

2015 ANNUAL GROUNDWATER REPORT

Gallegos Canyon Unit #124E
NMOCD Case#: 3RP-407-0
Meter Code: 95608
T28N, R12W, Sec 35, Unit N

SITE DETAILS

Site Location: Latitude: 36.614105 N, Longitude: -108.083662 W
Land Type: Navajo
Operator: BP America Production Company

SITE BACKGROUND

- **Site Assessment:** 1/95
- **Excavation:** 10/95 (196 cy)

Environmental Remediation activities at the Gallegos Canyon Unit #124E (Site) are managed pursuant to the procedures set forth in the document entitled, "Remediation Plan for Groundwater Encountered during Pit Closure Activities" (Remediation Plan, El Paso Natural Gas Company / El Paso Field Services Company, 1995). This Remediation Plan was conditionally approved by the New Mexico Oil Conservation Division (OCD) in correspondence dated November 30, 1995; and the OCD approval conditions were adopted into El Paso CGP Company (EPCGP's) program methods. Currently, the Site is operated by BP America Production Company and is active.

The Site is located on Navajo Agricultural Products Industry land. Various site investigations have occurred from 1995 through 2012. Monitoring wells were installed in 1995 (MW-1) and 2013 (MW-2 through MW-7). Currently, groundwater sampling is conducted on a semi-annual basis and free product was observed in MW-1 in 2015.

SUMMARY OF 2015 ACTIVITIES

On January 19, 2015, MW-2 was plugged and abandoned to facilitate the current operators pad expansion plans. On May 30 and November 18, 2015, water levels were gauged at MW-1, MW-3, MW-4, MW-5, MW-6, and MW-7. Groundwater samples were collected from each well that did not contain free product using HydraSleeve™ (HydraSleeve) no-purge passive groundwater sampling devices. The HydraSleeves were set during the previous sampling event approximately 0.5 foot above termination depth of the monitoring wells using a suspension tether and stainless steel weights to collect a sample from the screened interval. Groundwater samples were placed into laboratory-supplied sample containers, packed on ice, and shipped under standard chain-of-custody protocols to TestAmerica Laboratories, Inc. in Pensacola, Florida where they were analyzed for benzene, toluene, ethylbenzene, and total xylenes (BTEX). Additional field parameters are collected from the excess sample water recovered by the HydraSleeve. Excess sample water is poured into a YSI multi-parameter instrument sample cup and analyzed. Field parameters include dissolved oxygen, temperature, conductivity, pH, and oxidation-reduction potential ORP. Field parameters are not collected if free product is present. The unused sample water is combined in a waste container and taken to Basin Disposal, Inc. for disposal.

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SUMMARY TABLES

Historic analytical and water level data are summarized in Table 1 and Table 2, respectively. When free product was present, static water level elevations were corrected for measurable thicknesses of free product (specific gravity of 0.75).

SITE MAPS

Groundwater analytical maps (Figures 1 and 3) and groundwater elevation contour maps (Figures 2 and 4) summarize results of the 2015 groundwater sampling and gauging events.

ANALYTICAL LAB REPORTS

The groundwater analytical lab reports are included as Appendix A.

GROUNDWATER RESULTS

- The groundwater flow direction at the Site is generally to the west-southwest (see Figures 2 and 4).
- A trace amount of free product was observed in MW-1 in the May 2015 sampling event. No samples were collected from the well in 2015.
- All site monitoring wells that were sampled in 2015 were either below the New Mexico Water Quality Control Commission (NMWQCC) standard for benzene in groundwater or not detected.
- Concentrations of toluene were not detected in any of the Site monitoring wells sampled in 2015.
- Concentrations of ethylbenzene were not detected in any of the Site monitoring wells sampled in 2015.
- Concentrations of total xylenes were not detected in any of the Site monitoring wells sampled in 2015.

PLANNED FUTURE ACTIVITIES

Groundwater monitoring events will be conducted on a semi-annual basis. The 2016 Annual Report will be submitted in early 2017. When BTEX concentrations in all wells are reported below the NMWQCC standards, groundwater sampling frequency will be increased to quarterly. After four consecutive quarters with no dissolved-phase hydrocarbon concentrations are observed EPCGP will request site closure from NMOCD.

TABLES

TABLE 1 – GROUNDWATER ANALYTICAL AND WATER LEVEL RESULTS

TABLE 2 – GROUNDWATER ELEVATION RESULTS

TABLE 1 - GROUNDWATER ANALYTICAL RESULTS

Gallegos Canyon Unit #124E					
Location	Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)
NMWQCC Standards:		10	750	750	620
MW-1	06/25/98	340	271	111	510
MW-1	09/14/98	410	251	68.3	220
MW-1	12/15/98	710	1300	160	940
MW-1	03/16/99	2960	5130	367	2890
MW-1	10/05/00	NS	NS	NS	NS
MW-1	11/15/00	NS	NS	NS	NS
MW-1	12/20/00	NS	NS	NS	NS
MW-1	01/09/01	NS	NS	NS	NS
MW-1	01/15/01	NS	NS	NS	NS
MW-1	01/22/01	NS	NS	NS	NS
MW-1	01/30/01	NS	NS	NS	NS
MW-1	03/12/01	NS	NS	NS	NS
MW-1	06/05/01	NS	NS	NS	NS
MW-1	07/13/01	NS	NS	NS	NS
MW-1	08/02/01	NS	NS	NS	NS
MW-1	08/31/01	NS	NS	NS	NS
MW-1	09/21/01	NS	NS	NS	NS
MW-1	10/02/01	NS	NS	NS	NS
MW-1	01/02/02	NS	NS	NS	NS
MW-1	01/07/02	NS	NS	NS	NS
MW-1	01/23/02	NS	NS	NS	NS
MW-1	01/30/02	NS	NS	NS	NS
MW-1	02/07/02	NS	NS	NS	NS
MW-1	02/14/02	NS	NS	NS	NS
MW-1	02/20/02	NS	NS	NS	NS
MW-1	03/04/02	NS	NS	NS	NS
MW-1	03/11/02	NS	NS	NS	NS
MW-1	03/21/02	NS	NS	NS	NS
MW-1	03/28/02	NS	NS	NS	NS
MW-1	04/03/02	NS	NS	NS	NS
MW-1	04/12/02	NS	NS	NS	NS
MW-1	04/18/02	NS	NS	NS	NS
MW-1	04/25/02	NS	NS	NS	NS
MW-1	05/03/02	NS	NS	NS	NS
MW-1	05/10/02	NS	NS	NS	NS
MW-1	05/17/02	NS	NS	NS	NS
MW-1	05/24/02	NS	NS	NS	NS
MW-1	05/31/02	NS	NS	NS	NS
MW-1	06/07/02	NS	NS	NS	NS
MW-1	06/12/02	NS	NS	NS	NS
MW-1	06/21/02	NS	NS	NS	NS
MW-1	06/27/02	NS	NS	NS	NS

TABLE 1 - GROUNDWATER ANALYTICAL RESULTS

Gallegos Canyon Unit #124E					
Location	Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)
NMWQCC Standards:		10	750	750	620
MW-1	07/02/02	NS	NS	NS	NS
MW-1	07/11/02	NS	NS	NS	NS
MW-1	07/15/02	NS	NS	NS	NS
MW-1	10/16/02	NS	NS	NS	NS
MW-1	01/15/03	NS	NS	NS	NS
MW-1	05/05/03	NS	NS	NS	NS
MW-1	07/18/03	NS	NS	NS	NS
MW-1	01/29/04	NS	NS	NS	NS
MW-1	04/15/04	NS	NS	NS	NS
MW-1	07/26/04	NS	NS	NS	NS
MW-1	10/15/04	NS	NS	NS	NS
MW-1	01/17/05	NS	NS	NS	NS
MW-1	04/19/05	38.8	<1	142	1160
MW-1	07/20/05	125	11.4	371	2640
MW-1	10/20/05	86.8	11.3	125	864
MW-1	01/19/06	77.9	12	101	656
MW-1	04/24/06	45.1	3.5 J	56.1	377
MW-1	07/31/06	60.8	1.5 J	79.3	524
MW-1	10/24/06	21.1	<1	56.6	349
MW-1	01/19/07	22.4	<1	60	367
MW-1	04/24/07	30.3	<1	60.6	407
MW-1	07/31/07	35.3	<2	68.4	416
MW-1	10/25/07	9	<1	33.2	173
MW-1	01/28/08	6	<2	41.6	210
MW-1	04/23/08	14.1	0.59 J	50.1	360
MW-1	07/23/08	72.7	6.7	65.8	210
MW-1	10/08/08	194	<50	43.6 J	328
MW-1	01/07/09	281	6 J	110	653
MW-1	08/25/09	57.9	8.8 J	58.4	298
MW-1	11/03/09	NS	NS	NS	NS
MW-1	02/15/10	98.3	4.1	80.6	385
MW-1	05/24/10	NS	NS	NS	NS
MW-1	09/27/10	159	<2	56.4	348
MW-1	11/01/10	NS	NS	NS	NS
MW-1	02/01/11	109	0.28 J	54.1	436
MW-1	05/02/11	NS	NS	NS	NS
MW-1	09/23/11	288	<1	116	1020
MW-1	02/22/12	255	<5	145	853
MW-1	05/07/12	NS	NS	NS	NS
MW-1	06/04/13	33	<0.60	11	0.86
MW-1	09/11/13	25	<0.30	9.8	8.9
MW-1	12/15/13	87	<0.30	50	100
MW-1	04/05/14	31	6.2	23	15
MW-1	10/25/14	NS	NS	NS	NS
MW-1	05/31/15	NS	NS	NS	NS
MW-1	11/22/15	NS	NS	NS	NS

