2016 ANNUAL GROUNDWATER REPORT

Lindrith B#24
NMOCD Case#: 3RP-214-0
Meter Code: 94967
T24N, 03W, Sec 9, Unit N

SITE DETAILS

Site Location: Latitude: 36.319794 N, Longitude: -107.166008 W
Land Type: Private/Fee
Operator: Conoco Phillips (Well is plugged and abandoned)

SITE BACKGROUND

- **Site Assessment:** 8/94
- **Excavations:** 10/94 (60 cy)
- **Re-Excavation:** 8/97 (180 cy)

Environmental Remediation activities at the Lindrith B#24 (Site) are being managed pursuant to the procedures set forth in the document entitled, "Remediation Plan for Groundwater Encountered during Pit Closure Activities" (Remediation Plan, El Paso Natural Gas Company / El Paso Field Services Company, 1995). This Remediation Plan was conditionally approved by the New Mexico Oil Conservation Division (OCD) in correspondence dated November 30, 1995; and the OCD approval conditions were adopted into El Paso CGP Company, LLC's (EPCGP's) program methods. Currently, the Site is operated by Conoco Phillips and the production well is plugged and abandoned.

The Site is located on Private/Fee land. Various site investigations have occurred from 1994 through 2016. Monitoring wells were installed in 1997 (MW-1), 1999 (MW-2 through MW-3), 2014 (MW-4 through MW-7), and 2016 (MW-1R, and soil borings DP-1 though DP-4). Free product has been encountered periodically in the past, but was not encountered in 2016. Currently, groundwater sampling is conducted on a semi-annual basis.

SOIL BORING AND MONITORING WELL REPLACEMENT ACTIVITIES

In April 2016, soil boring locations were staked for permitting and utility locating purposes. Soil borings were advanced using direct-push methods, in accordance with the 2016 Soil Assessment Work Plan, submitted on May 4, 2016 (Work Plan)

Five soil borings (DP-1 through DP-5) were advanced in May 2016, to evaluate soil impacts in and around the former Pit. 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. Locations were measured in and converted to state plane coordinates. Pertinent site features and soil boring locations are shown on Figure 5. Boring logs are included as Appendix A.

During advancement of the soil borings, completed in May 2016, the soil sample interval exhibiting the highest photoionization detector (PID) reading was collected and placed in a 4-ounce jar for laboratory analysis. Additional soil samples were retained from soil boring SB-1 to evaluate hydrocarbon concentrations at additional intervals. Sample jars were stored in an ice-filled cooler and shipped under standard chain of custody to TestAmerica Laboratories, Inc. in Pensacola, Florida. The soil samples were analyzed for the presence of benzene, toluene, ethylbenzene, and total xylenes (BTEX) according to United States Environmental Protection Agency (EPA) Method SW846 8021B, total petroleum hydrocarbons (TPH) using EPA Method 8015B-gasoline-range organics (GRO), diesel-range organics (DRO), and mineral oil range organics (MRO), and chlorides according to EPA Method 300. The soil sample analytical report is provided in Appendix B.

The soil cuttings were contained in a drum and staged on site for later disposal at Envirotech, Inc. (Envirotech), located south of Bloomfield, New Mexico. On May 25, 2016, Sierra Oilfield Services, Inc. removed the drum of soil cuttings from the Site and delivered them to Envirotech. Disposal documentation is contained in Appendix C.

On September 29, 2016, MW-1 was over drilled and replaced to address intermittent free product observed in the well. The 2016 Monitoring Well Replacement Work Plan summarizing the planned activities was submitted to the NMOCD on September 9, 2016. No soil sampling was conducted during well replacement activities. The replacement monitoring well was constructed of 4-inch-diameter, schedule 40 polyvinyl chloride (PVC), with 0.010-inch, continuous, factory-slotted PVC screen. The well screen was installed from 16.5 feet below ground surface (bgs) to 31.5 feet bgs and bisects the observed water table located at approximately 27 feet below the top of the monitoring well casings during 2016 gauging events. A 3-foot seal of bentonite chips was placed above the sandpack and hydrated, and the remaining annular space filled with bentonite grout. The well was completed as a stick-up well with locking protective casings and a concrete surface completion. Four protective bollards were installed around the new monitoring well. Well construction diagram is provided in Appendix A. The top of casing elevation was surveyed in October 2016.

On April 14 and October 13, 2016, water levels were gauged at MW-2, MW-3, MW-4, MW-5, MW-6 and MW-7. Existing monitoring well MW-1 was also gauged on April 14, 2016, and replacement monitoring well MW-1R was also gauged during the October 2016 sampling event. Groundwater samples were collected from each well using HydraSleeve™ (HydraSleeve) no-purge passive groundwater sampling devices. The HydraSleeves were set, either during the previous sampling event or following well replacement activities, 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. 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.

SUMMARY TABLES

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

SITE MAPS

Groundwater analytical maps (Figures 1 and 3) and groundwater elevation contour maps (Figures 2 and 4) summarize results of the 2016 groundwater sampling and gauging events. The soil analytical results are summarized on Figure 5.

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 (see Figures 2 and 4).
- Concentrations of benzene were not detected in any of the Site monitoring wells sampled in 2016.
- Concentrations of toluene were not detected in any of the Site monitoring wells sampled in 2016.
- Concentrations of ethylbenzene were not detected in any of the Site monitoring wells sampled in 2016.
- Concentrations of total xylenes were not detected in any of the Site monitoring wells sampled in 2016.

SOIL RESULTS

- Soil samples were collected from the borings for soil borings DP-1 through DP-5. Concentrations of benzene, toluene, ethylbenzene, and total xylenes on the soil samples were non-detect. Resulting total BTEX concentrations were below the applicable limit in the NMOCD 2013 Pit Rule Guidance for all samples collected from DP-1 through DP-5.

- Total petroleum hydrocarbons (TPH) ranged from non-detect to up to 109 mg/kg in DP-4 (22-23'). TPH concentrations in DP-4 exceeded the 2013 Pit Rule Guidance (100 mg/kg).

- Concentrations for chloride in the soil samples were non-detect.

PLANNED FUTURE ACTIVITIES

BTEX concentrations in the monitoring wells are reported below the NMWQCC standards during the fourth calendar quarter of 2016. Groundwater sampling will be completed quarterly through at least the third calendar quarter of 2017. If groundwater concentrations remain below NMWQCC standards after four consecutive quarters, groundwater monitoring may cease, and EPCGP may request site closure from NMOCD. If site closure is not requested in 2017, a 2017 Annual Report will be submitted to the NMOCD in early 2018.

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TABLES

TABLE 1 - GROUNDWATER 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

TABLE 1 - GROUNDWATER 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-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-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

TABLE 1 - GROUNDWATER 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-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-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

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 in 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

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-1R	10/13/16	6886.30	27.48	ND		6858.82

TABLE 2 - 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-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-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

TABLE 2 - 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-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-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

Notes:
"ft" = feet
"TOC" = Top of casing
"LNAPL" = Light non-aqueous phase liquid
"ND" = LNAPL not detected
"NR" = LNAPL not recorded

TABLE 3 - SOIL ANALYTICAL RESULTS

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

FIGURES

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MW-4
B: <1.0
T: <5.0
E: <1.0
X: <5.0

MW-1
B: <1.0
T: <5.0
E: <1.0
X: <5.0

MW-5
B: <1.0
T: <5.0
E: <1.0
X: <5.0

MW-7
B: <1.0
T: <5.0
E: <1.0
X: <5.0

MW-6
B: <1.0
T: <5.0
E: <1.0
X: <5.0

MW-3
NS

MW-2
NS

FORMER EPC PIT
EXCAVATED TO 20.5 FEET

FORMER METER HOUSE

GAS RISER PIPE

FORMER WELLHEAD
LINDRITH B UNIT #24

FORMER PUMPJACK

DOG LEG

2.5 INCH CAPPED PIPE

FORMER TANKS

FORMER BERM

FORMER FENCE

FORMER PRODUCED WATER

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

6881
6882
6883
6884
6885
6886
6887
6888

LEGEND:

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

EXPLANATION OF ANALYTES AND APPLICABLE STANDARDS:

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

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

N

SCALE IN FEET
0 30 60

REVISION	DATE	DESIGN BY	DRAWN BY	REVIEWED BY
	1/27/2017	SLG	SLG	SRV

TITLE:

GROUNDWATER ANALYTICAL RESULTS
APRIL 14, 2016

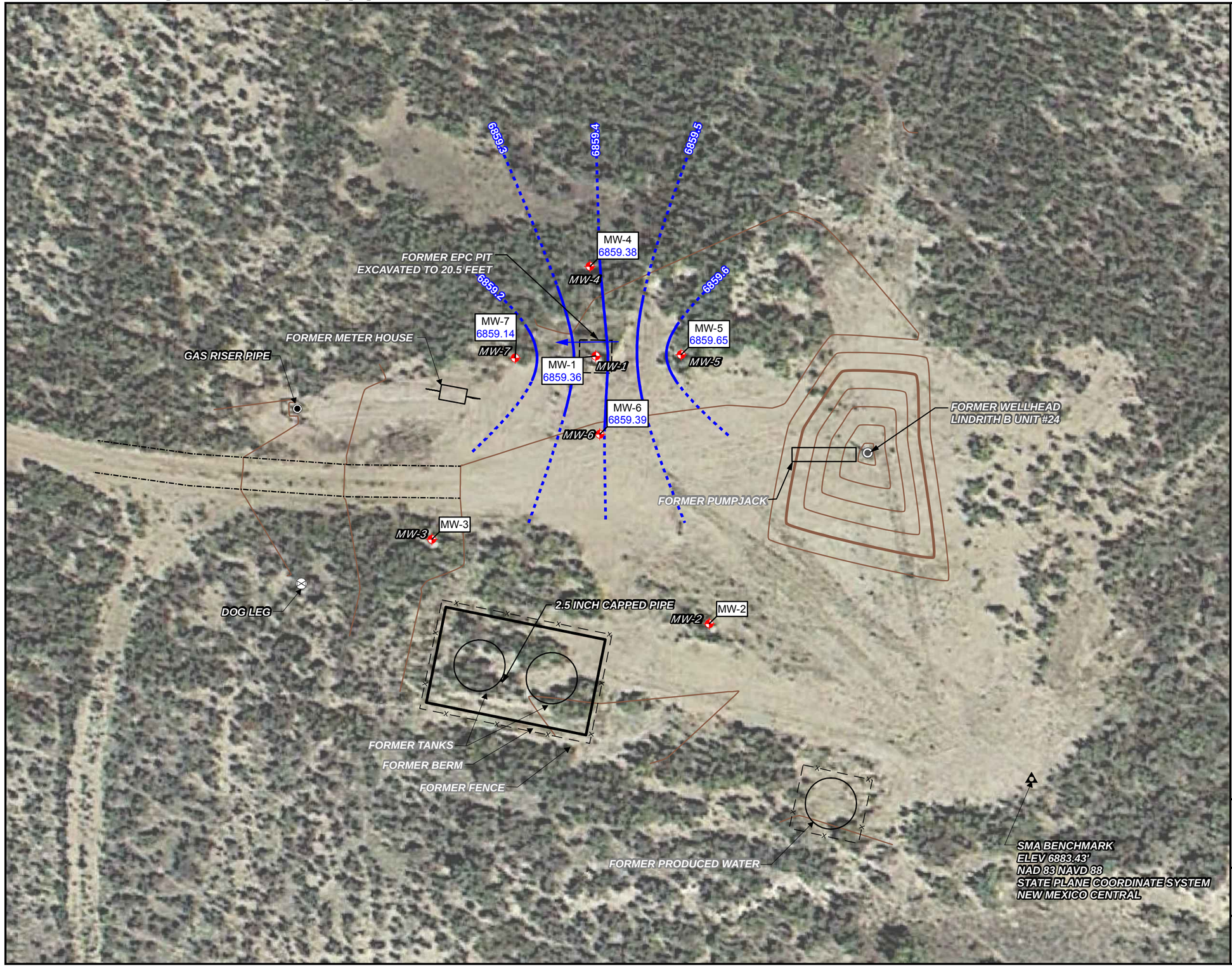
PROJECT:

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

MWH

Figure No.: 1

L:\San Juan River Basin\SJRB GENERAL\GIS-NEW_MXDs\LINDRITH B#24\2016 MAPS\LINDRITH B#24_GECM_1SA _2016.mxd



LEGEND:

- 6882 — 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

6859.4 CORRECTED WATER LEVEL ELEVATION CONTOUR DASHED WHERE INFERRED (FEET ABOVE MEAN SEA LEVEL, 0.1 FOOT CONTOUR INTERVAL)

DIRECTION OF APPARENT GROUNDWATER FLOW

N

SCALE IN FEET

0 30 60

REVISION	DATE	DESIGN BY	DRAWN BY	REVIEWED BY
	11/2/2016	SLG	SLG	SRV

TITLE:

