2015 ANNUAL GROUNDWATER REPORT

Johnston Fed #6A
NMOCD Case#: 3RP-207-0
Meter Code: 89232
T31N, R9W, Sec35, Unit F

SITE DETAILS

Site Location: Latitude: 36.856422 N, Longitude: -107.753819 W
Land Type: Federal
Operator: Burlington Resources Oil & Gas Company, LP

SITE BACKGROUND

- **Site Assessment:** 8/94
- **Excavation:** 9/94 (80 cy)

Environmental Remediation activities at the Johnston Fed #6A (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 (EPCGP's) program methods. Currently, the Site is operated by Burlington Resources Oil & Gas Company, LP and is active.

The Site is located on Federal land. Various site investigations have occurred from 1994 through 2015. Monitoring wells were installed in 1994 (MW-1 through MW-4), 1997 (temporary monitoring wells PZ-01 through PZ-07), 2000 (MW-5), 2006 (MW-6), and 2015 (MW-7 though MW-9). Free product recovery has been periodically conducted since 1997. Currently, groundwater sampling is conducted on a semi-annual basis and free product was observed in MW-1 in 2015.

SUMMARY OF 2015 ACTIVITIES

In July 2014, new monitoring well locations were staked and surveyed for permitting and utility locating purposes. The monitoring well advancement and installation activities were completed in accordance with the Monitoring Well Installation Work Plan, submitted on September 28, 2015.

Three new wells (MW-7, MW-8, and MW-9) and one soil boring (SB-1) were drilled in November 2015, to delineate the extent of the dissolved-phase hydrocarbons. Ground surface and casing elevations of the new monitoring wells were surveyed on November 13, 2015, by a licensed surveyor using state plane coordinates.

Monitoring wells were constructed of 2-inch-diameter, Schedule 40 polyvinyl chloride (PVC), with 0.010-inch, continuous, factory-slotted PVC screen. The well screen was installed from 15 feet below ground surface (bgs) to 40 feet bgs and bisects the observed water table located at depths ranging from 22-24 feet below the top of the monitoring well casings during 2015 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 wells were completed as stick-up wells with locking protective casings and a concrete

surface completion. Four protective bollards were installed around each new monitoring well. Borehole logs and well construction diagrams are provided in Appendix A. Monitoring well MW-7 was installed upgradient of the former pit location. Well MW-8 was installed to the west of well MW-1. Monitoring well MW-9 was installed northwest of well MW-1. Soil boring SB-1 was completed near MW-1 to evaluate remaining soil impacts in the vicinity of the former pit. Pertinent site features and soil boring/monitoring well locations are shown on maps in Figures 1 through 4.

During drilling of the soil borings, completed in October 2015, the soil sample interval exhibiting the highest photoionization detector (PID) reading was collected and placed in a 4-ounce jar for laboratory analysis. 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) gasoline-range organics, diesel-range organics , and mineral-range organics using EPA Method 8015B; and chloride according to EPA Method 300. Sample jars were stored in an ice-filled cooler and shipped under standard chain-of-custody protocols to TestAmerica Laboratories, Inc. in Pensacola, Florida (TestAmerica). The soil sample analytical report is provided in Appendix B.

Monitoring well development was performed using a well swab and stainless steel bailer until all sediment was removed and visibly clear groundwater was observed. Purged groundwater was containerized and transported to Basin Disposal, Inc. in Bloomfield, NM for disposal. Soil drums were staged on site for later disposal at Envirotech, Inc. (Envirotech), located south of Bloomfield, NM. On November 13, 2015, Sierra Oilfield Services, Inc. removed 11 drums of soil cuttings from the Site and delivered them to Envirotech. Disposal documentation is contained in Appendix C.

On May 30 and November 19, 2015, water levels were gauged at MW-1, MW-2, MW-3, MW-4, MW-5, and MW-6 and groundwater samples were collected from each well that did not contain free product using HydraSleeve™ (HydraSleeve) no-purge passive groundwater sampling devices. New monitoring wells MW-7, MW-8 and MW-9 were also gauged and sampled during the November 2015 sampling event. The HydraSleeves were set during the previous sampling event or after well installation to approximately 0.5 foot above termination depth of the monitoring wells. HydraSleeves were suspended in the well 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 where they were analyzed for 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.

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SUMMARY TABLES

Historic groundwater analytical results and well gauging data are summarized in Tables 1 and 2, respectively. When free product was present, static water level elevations were corrected for measurable thicknesses of free product (specific gravity of 0.75). Soil analytical results are summarized in Table 3.