TABLE 1 - GROUNDWATER ANALYTICAL RESULTS

Gallegos Canyon Unit #124E					
Location	Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)
NMWQCC Standards:		10	750	750	620
MW-2	12/15/13	<0.14	<0.30	<0.20	<0.23
MW-2	04/05/14	<0.20	<0.38	<0.20	<0.65
MW-2	10/25/14	<0.38	<0.70	<0.50	<1.6
MW-2	Well abandoned 1/19/2014				
MW-3	12/15/13	4.1	<0.30	7.4	27
MW-3	04/05/14	<0.20	<0.38	<0.20	<0.65
MW-3	10/25/14	<0.38	<0.70	<0.50	<1.6
MW-3	05/31/15	<1.0	<5.0	<1.0	<5.0
MW-3	11/22/15	<1.0	<1.0	<1.0	<3.0
MW-4	12/15/13	<0.14	<0.30	0.28 J	1.4 J
MW-4	04/05/14	<0.20	<0.38	<0.20	<0.65
MW-4	10/25/14	<0.38	<0.70	<0.50	<1.6
MW-4	05/31/15	<1.0	<5.0	<1.0	<5.0
MW-4	11/22/15	<1.0	<1.0	<1.0	<3.0
MW-5	12/15/13	9.3	<0.30	53	32
MW-5	04/05/14	11	5.8	13	<0.65
MW-5	10/25/14	5.9	<0.70	5.2	<1.6
MW-5	05/31/15	0.65 J	<5.0	<1.0	<5.0
MW-5	11/22/15	1.6	<1.0	2.7	<3.0
MW-6	12/15/13	<0.14	<0.30	<0.20	2.0 J
MW-6	04/05/14	<0.20	<0.38	<0.20	<0.65
MW-6	10/25/14	<0.38	<0.70	<0.50	<1.6
MW-6	05/31/15	<1.0	<5.0	<1.0	<5.0
MW-6	11/22/15	<1.0	<1.0	<1.0	<3.0
MW-7	12/15/13	<0.14	<0.30	<0.20	<0.23
MW-7	04/05/14	<0.20	<0.38	<0.20	<0.65
MW-7	10/25/14	<0.38	<0.70	<0.50	<1.6
MW-7	05/31/15	<1.0	<5.0	<1.0	<5.0
MW-7	11/22/15	<1.0	<1.0	<1.0	<3.0

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

TABLE 2 - GROUNDWATER ELEVATION RESULTS

Gallegos Canyon Unit #124E						
Location	Date	TOC	Depth to Water (ft.)	Depth to LNAPL (ft.)	LNAPL Thickness (ft.)	GW Elevation (ft.)
MW-1	06/25/98	5949.45	27.21	NR		5922.24
MW-1	09/14/98	5949.45	27.50	NR		5921.95
MW-1	12/15/98	5949.45	28.16	27.61	0.55	5921.70
MW-1	03/16/99	5949.45	29.02	27.60	1.42	5921.50
MW-1	10/05/00	5949.45	29.46	29.04	0.42	5920.31
MW-1	11/15/00	5949.45	28.93	28.93		5920.52
MW-1	12/20/00	5949.45	28.98	NR		5920.47
MW-1	01/09/01	5949.45	29.21	29.18	0.03	5920.26
MW-1	01/15/01	5949.45	29.07	29.04	0.03	5920.40
MW-1	01/22/01	5949.45	28.99	NR		5920.46
MW-1	01/30/01	5949.45	29.09	NR		5920.36
MW-1	03/12/01	5949.45	29.26	NR		5920.19
MW-1	06/05/01	5949.45	29.32	29.28	0.04	5920.16
MW-1	07/13/01	5949.45	29.65	NR		5919.80
MW-1	08/02/01	5949.45	29.53	NR		5919.92
MW-1	08/31/01	5949.45	29.27	NR		5920.18
MW-1	09/21/01	5949.45	29.33	NR		5920.12
MW-1	10/02/01	5949.45	28.98	NR		5920.47
MW-1	01/02/02	5949.45	28.96	28.85	0.11	5920.57
MW-1	01/07/02	5949.45	28.99	28.94	0.05	5920.50
MW-1	01/23/02	5949.45	29.35	26.35	3.00	5922.35
MW-1	01/30/02	5949.45	29.24	29.22	0.02	5920.23
MW-1	02/07/02	5949.45	29.70	29.66	0.04	5919.78
MW-1	02/14/02	5949.45	29.29	29.28	0.01	5920.17
MW-1	02/20/02	5949.45	29.76	29.75	0.01	5919.70
MW-1	03/04/02	5949.45	29.30	NR		5920.15
MW-1	03/11/02	5949.45	29.17	NR		5920.28
MW-1	03/21/02	5949.45	29.47	NR		5919.98
MW-1	03/28/02	5949.45	29.33	NR		5920.12
MW-1	04/03/02	5949.45	29.33	NR		5920.12
MW-1	04/12/02	5949.45	29.70	NR		5919.75
MW-1	04/18/02	5949.45	29.31	NR		5920.14
MW-1	04/25/02	5949.45	30.11	NR		5919.34
MW-1	05/03/02	5949.45	30.18	NR		5919.27
MW-1	05/10/02	5949.45	30.25	NR		5919.20
MW-1	05/17/02	5949.45	29.57	NR		5919.88
MW-1	05/24/02	5949.45	29.70	NR		5919.75
MW-1	05/31/02	5949.45	29.54	NR		5919.91
MW-1	06/07/02	5949.45	29.42	NR		5920.03
MW-1	06/12/02	5949.45	29.21	NR		5920.24
MW-1	06/21/02	5949.45	30.12	NR		5919.33
MW-1	06/27/02	5949.45	30.18	NR		5919.27
MW-1	07/02/02	5949.45	29.99	29.98	0.01	5919.47
MW-1	07/11/02	5949.45	30.06	NR		5919.39

TABLE 2 - GROUNDWATER ELEVATION RESULTS

Gallegos Canyon Unit #124E						
Location	Date	TOC	Depth to Water (ft.)	Depth to LNAPL (ft.)	LNAPL Thickness (ft.)	GW Elevation (ft.)
MW-1	07/15/02	5949.45	29.63	NR		5919.82
MW-1	10/16/02	5949.45	29.65	29.24	0.41	5920.11
MW-1	01/15/03	5949.45	28.63	ND		5920.82
MW-1	05/05/03	5949.45	27.72	27.69	0.03	5921.75
MW-1	07/18/03	5949.45	27.08	27.06	0.02	5922.39
MW-1	01/29/04	5949.45	25.40	ND		5924.05
MW-1	04/15/04	5949.45	24.98	ND		5924.47
MW-1	07/26/04	5949.45	24.50	ND		5924.95
MW-1	10/15/04	5949.45	24.98	ND		5924.47
MW-1	01/17/05	5949.45	25.49	ND		5923.96
MW-1	04/19/05	5949.45	25.45	ND		5924.00
MW-1	07/20/05	5949.45	24.73	ND		5924.72
MW-1	10/20/05	5949.45	24.85	ND		5924.60
MW-1	01/19/06	5949.45	24.53	ND		5924.92
MW-1	04/24/06	5949.45	24.25	ND		5925.20
MW-1	07/31/06	5949.45	25.68	ND		5923.77
MW-1	10/24/06	5949.45	24.94	ND		5924.51
MW-1	01/19/07	5949.45	26.33	ND		5923.12
MW-1	04/24/07	5949.45	25.97	ND		5923.48
MW-1	07/31/07	5949.45	26.26	ND		5923.19
MW-1	10/25/07	5949.45	26.44	ND		5923.01
MW-1	01/28/08	5949.45	26.67	ND		5922.78
MW-1	04/23/08	5949.45	26.67	ND		5922.78
MW-1	07/23/08	5949.45	23.49	ND		5925.96
MW-1	10/08/08	5949.45	22.30	ND		5927.15
MW-1	01/07/09	5949.45	23.74	ND		5925.71
MW-1	08/25/09	5949.45	26.65	ND		5922.80
MW-1	11/03/09	5949.45	25.62	ND		5923.83
MW-1	02/15/10	5949.45	25.93	ND		5923.52
MW-1	05/24/10	5949.45	19.47	ND		5929.98
MW-1	09/27/10	5949.45	19.78	ND		5929.67
MW-1	11/01/10	5949.45	19.82	ND		5929.63
MW-1	02/01/11	5949.45	21.70	ND		5927.75
MW-1	05/02/11	5949.45	23.32	ND		5926.13
MW-1	09/23/11	5949.45	24.71	ND		5924.74
MW-1	02/22/12	5949.45	23.51	ND		5925.94
MW-1	05/07/12	5949.45	24.20	ND		5925.25
MW-1	06/04/13	5949.45	25.87	ND		5923.58
MW-1	09/11/13	5949.45	25.74	ND		5923.71
MW-1	12/15/13	5949.45	25.67	ND		5923.78
MW-1	04/05/14	5949.45	26.27	ND		5923.18
MW-1	10/25/14	5949.45	27.07	27.06	0.01	5922.39
MW-1	05/31/15	5946.73	24.70	24.70	0.00	5922.03
MW-1	11/22/15	5946.73	24.33	24.33	0.00	5922.40

TABLE 2 - GROUNDWATER ELEVATION RESULTS

Gallegos Canyon Unit #124E						
Location	Date	TOC	Depth to Water (ft.)	Depth to LNAPL (ft.)	LNAPL Thickness (ft.)	GW Elevation (ft.)
MW-2	12/15/13	5950.12	26.46	ND		5923.66
MW-2	04/05/14	5950.12	27.05	ND		5923.07
MW-2	10/25/14	5950.12	27.84	ND		5922.28
MW-2	abandon					
MW-3	12/15/13	5949.84	26.02	ND		5923.82
MW-3	04/05/14	5949.84	26.59	ND		5923.25
MW-3	10/25/14	5949.84	27.37	ND		5922.47
MW-3	05/31/15	5946.94	24.82	ND		5922.12
MW-3	11/22/15	5946.94	24.50	ND		5922.44
MW-4	12/15/13	5949.57	25.62	ND		5923.95
MW-4	04/05/14	5949.57	26.22	ND		5923.35
MW-4	10/25/14	5949.57	26.98	ND		5922.59
MW-4	05/31/15	5946.67	24.52	ND		5922.15
MW-4	11/22/15	5946.67	24.16	ND		5922.51
MW-5	12/15/13	5948.92	25.17	ND		5923.75
MW-5	04/05/14	5948.92	25.85	ND		5923.07
MW-5	10/25/14	5948.92	26.60	ND		5922.32
MW-5	05/31/15	5946.07	24.17	ND		5921.90
MW-5	11/22/15	5946.07	23.83	ND		5922.24
MW-6	12/15/13	5949.34	25.48	ND		5923.86
MW-6	04/05/14	5949.34	26.16	ND		5923.18
MW-6	10/25/14	5949.34	26.90	ND		5922.44
MW-6	05/31/15	5946.39	24.44	ND		5921.95
MW-6	11/22/15	5946.39	24.13	ND		5922.26
MW-7	12/15/13	5948.68	25.34	ND		5923.34
MW-7	04/05/14	5948.68	26.13	ND		5922.55
MW-7	10/25/14	5948.68	26.89	ND		5921.79
MW-7	05/31/15	5945.92	24.41	ND		5921.51
MW-7	11/22/15	5945.92	23.97	ND		5921.95