GROUNDWATER ELEVATION MAP
APRIL 14, 2016

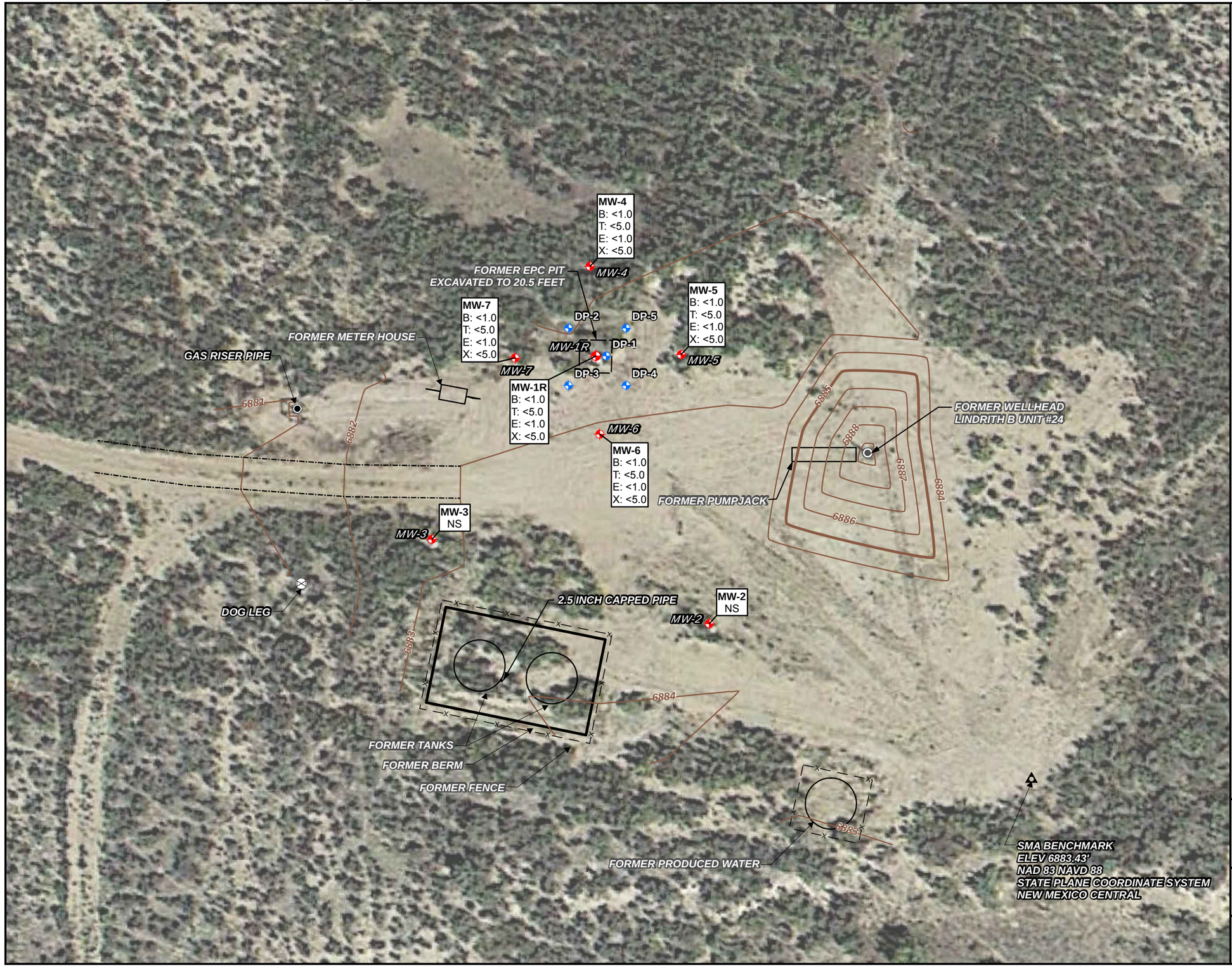
PROJECT:

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

MWH

Figure No.: 2

L:\San Juan River Basin\SJRB GENERAL\GIS-NEW_MXDs\LINDRITH B#24\2016 MAPS\LINDRITH B#24_GARM_2SA _2016.mxd



LEGEND:

- 6882 — 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
µg/L = MICROGRAMS PER LITER
<1 = BELOW METHOD DETECTION LIMIT

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

N

SCALE IN FEET
0 30 60

REVISION	DATE	DESIGN BY	DRAWN BY	REVIEWED BY
	1/18/2017	SLG	SLG	SRV

TITLE:

GROUNDWATER ANALYTICAL RESULTS
OCTOBER 13, 2016

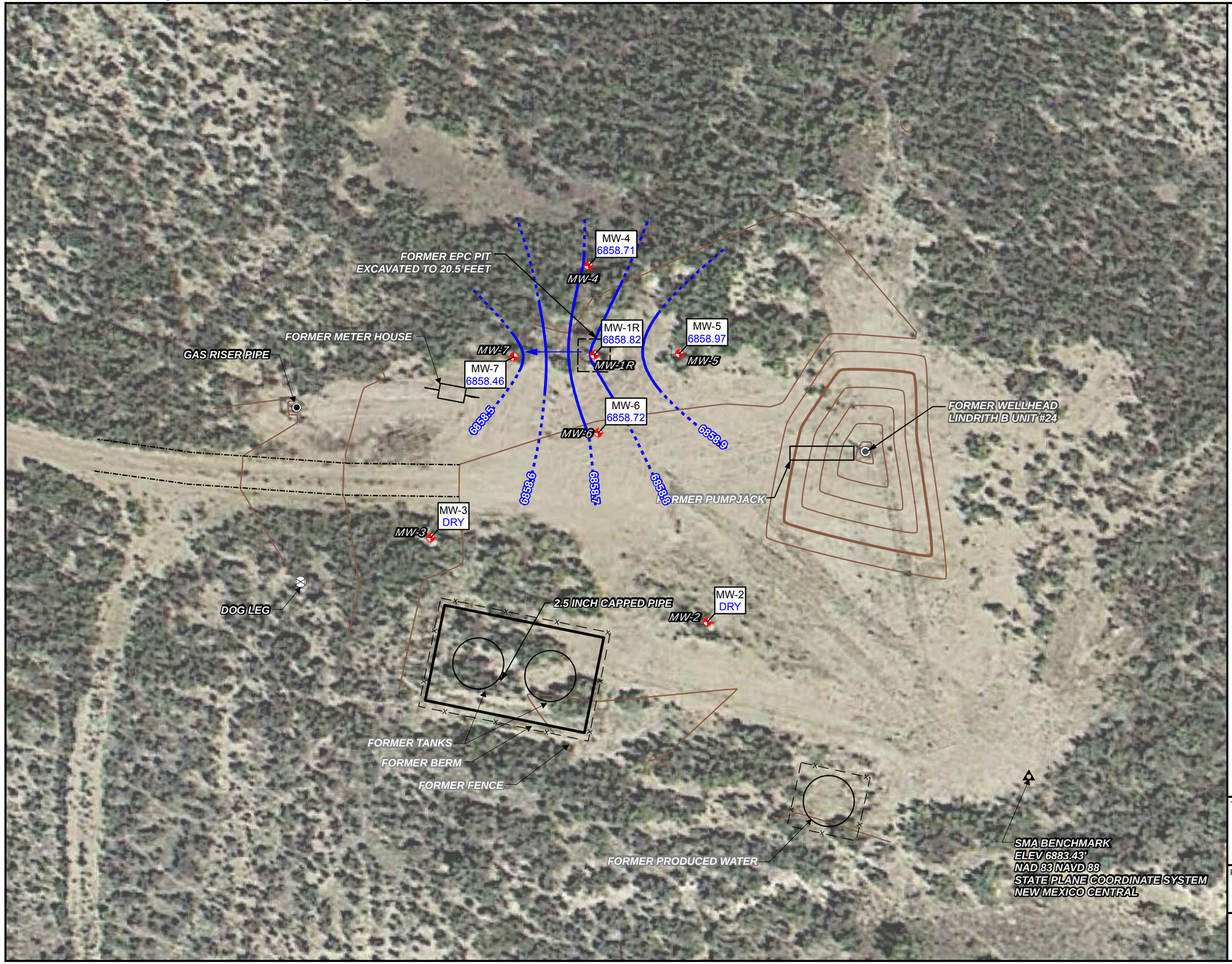
PROJECT:

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

MWH

Figure No.: **3**

L:\San Juan River Basin\SJRB GENERAL\GIS-NEW_MXDs\LINDRITH B#24\2016 MAPS\LINDRITH B#24_GECM_2SA _2016.mxd



LEGEND:

- 6882 — 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

6859.4 CORRECTED WATER LEVEL ELEVATION CONTOUR DASHED WHERE INFERRED (FEET ABOVE MEAN SEA LEVEL, 0.1 FOOT CONTOUR INTERVAL)

DIRECTION OF APPARENT GROUNDWATER FLOW

N

SCALE IN FEET

0 30 60

REVISION	DATE	DESIGN BY	DRAWN BY	REVIEWED BY
	1/18/2017	SLG	SLG	SRV

TITLE:

GROUNDWATER ELEVATION MAP
OCOTBER 13, 2016

PROJECT:

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

MWH

Figure No.: 4

L:\San Juan River Basin\SJRB GENERAL\GIS-NEW_MXDs\LINDRITH B#24\2016 MAPS\LINDRITH B#24_SARM_MAY2016.mxd

DP-2
23-24 ft. bgs
B: BRL
BTEX: BRL
TPH: 63
Cl: BRL

DP-5
22-23 ft. bgs
B: BRL
BTEX: BRL
TPH: BRL
Cl: BRL

DP-1
22-33 ft. bgs
B: BRL
BTEX: BRL
TPH: BRL
Cl: BRL

24-25 ft. bgs
B: BRL
BTEX: BRL
TPH: BRL
Cl: BRL

29-30 ft. bgs
B: BRL
BTEX: BRL
TPH: BRL
Cl: BRL

DP-4
22-23 ft. bgs
B: BRL
BTEX: BRL
TPH: **109**
Cl: BRL

DP-3
22.5-23.5 ft. bgs
B: BRL
BTEX: BRL
TPH: 77
Cl: BRL

MW-4
NA

MW-7
NA

MW-1R
NS

MW-5
NA

MW-6
NA

MW-3
NS

MW-2
NS

FORMER EPC PIT
EXCAVATED TO 20.5 FEET

FORMER METER HOUSE

GAS RISER PIPE

FORMER WELLHEAD
LINDRITH B UNIT #24

FORMER PUMPJACK

DOG LEG

2.5 INCH CAPPED PIPE

FORMER TANKS

FORMER BERM

FORMER FENCE

FORMER PRODUCED WATER

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

6881 6882 6883 6884 6885 6886 6887 6888

LEGEND:

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

NOTES:

DPE-1, DPE-2, DPE-3, DPE-4 AND DPE-5 SAMPLES COLLECTED 5/24/2016.

UTILITY LOCATIONS ARE APPROXIMATE.

ft. bgs = FEET BELOW GROUND SURFACE
NS = NOT SAMPLED
NA = NOT ANALYZED - SAMPLES LOST IN TRANSIT AND ARRIVED AT THE LAB ABOVE ACCEPTABLE TEMPERATURE.

EXPLANATION OF ANALYTES AND APPLICABLE STANDARDS:

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

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

N

SCALE IN FEET
0 30 60

REVISION	DATE	DESIGN BY	DRAWN BY	REVIEWED BY
	2/27/2017	SLG	SLG	SRV

TITLE:

SOIL ANALYTICAL RESULTS

PROJECT:

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

MWH

Figure No.: **5**

APPENDICES

APPENDIX A – BOREHOLE AND WELL CONSTRUCTION LOGS

APPENDIX B – SOIL SAMPLING ANALYTICAL REPORTS

APPENDIX C – WASTE DISPOSAL DOCUMENTATION

APPENDIX D – APRIL 29, 2016 GROUNDWATER SAMPLING ANALYTICAL REPORT
OCTOBER 27, 2016 GROUNDWATER SAMPLING ANALYTICAL REPORT

APPENDIX A

Drilling Log

MWH

Soil Boring **DP-1**

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						
	0.0					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	0.0					
	0.0					
4	0.0	100%				
	0.0					
6	0.0					
	0.0					
8	0.0					
	0.0	100%			SP	
10	0.0					
	0.0					
12	0.0					
	0.0	100%				
14	0.0					
	0.0					
16	0.0					
	0.0					
18	0.0	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.
	0.0				SP	Poorly-graded sand (continued), becoming soft, light brown, soil compacted in the core liner in the 20-25' interval.
20						*Continued Next Page*

Drilling Log

MWH

Soil Boring **DP-1**

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
20	0.0				SP	
	0.0					Well-graded sand, brown, loose, slightly moist, all sand sizes, subangular to subrounded, trace gravels;
22	0.0	DP1 22-23'				
	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						

Drilling Log

MWH

Soil Boring **DP-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 ▼

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						
	0.0				SP	Poorly-graded sand, loose, dry, fine sand, no cementation, no hydrocarbon odor, subangular sand, brown. (0-8' cleared with a hydro-vac).
2	0.0					
	0.0					
4	0.0	100%				
	0.0					
6	0.0					
	0.0					
8	0.0					
	0.0	100%				
10	0.0					
	0.0					
12	0.0					
	0.0	100%				
14	0.0					

Continued Next Page

Drilling Log

MWH

Soil Boring **DP-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					
	0.0					
	0.0					
18	0.0	100%			SP	
	0.0					
	0.0					
20	0.0					
	0.0				SW	Well-graded sand, brown, loose, all sand sizes, no cementation, no hydrocarbon odor.
	0.0				CH	Fat clay seam, dark brown, tight, soft, high plasticity, slightly moist.
22	0.0					Well-graded sand (continues), water at 24'.
	0.0	100% DP2 23-24'			SW	
24	0.0					
	0.0					
26						Total depth = 25'.
28						
30						
32						
34						