SITE MAPS

Groundwater analytical maps and groundwater elevation contour maps from each sampling event are included as Figures 1 through 4.

ANALYTICAL LAB REPORTS

The soil and groundwater analytical lab reports are included as Appendices B and D, respectively.

GROUNDWATER RESULTS

- The groundwater flow direction at the Site is generally to the north-northeast (see Figures 2 and 4).
- Free product was observed in MW-1 in 2015. No samples were collected.
- Concentrations of benzene were not detected in any of the Site monitoring wells sampled in 2015.
- All site monitoring wells that were sampled in 2015 were either below the New Mexico Water Quality Control Commission (NMWQCC) for toluene in groundwater or not detected.
- All site monitoring wells that were sampled in 2015 were either below the NMWQCC for ethylbenzene in groundwater or not detected.
- All site monitoring wells that were sampled in 2015 were either below the NMWQCC for total xylenes in groundwater or not detected.

SOIL RESULTS

- Soil samples were collected from the borings of monitoring wells MW-7 through MW-9 and soil boring SB-1. Sample locations were based on elevated soil screening results. For benzene, all sample results were non-detect, with the exception of SB-1 (0.52 milligram per kilogram [mg/kg] of soil). Toluene results ranged from non-detect (MW-7) to a high of 0.52 mg/kg at SB-1. Ethylbenzene results ranged from non-detect (MW-7) to 170 mg/kg at SB-1. Total xylene concentrations ranged from non-detect (MW-7) to 1,500 mg/kg at SB-1. Total

BTEX concentrations exceeded the applicable limit in the NMOCD 2013 Pit Rule Guidance at SB-1.

- TPH ranged from non-detect at MW-7 to 11,492 mg/kg in SB-1. TPH concentrations exceeded the 2013 Pit Rule Guidance at SB-1.

- Concentrations of chloride were not detected in any soil sample collected in 2015.

PLANNED FUTURE ACTIVITIES

Groundwater monitoring events will be conducted on a semi-annual basis. The 2016 Annual Report will be submitted in early 2017.

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TABLES

TABLE 1 – GROUNDWATER ANALYTICAL RESULTS

TABLE 2 – GROUNDWATER ELEVATION RESULTS

TABLE 3 – SOIL ANALYTICAL RESULTS

TABLE-1 GROUNDWATER ANALYTICAL RESULTS

Johnston Fed #6A					
Location	**Date**	**Benzene (µg/L)**	**Toluene (µg/L)**	**Ethylbenzene (µg/L)**	**Total Xylenes (µg/L)**
NMWQCC Standards:		10	750	750	620
MW-1	08/10/95	605	1380	74.6	718
MW-1	12/13/95	1330	1610	235	1540
MW-1	04/11/96	775	1070	124	810
MW-1	07/23/96	676	1980	233	2090
MW-1	10/14/96	1790	8350	580	6200
MW-1	01/22/97	6420	19800	934	10700
MW-1	04/11/97	7310	23500	1010	10800
MW-1	06/18/01	NS	NS	NS	NS
MW-1	09/04/01	NS	NS	NS	NS
MW-1	03/04/02	NS	NS	NS	NS
MW-1	06/04/02	NS	NS	NS	NS
MW-1	09/10/02	NS	NS	NS	NS
MW-1	12/12/02	NS	NS	NS	NS
MW-1	03/14/03	NS	NS	NS	NS
MW-1	06/18/03	NS	NS	NS	NS
MW-1	09/16/03	NS	NS	NS	NS
MW-1	12/17/03	NS	NS	NS	NS
MW-1	03/16/04	NS	NS	NS	NS
MW-1	06/22/04	NS	NS	NS	NS
MW-1	09/22/04	NS	NS	NS	NS
MW-1	12/21/04	NS	NS	NS	NS
MW-1	03/23/05	NS	NS	NS	NS
MW-1	06/17/05	NS	NS	NS	NS
MW-1	09/20/05	NS	NS	NS	NS
MW-1	12/14/05	NS	NS	NS	NS
MW-1	03/25/06	NS	NS	NS	NS
MW-1	03/27/06	NS	NS	NS	NS
MW-1	06/06/06	NS	NS	NS	NS
MW-1	09/25/06	NS	NS	NS	NS
MW-1	12/07/06	NS	NS	NS	NS
MW-1	03/28/07	NS	NS	NS	NS
MW-1	06/18/07	NS	NS	NS	NS
MW-1	09/17/07	NS	NS	NS	NS
MW-1	12/17/07	NS	NS	NS	NS
MW-1	03/10/08	NS	NS	NS	NS
MW-1	06/17/08	NS	NS	NS	NS
MW-1	09/10/08	NS	NS	NS	NS
MW-1	12/02/08	NS	NS	NS	NS