Notes:

"ft" = feet

"TOC" = Top of casing

"LNAPL" = Light non-aqueous phase liquid

"ND" = LNAPL not detected

"NR" = LNAPL not recorded

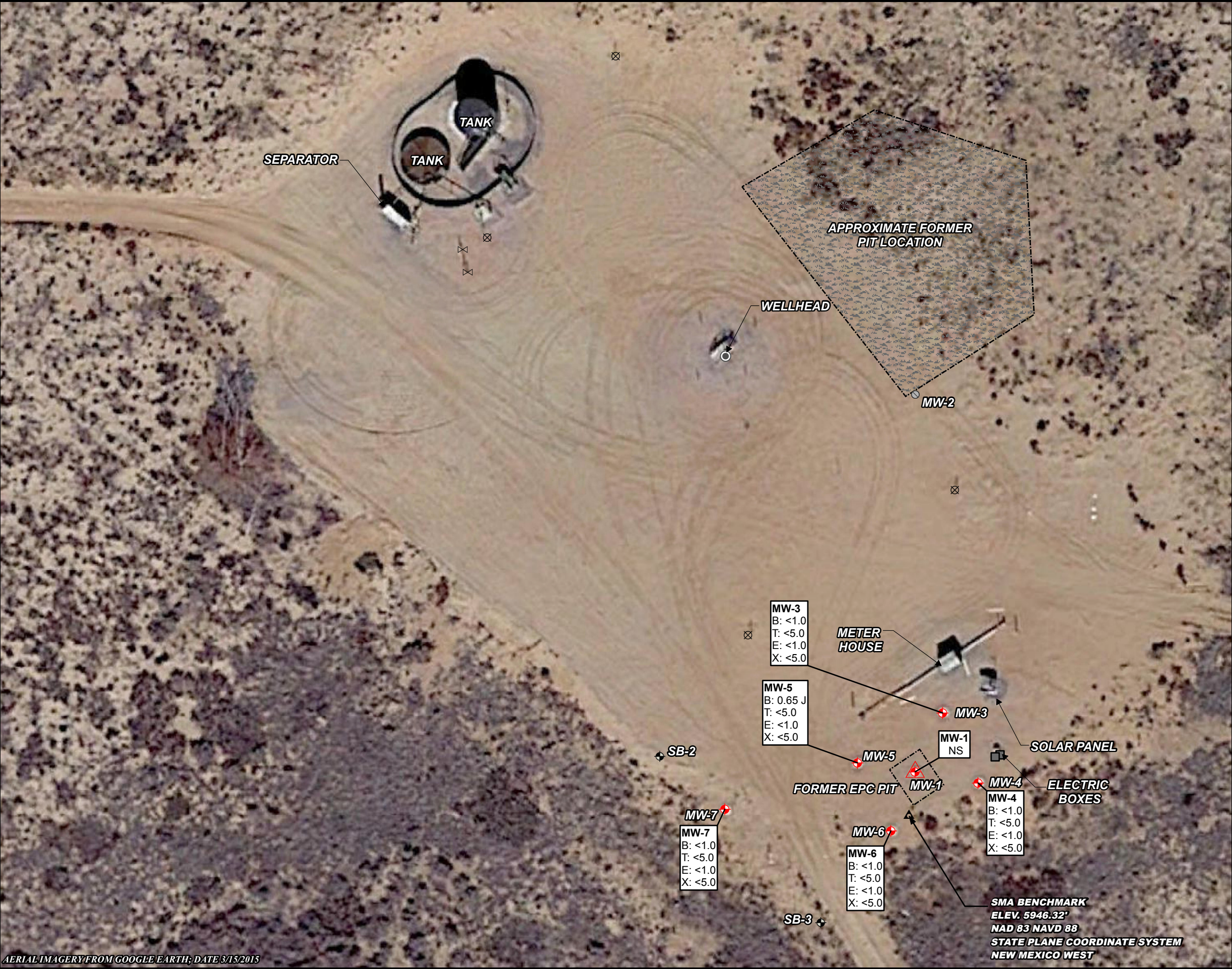
FIGURES

FIGURE 1: MAY 31, 2015 GROUNDWATER ANALYTICAL RESULTS MAP

FIGURE 2: MAY 31, 2015 GROUNDWATER ELEVATION MAP

FIGURE 3: NOV. 22, 2015 GROUNDWATER ANALYTICAL RESULTS MAP

FIGURE 4: NOV. 22, 2015 GROUNDWATER ELEVATION MAP



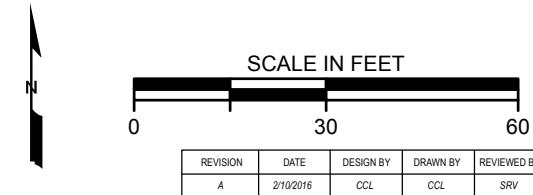
LEGEND:

- ABANDONED MONITORING WELL
- SMA BENCHMARK
- GAS VALVE
- MONITORING WELL
- MONITORING WELL WITH MEASUREABLE FREE PRODUCT
- SOIL BORING
- RIG ANCHOR
- WELLHEAD

NOTE:
SITE WAS RECONFIGURED BETWEEN 12/15/13 AND 4/5/14. UNDERGROUND UTILITY LOCATE AND TOPOGRAPHIC SURVEY WAS CONDUCTED IN JULY 2013.

EXPLANATION OF ANALYTES AND APPLICABLE STANDARDS:
RESULTS IN **BOLDFACE** TYPE INDICATE CONCENTRATION IN EXCESS OF THE STANDARD FOR THAT ANALYTE.
NS = NOT SAMPLED
µg/L = MICROGRAMS PER LITER
<1 = BELOW METHOD DETECTION LIMIT
J = RESULT IS LESS THAN THE REPORTING LIMIT, BUT GREATER THAN OR EQUAL TO THE METHOD DETECTION LIMIT AND THE CONCENTRATION IS AN APPROXIMATE VALUE.

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



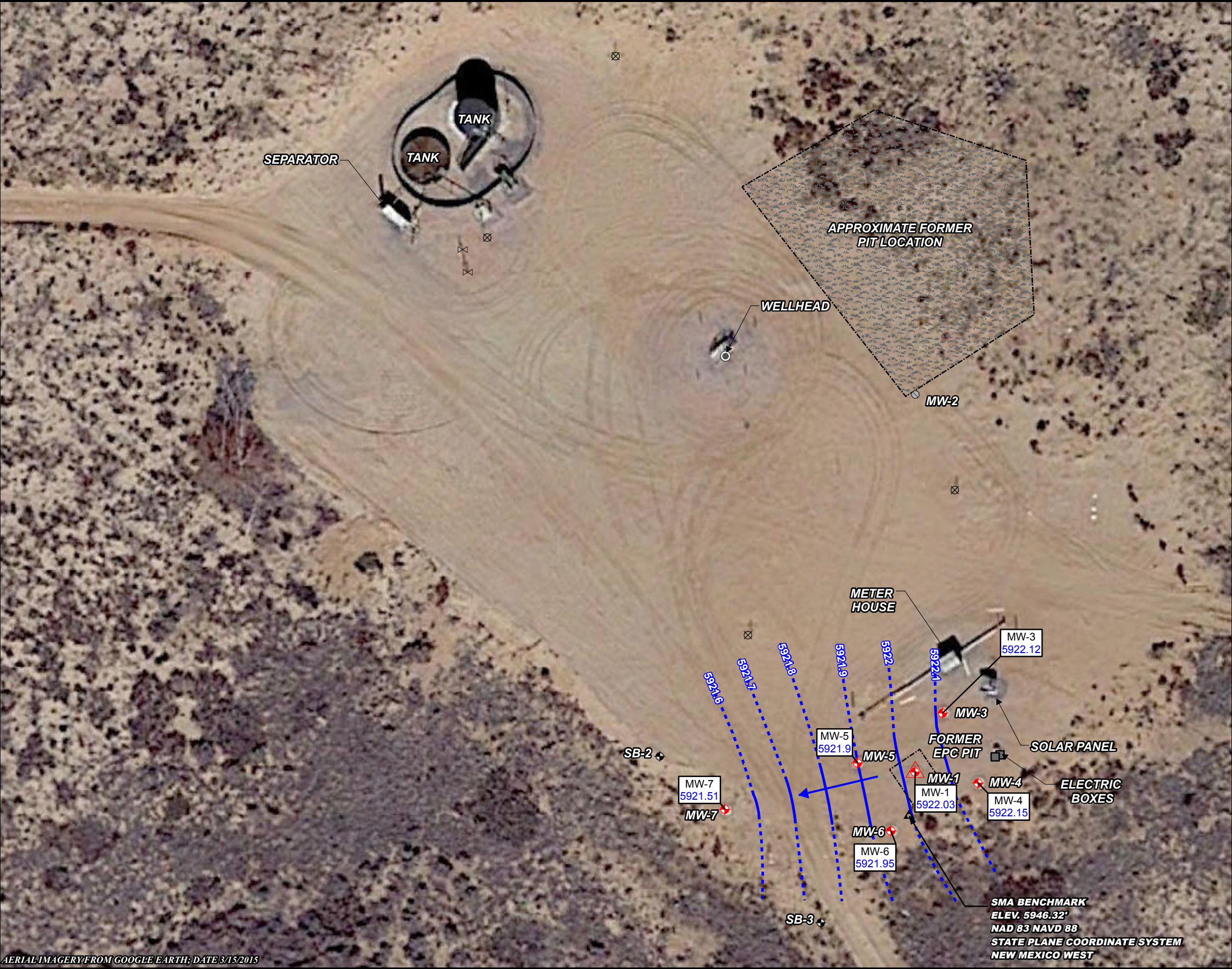
TITLE:
**GROUNDWATER ANALYTICAL RESULTS
MAY 31, 2015**