Drilling Log

MWH

Soil Boring **DP-3**

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 ▼

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						
	0.0				SP	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).
2	0.0					
	0.0					
4	0.0	100%				
	0.0					
6	0.0					
	0.0					
8	0.0					
	0.0	100%				
10	0.0					
	0.0					
12	0.0					
	0.0	100%				
14	0.0					

Continued Next Page

Drilling Log

MWH

Soil Boring **DP-3**

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					
	0.0				SP	
	0.0					
		100%				
18	0.0					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.
	0.0					
20	0.0					
	0.0				SW	
22	0.0	DP3 22.5-23.5' 100%				
	0.0					
24	0.0					
	0.0					
26						Total depth = 25'.
28						
30						
32						
34						

Drilling Log

MWH

Soil Boring **DP-4**

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						
	0.0				SP	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).
2	0.0					
	0.0					
4	0.0	100%				
	0.0					
6	0.0					
	0.0					
8	0.0					
	0.0	100%				
10	0.0					
	0.0					
12	0.0					
	0.0	100%				
14	0.0					

Continued Next Page

Drilling Log

MWH

Soil Boring **DP-4**

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				CH	Fat clay seam, soft to medium stiff, slightly moist, high plasticity, no hydrocarbon odor, dark brown.
	0.0					Poorly-graded sand (continues).
	0.0				SP	
	0.0	100%				
18	0.0					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;
	0.0					
20	0.0					
	0.0					thin, dark brown clay seams intermittently from 21-23'; water at 23'.
	0.0				SW	
22	0.0	DP4 22-23'				
	0.0	100%				
24	0.0					
	0.0					
26						Total depth = 25'.
28						
30						
32						
34						

Drilling Log

MWH

Soil Boring **DP-5**

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' 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						
	0.0				SP	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.
2	0.0					
	0.0					
4	0.0	100%				
	0.0					
6	0.0					
	0.0					
8	0.0					
	0.0	100%				
10	0.0					
	0.0					
12	0.0					
	0.0	100%				
14	0.0					

Continued Next Page

Drilling Log

MWH

Soil Boring **DP-5**

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
	0.0					
16	0.0				SP	
	0.0					
		100%				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					
	0.0					
20	0.0					
	0.0				SW	
		DP5 22-23' 100%				
22	0.0					
	0.0					
24	0.0					
	0.0					
						Total depth = 25'.
26						
28						
30						
32						
34						

Drilling Log

MWH

Monitoring Well **MW-1R**

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*

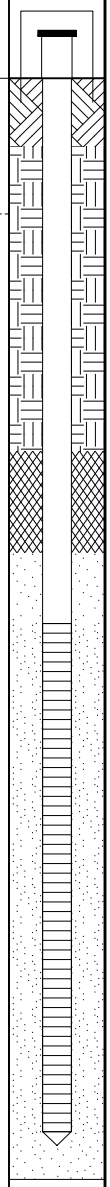
Driller *Gary Whitley* Driller Reg. # *WD-1210* Log By *Brad Barton*

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							



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

APPENDIX B

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: 400-122218-1
Client Project/Site: Lindrith B #24 Soils

For:
MWH Americas Inc
11153 Aurora Avenue
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Attn: Steve Varsa

Authorized for release by:
6/9/2016 5:53:54 PM

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Table of Contents

Definitions/Glossary

Client: MWH Americas Inc
Project/Site: Lindrith B #24 Soils

TestAmerica Job ID: 400-122218-1

Qualifiers

GC Semi VOA

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
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: Lindrith B #24 Soils

TestAmerica Job ID: 400-122218-1

Job ID: 400-122218-1

Laboratory: TestAmerica Pensacola

Narrative

Job Narrative
400-122218-1

Comments
No additional comments.

Receipt
The samples were received on 5/26/2016 9:27 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 0.0º C.

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

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

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

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

Detection Summary

Client: MWH Americas Inc
Project/Site: Lindrith B #24 Soils

TestAmerica Job ID: 400-122218-1

Client Sample ID: DP-2 (23-24) — Lab Sample ID: 400-122218-1

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
C10-C28	39		12		mg/Kg	1	☼	8015B	Total/NA
C28-C35	24		12		mg/Kg	1	☼	8015B	Total/NA

Client Sample ID: DP-5 (22-23) — Lab Sample ID: 400-122218-2

No Detections.

Client Sample ID: DP-4 (22-23) — Lab Sample ID: 400-122218-3

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
C10-C28	73		13		mg/Kg	1	☼	8015B	Total/NA
C28-C35	36		13		mg/Kg	1	☼	8015B	Total/NA

Client Sample ID: DP-3 (22.5-23.5) — Lab Sample ID: 400-122218-4

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
C10-C28	53		13		mg/Kg	1	☼	8015B	Total/NA
C28-C35	24		13		mg/Kg	1	☼	8015B	Total/NA

Client Sample ID: DP-1 (22-23) — Lab Sample ID: 400-122218-5

No Detections.

Client Sample ID: DP-1 (24-25) — Lab Sample ID: 400-122218-6

No Detections.

Client Sample ID: DP-1 (29-30) — Lab Sample ID: 400-122218-7

No Detections.

This Detection Summary does not include radiochemical test results.

Sample Summary

Client: MWH Americas Inc
Project/Site: Lindrith B #24 Soils

TestAmerica Job ID: 400-122218-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-122218-1	DP-2 (23-24)	Solid	05/24/16 12:30	05/26/16 09:27
400-122218-2	DP-5 (22-23)	Solid	05/24/16 13:00	05/26/16 09:27
400-122218-3	DP-4 (22-23)	Solid	05/24/16 13:25	05/26/16 09:27
400-122218-4	DP-3 (22.5-23.5)	Solid	05/24/16 14:00	05/26/16 09:27
400-122218-5	DP-1 (22-23)	Solid	05/24/16 15:05	05/26/16 09:27
400-122218-6	DP-1 (24-25)	Solid	05/24/16 15:15	05/26/16 09:27
400-122218-7	DP-1 (29-30)	Solid	05/24/16 15:20	05/26/16 09:27

Client: MWH Americas Inc
Project/Site: Lindrith B #24 Soils

TestAmerica Job ID: 400-122218-1

Client Sample ID: DP-2 (23-24)
Date Collected: 05/24/16 12:30
Date Received: 05/26/16 09:27

Lab Sample ID: 400-122218-1
Matrix: Solid
Percent Solids: 83.8

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) C6--C10	<0.11		0.11		mg/Kg	☼	06/06/16 11:30	06/06/16 14:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (fid)	*96*		*65 - 125*	*06/06/16 11:30*	*06/06/16 14:15*	*1*

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0011		0.0011		mg/Kg	☼	06/06/16 11:30	06/06/16 14:15	1
Ethylbenzene	<0.0011		0.0011		mg/Kg	☼	06/06/16 11:30	06/06/16 14:15	1
Toluene	<0.0057		0.0057		mg/Kg	☼	06/06/16 11:30	06/06/16 14:15	1
Xylenes, Total	<0.0057		0.0057		mg/Kg	☼	06/06/16 11:30	06/06/16 14:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (pid)	*92*		*40 - 150*	*06/06/16 11:30*	*06/06/16 14:15*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
C10-C28	39		12		mg/Kg	☼	06/02/16 09:32	06/07/16 21:17	1
C28-C35	24		12		mg/Kg	☼	06/02/16 09:32	06/07/16 21:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*43*		*27 - 151*	*06/02/16 09:32*	*06/07/16 21:17*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<24		24		mg/Kg	☼		06/07/16 05:18	1

Client: MWH Americas Inc
Project/Site: Lindrith B #24 Soils

TestAmerica Job ID: 400-122218-1

Client Sample ID: DP-5 (22-23)
Date Collected: 05/24/16 13:00
Date Received: 05/26/16 09:27

Lab Sample ID: 400-122218-2
Matrix: Solid
Percent Solids: 82.0

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) C6--C10	<0.10		0.10		mg/Kg	☼	06/06/16 11:30	06/06/16 14:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (fid)	*95*		*65 - 125*	*06/06/16 11:30*	*06/06/16 14:49*	*1*

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0010		0.0010		mg/Kg	☼	06/06/16 11:30	06/06/16 14:49	1
Ethylbenzene	<0.0010		0.0010		mg/Kg	☼	06/06/16 11:30	06/06/16 14:49	1
Toluene	<0.0051		0.0051		mg/Kg	☼	06/06/16 11:30	06/06/16 14:49	1
Xylenes, Total	<0.0051		0.0051		mg/Kg	☼	06/06/16 11:30	06/06/16 14:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (pid)	*92*		*40 - 150*	*06/06/16 11:30*	*06/06/16 14:49*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
C10-C28	<12		12		mg/Kg	☼	06/02/16 09:32	06/07/16 21:27	1
C28-C35	<12		12		mg/Kg	☼	06/02/16 09:32	06/07/16 21:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*54*		*27 - 151*	*06/02/16 09:32*	*06/07/16 21:27*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<24		24		mg/Kg	☼		06/07/16 05:41	1

Client Sample Results

Client: MWH Americas Inc
Project/Site: Lindrith B #24 Soils

TestAmerica Job ID: 400-122218-1

Client Sample ID: DP-4 (22-23)

Date Collected: 05/24/16 13:25
Date Received: 05/26/16 09:27

Lab Sample ID: 400-122218-3

Matrix: Solid
Percent Solids: 73.9

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) C6--C10	<0.14		0.14		mg/Kg	☼	06/06/16 11:30	06/06/16 15:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (fid)	*95*		*65 - 125*	*06/06/16 11:30*	*06/06/16 15:23*	*1*

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0014		0.0014		mg/Kg	☼	06/06/16 11:30	06/06/16 15:23	1
Ethylbenzene	<0.0014		0.0014		mg/Kg	☼	06/06/16 11:30	06/06/16 15:23	1
Toluene	<0.0069		0.0069		mg/Kg	☼	06/06/16 11:30	06/06/16 15:23	1
Xylenes, Total	<0.0069		0.0069		mg/Kg	☼	06/06/16 11:30	06/06/16 15:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (pid)	*93*		*40 - 150*	*06/06/16 11:30*	*06/06/16 15:23*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
C10-C28	73		13		mg/Kg	☼	06/02/16 09:32	06/07/16 21:38	1
C28-C35	36		13		mg/Kg	☼	06/02/16 09:32	06/07/16 21:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*50*		*27 - 151*	*06/02/16 09:32*	*06/07/16 21:38*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<27		27		mg/Kg	☼		06/07/16 06:03	1

Client: MWH Americas Inc
Project/Site: Lindrith B #24 Soils

TestAmerica Job ID: 400-122218-1

Client Sample ID: DP-3 (22.5-23.5)

Date Collected: 05/24/16 14:00
Date Received: 05/26/16 09:27

Lab Sample ID: 400-122218-4

Matrix: Solid
Percent Solids: 73.5

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) C6--C10	<0.14		0.14		mg/Kg	☼	06/06/16 11:30	06/06/16 15:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (fid)	*97*		*65 - 125*	*06/06/16 11:30*	*06/06/16 15:57*	*1*

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0014		0.0014		mg/Kg	☼	06/06/16 11:30	06/06/16 15:57	1
Ethylbenzene	<0.0014		0.0014		mg/Kg	☼	06/06/16 11:30	06/06/16 15:57	1
Toluene	<0.0069		0.0069		mg/Kg	☼	06/06/16 11:30	06/06/16 15:57	1
Xylenes, Total	<0.0069		0.0069		mg/Kg	☼	06/06/16 11:30	06/06/16 15:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (pid)	*96*		*40 - 150*	*06/06/16 11:30*	*06/06/16 15:57*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
C10-C28	**53**		13		mg/Kg	☼	06/02/16 09:32	06/07/16 21:49	1
C28-C35	**24**		13		mg/Kg	☼	06/02/16 09:32	06/07/16 21:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*44*		*27 - 151*	*06/02/16 09:32*	*06/07/16 21:49*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<27		27		mg/Kg	☼		06/07/16 06:26	1

Client: MWH Americas Inc
Project/Site: Lindrith B #24 Soils

TestAmerica Job ID: 400-122218-1

Client Sample ID: DP-1 (22-23)
Date Collected: 05/24/16 15:05
Date Received: 05/26/16 09:27

Lab Sample ID: 400-122218-5
Matrix: Solid
Percent Solids: 74.7

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) C6--C10	<0.11		0.11		mg/Kg	☼	06/06/16 11:30	06/06/16 16:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (fid)	*96*		*65 - 125*	*06/06/16 11:30*	*06/06/16 16:31*	*1*

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0011		0.0011		mg/Kg	☼	06/06/16 11:30	06/06/16 16:31	1
Ethylbenzene	<0.0011		0.0011		mg/Kg	☼	06/06/16 11:30	06/06/16 16:31	1
Toluene	<0.0056		0.0056		mg/Kg	☼	06/06/16 11:30	06/06/16 16:31	1
Xylenes, Total	<0.0056		0.0056		mg/Kg	☼	06/06/16 11:30	06/06/16 16:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (pid)	*94*		*40 - 150*	*06/06/16 11:30*	*06/06/16 16:31*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
C10-C28	<13		13		mg/Kg	☼	06/02/16 09:32	06/07/16 21:59	1
C28-C35	<13		13		mg/Kg	☼	06/02/16 09:32	06/07/16 21:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*55*		*27 - 151*	*06/02/16 09:32*	*06/07/16 21:59*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<28		28		mg/Kg	☼		06/07/16 06:49	1