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Johnston Fed #6A					
Location	**Date**	**Benzene (µg/L)**	**Toluene (µg/L)**	**Ethylbenzene (µg/L)**	**Total Xylenes (µg/L)**
NMWQCC Standards:		10	750	750	620
MW-1	03/05/09	NS	NS	NS	NS
MW-1	06/02/09	NS	NS	NS	NS
MW-1	08/28/09	NS	NS	NS	NS
MW-1	11/04/09	NS	NS	NS	NS
MW-1	02/17/10	NS	NS	NS	NS
MW-1	05/24/10	NS	NS	NS	NS
MW-1	09/24/10	NS	NS	NS	NS
MW-1	11/02/10	NS	NS	NS	NS
MW-1	02/07/11	611	8260	1260	11600
MW-1	05/02/11	NS	NS	NS	NS
MW-1	09/23/11	NS	NS	NS	NS
MW-1	11/01/11	NS	NS	NS	NS
MW-1	02/21/12	577	5510	916	5420
MW-1	05/14/12	NS	NS	NS	NS
MW-1	06/09/13	510	17000	1400	15000
MW-1	09/09/13	NS	NS	NS	NS
MW-1	12/12/13	NS	NS	NS	NS
MW-1	04/02/14	NS	NS	NS	NS
MW-1	10/23/14	NS	NS	NS	NS
MW-1	05/30/15	NS	NS	NS	NS
MW-1	11/19/15	NS	NS	NS	NS

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Location	**Date**	**Benzene (µg/L)**	**Toluene (µg/L)**	**Ethylbenzene (µg/L)**	**Total Xylenes (µg/L)**
NMWQCC Standards:		10	750	750	620
MW-2	12/13/95	15.1	50.8	<2.5	53.8
MW-2	04/11/96	<1	<1	<1	3.13
MW-2	07/23/96	<1	1.15	<1	4.06
MW-2	10/14/96	<1	1.04	<1	4.85
MW-2	01/22/97	<1	<1	<1	<3
MW-2	04/11/97	<1	<1	<1	<3
MW-2	10/09/00	<0.5	<0.5	<0.5	<0.5
MW-2	06/18/01	<0.5	<0.5	<0.5	<0.5
MW-2	09/04/01	NS	NS	NS	NS
MW-2	06/03/02	<0.5	<0.5	<0.5	<1
MW-2	09/10/02	NS	NS	NS	NS
MW-2	12/12/02	NS	NS	NS	NS
MW-2	03/14/03	NS	NS	NS	NS
MW-2	06/18/03	NS	NS	NS	NS
MW-2	09/16/03	NS	NS	NS	NS
MW-2	12/17/03	NS	NS	NS	NS
MW-2	03/16/04	NS	NS	NS	NS
MW-2	06/22/04	NS	NS	NS	NS
MW-2	09/22/04	NS	NS	NS	NS
MW-2	12/21/04	NS	NS	NS	NS
MW-2	03/23/05	NS	NS	NS	NS
MW-2	06/17/05	NS	NS	NS	NS
MW-2	09/20/05	NS	NS	NS	NS
MW-2	12/14/05	NS	NS	NS	NS
MW-2	03/27/06	NS	NS	NS	NS
MW-2	06/06/06	NS	NS	NS	NS
MW-2	09/25/06	NS	NS	NS	NS
MW-2	12/07/06	NS	NS	NS	NS
MW-2	03/28/07	NS	NS	NS	NS
MW-2	06/18/07	NS	NS	NS	NS
MW-2	09/17/07	NS	NS	NS	NS
MW-2	12/17/07	NS	NS	NS	NS
MW-2	03/10/08	NS	NS	NS	NS
MW-2	06/17/08	NS	NS	NS	NS
MW-2	09/10/08	NS	NS	NS	NS
MW-2	12/02/08	NS	NS	NS	NS