PROJECT: **GALLEGOS CANYON UNIT #124E
SAN JUAN RIVER BASIN
SAN JUAN COUNTY, NEW MEXICO**



Figure No.:

1



AERIAL IMAGERY FROM GOOGLE EARTH; DATE 3/15/2015

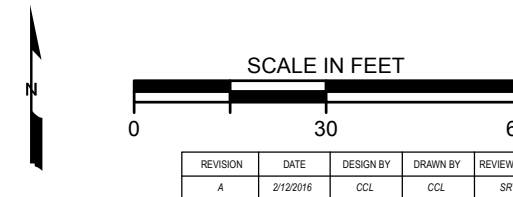
LEGEND:

- ABANDONED MONITORING WELL
- SMA BENCHMARK
- GAS VALVE
- MONITORING WELL
- MONITORING WELL WITH MEASUREABLE FREE PRODUCT
- SOIL BORING
- RIG ANCHOR
- WELLHEAD

NOTES:

- 5921.95 GROUNDWATER ELEVATION CORRECTED FOR PRODUCT THICKNESS. FEET ABOVE MEAN SEA LEVEL
- 5922 CORRECTED WATER LEVEL ELEVATION CONTOUR DASHED WHERE INFERRED (FEET ABOVE MEAN SEA LEVEL, 0.1 FOOT CONTOUR INTERVAL)
- DIRECTION OF APPARENT GROUNDWATER FLOW

SITE WAS RECONFIGURED BETWEEN 12/15/13 AND 4/5/14. UNDERGROUND UTILITY LOCATE AND TOPOGRAPHIC SURVEY WAS CONDUCTED IN JULY 2013.



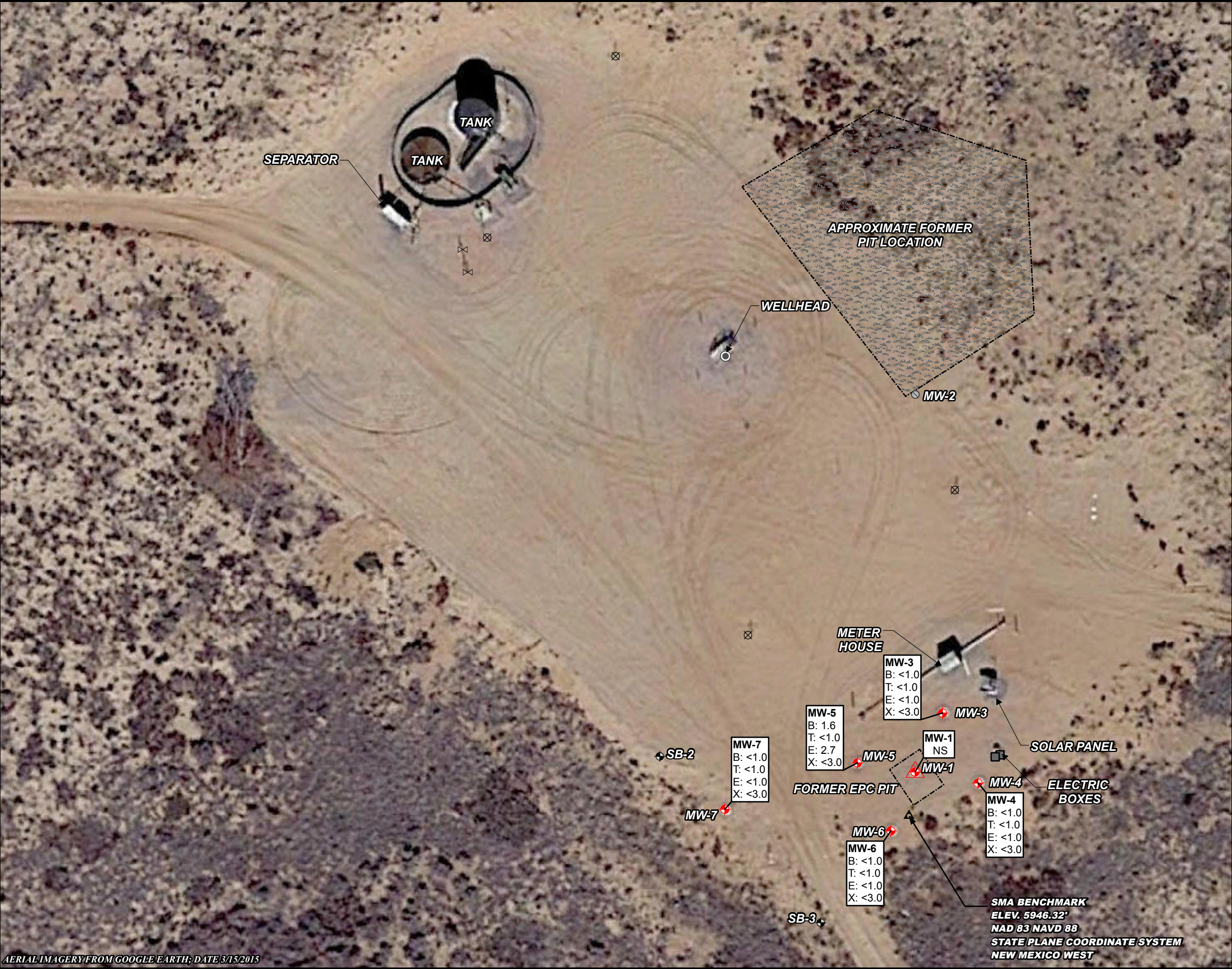
TITLE: **GROUNDWATER ELEVATION MAP
MAY 31, 2015**

PROJECT: **GALLEGOS CANYON UNIT #124E
SAN JUAN RIVER BASIN
SAN JUAN COUNTY, NEW MEXICO**



Figure No.:

2



AERIAL IMAGERY FROM GOOGLE EARTH, DATE 3/15/2015

LEGEND:

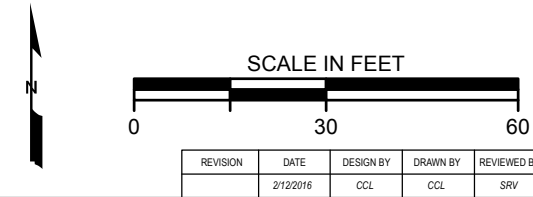
- ABANDONED MONITORING WELL
- SMA BENCHMARK
- GAS VALVE
- MONITORING WELL
- MONITORING WELL WITH MEASUREABLE FREE PRODUCT
- SOIL BORING
- RIG ANCHOR
- WELLHEAD

NOTE:
SITE WAS RECONFIGURED BETWEEN 12/15/13 AND 4/5/14. UNDERGROUND UTILITY LOCATE AND TOPOGRAPHIC SURVEY WAS CONDUCTED IN JULY 2013.

EXPLANATION OF ANALYTES AND APPLICABLE STANDARDS:

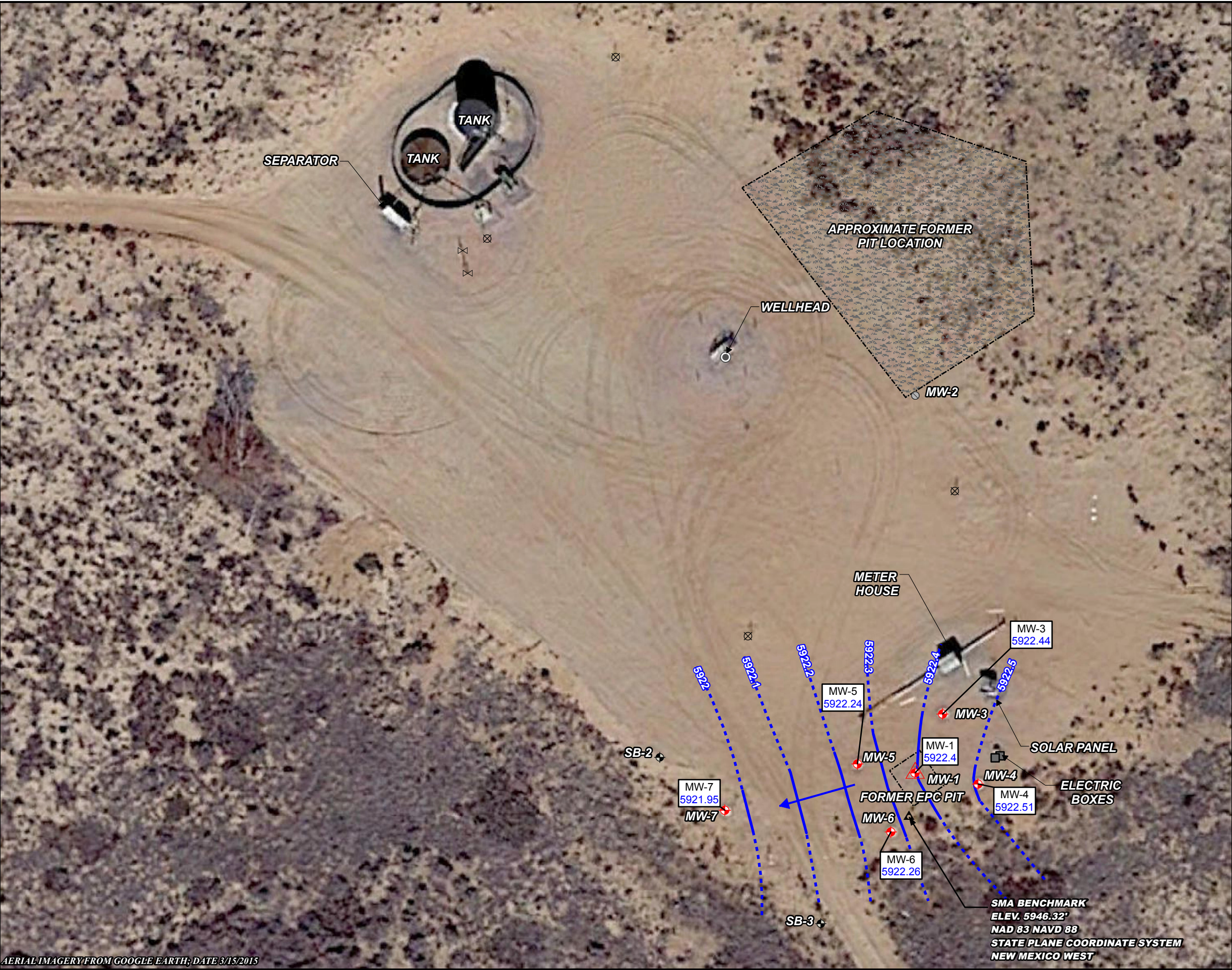
RESULTS IN **BOLDFACE** TYPE INDICATE CONCENTRATION IN EXCESS OF THE STANDARD FOR THAT ANALYTE.
NS = NOT SAMPLED
µg/L = MICROGRAMS PER LITER
<1 = BELOW METHOD DETECTION LIMIT