Client: MWH Americas Inc
Project/Site: Lindrith B #24 Soils

TestAmerica Job ID: 400-122218-1

Client Sample ID: DP-1 (24-25) — **Lab Sample ID: 400-122218-6**
Date Collected: 05/24/16 15:15 — **Matrix: Solid**
Date Received: 05/26/16 09:27 — **Percent Solids: 73.6**

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) C6--C10	<0.13		0.13		mg/Kg	☼	06/06/16 11:30	06/06/16 17:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (fid)	*96*		*65 - 125*	*06/06/16 11:30*	*06/06/16 17:06*	*1*

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0013		0.0013		mg/Kg	☼	06/06/16 11:30	06/06/16 17:06	1
Ethylbenzene	<0.0013		0.0013		mg/Kg	☼	06/06/16 11:30	06/06/16 17:06	1
Toluene	<0.0064		0.0064		mg/Kg	☼	06/06/16 11:30	06/06/16 17:06	1
Xylenes, Total	<0.0064		0.0064		mg/Kg	☼	06/06/16 11:30	06/06/16 17:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (pid)	*93*		*40 - 150*	*06/06/16 11:30*	*06/06/16 17:06*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
C10-C28	<13		13		mg/Kg	☼	06/02/16 09:32	06/07/16 22:10	1
C28-C35	<13		13		mg/Kg	☼	06/02/16 09:32	06/07/16 22:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*46*		*27 - 151*	*06/02/16 09:32*	*06/07/16 22:10*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<27		27		mg/Kg	☼		06/07/16 07:12	1

Client: MWH Americas Inc
Project/Site: Lindrith B #24 Soils

TestAmerica Job ID: 400-122218-1

Client Sample ID: DP-1 (29-30)
Date Collected: 05/24/16 15:20
Date Received: 05/26/16 09:27

Lab Sample ID: 400-122218-7
Matrix: Solid
Percent Solids: 75.0

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) C6--C10	<0.12		0.12		mg/Kg	☼	06/06/16 11:30	06/06/16 21:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (fid)	*96*		*65 - 125*	*06/06/16 11:30*	*06/06/16 21:39*	*1*

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0012		0.0012		mg/Kg	☼	06/06/16 11:30	06/06/16 21:39	1
Ethylbenzene	<0.0012		0.0012		mg/Kg	☼	06/06/16 11:30	06/06/16 21:39	1
Toluene	<0.0060		0.0060		mg/Kg	☼	06/06/16 11:30	06/06/16 21:39	1
Xylenes, Total	<0.0060		0.0060		mg/Kg	☼	06/06/16 11:30	06/06/16 21:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (pid)	*95*		*40 - 150*	*06/06/16 11:30*	*06/06/16 21:39*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
C10-C28	<13	F1	13		mg/Kg	☼	06/02/16 09:32	06/07/16 21:06	1
C28-C35	<13		13		mg/Kg	☼	06/02/16 09:32	06/07/16 21:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*28*		*27 - 151*	*06/02/16 09:32*	*06/07/16 21:06*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<26		26		mg/Kg	☼		06/07/16 07:35	1

QC Association Summary

Client: MWH Americas Inc
Project/Site: Lindrith B #24 Soils

TestAmerica Job ID: 400-122218-1

GC VOA

Analysis Batch: 308738

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-122218-1	DP-2 (23-24)	Total/NA	Solid	8021B	308786
400-122218-1 MS	DP-2 (23-24)	Total/NA	Solid	8021B	308786
400-122218-1 MSD	DP-2 (23-24)	Total/NA	Solid	8021B	308786
400-122218-2	DP-5 (22-23)	Total/NA	Solid	8021B	308786
400-122218-3	DP-4 (22-23)	Total/NA	Solid	8021B	308786
400-122218-4	DP-3 (22.5-23.5)	Total/NA	Solid	8021B	308786
400-122218-5	DP-1 (22-23)	Total/NA	Solid	8021B	308786
400-122218-6	DP-1 (24-25)	Total/NA	Solid	8021B	308786
400-122218-7	DP-1 (29-30)	Total/NA	Solid	8021B	308786
LCS 400-308738/1013	Lab Control Sample	Total/NA	Solid	8021B	
MB 400-308786/1-A	Method Blank	Total/NA	Solid	8021B	308786

Analysis Batch: 308739

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-122218-1	DP-2 (23-24)	Total/NA	Solid	8015B	308786
400-122218-1 MS	DP-2 (23-24)	Total/NA	Solid	8015B	308786
400-122218-1 MSD	DP-2 (23-24)	Total/NA	Solid	8015B	308786
400-122218-2	DP-5 (22-23)	Total/NA	Solid	8015B	308786
400-122218-3	DP-4 (22-23)	Total/NA	Solid	8015B	308786
400-122218-4	DP-3 (22.5-23.5)	Total/NA	Solid	8015B	308786
400-122218-5	DP-1 (22-23)	Total/NA	Solid	8015B	308786
400-122218-6	DP-1 (24-25)	Total/NA	Solid	8015B	308786
400-122218-7	DP-1 (29-30)	Total/NA	Solid	8015B	308786
LCS 400-308786/3-A	Lab Control Sample	Total/NA	Solid	8015B	308786
MB 400-308786/1-A	Method Blank	Total/NA	Solid	8015B	308786

Prep Batch: 308786

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-122218-1	DP-2 (23-24)	Total/NA	Solid	5035	
400-122218-1 MS	DP-2 (23-24)	Total/NA	Solid	5035	
400-122218-1 MS	DP-2 (23-24)	Total/NA	Solid	5035	
400-122218-1 MSD	DP-2 (23-24)	Total/NA	Solid	5035	
400-122218-1 MSD	DP-2 (23-24)	Total/NA	Solid	5035	
400-122218-2	DP-5 (22-23)	Total/NA	Solid	5035	
400-122218-3	DP-4 (22-23)	Total/NA	Solid	5035	
400-122218-4	DP-3 (22.5-23.5)	Total/NA	Solid	5035	
400-122218-5	DP-1 (22-23)	Total/NA	Solid	5035	
400-122218-6	DP-1 (24-25)	Total/NA	Solid	5035	
400-122218-7	DP-1 (29-30)	Total/NA	Solid	5035	
LCS 400-308786/3-A	Lab Control Sample	Total/NA	Solid	5035	
MB 400-308786/1-A	Method Blank	Total/NA	Solid	5035	

GC Semi VOA

Prep Batch: 308333

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-122218-1	DP-2 (23-24)	Total/NA	Solid	3546	
400-122218-2	DP-5 (22-23)	Total/NA	Solid	3546	
400-122218-3	DP-4 (22-23)	Total/NA	Solid	3546	
400-122218-4	DP-3 (22.5-23.5)	Total/NA	Solid	3546	

GC Semi VOA (Continued)

Prep Batch: 308333 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-122218-5	DP-1 (22-23)	Total/NA	Solid	3546	
400-122218-6	DP-1 (24-25)	Total/NA	Solid	3546	
400-122218-7	DP-1 (29-30)	Total/NA	Solid	3546	
400-122218-7 MS	DP-1 (29-30)	Total/NA	Solid	3546	
400-122218-7 MSD	DP-1 (29-30)	Total/NA	Solid	3546	
LCS 400-308333/22-A	Lab Control Sample	Total/NA	Solid	3546	
MB 400-308333/23-A	Method Blank	Total/NA	Solid	3546	

Analysis Batch: 308869

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-122218-1	DP-2 (23-24)	Total/NA	Solid	8015B	308333
400-122218-2	DP-5 (22-23)	Total/NA	Solid	8015B	308333
400-122218-3	DP-4 (22-23)	Total/NA	Solid	8015B	308333
400-122218-4	DP-3 (22.5-23.5)	Total/NA	Solid	8015B	308333
400-122218-5	DP-1 (22-23)	Total/NA	Solid	8015B	308333
400-122218-6	DP-1 (24-25)	Total/NA	Solid	8015B	308333
400-122218-7	DP-1 (29-30)	Total/NA	Solid	8015B	308333
400-122218-7 MS	DP-1 (29-30)	Total/NA	Solid	8015B	308333
400-122218-7 MSD	DP-1 (29-30)	Total/NA	Solid	8015B	308333
LCS 400-308333/22-A	Lab Control Sample	Total/NA	Solid	8015B	308333
MB 400-308333/23-A	Method Blank	Total/NA	Solid	8015B	308333

HPLC/IC

Leach Batch: 308530

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-121955-A-1-E MS	Matrix Spike	Soluble	Solid	DI Leach	
400-121955-A-1-F MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	
400-122218-1	DP-2 (23-24)	Soluble	Solid	DI Leach	
400-122218-2	DP-5 (22-23)	Soluble	Solid	DI Leach	
400-122218-3	DP-4 (22-23)	Soluble	Solid	DI Leach	
400-122218-4	DP-3 (22.5-23.5)	Soluble	Solid	DI Leach	
400-122218-5	DP-1 (22-23)	Soluble	Solid	DI Leach	
400-122218-6	DP-1 (24-25)	Soluble	Solid	DI Leach	
400-122218-7	DP-1 (29-30)	Soluble	Solid	DI Leach	
LCS 400-308530/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 400-308530/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
MB 400-308530/1-A	Method Blank	Soluble	Solid	DI Leach	

Analysis Batch: 308790

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-121955-A-1-E MS	Matrix Spike	Soluble	Solid	300.0	308530
400-121955-A-1-F MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	308530
LCS 400-308530/2-A	Lab Control Sample	Soluble	Solid	300.0	308530
LCSD 400-308530/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	308530
MB 400-308530/1-A	Method Blank	Soluble	Solid	300.0	308530

Analysis Batch: 309038

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-122218-1	DP-2 (23-24)	Soluble	Solid	300.0	308530

HPLC/IC (Continued)

Analysis Batch: 309038 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-122218-2	DP-5 (22-23)	Soluble	Solid	300.0	308530
400-122218-3	DP-4 (22-23)	Soluble	Solid	300.0	308530
400-122218-4	DP-3 (22.5-23.5)	Soluble	Solid	300.0	308530
400-122218-5	DP-1 (22-23)	Soluble	Solid	300.0	308530
400-122218-6	DP-1 (24-25)	Soluble	Solid	300.0	308530
400-122218-7	DP-1 (29-30)	Soluble	Solid	300.0	308530

General Chemistry

Analysis Batch: 307945

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-122216-A-1 DU	Duplicate	Total/NA	Solid	Moisture	
400-122218-1	DP-2 (23-24)	Total/NA	Solid	Moisture	
400-122218-2	DP-5 (22-23)	Total/NA	Solid	Moisture	
400-122218-3	DP-4 (22-23)	Total/NA	Solid	Moisture	
400-122218-4	DP-3 (22.5-23.5)	Total/NA	Solid	Moisture	
400-122218-5	DP-1 (22-23)	Total/NA	Solid	Moisture	
400-122218-6	DP-1 (24-25)	Total/NA	Solid	Moisture	
400-122218-7	DP-1 (29-30)	Total/NA	Solid	Moisture	

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

Lab Sample ID: MB 400-308786/1-A
Matrix: Solid
Analysis Batch: 308739

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 308786

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) C6--C10	<0.10		0.10		mg/Kg		06/06/16 11:30	06/06/16 13:41	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (fid)	*96*		*65 - 125*	*06/06/16 11:30*	*06/06/16 13:41*	*1*

Lab Sample ID: LCS 400-308786/3-A
Matrix: Solid
Analysis Batch: 308739

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 308786

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO) C6--C10			1.00	1.02		mg/Kg		102	62 - 141		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
a,a,a-Trifluorotoluene (fid)	*98*		*65 - 125*

Lab Sample ID: 400-122218-1 MS
Matrix: Solid
Analysis Batch: 308739

Client Sample ID: DP-2 (23-24)
Prep Type: Total/NA
Prep Batch: 308786

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO) C6--C10	<0.11		1.16	0.701		mg/Kg	☼	61	10 - 150		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
a,a,a-Trifluorotoluene (fid)	*101*		*65 - 125*

Lab Sample ID: 400-122218-1 MSD
Matrix: Solid
Analysis Batch: 308739

Client Sample ID: DP-2 (23-24)
Prep Type: Total/NA
Prep Batch: 308786

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) C6--C10	<0.11		1.13	0.680		mg/Kg	☼	60	10 - 150	3	32

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
a,a,a-Trifluorotoluene (fid)	*100*		*65 - 125*

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: LCS 400-308738/1013
Matrix: Solid
Analysis Batch: 308738

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.0500	0.0442		mg/Kg		88	74 - 127		
Ethylbenzene			0.0500	0.0457		mg/Kg		91	79 - 131		

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

Lab Sample ID: LCS 400-308738/1013
Matrix: Solid
Analysis Batch: 308738

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Toluene			0.0500	0.0462		mg/Kg		92	76 - 127		
Xylenes, Total			0.150	0.133		mg/Kg		89	80 - 129		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
a,a,a-Trifluorotoluene (pid)	*98*		*40 - 150*

Lab Sample ID: MB 400-308786/1-A
Matrix: Solid
Analysis Batch: 308738

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 308786

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0010		0.0010		mg/Kg		06/06/16 11:30	06/06/16 13:41	1
Ethylbenzene	<0.0010		0.0010		mg/Kg		06/06/16 11:30	06/06/16 13:41	1
Toluene	<0.0050		0.0050		mg/Kg		06/06/16 11:30	06/06/16 13:41	1
Xylenes, Total	<0.0050		0.0050		mg/Kg		06/06/16 11:30	06/06/16 13:41	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (pid)	*93*		*40 - 150*	*06/06/16 11:30*	*06/06/16 13:41*	*1*