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Johnston Fed #6A					
Location	**Date**	**Benzene (µg/L)**	**Toluene (µg/L)**	**Ethylbenzene (µg/L)**	**Total Xylenes (µg/L)**
NMWQCC Standards:		10	750	750	620
MW-2	03/05/09	NS	NS	NS	NS
MW-2	06/02/09	NS	NS	NS	NS
MW-2	08/28/09	NS	NS	NS	NS
MW-2	11/04/09	NS	NS	NS	NS
MW-2	02/17/10	NS	NS	NS	NS
MW-2	05/24/10	NS	NS	NS	NS
MW-2	09/24/10	NS	NS	NS	NS
MW-2	11/02/10	NS	NS	NS	NS
MW-2	02/07/11	NS	NS	NS	NS
MW-2	05/02/11	NS	NS	NS	NS
MW-2	09/23/11	NS	NS	NS	NS
MW-2	11/01/11	NS	NS	NS	NS
MW-2	02/21/12	NS	NS	NS	NS
MW-2	05/14/12	NS	NS	NS	NS
MW-2	06/09/13	<0.14	<0.30	<0.20	<0.23
MW-2	09/09/13	<0.14	<0.30	<0.20	<0.23
MW-2	12/12/13	<0.20	<0.38	<0.20	<0.65
MW-2	04/02/14	<0.20	<0.38	<0.20	<0.65
MW-2	10/23/14	<0.38	<0.70	<0.50	<1.6
MW-2	05/30/15	<1.0	<5.0	<1.0	<5.0
MW-2	11/19/15	<1.0	<1.0	<1.0	<3.0

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Location	**Date**	**Benzene (µg/L)**	**Toluene (µg/L)**	**Ethylbenzene (µg/L)**	**Total Xylenes (µg/L)**
NMWQCC Standards:		10	750	750	620
MW-3	12/13/95	488	1020	104	1120
MW-3	04/11/96	772	231	113	379
MW-3	07/25/96	687	112	115	209
MW-3	10/14/96	900	240	140	340
MW-3	01/22/97	907	234	215	340
MW-3	04/11/97	944	209	223	322
MW-3	06/18/01	510	23	160	98
MW-3	09/04/01	NS	NS	NS	NS
MW-3	06/03/02	380	<5	110	29
MW-3	12/12/02	NS	NS	NS	NS
MW-3	03/14/03	NS	NS	NS	NS
MW-3	06/18/03	NS	NS	NS	NS
MW-3	09/16/03	NS	NS	NS	NS
MW-3	12/17/03	NS	NS	NS	NS
MW-3	03/16/04	NS	NS	NS	NS
MW-3	06/22/04	NS	NS	NS	NS
MW-3	09/22/04	NS	NS	NS	NS
MW-3	12/21/04	NS	NS	NS	NS
MW-3	03/23/05	NS	NS	NS	NS
MW-3	06/17/05	NS	NS	NS	NS
MW-3	09/20/05	NS	NS	NS	NS
MW-3	12/14/05	NS	NS	NS	NS
MW-3	03/25/06	NS	NS	NS	NS
MW-3	03/27/06	NS	NS	NS	NS
MW-3	06/06/06	NS	NS	NS	NS
MW-3	09/25/06	NS	NS	NS	NS
MW-3	12/07/06	NS	NS	NS	NS
MW-3	03/28/07	NS	NS	NS	NS
MW-3	06/18/07	NS	NS	NS	NS
MW-3	09/17/07	NS	NS	NS	NS
MW-3	12/17/07	NS	NS	NS	NS
MW-3	03/10/08	NS	NS	NS	NS
MW-3	06/17/08	NS	NS	NS	NS
MW-3	09/10/08	NS	NS	NS	NS
MW-3	12/02/08	NS	NS	NS	NS

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Location	**Date**	**Benzene (µg/L)**	**Toluene (µg/L)**	**Ethylbenzene (µg/L)**	**Total Xylenes (µg/L)**
NMWQCC Standards:		10	750	750	620
MW-3	03/05/09	1.2	17.9	9.4	59
MW-3	06/02/09	NS	NS	NS	NS
MW-3	08/28/09	NS	NS	NS	NS
MW-3	11/04/09	NS	NS	NS	NS
MW-3	02/17/10	3.2	4.5	3.4	25.9
MW-3	05/24/10	NS	NS	NS	NS
MW-3	09/24/10	NS	NS	NS	NS
MW-3	11/02/10	NS	NS	NS	NS
MW-3	02/07/11	8.6	1.3	6	13.1
MW-3	05/02/11	NS	NS	NS	NS
MW-3	09/23/11	NS	NS	NS	NS
MW-3	11/01/11	NS	NS	NS	NS
MW-3	02/21/12	4.7	7.6	23.1	19.1
MW-3	05/14/12	NS	NS	NS	NS
MW-3	06/09/13	<0.14	0.71 J	49	12
MW-3	09/09/13	0.78 J	0.48 J	30	2.2 J
MW-3	12/12/13	<0.20	51	23	5.4
MW-3	04/02/14	3.5	57	19	8.7
MW-3	10/23/14	<0.38	<0.70	6.2	<1.6
MW-3	05/30/15	<1.0	<5.0	4.6	17
MW-3	11/19/15	<1.0	2.5	2.1	<3.0