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



TITLE:
**GROUNDWATER ANALYTICAL RESULTS
NOVEMBER 22, 2015**

PROJECT: **GALLEGOS CANYON UNIT #124E
SAN JUAN RIVER BASIN
SAN JUAN COUNTY, NEW MEXICO**



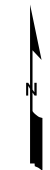
LEGEND:

- ABANDONED MONITORING WELL
- SMA BENCHMARK
- GAS VALVE
- MONITORING WELL
- MONITORING WELL WITH MEASUREABLE FREE PRODUCT
- SOIL BORING
- RIG ANCHOR
- WELLHEAD

NOTES:

- 5922.44** GROUNDWATER ELEVATION CORRECTED FOR PRODUCT THICKNESS. FEET ABOVE MEAN SEA LEVEL
- 5922.2** CORRECTED WATER LEVEL ELEVATION CONTOUR DASHED WHERE INFERRED (FEET ABOVE MEAN SEA LEVEL, 0.1 FOOT CONTOUR INTERVAL)
- DIRECTION OF GROUNDWATER FLOW

SITE WAS RECONFIGURED BETWEEN 12/15/13 AND 4/5/14. UNDERGROUND UTILITY LOCATE AND TOPOGRAPHIC SURVEY WAS CONDUCTED IN JULY 2013.



REVISION	DATE	DESIGN BY	DRAWN BY	REVIEWED BY
	2/12/2016	CCL	CCL	SRV

TITLE:

**GROUNDWATER ELEVATION MAP
NOVEMBER 22, 2015**

PROJECT:

**GALLEGOS CANYON UNIT #124E
SAN JUAN RIVER BASIN
SAN JUAN COUNTY, NEW MEXICO**



Figure No.:

4

APPENDIX A

MAY, 31, 2015 GROUNDWATER SAMPLING ANALYTICAL REPORT

NOVEMBER 22, 2015 GROUNDWATER SAMPLING ANALYTICAL REPORT

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

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

TestAmerica Job ID: 400-106450-1

Client Project/Site: NM-GW Pits, Gallagos Canyon Unit#124E

For:

MWH Americas Inc
1560 Broadway
Suite 1800
Denver, Colorado 80202

Attn: Ms. Sarah Gardner



Authorized for release by:
6/16/2015 4:34:44 PM

Marty Edwards, Manager of Project Management
(850)474-1001
marty.edwards@testamericainc.com

LINKS

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results through

TotalAccess

Have a Question?



Visit us at:

www.testamericainc.com

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

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

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

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Definitions/Glossary

Client: MWH Americas Inc
Project/Site: NM-GW Pits, Gallagos Canyon Unit#124E

TestAmerica Job ID: 400-106450-1

Qualifiers

GC VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

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: MWH Americas Inc
Project/Site: NM-GW Pits, Gallagos Canyon Unit#124E

TestAmerica Job ID: 400-106450-1

Job ID: 400-106450-1

Laboratory: TestAmerica Pensacola

Narrative

Job Narrative
400-106450-1

Comments

No additional comments.

Receipt

The samples were received on 6/2/2015 9:37 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.0° C.

GC VOA

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

Detection Summary

Client: MWH Americas Inc
Project/Site: NM-GW Pits, Gallagos Canyon Unit#124E

TestAmerica Job ID: 400-106450-1

Client Sample ID: GALLEGOS CANYON UNIT #124E MW-3

Lab Sample ID: 400-106450-1

☐ No Detections.

Client Sample ID: GALLEGOS CANYON UNIT #124E MW-4

Lab Sample ID: 400-106450-2

☐ No Detections.

Client Sample ID: GALLEGOS CANYON UNIT #124E MW-5

Lab Sample ID: 400-106450-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.65	J	1.0	0.56	ug/L	1		8021B	Total/NA

Client Sample ID: GALLEGOS CANYON UNIT #124E MW-6

Lab Sample ID: 400-106450-4

☐ No Detections.

Client Sample ID: GALLEGOS CANYON UNIT #124E MW-7

Lab Sample ID: 400-106450-5

☐ No Detections.

**Client Sample ID: GALLEGOS CANYON UNIT #124E TRIP
BLANK**

Lab Sample ID: 400-106450-6

☐ No Detections.

This Detection Summary does not include radiochemical test results.

TestAmerica Pensacola

Sample Summary

Client: MWH Americas Inc

Project/Site: NM-GW Pits, Gallagos Canyon Unit#124E

TestAmerica Job ID: 400-106450-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-106450-1	GALLEGOS CANYON UNIT #124E MW-3	Water	05/31/15 08:55	06/02/15 09:37
400-106450-2	GALLEGOS CANYON UNIT #124E MW-4	Water	05/31/15 08:50	06/02/15 09:37
400-106450-3	GALLEGOS CANYON UNIT #124E MW-5	Water	05/31/15 08:35	06/02/15 09:37
400-106450-4	GALLEGOS CANYON UNIT #124E MW-6	Water	05/31/15 08:30	06/02/15 09:37
400-106450-5	GALLEGOS CANYON UNIT #124E MW-7	Water	05/31/15 08:25	06/02/15 09:37
400-106450-6	GALLEGOS CANYON UNIT #124E TRIP BLANK	Water	05/31/15 08:15	06/02/15 09:37

Client Sample Results

Client: MWH Americas Inc
Project/Site: NM-GW Pits, Gallagos Canyon Unit#124E

TestAmerica Job ID: 400-106450-1

Client Sample ID: GALLEGOS CANYON UNIT #124E MW-3

Lab Sample ID: 400-106450-1

Date Collected: 05/31/15 08:55

Matrix: Water

Date Received: 06/02/15 09:37

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0	0.56	ug/L			06/06/15 17:39	1
Ethylbenzene	<1.0		1.0	0.64	ug/L			06/06/15 17:39	1
Toluene	<5.0		5.0	0.98	ug/L			06/06/15 17:39	1
Xylenes, Total	<5.0		5.0	1.7	ug/L			06/06/15 17:39	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (pid)	100		78 - 124					06/06/15 17:39	1

Client Sample Results

Client: MWH Americas Inc
Project/Site: NM-GW Pits, Gallagos Canyon Unit#124E

TestAmerica Job ID: 400-106450-1

Client Sample ID: GALLEGOS CANYON UNIT #124E MW-4

Lab Sample ID: 400-106450-2

Date Collected: 05/31/15 08:50

Matrix: Water

Date Received: 06/02/15 09:37

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0	0.56	ug/L			06/06/15 19:14	1
Ethylbenzene	<1.0		1.0	0.64	ug/L			06/06/15 19:14	1
Toluene	<5.0		5.0	0.98	ug/L			06/06/15 19:14	1
Xylenes, Total	<5.0		5.0	1.7	ug/L			06/06/15 19:14	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (pid)	100		78 - 124					06/06/15 19:14	1

Client Sample Results

Client: MWH Americas Inc
Project/Site: NM-GW Pits, Gallagos Canyon Unit#124E

TestAmerica Job ID: 400-106450-1

Client Sample ID: GALLEGOS CANYON UNIT #124E MW-5

Lab Sample ID: 400-106450-3

Date Collected: 05/31/15 08:35

Matrix: Water

Date Received: 06/02/15 09:37

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.65	J	1.0	0.56	ug/L			06/06/15 19:45	1
Ethylbenzene	<1.0		1.0	0.64	ug/L			06/06/15 19:45	1
Toluene	<5.0		5.0	0.98	ug/L			06/06/15 19:45	1
Xylenes, Total	<5.0		5.0	1.7	ug/L			06/06/15 19:45	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (pid)	99		78 - 124					06/06/15 19:45	1

Client Sample Results

Client: MWH Americas Inc
Project/Site: NM-GW Pits, Gallagos Canyon Unit#124E

TestAmerica Job ID: 400-106450-1

Client Sample ID: GALLEGOS CANYON UNIT #124E MW-6

Lab Sample ID: 400-106450-4

Date Collected: 05/31/15 08:30

Matrix: Water

Date Received: 06/02/15 09:37

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0	0.56	ug/L			06/06/15 20:17	1
Ethylbenzene	<1.0		1.0	0.64	ug/L			06/06/15 20:17	1
Toluene	<5.0		5.0	0.98	ug/L			06/06/15 20:17	1
Xylenes, Total	<5.0		5.0	1.7	ug/L			06/06/15 20:17	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (pid)	99		78 - 124					06/06/15 20:17	1