Lab Sample ID: 400-122218-1 MS
Matrix: Solid
Analysis Batch: 308738

Client Sample ID: DP-2 (23-24)
Prep Type: Total/NA
Prep Batch: 308786

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene	<0.0011		0.0562	0.0557		mg/Kg	☼	99	10 - 150		
Ethylbenzene	<0.0011		0.0562	0.0444		mg/Kg	☼	79	10 - 150		
Toluene	<0.0057		0.0562	0.0487		mg/Kg	☼	87	10 - 150		
Xylenes, Total	<0.0057		0.168	0.127		mg/Kg	☼	76	50 - 150		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
a,a,a-Trifluorotoluene (pid)	*95*		*40 - 150*

Lab Sample ID: 400-122218-1 MSD
Matrix: Solid
Analysis Batch: 308738

Client Sample ID: DP-2 (23-24)
Prep Type: Total/NA
Prep Batch: 308786

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.0011		0.0579	0.0577		mg/Kg	☼	100	10 - 150	4	34
Ethylbenzene	<0.0011		0.0579	0.0467		mg/Kg	☼	81	10 - 150	5	66
Toluene	<0.0057		0.0579	0.0515		mg/Kg	☼	89	10 - 150	6	44
Xylenes, Total	<0.0057		0.174	0.135		mg/Kg	☼	78	50 - 150	6	46

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
a,a,a-Trifluorotoluene (pid)	*98*		*40 - 150*

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

Lab Sample ID: MB 400-308333/23-A
Matrix: Solid
Analysis Batch: 308869

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 308333

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
C10-C28	<10		10		mg/Kg		06/02/16 09:32	06/07/16 20:12	1
C28-C35	<10		10		mg/Kg		06/02/16 09:32	06/07/16 20:12	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*65*		*27 - 151*	*06/02/16 09:32*	*06/07/16 20:12*	*1*

Lab Sample ID: LCS 400-308333/22-A
Matrix: Solid
Analysis Batch: 308869

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 308333

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
C10-C28			338	305		mg/Kg		90	63 - 153		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
o-Terphenyl	*102*		*27 - 151*

Lab Sample ID: 400-122218-7 MS
Matrix: Solid
Analysis Batch: 308869

Client Sample ID: DP-1 (29-30)
Prep Type: Total/NA
Prep Batch: 308333

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
C10-C28	<13	F1	445	230	F1	mg/Kg	☼	52	62 - 204		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
o-Terphenyl	*63*		*27 - 151*

Lab Sample ID: 400-122218-7 MSD
Matrix: Solid
Analysis Batch: 308869

Client Sample ID: DP-1 (29-30)
Prep Type: Total/NA
Prep Batch: 308333

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
C10-C28	<13	F1	441	235	F1	mg/Kg	☼	53	62 - 204	2	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
o-Terphenyl	*63*		*27 - 151*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 400-308530/1-A
Matrix: Solid
Analysis Batch: 308790

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<20		20		mg/Kg			06/05/16 04:26	1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 400-308530/2-A
Matrix: Solid
Analysis Batch: 308790

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride			100	97.4		mg/Kg		97	80 - 120		

Lab Sample ID: LCSD 400-308530/3-A
Matrix: Solid
Analysis Batch: 308790

Client Sample ID: Lab Control Sample Dup
Prep Type: Soluble

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride			100	97.2		mg/Kg		97	80 - 120	0	15

Lab Sample ID: 400-121955-A-1-E MS
Matrix: Solid
Analysis Batch: 308790

Client Sample ID: Matrix Spike
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride	26		112	136		mg/Kg	☼	98	80 - 120		

Lab Sample ID: 400-121955-A-1-F MSD
Matrix: Solid
Analysis Batch: 308790

Client Sample ID: Matrix Spike Duplicate
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	26		112	138		mg/Kg	☼	101	80 - 120	2	15

Lab Chronicle

Client: MWH Americas Inc
Project/Site: Lindrith B #24 Soils

TestAmerica Job ID: 400-122218-1

Client Sample ID: DP-2 (23-24)
Date Collected: 05/24/16 12:30
Date Received: 05/26/16 09:27

Lab Sample ID: 400-122218-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			307945	05/28/16 16:16	LEC	TAL PEN
	Instrument ID: NOEQUIP									

Client Sample ID: DP-2 (23-24)
Date Collected: 05/24/16 12:30
Date Received: 05/26/16 09:27

Lab Sample ID: 400-122218-1
Matrix: Solid
Percent Solids: 83.8

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.26 g	5.0 g	308786	06/06/16 11:30	GRK	TAL PEN
Total/NA	Analysis	8015B		1	5.26 g	5.0 g	308739	06/06/16 14:15	GRK	TAL PEN
	Instrument ID: CH_JOAN									
Total/NA	Prep	5035			5.26 g	5.0 g	308786	06/06/16 11:30	GRK	TAL PEN
Total/NA	Analysis	8021B		1	5.26 g	5.0 g	308738	06/06/16 14:15	GRK	TAL PEN
	Instrument ID: CH_JOAN									
Total/NA	Prep	3546			15.29 g	2.0 mL	308333	06/02/16 09:32	RDT	TAL PEN
Total/NA	Analysis	8015B		1	15.29 g	2.0 mL	308869	06/07/16 21:17	RM	TAL PEN
	Instrument ID: Eva									
Soluble	Leach	DI Leach			2.47 g	50 mL	308530	06/03/16 12:29	TAJ	TAL PEN
Soluble	Analysis	300.0		1	10 mL		309038	06/07/16 05:18	TAJ	TAL PEN
	Instrument ID: IC2									

Client Sample ID: DP-5 (22-23)
Date Collected: 05/24/16 13:00
Date Received: 05/26/16 09:27

Lab Sample ID: 400-122218-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			307945	05/28/16 16:16	LEC	TAL PEN
	Instrument ID: NOEQUIP									

Client Sample ID: DP-5 (22-23)
Date Collected: 05/24/16 13:00
Date Received: 05/26/16 09:27

Lab Sample ID: 400-122218-2
Matrix: Solid
Percent Solids: 82.0

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			6.01 g	5.0 g	308786	06/06/16 11:30	GRK	TAL PEN
Total/NA	Analysis	8015B		1	6.01 g	5.0 g	308739	06/06/16 14:49	GRK	TAL PEN
	Instrument ID: CH_JOAN									
Total/NA	Prep	5035			6.01 g	5.0 g	308786	06/06/16 11:30	GRK	TAL PEN
Total/NA	Analysis	8021B		1	6.01 g	5.0 g	308738	06/06/16 14:49	GRK	TAL PEN
	Instrument ID: CH_JOAN									
Total/NA	Prep	3546			15.41 g	2.0 mL	308333	06/02/16 09:32	RDT	TAL PEN
Total/NA	Analysis	8015B		1	15.41 g	2.0 mL	308869	06/07/16 21:27	RM	TAL PEN
	Instrument ID: Eva									

Lab Chronicle

Client: MWH Americas Inc
Project/Site: Lindrith B #24 Soils

TestAmerica Job ID: 400-122218-1

Client Sample ID: DP-5 (22-23)

Lab Sample ID: 400-122218-2
Date Collected: 05/24/16 13:00
Matrix: Solid
Date Received: 05/26/16 09:27
Percent Solids: 82.0

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			2.58 g	50 mL	308530	06/03/16 12:29	TAJ	TAL PEN
Soluble	Analysis	300.0		1	10 mL		309038	06/07/16 05:41	TAJ	TAL PEN
	Instrument ID: IC2									

Client Sample ID: DP-4 (22-23)

Lab Sample ID: 400-122218-3
Date Collected: 05/24/16 13:25
Matrix: Solid
Date Received: 05/26/16 09:27

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			307945	05/28/16 16:16	LEC	TAL PEN
	Instrument ID: NOEQUIP									

Client Sample ID: DP-4 (22-23)

Lab Sample ID: 400-122218-3
Date Collected: 05/24/16 13:25
Matrix: Solid
Date Received: 05/26/16 09:27
Percent Solids: 73.9

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.90 g	5.0 g	308786	06/06/16 11:30	GRK	TAL PEN
Total/NA	Analysis	8015B		1	4.90 g	5.0 g	308739	06/06/16 15:23	GRK	TAL PEN
	Instrument ID: CH_JOAN									
Total/NA	Prep	5035			4.90 g	5.0 g	308786	06/06/16 11:30	GRK	TAL PEN
Total/NA	Analysis	8021B		1	4.90 g	5.0 g	308738	06/06/16 15:23	GRK	TAL PEN
	Instrument ID: CH_JOAN									
Total/NA	Prep	3546			15.25 g	2.0 mL	308333	06/02/16 09:32	RDT	TAL PEN
Total/NA	Analysis	8015B		1	15.25 g	2.0 mL	308869	06/07/16 21:38	RM	TAL PEN
	Instrument ID: Eva									
Soluble	Leach	DI Leach			2.47 g	50 mL	308530	06/03/16 12:29	TAJ	TAL PEN
Soluble	Analysis	300.0		1	10 mL		309038	06/07/16 06:03	TAJ	TAL PEN
	Instrument ID: IC2									

Client Sample ID: DP-3 (22.5-23.5)

Lab Sample ID: 400-122218-4
Date Collected: 05/24/16 14:00
Matrix: Solid
Date Received: 05/26/16 09:27

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			307945	05/28/16 16:16	LEC	TAL PEN
	Instrument ID: NOEQUIP									

Lab Chronicle

Client: MWH Americas Inc
Project/Site: Lindrith B #24 Soils

TestAmerica Job ID: 400-122218-1

Client Sample ID: DP-3 (22.5-23.5)

Lab Sample ID: 400-122218-4
Date Collected: 05/24/16 14:00
Matrix: Solid
Date Received: 05/26/16 09:27
Percent Solids: 73.5

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.92 g	5.0 g	308786	06/06/16 11:30	GRK	TAL PEN
Total/NA	Analysis	8015B		1	4.92 g	5.0 g	308739	06/06/16 15:57	GRK	TAL PEN
	Instrument ID: CH_JOAN									
Total/NA	Prep	5035			4.92 g	5.0 g	308786	06/06/16 11:30	GRK	TAL PEN
Total/NA	Analysis	8021B		1	4.92 g	5.0 g	308738	06/06/16 15:57	GRK	TAL PEN
	Instrument ID: CH_JOAN									
Total/NA	Prep	3546			15.32 g	2.0 mL	308333	06/02/16 09:32	RDT	TAL PEN
Total/NA	Analysis	8015B		1	15.32 g	2.0 mL	308869	06/07/16 21:49	RM	TAL PEN
	Instrument ID: Eva									
Soluble	Leach	DI Leach			2.48 g	50 mL	308530	06/03/16 12:29	TAJ	TAL PEN
Soluble	Analysis	300.0		1	10 mL		309038	06/07/16 06:26	TAJ	TAL PEN
	Instrument ID: IC2									

Client Sample ID: DP-1 (22-23)

Lab Sample ID: 400-122218-5
Date Collected: 05/24/16 15:05
Matrix: Solid
Date Received: 05/26/16 09:27

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			307945	05/28/16 16:16	LEC	TAL PEN
	Instrument ID: NOEQUIP									

Client Sample ID: DP-1 (22-23)

Lab Sample ID: 400-122218-5
Date Collected: 05/24/16 15:05
Matrix: Solid
Date Received: 05/26/16 09:27
Percent Solids: 74.7

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			6.01 g	5.0 g	308786	06/06/16 11:30	GRK	TAL PEN
Total/NA	Analysis	8015B		1	6.01 g	5.0 g	308739	06/06/16 16:31	GRK	TAL PEN
	Instrument ID: CH_JOAN									
Total/NA	Prep	5035			6.01 g	5.0 g	308786	06/06/16 11:30	GRK	TAL PEN
Total/NA	Analysis	8021B		1	6.01 g	5.0 g	308738	06/06/16 16:31	GRK	TAL PEN
	Instrument ID: CH_JOAN									
Total/NA	Prep	3546			15.01 g	2.0 mL	308333	06/02/16 09:32	RDT	TAL PEN
Total/NA	Analysis	8015B		1	15.01 g	2.0 mL	308869	06/07/16 21:59	RM	TAL PEN
	Instrument ID: Eva									
Soluble	Leach	DI Leach			2.43 g	50 mL	308530	06/03/16 12:29	TAJ	TAL PEN
Soluble	Analysis	300.0		1	10 mL		309038	06/07/16 06:49	TAJ	TAL PEN
	Instrument ID: IC2									

Lab Chronicle

Client: MWH Americas Inc
Project/Site: Lindrith B #24 Soils

TestAmerica Job ID: 400-122218-1

Client Sample ID: DP-1 (24-25)
Date Collected: 05/24/16 15:15
Date Received: 05/26/16 09:27

Lab Sample ID: 400-122218-6
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			307945	05/28/16 16:16	LEC	TAL PEN
	Instrument ID: NOEQUIP									

Client Sample ID: DP-1 (24-25)
Date Collected: 05/24/16 15:15
Date Received: 05/26/16 09:27