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NMWQCC Standards:		10	750	750	620
MW-4	12/13/95	545	121	114	177
MW-4	04/11/96	591	160	133	193
MW-4	07/25/96	793	96.4	172	174
MW-4	10/14/96	800	100	130	235
MW-4	01/22/97	899	26.7	157	186
MW-4	04/11/97	703	20.1	149	138
MW-4	10/09/00	81	36	45	20
MW-4	06/18/01	490	70	91	96
MW-4	09/04/01	NS	NS	NS	NS
MW-4	06/03/02	16	<5	17	2.2
MW-4	09/10/02	NS	NS	NS	NS
MW-4	12/12/02	NS	NS	NS	NS
MW-4	03/14/03	NS	NS	NS	NS
MW-4	06/18/03	<1	<1	1.7	<3
MW-4	09/16/03	NS	NS	NS	NS
MW-4	12/17/03	NS	NS	NS	NS
MW-4	03/16/04	NS	NS	NS	NS
MW-4	06/22/04	0.56 J	1.1	2.8	<1
MW-4	09/22/04	NS	NS	NS	NS
MW-4	12/21/04	NS	NS	NS	NS
MW-4	03/23/05	<1	<1	<1	0.99
MW-4	06/17/05	NS	NS	NS	NS
MW-4	09/20/05	NS	NS	NS	NS
MW-4	12/14/05	NS	NS	NS	NS
MW-4	03/27/06	0.39 J	<1	<1	0.83 J
MW-4	06/06/06	NS	NS	NS	NS
MW-4	09/25/06	NS	NS	NS	NS
MW-4	12/07/06	NS	NS	NS	NS
MW-4	03/28/07	0.39 J	0.6 J	<1	1.7 J
MW-4	06/18/07	NS	NS	NS	NS
MW-4	09/17/07	NS	NS	NS	NS
MW-4	12/17/07	NS	NS	NS	NS
MW-4	03/10/08	0.25 J	<1	<1	<2
MW-4	06/17/08	NS	NS	NS	NS
MW-4	09/10/08	NS	NS	NS	NS
MW-4	12/02/08	NS	NS	NS	NS

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NMWQCC Standards:		10	750	750	620
MW-4	03/05/09	NS	NS	NS	NS
MW-4	06/02/09	NS	NS	NS	NS
MW-4	08/28/09	NS	NS	NS	NS
MW-4	11/04/09	NS	NS	NS	NS
MW-4	02/17/10	NS	NS	NS	NS
MW-4	05/24/10	NS	NS	NS	NS
MW-4	09/24/10	NS	NS	NS	NS
MW-4	11/02/10	NS	NS	NS	NS
MW-4	02/07/11	NS	NS	NS	NS
MW-4	05/02/11	NS	NS	NS	NS
MW-4	09/23/11	NS	NS	NS	NS
MW-4	11/01/11	NS	NS	NS	NS
MW-4	02/21/12	NS	NS	NS	NS
MW-4	05/14/12	NS	NS	NS	NS
MW-4	06/09/13	<0.14	<0.30	<0.20	<0.23
MW-4	09/09/13	<0.14	<0.30	<0.20	<0.23
MW-4	12/12/13	<0.20	0.51 J	<0.20	<0.65
MW-4	04/02/14	<0.20	1.2 J	<0.20	<0.65
MW-4	10/23/14	<0.38	<0.70	<0.50	<1.6
MW-4	05/30/15	<1.0	<5.0	<1.0	<5.0
MW-4	11/19/15	<1.0	<1.0	<1.0	<3.0

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Johnston Fed #6A					
Location	**Date**	**Benzene (µg/L)**	**Toluene (µg/L)**	**Ethylbenzene (µg/L)**	**Total Xylenes (µg/L)**
NMWQCC Standards:		10	750	750	620
MW-5	08/30/00	130	180	56	650
MW-5	06/18/01	170	300	68	630
MW-5	09/04/01	NS	NS	NS	NS
MW-5	06/04/02	43	87	31	360
MW-5	09/10/02	NS	NS	NS	NS
MW-5	12/12/02	NS	NS	NS	NS
MW-5	03/14/03	NS	NS	NS	NS
MW-5	06/18/03	NS	NS	NS	NS
MW-5	09/16/03	NS	NS	NS	NS
MW-5	12/17/03	NS	NS	NS	NS
MW-5	03/16/04	NS	NS	NS	NS
MW-5	06/22/04	NS	NS	NS	NS
MW-5	09/22/04	NS	NS	NS	NS
MW-5	12/21/04	NS	NS	NS	NS
MW-5	03/23/05	NS	NS	NS	NS
MW-5	06/17/05	NS	NS	NS	NS
MW-5	09/20/05	NS	NS	NS	NS
MW-5	12/14/05	NS	NS	NS	NS
MW-5	03/27/06	NS	NS	NS	NS
MW-5	06/06/06	NS	NS	NS	NS
MW-5	09/25/06	NS	NS	NS	NS
MW-5	12/07/06	NS	NS	NS	NS
MW-5	03/28/07	NS	NS	NS	NS
MW-5	06/18/07	NS	NS	NS	NS
MW-5	09/17/07	NS	NS	NS	NS
MW-5	12/17/07	NS	NS	NS	NS
MW-5	03/10/08	NS	NS	NS	NS
MW-5	06/17/08	NS	NS	NS	NS
MW-5	09/10/08	NS	NS	NS	NS
MW-5	12/02/08	NS	NS	NS	NS