Client Sample Results

Client: MWH Americas Inc
Project/Site: NM-GW Pits, Gallagos Canyon Unit#124E

TestAmerica Job ID: 400-106450-1

Client Sample ID: GALLEGOS CANYON UNIT #124E MW-7

Lab Sample ID: 400-106450-5

Date Collected: 05/31/15 08:25

Matrix: Water

Date Received: 06/02/15 09:37

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0	0.56	ug/L			06/06/15 20:48	1
Ethylbenzene	<1.0		1.0	0.64	ug/L			06/06/15 20:48	1
Toluene	<5.0		5.0	0.98	ug/L			06/06/15 20:48	1
Xylenes, Total	<5.0		5.0	1.7	ug/L			06/06/15 20:48	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (pid)	99		78 - 124		06/06/15 20:48	1

Client Sample Results

Client: MWH Americas Inc
Project/Site: NM-GW Pits, Gallagos Canyon Unit#124E

TestAmerica Job ID: 400-106450-1

**Client Sample ID: GALLEGOS CANYON UNIT #124E TRIP
BLANK**

Lab Sample ID: 400-106450-6

Date Collected: 05/31/15 08:15

Matrix: Water

Date Received: 06/02/15 09:37

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0	0.56	ug/L			06/06/15 21:20	1
Ethylbenzene	<1.0		1.0	0.64	ug/L			06/06/15 21:20	1
Toluene	<5.0		5.0	0.98	ug/L			06/06/15 21:20	1
Xylenes, Total	<5.0		5.0	1.7	ug/L			06/06/15 21:20	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>a,a,a-Trifluorotoluene (pid)</i>	98		78 - 124		06/06/15 21:20	1

QC Association Summary

Client: MWH Americas Inc
Project/Site: NM-GW Pits, Gallagos Canyon Unit#124E

TestAmerica Job ID: 400-106450-1

GC VOA

Analysis Batch: 260178

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-106450-1	GALLEGOS CANYON UNIT #124E MW-3	Total/NA	Water	8021B	
400-106450-2	GALLEGOS CANYON UNIT #124E MW-4	Total/NA	Water	8021B	
400-106450-3	GALLEGOS CANYON UNIT #124E MW-5	Total/NA	Water	8021B	
400-106450-4	GALLEGOS CANYON UNIT #124E MW-6	Total/NA	Water	8021B	
400-106450-5	GALLEGOS CANYON UNIT #124E MW-7	Total/NA	Water	8021B	
400-106450-6	GALLEGOS CANYON UNIT #124E TRIP BLANK	Total/NA	Water	8021B	
400-106465-A-1 MS	Matrix Spike	Total/NA	Water	8021B	
400-106465-A-1 MSD	Matrix Spike Duplicate	Total/NA	Water	8021B	
LCS 400-260178/1034	Lab Control Sample	Total/NA	Water	8021B	
MB 400-260178/35	Method Blank	Total/NA	Water	8021B	

QC Sample Results

Client: MWH Americas Inc
Project/Site: NM-GW Pits, Gallagos Canyon Unit#124E

TestAmerica Job ID: 400-106450-1

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 400-260178/35

Matrix: Water

Analysis Batch: 260178

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0	0.56	ug/L			06/06/15 12:55	1
Ethylbenzene	<1.0		1.0	0.64	ug/L			06/06/15 12:55	1
Toluene	<5.0		5.0	0.98	ug/L			06/06/15 12:55	1
Xylenes, Total	<5.0		5.0	1.7	ug/L			06/06/15 12:55	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (pid)	99		78 - 124		06/06/15 12:55	1

Lab Sample ID: LCS 400-260178/1034

Matrix: Water

Analysis Batch: 260178

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	50.0	53.2		ug/L		106	85 - 115
Ethylbenzene	50.0	53.2		ug/L		106	85 - 115
Toluene	50.0	52.8		ug/L		106	85 - 115
Xylenes, Total	150	156		ug/L		104	85 - 115

Surrogate	LCS %Recovery	LCS Qualifier	Limits
a,a,a-Trifluorotoluene (pid)	98		78 - 124

Lab Sample ID: 400-106465-A-1 MS

Matrix: Water

Analysis Batch: 260178

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	59.1		ug/L		118	44 - 150
Ethylbenzene	<1.0		50.0	59.7		ug/L		119	70 - 142
Toluene	<5.0		50.0	59.0		ug/L		118	69 - 136
Xylenes, Total	<5.0		150	176		ug/L		117	68 - 142

Surrogate	MS %Recovery	MS Qualifier	Limits
a,a,a-Trifluorotoluene (pid)	98		78 - 124

Lab Sample ID: 400-106465-A-1 MSD

Matrix: Water

Analysis Batch: 260178

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	59.0		ug/L		118	44 - 150	0	16
Ethylbenzene	<1.0		50.0	60.4		ug/L		121	70 - 142	1	16
Toluene	<5.0		50.0	59.5		ug/L		119	69 - 136	1	16
Xylenes, Total	<5.0		150	178		ug/L		119	68 - 142	1	15

Surrogate	MSD %Recovery	MSD Qualifier	Limits
a,a,a-Trifluorotoluene (pid)	98		78 - 124

TestAmerica Pensacola

Lab Chronicle

Client: MWH Americas Inc
Project/Site: NM-GW Pits, Gallagos Canyon Unit#124E

TestAmerica Job ID: 400-106450-1

Client Sample ID: GALLEGOS CANYON UNIT #124E MW-3

Lab Sample ID: 400-106450-1

Date Collected: 05/31/15 08:55

Matrix: Water

Date Received: 06/02/15 09:37

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	260178	06/06/15 17:39	MKA	TAL PEN
Instrument ID: CH_PAULA										

Client Sample ID: GALLEGOS CANYON UNIT #124E MW-4

Lab Sample ID: 400-106450-2

Date Collected: 05/31/15 08:50

Matrix: Water

Date Received: 06/02/15 09:37

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	260178	06/06/15 19:14	MKA	TAL PEN
Instrument ID: CH_PAULA										

Client Sample ID: GALLEGOS CANYON UNIT #124E MW-5

Lab Sample ID: 400-106450-3

Date Collected: 05/31/15 08:35

Matrix: Water

Date Received: 06/02/15 09:37

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	260178	06/06/15 19:45	MKA	TAL PEN
Instrument ID: CH_PAULA										

Client Sample ID: GALLEGOS CANYON UNIT #124E MW-6

Lab Sample ID: 400-106450-4

Date Collected: 05/31/15 08:30

Matrix: Water

Date Received: 06/02/15 09:37

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	260178	06/06/15 20:17	MKA	TAL PEN
Instrument ID: CH_PAULA										

Client Sample ID: GALLEGOS CANYON UNIT #124E MW-7

Lab Sample ID: 400-106450-5

Date Collected: 05/31/15 08:25

Matrix: Water

Date Received: 06/02/15 09:37

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	260178	06/06/15 20:48	MKA	TAL PEN
Instrument ID: CH_PAULA										

Client Sample ID: GALLEGOS CANYON UNIT #124E TRIP BLANK

Lab Sample ID: 400-106450-6

Date Collected: 05/31/15 08:15

Matrix: Water

Date Received: 06/02/15 09:37

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	260178	06/06/15 21:20	MKA	TAL PEN

TestAmerica Pensacola

Lab Chronicle

Client: MWH Americas Inc
Project/Site: NM-GW Pits, Gallagos Canyon Unit#124E

TestAmerica Job ID: 400-106450-1

**Client Sample ID: GALLEGOS CANYON UNIT #124E TRIP
BLANK**

Lab Sample ID: 400-106450-6

Date Collected: 05/31/15 08:15

Matrix: Water

Date Received: 06/02/15 09:37

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	260178	06/06/15 21:20	MKA	TAL PEN
Instrument ID: CH_PAULA										

Laboratory References:

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

Certification Summary

Client: MWH Americas Inc
Project/Site: NM-GW Pits, Gallagos Canyon Unit#124E

TestAmerica Job ID: 400-106450-1

Laboratory: TestAmerica Pensacola

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

Authority	Program	EPA Region	Certification ID	Expiration Date
Alabama	State Program	4	40150	06-30-15
Arizona	State Program	9	AZ0710	01-11-16
Arkansas DEQ	State Program	6	88-0689	09-01-15
Florida	NELAP	4	E81010	06-30-15
Georgia	State Program	4	N/A	06-30-15
Illinois	NELAP	5	200041	10-09-15
Iowa	State Program	7	367	07-31-16
Kansas	NELAP	7	E-10253	06-30-15 *
Kentucky (UST)	State Program	4	53	06-30-15
Kentucky (WW)	State Program	4	98030	12-31-15
Louisiana	NELAP	6	30976	06-30-15
Maryland	State Program	3	233	09-30-15
Massachusetts	State Program	1	M-FL094	06-30-15
Michigan	State Program	5	9912	06-30-15
New Jersey	NELAP	2	FL006	06-30-15
North Carolina (WW/SW)	State Program	4	314	12-31-15
Oklahoma	State Program	6	9810	08-31-15
Pennsylvania	NELAP	3	68-00467	01-31-16
Rhode Island	State Program	1	LAO00307	12-30-15
South Carolina	State Program	4	96026	06-30-15
Tennessee	State Program	4	TN02907	06-30-15
Texas	NELAP	6	T104704286-12-5	09-30-15
USDA	Federal		P330-13-00193	07-01-16
Virginia	NELAP	3	460166	06-14-16
West Virginia DEP	State Program	3	136	06-30-15

* Certification renewal pending - certification considered valid.

TestAmerica Pensacola

Method Summary

Client: MWH Americas Inc
Project/Site: NM-GW Pits, Gallagos Canyon Unit#124E

TestAmerica Job ID: 400-106450-1

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

400-106450

SERIAL NUMBER: 80206

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

TestAmerica Pensacola
3355 McLemore Drive
Pensacola, FL 32514
Phone: 850-474-1001
Fax: 850-478-2671
Website: www.testamericainc.com

BOTTLE ORDER NO. **C**

QUOTE NO.