Lab Sample ID: 400-122218-6
Matrix: Solid
Percent Solids: 73.6

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.28 g	5.0 g	308786	06/06/16 11:30	GRK	TAL PEN
Total/NA	Analysis	8015B		1	5.28 g	5.0 g	308739	06/06/16 17:06	GRK	TAL PEN
	Instrument ID: CH_JOAN									
Total/NA	Prep	5035			5.28 g	5.0 g	308786	06/06/16 11:30	GRK	TAL PEN
Total/NA	Analysis	8021B		1	5.28 g	5.0 g	308738	06/06/16 17:06	GRK	TAL PEN
	Instrument ID: CH_JOAN									
Total/NA	Prep	3546			15.27 g	2.0 mL	308333	06/02/16 09:32	RDT	TAL PEN
Total/NA	Analysis	8015B		1	15.27 g	2.0 mL	308869	06/07/16 22:10	RM	TAL PEN
	Instrument ID: Eva									
Soluble	Leach	DI Leach			2.55 g	50 mL	308530	06/03/16 12:29	TAJ	TAL PEN
Soluble	Analysis	300.0		1	10 mL		309038	06/07/16 07:12	TAJ	TAL PEN
	Instrument ID: IC2									

Client Sample ID: DP-1 (29-30)
Date Collected: 05/24/16 15:20
Date Received: 05/26/16 09:27

Lab Sample ID: 400-122218-7
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			307945	05/28/16 16:16	LEC	TAL PEN
	Instrument ID: NOEQUIP									

Client Sample ID: DP-1 (29-30)
Date Collected: 05/24/16 15:20
Date Received: 05/26/16 09:27

Lab Sample ID: 400-122218-7
Matrix: Solid
Percent Solids: 75.0

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.54 g	5.0 g	308786	06/06/16 11:30	GRK	TAL PEN
Total/NA	Analysis	8015B		1	5.54 g	5.0 g	308739	06/06/16 21:39	GRK	TAL PEN
	Instrument ID: CH_JOAN									
Total/NA	Prep	5035			5.54 g	5.0 g	308786	06/06/16 11:30	GRK	TAL PEN
Total/NA	Analysis	8021B		1	5.54 g	5.0 g	308738	06/06/16 21:39	GRK	TAL PEN
	Instrument ID: CH_JOAN									
Total/NA	Prep	3546			15.45 g	2.0 mL	308333	06/02/16 09:32	RDT	TAL PEN
Total/NA	Analysis	8015B		1	15.45 g	2.0 mL	308869	06/07/16 21:06	RM	TAL PEN
	Instrument ID: Eva									
Soluble	Leach	DI Leach			2.54 g	50 mL	308530	06/03/16 12:29	TAJ	TAL PEN

Lab Chronicle

Client: MWH Americas Inc
Project/Site: Lindrith B #24 Soils

TestAmerica Job ID: 400-122218-1

Client Sample ID: DP-1 (29-30)
Date Collected: 05/24/16 15:20
Date Received: 05/26/16 09:27

Lab Sample ID: 400-122218-7
Matrix: Solid
Percent Solids: 75.0

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Analysis	300.0		1	10 mL		309038	06/07/16 07:35	TAJ	TAL PEN
	Instrument ID: IC2									

Laboratory References:

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

Certification Summary

Client: MWH Americas Inc
Project/Site: Lindrith B #24 Soils

TestAmerica Job ID: 400-122218-1

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	06-30-16
Arizona	State Program	9	AZ0710	01-11-17
Arkansas DEQ	State Program	6	88-0689	09-01-16
California	ELAP	9	2510	03-31-18
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	07-31-16 *
Kentucky (UST)	State Program	4	53	06-30-16
Kentucky (WW)	State Program	4	98030	12-31-16
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	06-30-17 *
North Carolina (WW/SW)	State Program	4	314	12-31-16
Oklahoma	State Program	6	9810	08-31-16
Pennsylvania	NELAP	3	68-00467	01-31-17
Rhode Island	State Program	1	LAO00307	12-30-16
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	06-14-17
Washington	State Program	10	C915	05-15-17
West Virginia DEP	State Program	3	136	06-30-16

* Certification renewal pending - certification considered valid.

Method Summary

Client: MWH Americas Inc
Project/Site: Lindrith B #24 Soils

TestAmerica Job ID: 400-122218-1

Method	Method Description	Protocol	Laboratory
8015B	Gasoline Range Organics - (GC)	SW846	TAL PEN
8021B	Volatile Organic Compounds (GC)	SW846	TAL PEN
8015B	Diesel Range Organics (DRO) (GC)	SW846	TAL PEN
300.0	Anions, Ion Chromatography	MCAWW	TAL PEN
Moisture	Percent Moisture	EPA	TAL PEN

Protocol References:

EPA = US Environmental Protection Agency

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

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

Laboratory References:

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

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

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: Brad Barton	Lab PM: Edwards, Marty P	Carrier Tracking No(s):	COC No: 400-55303-24153.1
Client Contact: Steve Varsa	Phone: 316 305 2789	E-Mail: marty.edwards@testamericainc.com		Page: Page 1 of 1
Company: MWH Americas Inc		Analysis Requested		Job #:
Address: 11153 Aurora Avenue	Due Date Requested: Per ARF			Preservation Codes: A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - ph 4-5, Z - other (specify)
City: Des Moines	TAT Requested (days): Per ARF			
State, Zip: IA, 50322-7904	PO #: Purchase Order Requested			
Phone: 303-291-2239(Tel)	WO#: ARF # ERG-MWH-04-28-16-CW0-01			
Email: steve.varsa@us.mwhglobal.com	Project #: 40005479		400-122218 COC	Other:
Project Name: Lindrith B #24 Soils	SSOW#:			
Site: Lindrith B #24				

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	8015B_DRO - DRO C10-C28 / ORO & Chloride	8015B_GRO, 8021B	Total Number of containers	Special Instructions/Note:
			Preservation Code:		X	N	N	X	
DP-2 (23-24)	5/24/16	1230	G	Solid	N	N	1	1	2
DP-5 (22-23)	5/24/16	1300	G	Solid	N	N	1	1	2
DP-4 (22-23)	5/24/16	1325	G	Solid	N	N	1	1	2
DP-3 (22.5-23.5)	5/24/16	1400	G	Solid	N	N	1	1	2
DP-1 (22-23)	5/24/16	1505	G	Solid	N	N	1	1	2
DP-1 (24-25)	5/24/16	1515	G	Solid	N	N	1	1	2
DP-1 (29-30)	5/24/16	1520	G	Solid	N	N	1	1	2
				~~Solid~~					
				~~Solid~~					
				~~Solid~~					

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

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

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

Special Instructions/QC Requirements: Per ARF

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

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Brad Barton	5/25/16 0930	MWH	Fed Ex office	5/25/16 0930	Fed Ex
Fed Ex	5/26/16 -	Fed Ex		5/26/16 0927	TA

Custody Seals Intact: △ Yes △ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks: 0.0 C IR 6

Login Sample Receipt Checklist

Client: MWH Americas Inc

Job Number: 400-122218-1

Login Number: 122218
List Number: 1
Creator: Crawford, Lauren E

List Source: TestAmerica Pensacola

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	0.0°C IR-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 (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

APPENDIX C

envirotech

Bill of Lading

MANIFEST # 55240
GENERATOR EL PASO
POINT OF ORIGIN LINDRITH B #24
TRANSPORTER SEARA
DATE 9-30-16 JOB # 14073-0019

PHONE: (505) 632-0615 • 5796 U.S. HIGHWAY 64 • FARMINGTON, NEW MEXICO 87401

LOAD NO.	COMPLETE DESCRIPTION OF SHIPMENT					TRANSPORTING COMPANY			
	DESTINATION	MATERIAL	GRID	YDS	BBLS	TKT#	TRK#	TIME	DRIVER SIGNATURE
1	LF II-5	Cont Soil	V-11		8		54	16:05	
					8				

RESULTS			LANDFARM EMPLOYEE	NOTES
<305	CHLORIDE TEST	1		8 DRUMS NEED to BE DUMPED AND DECON
	PAINT FILTER TEST	1	Certification of above receival & placement	ENTERED OCT 04 2016

By signing as the driver/transporter, I certify the material hauled from the above location has not been added to or tampered with. I certify the material is from the above mentioned Generator/Point of Origin and that no additional material has been added or mixed into the load.

Generator Onsite Contact _____ Phone _____

Signatures required prior to distribution of the legal document. DISTRIBUTION: **White** - Company Records, **Yellow** - Billing, **Pink** - Customer, **Goldenrod** - LF Copy

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. 671851

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

DATE 10-11-16

DEL. TKT#.

GENERATOR: El Paso

BILL TO: El Paso

HAULING CO. Sierra Oil Field

DRIVER: Jose
(Print Full Name)

ORDERED BY: Jason Vaidez

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	SP8	Atlantic L 40	1	75	-		[illegible]	[illegible]
2								
3	1	Lindrith	1	75			75	
4								
5								

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

☑ Approved ☐ Denied

ATTENDANT SIGNATURE

san juan reproduction 168-6

APPENDIX D

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: 400-120373-1
Client Project/Site: Lindrith B #24

For:
MWH Americas Inc
11153 Aurora Avenue
Des Moines, Iowa 50322-7904

Attn: Steve Varsa

Authorized for release by:
4/29/2016 9:50:25 AM

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

Table of Contents

Client: MWH Americas Inc
Project/Site: Lindrith B #24

TestAmerica Job ID: 400-120373-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, 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)

Job ID: 400-120373-1

Laboratory: TestAmerica Pensacola

Narrative

Job Narrative
400-120373-1

Comments
No additional comments.

Receipt
The samples were received on 4/16/2016 9:09 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.1° 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: Lindrith B #24

TestAmerica Job ID: 400-120373-1

Client Sample ID: TRIP BLANK — Lab Sample ID: 400-120373-1

No Detections.

Client Sample ID: MW-1 — Lab Sample ID: 400-120373-2

No Detections.

Client Sample ID: MW-4 — Lab Sample ID: 400-120373-3

No Detections.

Client Sample ID: MW-5 — Lab Sample ID: 400-120373-4

No Detections.

Client Sample ID: MW-6 — Lab Sample ID: 400-120373-5

No Detections.

Client Sample ID: MW-7 — Lab Sample ID: 400-120373-6

No Detections.

This Detection Summary does not include radiochemical test results.

Sample Summary

Client: MWH Americas Inc
Project/Site: Lindrith B #24

TestAmerica Job ID: 400-120373-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-120373-1	TRIP BLANK	Water	04/14/16 08:00	04/16/16 09:09
400-120373-2	MW-1	Water	04/14/16 09:40	04/16/16 09:09
400-120373-3	MW-4	Water	04/14/16 09:50	04/16/16 09:09
400-120373-4	MW-5	Water	04/14/16 09:55	04/16/16 09:09
400-120373-5	MW-6	Water	04/14/16 10:00	04/16/16 09:09
400-120373-6	MW-7	Water	04/14/16 10:10	04/16/16 09:09

Client: MWH Americas Inc
Project/Site: Lindrith B #24

TestAmerica Job ID: 400-120373-1

Client Sample ID: TRIP BLANK
Date Collected: 04/14/16 08:00
Date Received: 04/16/16 09:09

Lab Sample ID: 400-120373-1
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			04/26/16 23:00	1
Ethylbenzene	<1.0		1.0		ug/L			04/26/16 23:00	1
Toluene	<5.0		5.0		ug/L			04/26/16 23:00	1
Xylenes, Total	<5.0		5.0		ug/L			04/26/16 23:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (pid)	*104*		*78 - 124*		*04/26/16 23:00*	*1*

Client: MWH Americas Inc
Project/Site: Lindrith B #24

TestAmerica Job ID: 400-120373-1

Client Sample ID: MW-1
Date Collected: 04/14/16 09:40
Date Received: 04/16/16 09:09

Lab Sample ID: 400-120373-2
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			04/27/16 12:47	1
Ethylbenzene	<1.0		1.0		ug/L			04/27/16 12:47	1
Toluene	<5.0		5.0		ug/L			04/27/16 12:47	1
Xylenes, Total	<5.0		5.0		ug/L			04/27/16 12:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (pid)	*100*		*78 - 124*		*04/27/16 12:47*	*1*

Client: MWH Americas Inc
Project/Site: Lindrith B #24

TestAmerica Job ID: 400-120373-1

Client Sample ID: MW-4
Date Collected: 04/14/16 09:50
Date Received: 04/16/16 09:09

Lab Sample ID: 400-120373-3
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			04/27/16 14:32	1
Ethylbenzene	<1.0		1.0		ug/L			04/27/16 14:32	1
Toluene	<5.0		5.0		ug/L			04/27/16 14:32	1
Xylenes, Total	<5.0		5.0		ug/L			04/27/16 14:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (pid)	*104*		*78 - 124*		*04/27/16 14:32*	*1*

Client: MWH Americas Inc
Project/Site: Lindrith B #24

TestAmerica Job ID: 400-120373-1

Client Sample ID: MW-5
Date Collected: 04/14/16 09:55
Date Received: 04/16/16 09:09

Lab Sample ID: 400-120373-4
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			04/27/16 13:15	1
Ethylbenzene	<1.0		1.0		ug/L			04/27/16 13:15	1
Toluene	<5.0		5.0		ug/L			04/27/16 13:15	1
Xylenes, Total	<5.0		5.0		ug/L			04/27/16 13:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (pid)	*97*		*78 - 124*		*04/27/16 13:15*	*1*

Client: MWH Americas Inc
Project/Site: Lindrith B #24

TestAmerica Job ID: 400-120373-1

Client Sample ID: MW-6
Date Collected: 04/14/16 10:00
Date Received: 04/16/16 09:09