TABLE-1 GROUNDWATER ANALYTICAL RESULTS

Johnston Fed #6A					
Location	**Date**	**Benzene (µg/L)**	**Toluene (µg/L)**	**Ethylbenzene (µg/L)**	**Total Xylenes (µg/L)**
NMWQCC Standards:		10	750	750	620
MW-5	03/05/09	1.9	9.8	44	120
MW-5	06/02/09	NS	NS	NS	NS
MW-5	08/28/09	NS	NS	NS	NS
MW-5	11/04/09	NS	NS	NS	NS
MW-5	02/17/10	1.7	2.6	2.7	19.2
MW-5	05/24/10	NS	NS	NS	NS
MW-5	09/24/10	NS	NS	NS	NS
MW-5	11/02/10	NS	NS	NS	NS
MW-5	02/07/11	11.9	920	177	1870
MW-5	05/02/11	NS	NS	NS	NS
MW-5	09/23/11	NS	NS	NS	NS
MW-5	11/01/11	NS	NS	NS	NS
MW-5	02/21/12	2.7	1.7	5.2	85.5
MW-5	05/14/12	NS	NS	NS	NS
MW-5	06/09/13	<0.14	<0.30	0.31 J	0.79 J
MW-5	09/09/13	<0.14	<0.30	<0.20	<0.23
MW-5	12/12/13	<0.20	<0.38	<0.20	<0.65
MW-5	04/02/14	<0.20	<0.38	<0.20	<0.65
MW-5	10/23/14	<0.38	0.96 J	<0.50	1.9 J
MW-5	05/30/15	<1.0	<5.0	<1.0	2.1 J
MW-5	11/19/15	<1.0	<1.0	<1.0	<3.0

TABLE-1 GROUNDWATER ANALYTICAL RESULTS

Johnston Fed #6A					
Location	**Date**	**Benzene (µg/L)**	**Toluene (µg/L)**	**Ethylbenzene (µg/L)**	**Total Xylenes (µg/L)**
NMWQCC Standards:		10	750	750	620
MW-6	12/07/06	NS	NS	NS	NS
MW-6	03/28/07	<1	<1	<1	<2
MW-6	06/18/07	NS	NS	NS	NS
MW-6	09/17/07	NS	NS	NS	NS
MW-6	12/17/07	NS	NS	NS	NS
MW-6	03/10/08	9.4	<1	0.5 J	139
MW-6	03/05/09	<1	<1	<1	<2
MW-6	06/02/09	NS	NS	NS	NS
MW-6	08/28/09	NS	NS	NS	NS
MW-6	11/04/09	NS	NS	NS	NS
MW-6	05/24/10	NS	NS	NS	NS
MW-6	09/24/10	NS	NS	NS	NS
MW-6	11/02/10	NS	NS	NS	NS
MW-6	02/07/11	<1	<1	<1	<2
MW-6	05/02/11	NS	NS	NS	NS
MW-6	09/23/11	NS	NS	NS	NS
MW-6	11/01/11	NS	NS	NS	NS
MW-6	02/21/12	<1	<1	<1	<2
MW-6	05/14/12	NS	NS	NS	NS
MW-6	06/09/13	<0.14	<0.30	<0.20	<0.23
MW-6	09/09/13	<0.14	<0.30	<0.20	<0.23
MW-6	12/12/13	<0.20	<0.38	<0.20	<0.65
MW-6	10/23/14	<0.38	<0.70	<0.50	<1.6
MW-6	04/02/14	<0.20	<0.38	<0.20	<0.65
MW-6	05/30/15	<1.0	<5.0	<1.0	<5.0
MW-6	11/19/15	<1.0	<1.0	<1.0	<3.0