CLIENT MW-4		ADDRESS 1560 Broadway Suite 1800 Denver CO 80202		PROJECT LOC. (STATE) NM		REQUESTED ANALYSIS		PAGE 1 OF 1	
PROJECT NAME NM-116W		CLIENT PROJECT MANAGER Steve Varso		PROJECT LOC. (STATE) NM		REQUESTED ANALYSIS		PAGE 1 OF 1	
PROJECT NO. 40005479		CONTRACT / P.O. NO.		PRESERVATIVE		MATRIX		LAB USE ONLY - SAMPLE NUMBER	
SAMPLED BY Sarah Gardner/Chris Lee		CLIENT E-MAIL OR FAX Sarah.gardner@nwdigital.com		HCL - Hydrochloric Acid		Drinking Water		NON-AQUEOUS (Oil, Solvent, etc.)	
CLIENT PHONE 303 291 2237		TAT REQUESTED: RUSH NEEDS LAB PREAPPROVAL ☒ NORMAL ☐ 10 BUSINESS DAYS		HNO3 - Nitric Acid		Other:		400-106450 COC	
TAT REQUESTED: RUSH NEEDS LAB PREAPPROVAL ☒ 1 DAY ☐ 2 DAYS ☐ 3 DAYS ☐ 5 DAYS ☐ 20 DAYS (Package) ☐ OTHER:		SAMPLE DISPOSAL: ☐ RETURN TO CLIENT ☒ DISPOSAL BY LAB		H2SO4 - Sulfuric Acid or H3PO4		Aqueous GW, SW, WW		POSSIBLE HAZARD	
☐ SEE CONTRACT ☐ OTHER:		SAMPLE IDENTIFICATION		NAOH - Sodium Hydroxide		Solid, Semisolid, Sediment		IDENTIFICATION	
		DATE		CH3OH - Methanol		Air		NON-HAZARD	
		TIME		NAHSO4 - Sodium Bisulfate		Non-Aqueous (Oil, Solvent, etc.)		FLAMMABLE	
5/31/15 855		Railways Canyon Unit #124E MW-3		H2SO4 - Sulfuric Acid or H3PO4				RADIOACTIVE	
5/31/15 850		Railways Canyon Unit #124E MW-4		HNO3 - Nitric Acid				POISON B	
5/31/15 835		Railways Canyon Unit #124E MW-5		HCL - Hydrochloric Acid				UNKNOWN	
5/31/15 830		Railways Canyon Unit #124E MW-6		H2SO4 - Sulfuric Acid or H3PO4				OTHER:	
5/31/15 825		Railways Canyon Unit #124E MW-7		CH3OH - Methanol				NO. OF COOLERS PER SHIPMENT:	
5/31/15 815		Railways Canyon Unit #124E TRIP BLANK		NAOH - Sodium Hydroxide				SPECIAL INSTRUCTIONS/CONDITIONS OF RECEIPT	
				NAHSO4 - Sodium Bisulfate					
				H2SO4 - Sulfuric Acid or H3PO4					
				HNO3 - Nitric Acid					
				CH3OH - Methanol					
				NAHSO4 - Sodium Bisulfate					
				H2SO4 - Sulfuric Acid or H3PO4					
				HNO3 - Nitric Acid					
				CH3OH - Methanol					
				NAHSO4 - Sodium Bisulfate					
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				NAHSO4 - Sodium Bisulfate					
				H2SO4 - Sulfuric Acid or H3PO4					
</									

Login Sample Receipt Checklist

Client: MWH Americas Inc

Job Number: 400-106450-1

Login Number: 106450

List Source: TestAmerica Pensacola

List Number: 1

Creator: Crawford, Lauren E

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	2.0°C IR-6
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.	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: 400-114300-1

Client Project/Site: Gallegos Canyon Unit #124E

For:

MWH Americas Inc

1560 Broadway

Suite 1800

Denver, Colorado 80202

Attn: Ms. Sarah Gardner



Authorized for release by:

12/8/2015 7:24:59 PM

Marty Edwards, Manager of Project Management

(850)474-1001

marty.edwards@testamericainc.com

LINKS

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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.

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Definitions/Glossary

Client: MWH Americas Inc
Project/Site: Gallegos Canyon Unit #124E

TestAmerica Job ID: 400-114300-1

Qualifiers

GC VOA

Qualifier	Qualifier Description
X	Surrogate is outside control limits

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, 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: MWH Americas Inc
Project/Site: Gallegos Canyon Unit #124E

TestAmerica Job ID: 400-114300-1

Job ID: 400-114300-1

Laboratory: TestAmerica Pensacola

Narrative

Job Narrative 400-114300-1

Comments

No additional comments.

Receipt

The samples were received on 11/24/2015 8:47 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 5 coolers at receipt time were 0.4° C, 0.8° C, 0.9° C, 0.9° C and 1.1° C.

GC VOA

Method 8021B: The instrument on which these samples ran experienced an anomaly in which surrogate delivery increased for all client and QC samples after sequence run # 18. As all of these samples were non-detects, and the spiked quality samples were within accepted ranges for target analytes, these samples have been qualified and reported: MW-7 (400-114300-5) and (CCV 490-303336/29)

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

Detection Summary

Client: MWH Americas Inc
Project/Site: Gallegos Canyon Unit #124E

TestAmerica Job ID: 400-114300-1

Client Sample ID: MW-3

Lab Sample ID: 400-114300-1

No Detections.

Client Sample ID: MW-4

Lab Sample ID: 400-114300-2

No Detections.

Client Sample ID: MW-5

Lab Sample ID: 400-114300-3

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Ethylbenzene	2.7		1.0	ug/L	1		8021B	Total/NA
Benzene	1.6		1.0	ug/L	1		8021B	Total/NA

Client Sample ID: MW-6

Lab Sample ID: 400-114300-4

No Detections.

Client Sample ID: MW-7

Lab Sample ID: 400-114300-5

No Detections.

Client Sample ID: TRIP BLANK

Lab Sample ID: 400-114300-6

No Detections.

This Detection Summary does not include radiochemical test results.

TestAmerica Pensacola

Sample Summary

Client: MWH Americas Inc
Project/Site: Gallegos Canyon Unit #124E

TestAmerica Job ID: 400-114300-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-114300-1	MW-3	Water	11/22/15 15:10	11/24/15 08:47
400-114300-2	MW-4	Water	11/22/15 15:00	11/24/15 08:47
400-114300-3	MW-5	Water	11/22/15 15:20	11/24/15 08:47
400-114300-4	MW-6	Water	11/22/15 14:55	11/24/15 08:47
400-114300-5	MW-7	Water	11/22/15 14:50	11/24/15 08:47
400-114300-6	TRIP BLANK	Water	11/22/15 14:30	11/24/15 08:47

Client Sample Results

Client: MWH Americas Inc
Project/Site: Gallegos Canyon Unit #124E

TestAmerica Job ID: 400-114300-1

Client Sample ID: MW-3
Date Collected: 11/22/15 15:10
Date Received: 11/24/15 08:47

Lab Sample ID: 400-114300-1
Matrix: Water

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	<1.0		1.0	ug/L			12/02/15 21:11	1
Toluene	<1.0		1.0	ug/L			12/02/15 21:11	1
Xylenes, Total	<3.0		3.0	ug/L			12/02/15 21:11	1
Benzene	<1.0		1.0	ug/L			12/02/15 21:11	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	104		50 - 150				12/02/15 21:11	1

Client Sample Results

Client: MWH Americas Inc
Project/Site: Gallegos Canyon Unit #124E

TestAmerica Job ID: 400-114300-1

Client Sample ID: MW-4
Date Collected: 11/22/15 15:00
Date Received: 11/24/15 08:47

Lab Sample ID: 400-114300-2
Matrix: Water

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	<1.0		1.0	ug/L			12/02/15 21:52	1
Toluene	<1.0		1.0	ug/L			12/02/15 21:52	1
Xylenes, Total	<3.0		3.0	ug/L			12/02/15 21:52	1
Benzene	<1.0		1.0	ug/L			12/02/15 21:52	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	90		50 - 150				12/02/15 21:52	1

Client Sample Results

Client: MWH Americas Inc
Project/Site: Gallegos Canyon Unit #124E

TestAmerica Job ID: 400-114300-1

Client Sample ID: MW-5
Date Collected: 11/22/15 15:20
Date Received: 11/24/15 08:47

Lab Sample ID: 400-114300-3
Matrix: Water

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	2.7		1.0	ug/L			12/02/15 22:32	1
Toluene	<1.0		1.0	ug/L			12/02/15 22:32	1
Xylenes, Total	<3.0		3.0	ug/L			12/02/15 22:32	1
Benzene	1.6		1.0	ug/L			12/02/15 22:32	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	101		50 - 150				12/02/15 22:32	1

Client Sample Results

Client: MWH Americas Inc
Project/Site: Gallegos Canyon Unit #124E

TestAmerica Job ID: 400-114300-1

Client Sample ID: MW-6

Date Collected: 11/22/15 14:55

Date Received: 11/24/15 08:47

Lab Sample ID: 400-114300-4

Matrix: Water

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	<1.0		1.0	ug/L			12/02/15 23:13	1
Toluene	<1.0		1.0	ug/L			12/02/15 23:13	1
Xylenes, Total	<3.0		3.0	ug/L			12/02/15 23:13	1
Benzene	<1.0		1.0	ug/L			12/02/15 23:13	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	107		50 - 150				12/02/15 23:13	1

TestAmerica Pensacola

Client Sample Results

Client: MWH Americas Inc
Project/Site: Gallegos Canyon Unit #124E

TestAmerica Job ID: 400-114300-1

Client Sample ID: MW-7

Date Collected: 11/22/15 14:50

Date Received: 11/24/15 08:47

Lab Sample ID: 400-114300-5

Matrix: Water

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	<1.0		1.0	ug/L			12/03/15 07:23	1
Toluene	<1.0		1.0	ug/L			12/03/15 07:23	1
Xylenes, Total	<3.0		3.0	ug/L			12/03/15 07:23	1
Benzene	<1.0		1.0	ug/L			12/03/15 07:23	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	357	X	50 - 150				12/03/15 07:23	1