Lab Sample ID: 400-120373-5
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			04/27/16 11:52	1
Ethylbenzene	<1.0		1.0		ug/L			04/27/16 11:52	1
Toluene	<5.0		5.0		ug/L			04/27/16 11:52	1
Xylenes, Total	<5.0		5.0		ug/L			04/27/16 11:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (pid)	*101*		*78 - 124*		*04/27/16 11:52*	*1*

Client: MWH Americas Inc
Project/Site: Lindrith B #24

TestAmerica Job ID: 400-120373-1

Client Sample ID: MW-7
Date Collected: 04/14/16 10:10
Date Received: 04/16/16 09:09

Lab Sample ID: 400-120373-6
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			04/27/16 12:20	1
Ethylbenzene	<1.0		1.0		ug/L			04/27/16 12:20	1
Toluene	<5.0		5.0		ug/L			04/27/16 12:20	1
Xylenes, Total	<5.0		5.0		ug/L			04/27/16 12:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (pid)	*101*		*78 - 124*		*04/27/16 12:20*	*1*

QC Association Summary

Client: MWH Americas Inc
Project/Site: Lindrith B #24

TestAmerica Job ID: 400-120373-1

GC VOA

Analysis Batch: 303450

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-120373-1	TRIP BLANK	Total/NA	Water	8021B	
400-120374-B-13 MS	Matrix Spike	Total/NA	Water	8021B	
400-120374-B-13 MSD	Matrix Spike Duplicate	Total/NA	Water	8021B	
LCS 400-303450/1001	Lab Control Sample	Total/NA	Water	8021B	
MB 400-303450/2	Method Blank	Total/NA	Water	8021B	

Analysis Batch: 303499

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-120248-A-6 MS	Matrix Spike	Total/NA	Water	8021B	
400-120248-A-6 MSD	Matrix Spike Duplicate	Total/NA	Water	8021B	
400-120373-2	MW-1	Total/NA	Water	8021B	
400-120373-4	MW-5	Total/NA	Water	8021B	
400-120373-5	MW-6	Total/NA	Water	8021B	
400-120373-6	MW-7	Total/NA	Water	8021B	
LCS 400-303499/1001	Lab Control Sample	Total/NA	Water	8021B	
MB 400-303499/3	Method Blank	Total/NA	Water	8021B	

Analysis Batch: 303641

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-120373-3	MW-4	Total/NA	Water	8021B	
400-120373-3 MS	MW-4	Total/NA	Water	8021B	
400-120373-3 MSD	MW-4	Total/NA	Water	8021B	
LCS 400-303641/1002	Lab Control Sample	Total/NA	Water	8021B	
MB 400-303641/3	Method Blank	Total/NA	Water	8021B	

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 400-303450/2
Matrix: Water
Analysis Batch: 303450

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			04/26/16 11:44	1
Ethylbenzene	<1.0		1.0		ug/L			04/26/16 11:44	1
Toluene	<5.0		5.0		ug/L			04/26/16 11:44	1
Xylenes, Total	<5.0		5.0		ug/L			04/26/16 11:44	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (pid)	*103*		*78 - 124*		*04/26/16 11:44*	*1*

Lab Sample ID: LCS 400-303450/1001
Matrix: Water
Analysis Batch: 303450

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	48.8		ug/L		98	85 - 115		
Ethylbenzene			50.0	48.6		ug/L		97	85 - 115		
Toluene			50.0	48.5		ug/L		97	85 - 115		
Xylenes, Total			150	146		ug/L		97	85 - 115		

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

Lab Sample ID: 400-120374-B-13 MS
Matrix: Water
Analysis Batch: 303450

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	1200		2500	3570		ug/L		94	44 - 150		
Ethylbenzene	940		2500	3390		ug/L		98	70 - 142		
Toluene	6400		2500	8830		ug/L		97	69 - 136		
Xylenes, Total	5900		7500	13000		ug/L		95	68 - 142		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
a,a,a-Trifluorotoluene (pid)	*99*		*78 - 124*

Lab Sample ID: 400-120374-B-13 MSD
Matrix: Water
Analysis Batch: 303450

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	1200		2500	3430		ug/L		88	44 - 150	4	16
Ethylbenzene	940		2500	3300		ug/L		95	70 - 142	3	16
Toluene	6400		2500	8510		ug/L		84	69 - 136	4	16
Xylenes, Total	5900		7500	12800		ug/L		91	68 - 142	2	15

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
a,a,a-Trifluorotoluene (pid)	*99*		*78 - 124*

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

Lab Sample ID: MB 400-303499/3
Matrix: Water
Analysis Batch: 303499

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			04/27/16 04:03	1
Ethylbenzene	<1.0		1.0		ug/L			04/27/16 04:03	1
Toluene	<5.0		5.0		ug/L			04/27/16 04:03	1
Xylenes, Total	<5.0		5.0		ug/L			04/27/16 04:03	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (pid)	*103*		*78 - 124*		*04/27/16 04:03*	*1*

Lab Sample ID: LCS 400-303499/1001
Matrix: Water
Analysis Batch: 303499

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			50.0	50.2		ug/L		100	85 - 115		
Ethylbenzene			50.0	49.4		ug/L		99	85 - 115		
Toluene			50.0	50.1		ug/L		100	85 - 115		
Xylenes, Total			150	148		ug/L		99	85 - 115		

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

Lab Sample ID: 400-120248-A-6 MS
Matrix: Water
Analysis Batch: 303499

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	11		50.0	64.3		ug/L		106	44 - 150		
Ethylbenzene	6.8		50.0	58.6		ug/L		104	70 - 142		
Toluene	<5.0		50.0	53.9		ug/L		108	69 - 136		
Xylenes, Total	8.6		150	170		ug/L		108	68 - 142		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
a,a,a-Trifluorotoluene (pid)	*96*		*78 - 124*

Lab Sample ID: 400-120248-A-6 MSD
Matrix: Water
Analysis Batch: 303499

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	11		50.0	62.6		ug/L		102	44 - 150	3	16
Ethylbenzene	6.8		50.0	53.7		ug/L		94	70 - 142	9	16
Toluene	<5.0		50.0	50.9		ug/L		102	69 - 136	6	16
Xylenes, Total	8.6		150	157		ug/L		99	68 - 142	8	15

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

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

Lab Sample ID: MB 400-303641/3
Matrix: Water
Analysis Batch: 303641

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			04/27/16 13:33	1
Ethylbenzene	<1.0		1.0		ug/L			04/27/16 13:33	1
Toluene	<5.0		5.0		ug/L			04/27/16 13:33	1
Xylenes, Total	<5.0		5.0		ug/L			04/27/16 13:33	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (pid)	*105*		*78 - 124*		*04/27/16 13:33*	*1*

Lab Sample ID: LCS 400-303641/1002
Matrix: Water
Analysis Batch: 303641

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			50.0	46.3		ug/L		93	85 - 115		
Ethylbenzene			50.0	46.6		ug/L		93	85 - 115		
Toluene			50.0	46.1		ug/L		92	85 - 115		
Xylenes, Total			150	140		ug/L		93	85 - 115		

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

Lab Sample ID: 400-120373-3 MS
Matrix: Water
Analysis Batch: 303641

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene	<1.0		50.0	42.7		ug/L		85	44 - 150		
Ethylbenzene	<1.0		50.0	41.9		ug/L		84	70 - 142		
Toluene	<5.0		50.0	42.2		ug/L		84	69 - 136		
Xylenes, Total	<5.0		150	127		ug/L		85	68 - 142		

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

Lab Sample ID: 400-120373-3 MSD
Matrix: Water
Analysis Batch: 303641

Client Sample ID: MW-4
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	36.7		ug/L		73	44 - 150	15	16
Ethylbenzene	<1.0		50.0	36.5		ug/L		73	70 - 142	14	16
Toluene	<5.0		50.0	36.6		ug/L		73	69 - 136	14	16
Xylenes, Total	<5.0		150	112		ug/L		75	68 - 142	12	15

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

Lab Chronicle

Client: MWH Americas Inc
Project/Site: Lindrith B #24

TestAmerica Job ID: 400-120373-1

Client Sample ID: TRIP BLANK
Date Collected: 04/14/16 08:00
Date Received: 04/16/16 09:09

Lab Sample ID: 400-120373-1
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	303450	04/26/16 23:00	MKA	TAL PEN
	Instrument ID: ETHYL									

Client Sample ID: MW-1
Date Collected: 04/14/16 09:40
Date Received: 04/16/16 09:09

Lab Sample ID: 400-120373-2
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	303499	04/27/16 12:47	GRK	TAL PEN
	Instrument ID: CH_RITA									

Client Sample ID: MW-4
Date Collected: 04/14/16 09:50
Date Received: 04/16/16 09:09

Lab Sample ID: 400-120373-3
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	303641	04/27/16 14:32	MKA	TAL PEN
	Instrument ID: ETHYL									

Client Sample ID: MW-5
Date Collected: 04/14/16 09:55
Date Received: 04/16/16 09:09

Lab Sample ID: 400-120373-4
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	303499	04/27/16 13:15	GRK	TAL PEN
	Instrument ID: CH_RITA									

Client Sample ID: MW-6
Date Collected: 04/14/16 10:00
Date Received: 04/16/16 09:09

Lab Sample ID: 400-120373-5
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	303499	04/27/16 11:52	GRK	TAL PEN
	Instrument ID: CH_RITA									

Client Sample ID: MW-7
Date Collected: 04/14/16 10:10
Date Received: 04/16/16 09:09

Lab Sample ID: 400-120373-6
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	303499	04/27/16 12:20	GRK	TAL PEN
	Instrument ID: CH_RITA									

Lab Chronicle

Client: MWH Americas Inc
Project/Site: Lindrith B #24

TestAmerica Job ID: 400-120373-1

Laboratory References:

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

Certification Summary

Client: MWH Americas Inc
Project/Site: Lindrith B #24

TestAmerica Job ID: 400-120373-1

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	06-30-16
Arizona	State Program	9	AZ0710	01-11-17
Arkansas DEQ	State Program	6	88-0689	09-01-16
California	ELAP	9	2510	03-31-18
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	05-31-16 *
Kentucky (UST)	State Program	4	53	06-30-16
Kentucky (WW)	State Program	4	98030	12-31-16
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	12-31-16
Oklahoma	State Program	6	9810	08-31-16
Pennsylvania	NELAP	3	68-00467	01-31-17
Rhode Island	State Program	1	LAO00307	12-30-16
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

* Certification renewal pending - certification considered valid.

Method Summary

Client: MWH Americas Inc
Project/Site: Lindrith B #24

TestAmerica Job ID: 400-120373-1

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

Protocol References:

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

Laboratory References:

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

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

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: Brad Barton / Clint Okeefe	Lab PM: Edwards, Marty P	Carrier Tracking No(s):	COC No: 400-54732-24009.1
Client Contact: Ms. Sarah Gardner	Phone: 316 634 1938	E-Mail: marty.edwards@testamericainc.com		Page: Page 1 of 1
Company: MWH Americas Inc		Analysis Requested		Job #:
Address: 1560 Broadway Suite 1800	Due Date Requested: Per ARF			Preservation Codes: A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - ph 4-5, Z - other (specify)
City: Denver	TAT Requested (days): Per ARF			
State, Zip: CO, 80202				
Phone: 303-291-2239(Tel)	PO #: Purchase Order Requested			
Email: sarah.gardner@mwhglobal.com	WO#: ~~ARF II~~ ERG-MWH-03-30-15-CWD-01			
Project Name: Lindrith B	Project #: 40005479			
Site: Lindrith B #24	SSOW#:			Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	8021B - BTEX 8021			Total Number of containers	Special Instructions/Note:
			Preservation Code:			X				
Trip Blank	4/14/16	0800	-	Water	N	N	2			
MW-1	4/14/16	0940	G	Water	N	N	2			
MW-4	4/14/16	0950	G	Water	N	N	2			
MW-5	4/14/16	0955	G	Water	N	N	2			
MW-6	4/14/16	1000	G	Water	N	N	2			
MW-7	4/14/16	1010	G	Water	N	N	2			

400-120373 COC

Possible Hazard Identification
[X] Non-Hazard [ ] Flammable [ ] Skin Irritant [ ] Poison B [ ] Unknown [ ] Radiological

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

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

Special Instructions/QC Requirements: per ARF

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

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by: Brad Bart	Date/Time: 4/15/16 1530	Company: MWH	Received by: FedEx office	Date/Time: 4/15/16 1536	Company: Fed Ex
Relinquished by: Fed Ex	Date/Time: 4/16/16 -	Company: Fed Ex	Received by:	Date/Time: 4/16/16 0909	Company: TA

Custody Seals Intact: [ ] Yes [ ] No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks: 2.1°C IR 6

Login Sample Receipt Checklist

Client: MWH Americas Inc

Job Number: 400-120373-1

Login Number: 120373
List Number: 1
Creator: Crawford, Lauren E

List Source: TestAmerica Pensacola

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	2.1°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 (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

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

TestAmerica Job ID: 400-128738-1
Client Project/Site: Lindrith B #24

For:
MWH Americas Inc
1560 Broadway
Suite 1800
Denver, Colorado 80202

Attn: Ms. Sarah Gardner

Carol M Webb

Authorized for release by:
10/27/2016 10:53:00 AM

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

Table of Contents

Client: MWH Americas Inc
Project/Site: Lindrith B #24

TestAmerica Job ID: 400-128738-1

Qualifiers

GC VOA

Qualifier	Qualifier Description
F2	MS/MSD RPD exceeds control limits

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
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: Lindrith B #24

TestAmerica Job ID: 400-128738-1

Job ID: 400-128738-1

Laboratory: TestAmerica Pensacola

Narrative

Job Narrative
400-128738-1

Comments
No additional comments.