TABLE-1 GROUNDWATER ANALYTICAL RESULTS

Johnston Fed #6A					
Location	**Date**	**Benzene (µg/L)**	**Toluene (µg/L)**	**Ethylbenzene (µg/L)**	**Total Xylenes (µg/L)**
NMWQCC Standards:		10	750	750	620
MW-7	11/19/15	<1.0	<1.0	<1.0	<3.0
MW-8	11/19/15	<1.0	<1.0	<1.0	<3.0
MW-9	11/19/15	<1.0	<1.0	<1.0	<3.0
PZ-1	08/28/97	991	2480	348	3740
PZ-2	08/28/97	3.82	<1	<1	3.59
PH(PZ)-3	08/29/97	44.3	129	20.8	184
GP-1	01/05/06	<1.0	0.55	<1.0	1.3
GP-2	01/05/06	<1.0	0.89	<1.0	2.2

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

Geopobe points GP-3 and GP-4 were dry, and were not sampled.

TABLE 2 - GROUNDWATER ELEVATION RESULTS

Johnston Fed #6A						
Location	Date	TOC	Depth to Water (ft.)	Depth to LNAPL (ft.)	LNAPL Thickness (ft.)	GW Elevation (ft.)
MW-1	08/10/95	6001.88	37.24	NR		5964.64
MW-1	12/13/95	6001.88	37.35	NR		5964.53
MW-1	04/11/96	6001.88	37.48	NR		5964.40
MW-1	07/23/96	6001.88	37.55	NR		5964.33
MW-1	10/14/96	6001.88	37.22	37.07	0.15	5964.78
MW-1	01/22/97	6001.88	38.26	37.43	0.83	5964.25
MW-1	04/11/97	6001.88	38.31	37.20	1.11	5964.41
MW-1	06/18/01	6001.88	38.21	37.34	0.87	5964.33
MW-1	09/04/01	6001.88	38.27	37.54	0.73	5964.16
MW-1	03/04/02	6001.88	38.35	37.74	0.61	5963.99
MW-1	06/04/02	6001.88	38.14	37.81	0.33	5963.99
MW-1	09/10/02	6001.88	38.24	38.00	0.23	5963.83
MW-1	12/12/02	6001.88	38.11	38.01	0.10	5963.85
MW-1	03/14/03	6001.88	38.08	37.95	0.13	5963.90
MW-1	06/18/03	6001.88	38.47	37.88	0.59	5963.86
MW-1	09/16/03	6001.88	38.25	38.17	0.08	5963.69
MW-1	12/17/03	6001.88	38.23	38.13	0.10	5963.73
MW-1	03/16/04	6001.88	38.57	37.90	0.67	5963.82
MW-1	06/22/04	6001.88	38.65	37.90	0.75	5963.80
MW-1	09/22/04	6001.88	38.60	38.21	0.39	5963.58
MW-1	12/21/04	6001.88	38.38	38.20	0.18	5963.64
MW-1	03/23/05	6001.88	38.50	37.95	0.55	5963.80
MW-1	06/17/05	6001.88	38.62	38.13	0.49	5963.63
MW-1	09/20/05	6001.88	38.83	38.40	0.43	5963.38
MW-1	12/14/05	6001.88	38.72	38.31	0.41	5963.47
MW-1	03/25/06	6001.88	38.66	38.15	0.51	5963.61
MW-1	03/27/06	6001.88	38.62	38.05	0.57	5963.69
MW-1	06/06/06	6001.88	38.84	38.29	0.55	5963.46
MW-1	09/25/06	6001.88	39.01	38.51	0.50	5963.25
MW-1	12/07/06	6001.88	38.33	ND		5963.55
MW-1	03/28/07	6001.88	38.09	38.02	0.07	5963.85
MW-1	06/18/07	6001.88	38.86	38.09	0.77	5963.60
MW-1	09/17/07	6001.88	39.32	38.40	0.92	5963.25
MW-1	12/17/07	6001.88	39.13	38.42	0.71	5963.29
MW-1	03/10/08	6001.88	38.24	37.90	0.34	5963.90
MW-1	06/17/08	6001.88	37.71	37.38	0.33	5964.42
MW-1	09/10/08	6001.88	37.72	37.41	0.31	5964.40
MW-1	12/02/08	6001.88	37.89	37.51	0.38	5964.28