Client Sample Results

Client: MWH Americas Inc
Project/Site: Gallegos Canyon Unit #124E

TestAmerica Job ID: 400-114300-1

Client Sample ID: TRIP BLANK

Lab Sample ID: 400-114300-6

Date Collected: 11/22/15 14:30

Matrix: Water

Date Received: 11/24/15 08:47

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	<1.0		1.0	ug/L			12/02/15 17:04	1
Toluene	<1.0		1.0	ug/L			12/02/15 17:04	1
Xylenes, Total	<3.0		3.0	ug/L			12/02/15 17:04	1
Benzene	<1.0		1.0	ug/L			12/02/15 17:04	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	83		50 - 150				12/02/15 17:04	1

QC Association Summary

Client: MWH Americas Inc
Project/Site: Gallegos Canyon Unit #124E

TestAmerica Job ID: 400-114300-1

GC VOA

Analysis Batch: 303336

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-114300-1	MW-3	Total/NA	Water	8021B	
400-114300-2	MW-4	Total/NA	Water	8021B	
400-114300-3	MW-5	Total/NA	Water	8021B	
400-114300-4	MW-6	Total/NA	Water	8021B	
400-114300-5	MW-7	Total/NA	Water	8021B	
400-114300-6	TRIP BLANK	Total/NA	Water	8021B	
LCS 490-303336/4	Lab Control Sample	Total/NA	Water	8021B	
LCSD 490-303336/16	Lab Control Sample Dup	Total/NA	Water	8021B	
MB 490-303336/5	Method Blank	Total/NA	Water	8021B	

QC Sample Results

Client: MWH Americas Inc
Project/Site: Gallegos Canyon Unit #124E

TestAmerica Job ID: 400-114300-1

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 490-303336/5

Matrix: Water

Analysis Batch: 303336

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	<1.0		1.0	ug/L			12/02/15 14:13	1
Toluene	<1.0		1.0	ug/L			12/02/15 14:13	1
Xylenes, Total	<3.0		3.0	ug/L			12/02/15 14:13	1
Benzene	<1.0		1.0	ug/L			12/02/15 14:13	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	92		50 - 150		12/02/15 14:13	1

Lab Sample ID: LCS 490-303336/4

Matrix: Water

Analysis Batch: 303336

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ethylbenzene	100	104		ug/L		104	70 - 130
Toluene	100	104		ug/L		104	66 - 127
Xylenes, Total	300	309		ug/L		103	69 - 123
Benzene	100	107		ug/L		107	69 - 129

Surrogate	LCS %Recovery	LCS Qualifier	Limits
a,a,a-Trifluorotoluene	69		50 - 150

Lab Sample ID: LCSD 490-303336/16

Matrix: Water

Analysis Batch: 303336

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ethylbenzene	100	107		ug/L		107	70 - 130	3	35
Toluene	100	107		ug/L		107	66 - 127	3	34
Xylenes, Total	300	319		ug/L		106	69 - 123	3	37
Benzene	100	111		ug/L		111	69 - 129	3	33

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
a,a,a-Trifluorotoluene	115		50 - 150

TestAmerica Pensacola

Lab Chronicle

Client: MWH Americas Inc
Project/Site: Gallegos Canyon Unit #124E

TestAmerica Job ID: 400-114300-1

Client Sample ID: MW-3

Date Collected: 11/22/15 15:10

Date Received: 11/24/15 08:47

Lab Sample ID: 400-114300-1

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	303336	12/02/15 21:11	AMC	TAL NSH
Instrument ID: HP15										

Client Sample ID: MW-4

Date Collected: 11/22/15 15:00

Date Received: 11/24/15 08:47

Lab Sample ID: 400-114300-2

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	303336	12/02/15 21:52	AMC	TAL NSH
Instrument ID: HP15										

Client Sample ID: MW-5

Date Collected: 11/22/15 15:20

Date Received: 11/24/15 08:47

Lab Sample ID: 400-114300-3

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	303336	12/02/15 22:32	AMC	TAL NSH
Instrument ID: HP15										

Client Sample ID: MW-6

Date Collected: 11/22/15 14:55

Date Received: 11/24/15 08:47

Lab Sample ID: 400-114300-4

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	303336	12/02/15 23:13	AMC	TAL NSH
Instrument ID: HP15										

Client Sample ID: MW-7

Date Collected: 11/22/15 14:50

Date Received: 11/24/15 08:47

Lab Sample ID: 400-114300-5

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	303336	12/03/15 07:23	AMC	TAL NSH
Instrument ID: HP15										

Client Sample ID: TRIP BLANK

Date Collected: 11/22/15 14:30

Date Received: 11/24/15 08:47

Lab Sample ID: 400-114300-6

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	303336	12/02/15 17:04	AMC	TAL NSH
Instrument ID: HP15										

TestAmerica Pensacola

Lab Chronicle

Client: MWH Americas Inc
Project/Site: Gallegos Canyon Unit #124E

TestAmerica Job ID: 400-114300-1

Laboratory References:

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

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Certification Summary

Client: MWH Americas Inc
Project/Site: Gallegos Canyon Unit #124E

TestAmerica Job ID: 400-114300-1

Laboratory: TestAmerica Pensacola

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

Authority	Program	EPA Region	Certification ID	Expiration Date
Alabama	State Program	4	40150	12-31-15 *
Arizona	State Program	9	AZ0710	01-11-16
Arkansas DEQ	State Program	6	88-0689	09-01-16
Florida	NELAP	4	E81010	06-30-16
Georgia	State Program	4	N/A	06-30-16
Illinois	NELAP	5	200041	10-09-16
Iowa	State Program	7	367	07-31-16
Kansas	NELAP	7	E-10253	01-31-16 *
Kentucky (UST)	State Program	4	53	06-30-16
Kentucky (WW)	State Program	4	98030	12-31-15
Louisiana	NELAP	6	30976	06-30-16
Maryland	State Program	3	233	09-30-16
Massachusetts	State Program	1	M-FL094	06-30-16
Michigan	State Program	5	9912	06-30-16
New Jersey	NELAP	2	FL006	06-30-16
North Carolina (WW/SW)	State Program	4	314	12-31-15
Oklahoma	State Program	6	9810	08-31-16
Pennsylvania	NELAP	3	68-00467	01-31-16
Rhode Island	State Program	1	LAO00307	12-30-15
South Carolina	State Program	4	96026	06-30-16
Tennessee	State Program	4	TN02907	06-30-16
Texas	NELAP	6	T104704286-15-9	09-30-16
USDA	Federal		P330-13-00193	07-01-16
Virginia	NELAP	3	460166	06-14-16
West Virginia DEP	State Program	3	136	06-30-16

Laboratory: TestAmerica Nashville

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

Authority	Program	EPA Region	Certification ID	Expiration Date
A2LA	A2LA		NA: NELAP & A2LA	12-31-15
A2LA	ISO/IEC 17025		0453.07	12-31-15
Alaska (UST)	State Program	10	UST-087	07-24-16
Arizona	State Program	9	AZ0473	05-05-16
Arkansas DEQ	State Program	6	88-0737	04-25-16
California	State Program	9	2938	10-31-16
Connecticut	State Program	1	PH-0220	12-31-15
Florida	NELAP	4	E87358	06-30-16
Georgia	State Program	4	N/A	06-30-16
Illinois	NELAP	5	200010	12-09-16
Iowa	State Program	7	131	04-01-16
Kansas	NELAP	7	E-10229	01-31-16
Kentucky (UST)	State Program	4	19	06-30-16
Kentucky (WW)	State Program	4	90038	12-31-15
Louisiana	NELAP	6	30613	06-30-16
Maine	State Program	1	TN00032	11-03-17
Maryland	State Program	3	316	03-31-16
Massachusetts	State Program	1	M-TN032	06-30-16
Minnesota	NELAP	5	047-999-345	12-31-16
Mississippi	State Program	4	N/A	06-30-16

* Certification renewal pending - certification considered valid.

TestAmerica Pensacola

Certification Summary

Client: MWH Americas Inc
Project/Site: Gallegos Canyon Unit #124E

TestAmerica Job ID: 400-114300-1

Laboratory: TestAmerica Nashville (Continued)

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

Authority	Program	EPA Region	Certification ID	Expiration Date
Montana (UST)	State Program	8	NA	02-24-20
Nevada	State Program	9	TN00032	07-31-16
New Hampshire	NELAP	1	2963	10-09-16
New Jersey	NELAP	2	TN965	06-30-16
New York	NELAP	2	11342	03-31-16
North Carolina (WW/SW)	State Program	4	387	12-31-15
North Dakota	State Program	8	R-146	06-30-16
Ohio VAP	State Program	5	CL0033	07-10-17
Oklahoma	State Program	6	9412	08-31-16
Oregon	NELAP	10	TN200001	04-27-16
Pennsylvania	NELAP	3	68-00585	06-30-16
Rhode Island	State Program	1	LAO00268	12-30-15
South Carolina	State Program	4	84009 (001)	02-28-16
South Carolina (Do Not Use - DW)	State Program	4	84009 (002)	12-16-17
Tennessee	State Program	4	2008	02-23-17
Texas	NELAP	6	T104704077	08-31-16
USDA	Federal		S-48469	10-30-16
Utah	NELAP	8	TN00032	07-31-16
Virginia	NELAP	3	460152	06-14-16
Washington	State Program	10	C789	07-19-16
West Virginia DEP	State Program	3	219	02-28-16
Wisconsin	State Program	5	998020430	08-31-16
Wyoming (UST)	A2LA	8	453.07	12-31-15

Method Summary

Client: MWH Americas Inc
Project/Site: Gallegos Canyon Unit #124E

TestAmerica Job ID: 400-114300-1

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

Protocol References:

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

Laboratory References:

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

12/8/2015

Login Sample Receipt Checklist

Client: MWH Americas Inc

Job Number: 400-114300-1

Login Number: 114300

List Source: TestAmerica Pensacola

List Number: 1

Creator: Menoher, Rachel C

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	1.1/0.9/0.4/0.8/0.9°C IR6
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.	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	

Login Sample Receipt Checklist

Client: MWH Americas Inc

Job Number: 400-114300-1

Login Number: 114300

List Number: 2

Creator: Ford, Easton

List Source: TestAmerica Nashville

List Creation: 11/25/15 04:49 PM

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	True	
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	
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.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	