Receipt
The samples were received on 10/15/2016 9:13 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.0º 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: MWH Americas Inc
Project/Site: Lindrith B #24

TestAmerica Job ID: 400-128738-1

Client Sample ID: MW-1R — Lab Sample ID: 400-128738-1

No Detections.

Client Sample ID: MW-4 — Lab Sample ID: 400-128738-2

No Detections.

Client Sample ID: MW-5 — Lab Sample ID: 400-128738-3

No Detections.

Client Sample ID: MW-6 — Lab Sample ID: 400-128738-4

No Detections.

Client Sample ID: MW-7 — Lab Sample ID: 400-128738-5

No Detections.

Client Sample ID: TB — Lab Sample ID: 400-128738-6

No Detections.

This Detection Summary does not include radiochemical test results.

Sample Summary

Client: MWH Americas Inc
Project/Site: Lindrith B #24

TestAmerica Job ID: 400-128738-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-128738-1	MW-1R	Water	10/13/16 10:15	10/15/16 09:13
400-128738-2	MW-4	Water	10/13/16 10:20	10/15/16 09:13
400-128738-3	MW-5	Water	10/13/16 10:25	10/15/16 09:13
400-128738-4	MW-6	Water	10/13/16 10:28	10/15/16 09:13
400-128738-5	MW-7	Water	10/13/16 10:32	10/15/16 09:13
400-128738-6	TB	Water	10/13/16 00:00	10/15/16 09:13

Client: MWH Americas Inc
Project/Site: Lindrith B #24

TestAmerica Job ID: 400-128738-1

Client Sample ID: MW-1R
Date Collected: 10/13/16 10:15
Date Received: 10/15/16 09:13

Lab Sample ID: 400-128738-1
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			10/25/16 21:36	1
Ethylbenzene	<1.0		1.0		ug/L			10/25/16 21:36	1
Toluene	<5.0		5.0		ug/L			10/25/16 21:36	1
Xylenes, Total	<5.0		5.0		ug/L			10/25/16 21:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (pid)	*95*		*78 - 124*		*10/25/16 21:36*	*1*

Client: MWH Americas Inc
Project/Site: Lindrith B #24

TestAmerica Job ID: 400-128738-1

Client Sample ID: MW-4
Date Collected: 10/13/16 10:20
Date Received: 10/15/16 09:13

Lab Sample ID: 400-128738-2
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			10/25/16 22:12	1
Ethylbenzene	<1.0		1.0		ug/L			10/25/16 22:12	1
Toluene	<5.0		5.0		ug/L			10/25/16 22:12	1
Xylenes, Total	<5.0		5.0		ug/L			10/25/16 22:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (pid)	*96*		*78 - 124*		*10/25/16 22:12*	*1*

Client: MWH Americas Inc
Project/Site: Lindrith B #24

TestAmerica Job ID: 400-128738-1

Client Sample ID: MW-5
Date Collected: 10/13/16 10:25
Date Received: 10/15/16 09:13

Lab Sample ID: 400-128738-3
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			10/25/16 22:49	1
Ethylbenzene	<1.0		1.0		ug/L			10/25/16 22:49	1
Toluene	<5.0		5.0		ug/L			10/25/16 22:49	1
Xylenes, Total	<5.0		5.0		ug/L			10/25/16 22:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (pid)	*94*		*78 - 124*		*10/25/16 22:49*	*1*

Client: MWH Americas Inc
Project/Site: Lindrith B #24

TestAmerica Job ID: 400-128738-1

Client Sample ID: MW-6
Date Collected: 10/13/16 10:28
Date Received: 10/15/16 09:13

Lab Sample ID: 400-128738-4
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			10/25/16 23:25	1
Ethylbenzene	<1.0		1.0		ug/L			10/25/16 23:25	1
Toluene	<5.0		5.0		ug/L			10/25/16 23:25	1
Xylenes, Total	<5.0		5.0		ug/L			10/25/16 23:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (pid)	*96*		*78 - 124*		*10/25/16 23:25*	*1*

Client: MWH Americas Inc
Project/Site: Lindrith B #24

TestAmerica Job ID: 400-128738-1

Client Sample ID: MW-7
Date Collected: 10/13/16 10:32
Date Received: 10/15/16 09:13

Lab Sample ID: 400-128738-5
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			10/26/16 00:01	1
Ethylbenzene	<1.0		1.0		ug/L			10/26/16 00:01	1
Toluene	<5.0		5.0		ug/L			10/26/16 00:01	1
Xylenes, Total	<5.0		5.0		ug/L			10/26/16 00:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (pid)	*95*		*78 - 124*		*10/26/16 00:01*	*1*

Client: MWH Americas Inc
Project/Site: Lindrith B #24

TestAmerica Job ID: 400-128738-1

Client Sample ID: TB
Date Collected: 10/13/16 00:00
Date Received: 10/15/16 09:13

Lab Sample ID: 400-128738-6
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			10/25/16 16:09	1
Ethylbenzene	<1.0		1.0		ug/L			10/25/16 16:09	1
Toluene	<5.0		5.0		ug/L			10/25/16 16:09	1
Xylenes, Total	<5.0		5.0		ug/L			10/25/16 16:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (pid)	*95*		*78 - 124*		*10/25/16 16:09*	*1*

QC Association Summary

Client: MWH Americas Inc
Project/Site: Lindrith B #24

TestAmerica Job ID: 400-128738-1

GC VOA

Analysis Batch: 328065

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-128738-1	MW-1R	Total/NA	Water	8021B	
400-128738-2	MW-4	Total/NA	Water	8021B	
400-128738-3	MW-5	Total/NA	Water	8021B	
400-128738-4	MW-6	Total/NA	Water	8021B	
400-128738-5	MW-7	Total/NA	Water	8021B	
400-128738-6	TB	Total/NA	Water	8021B	
MB 400-328065/34	Method Blank	Total/NA	Water	8021B	
LCS 400-328065/1043	Lab Control Sample	Total/NA	Water	8021B	
400-128758-B-12 MS	Matrix Spike	Total/NA	Water	8021B	
400-128758-B-12 MSD	Matrix Spike Duplicate	Total/NA	Water	8021B	

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 400-328065/34
Matrix: Water
Analysis Batch: 328065

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			10/25/16 08:33	1
Ethylbenzene	<1.0		1.0		ug/L			10/25/16 08:33	1
Toluene	<5.0		5.0		ug/L			10/25/16 08:33	1
Xylenes, Total	<5.0		5.0		ug/L			10/25/16 08:33	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (pid)	*94*		*78 - 124*		*10/25/16 08:33*	*1*

Lab Sample ID: LCS 400-328065/1043
Matrix: Water
Analysis Batch: 328065

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			50.0	46.9		ug/L		94	85 - 115		
Ethylbenzene			50.0	47.4		ug/L		95	85 - 115		
Toluene			50.0	47.4		ug/L		95	85 - 115		
Xylenes, Total			150	138		ug/L		92	85 - 115		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
a,a,a-Trifluorotoluene (pid)	*99*		*78 - 124*

Lab Sample ID: 400-128758-B-12 MS
Matrix: Water
Analysis Batch: 328065

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	50.7		ug/L		101	44 - 150		
Ethylbenzene	<1.0		50.0	45.0		ug/L		90	70 - 142		
Toluene	<5.0		50.0	47.5		ug/L		95	69 - 136		
Xylenes, Total	<5.0	F2	150	132		ug/L		88	68 - 142		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
a,a,a-Trifluorotoluene (pid)	*99*		*78 - 124*

Lab Sample ID: 400-128758-B-12 MSD
Matrix: Water
Analysis Batch: 328065

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	54.0		ug/L		108	44 - 150	6	16
Ethylbenzene	<1.0		50.0	52.9		ug/L		106	70 - 142	16	16
Toluene	<5.0		50.0	52.8		ug/L		106	69 - 136	11	16
Xylenes, Total	<5.0	F2	150	156	F2	ug/L		104	68 - 142	16	15

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
a,a,a-Trifluorotoluene (pid)	*99*		*78 - 124*

Lab Chronicle

Client: MWH Americas Inc
Project/Site: Lindrith B #24

TestAmerica Job ID: 400-128738-1

Client Sample ID: MW-1R
Date Collected: 10/13/16 10:15
Date Received: 10/15/16 09:13

Lab Sample ID: 400-128738-1
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	328065	10/25/16 21:36	SAB	TAL PEN
	Instrument ID: CH_JOAN									

Client Sample ID: MW-4
Date Collected: 10/13/16 10:20
Date Received: 10/15/16 09:13

Lab Sample ID: 400-128738-2
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	328065	10/25/16 22:12	SAB	TAL PEN
	Instrument ID: CH_JOAN									

Client Sample ID: MW-5
Date Collected: 10/13/16 10:25
Date Received: 10/15/16 09:13

Lab Sample ID: 400-128738-3
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	328065	10/25/16 22:49	SAB	TAL PEN
	Instrument ID: CH_JOAN									

Client Sample ID: MW-6
Date Collected: 10/13/16 10:28
Date Received: 10/15/16 09:13

Lab Sample ID: 400-128738-4
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	328065	10/25/16 23:25	SAB	TAL PEN
	Instrument ID: CH_JOAN									

Client Sample ID: MW-7
Date Collected: 10/13/16 10:32
Date Received: 10/15/16 09:13

Lab Sample ID: 400-128738-5
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	328065	10/26/16 00:01	SAB	TAL PEN
	Instrument ID: CH_JOAN									

Client Sample ID: TB
Date Collected: 10/13/16 00:00
Date Received: 10/15/16 09:13

Lab Sample ID: 400-128738-6
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	328065	10/25/16 16:09	SAB	TAL PEN
	Instrument ID: CH_JOAN									

Lab Chronicle

Client: MWH Americas Inc
Project/Site: Lindrith B #24

TestAmerica Job ID: 400-128738-1

Laboratory References:

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

Certification Summary

Client: MWH Americas Inc
Project/Site: Lindrith B #24

TestAmerica Job ID: 400-128738-1

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	06-30-17
Arizona	State Program	9	AZ0710	01-11-17
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	12-31-16
Louisiana	NELAP	6	30976	06-30-17
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	12-31-16
Oklahoma	State Program	6	9810	08-31-17
Pennsylvania	NELAP	3	68-00467	01-31-17
Rhode Island	State Program	1	LAO00307	12-30-16
South Carolina	State Program	4	96026	06-30-16 *
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

* Certification renewal pending - certification considered valid.

Method Summary

Client: MWH Americas Inc
Project/Site: Lindrith B #24

TestAmerica Job ID: 400-128738-1

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

SERIAL NUMBER: 80989

681-Atlanta

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

QUOTE NO.	BOTTLE ORDER NO.	ORDER - LOG-IN NO.
		C

CLIENT: EPCGPC | ADDRESS: — | PAGE: 1 OF 1

PROJECT NAME: Lindrith | PROJECT NO.: 10508834 | CLIENT PROJECT MANAGER: Clint Oberbroeckling | PROJECT LOC. (STATE): NM

SAMPLED BY: CWO | CONTRACT / P.O. NO.: AFE# ERG-MW#-09-2316-CWO-01

CLIENT PHONE: 515-210-4299 | CLIENT E-MAIL OR FAX:

TAT REQUESTED: RUSH NEEDS LAB PREAPPROVAL ☐ NORMAL 10 BUSINESS DAYS
☐ 1 DAY ☐ 2 DAYS ☐ 3 DAYS ☐ 5 DAYS ☐ 20 DAYS (Package) ☒ OTHER: See Contract

SAMPLE DISPOSAL: ☐ RETURN TO CLIENT ☒ DISPOSAL BY LAB
☐ SEE CONTRACT ☐ OTHER:

REQUESTED ANALYSIS: BTEX 8021B

400-128738 COC

POSSIBLE HAZARD IDENTIFICATION
△ NON-HAZARD
△ FLAMMABLE
△ RADIOACTIVE
△ POISON B
△ UNKNOWN
△ OTHER:

NO. OF COOLERS PER SHIPMENT:

SPECIAL INSTRUCTIONS/ CONDITIONS OF RECEIPT

LAB USE ONLY - SAMPLE NUMBER

SAMPLE DATE	SAMPLE TIME	SAMPLE IDENTIFICATION	PRESERVATIVE: HCL - Hydrochloric Acid	MATRIX: Aqueous GW, SW, WW	NUMBER OF CONTAINERS SUBMITTED
10/13/16	1015	MW-1R	2		2
	1020	MW-4	2		2
	1025	MW-5	2		2
	1028	MW-6	2		2
	1032	MW-7	2		2
↓	—	TB	2		2

RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME
EMPTY CONTAINERS				10/14/16	16:00			
RECEIVED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME
EMPTY CONTAINERS							10/15/16	0913

LABORATORY USE ONLY

RECEIVED FOR LABORATORY BY:	DATE	TIME	CUSTODY INTACT? △ YES △ NO	CUSTODY SEAL NO.	REMARKS:
					3.0°C IRS

TAL-8251 (1207)

Login Sample Receipt Checklist

Client: MWH Americas Inc

Job Number: 400-128738-1

Login Number: 128738
List Number: 1
Creator: Chambers, Cheryle A

List Source: TestAmerica Pensacola

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	745576
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	3.0°C IR5
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	