED BY: Joseph Wilcox

DEL. TKT# _____
BILL TO: EL PASO
DRIVER: Sarah Gardner
(Print Full Name)
CODES: _____

WASTE DESCRIPTION: ☒ Exempt Oilfield Waste ☐ Produced Water ☐ Drilling/Completion Fluids ☐ Reserve Pit
STATE: ☒ NM ☐ CO ☐ AZ ☐ UT TREATMENT/DISPOSAL METHODS: ☒ EVAPORATION ☒ INJECTION ☒ TREATING PLANT

NO.	TRUCK	LOCATION(S)	VOLUME	COST	H2S	COST	TOTAL	TIME
1	<u>01</u>	<u>JONES FR. #1 IE</u>	<u>7</u>	<u>750</u>			<u>754</u>	
2		<u>STATE GAS CUM #1</u>					<u>17 JUN 8</u>	<u>4:13 PM</u>
3		<u>CAWUDIN #2</u>						
4		<u>M. LOS FORTIA</u>						
5		<u>Fields #2A</u>						
		<u>Lindath B #24</u>						
		<u>Acropolis #41A</u>						
		<u>KNGLT #1</u>						
		<u>K2710072</u>						

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

☐ Approved

☐ Denied

ATTENDANT SIGNATURE _____

san juan reproduction 168-6

BASIN DISPOSAL

30 Years of Environmental Health and Safety Excellence

200 Montana, Bloomfield, NM 87413

505-632-8936 or 505-334-3013

OPEN 24 Hours per Day

NO. **691721**

NMOC D PERMIT: NM -001-0005

Oil Field Waste Document, Form C138

INVOICE:

DATE 8-1-17

GENERATOR: El Paso

HAULING CO: Serina

ORDERED BY: Joseph Wiley

DEL. TKT#

BILL TO: El Paso

DRIVER: Calvin
(Print Full Name)

CODES:

WASTE DESCRIPTION: ☒ Exempt Oilfield Waste

☒ Produced Water

☐ Drilling/Completion Fluids

☐ Reserve Pit

STATE: ☐ NM ☐ CO ☐ AZ ☐ UT

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

NO.	TRUCK	LOCATION(S)	VOLUME	COST	H2S	COST	TOTAL	TIME
1	39	Lindri th B 24	2 Gal.					
2		Hammond 41A						
3								
4								
5								

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

☒ Approved

☐ Denied

ATTENDANT SIGNATURE

Calvin John