TABLE 2 - GROUNDWATER ELEVATION RESULTS

Johnston Fed #6A						
Location	**Date**	**TOC**	**Depth to Water (ft.)**	**Depth to LNAPL (ft.)**	**LNAPL Thickness (ft.)**	**GW Elevation (ft.)**
MW-1	03/05/09	6001.88	37.63	37.20	0.43	5964.58
MW-1	06/02/09	6001.88	37.83	37.49	0.34	5964.31
MW-1	08/28/09	6001.88	37.99	37.65	0.34	5964.15
MW-1	11/04/09	6001.88	37.77	ND		5964.11
MW-1	02/17/10	6001.88	38.11	37.60	0.51	5964.16
MW-1	05/24/10	6001.88	38.27	37.81	0.46	5963.96
MW-1	09/24/10	6001.88	38.46	38.05	0.41	5963.73
MW-1	11/02/10	6001.88	38.55	38.16	0.39	5963.63
MW-1	02/07/11	6001.88	38.37	37.93	0.44	5963.84
MW-1	05/02/11	6001.88	38.57	ND		5963.31
MW-1	09/23/11	6001.88	38.75	38.32	0.43	5963.46
MW-1	11/01/11	6001.88	38.80	ND		5963.08
MW-1	02/21/12	6001.88	38.65	38.21	0.44	5963.56
MW-1	05/14/12	6001.88	38.84	38.36	0.48	5963.40
MW-1	06/09/13	6001.88	39.22	38.41	0.81	5963.27
MW-1	09/09/13	6001.88	39.21	38.60	0.61	5963.13
MW-1	12/12/13	6001.88	39.01	38.65	0.36	5963.14
MW-1	04/02/14	6001.88	38.94	38.61	0.33	5963.19
MW-1	10/23/14	6001.88	39.03	38.82	0.21	5963.01
MW-1	05/30/15	6001.88	39.04	38.86	0.18	5962.98
MW-1	11/19/15	6001.88	38.70	38.58	0.12	5963.27

TABLE 2 - GROUNDWATER ELEVATION RESULTS

Johnston Fed #6A						
Location	Date	TOC	Depth to Water (ft.)	Depth to LNAPL (ft.)	LNAPL Thickness (ft.)	GW Elevation (ft.)
MW-2	12/13/95	6001.82	37.39	NR		5964.43
MW-2	04/11/96	6001.82	37.47	NR		5964.35
MW-2	07/23/96	6001.82	37.60	NR		5964.22
MW-2	10/14/96	6001.82	37.70	NR		5964.12
MW-2	01/22/97	6001.82	37.66	NR		5964.16
MW-2	04/11/97	6001.82	37.58	NR		5964.24
MW-2	10/09/00	6001.82	37.56	NR		5964.26
MW-2	06/18/01	6001.82	37.58	NR		5964.24
MW-2	09/04/01	6001.82	37.75	NR		5964.07
MW-2	06/03/02	6001.82	37.88	NR		5963.94
MW-2	09/10/02	6001.82	38.02	NR		5963.80
MW-2	12/12/02	6001.82	38.01	NR		5963.81
MW-2	03/14/03	6001.82	37.97	ND		5963.85
MW-2	06/18/03	6001.82	38.01	ND		5963.81
MW-2	09/16/03	6001.82	38.18	ND		5963.64
MW-2	12/17/03	6001.82	38.13	ND		5963.69
MW-2	03/16/04	6001.82	38.04	ND		5963.78
MW-2	06/22/04	6001.82	38.05	ND		5963.77
MW-2	09/22/04	6001.82	38.26	ND		5963.56
MW-2	12/21/04	6001.82	38.20	ND		5963.62
MW-2	03/23/05	6001.82	38.07	ND		5963.75
MW-2	06/17/05	6001.82	38.07	ND		5963.75
MW-2	09/20/05	6001.82	38.33	ND		5963.49
MW-2	12/14/05	6001.82	38.24	ND		5963.58
MW-2	03/27/06	6001.82	38.16	ND		5963.66
MW-2	06/06/06	6001.82	38.22	ND		5963.60
MW-2	09/25/06	6001.82	38.42	ND		5963.40
MW-2	12/07/06	6001.82	38.35	ND		5963.47
MW-2	03/28/07	6001.82	38.13	ND		5963.69
MW-2	06/18/07	6001.82	38.14	ND		5963.68
MW-2	09/17/07	6001.82	38.35	ND		5963.47
MW-2	12/17/07	6001.82	38.33	ND		5963.49
MW-2	03/10/08	6001.82	37.80	ND		5964.02
MW-2	06/17/08	6001.82	37.41	ND		5964.41
MW-2	09/10/08	6001.82	37.40	ND		5964.42
MW-2	12/02/08	6001.82	37.39	ND		5964.43

TABLE 2 - GROUNDWATER ELEVATION RESULTS

Johnston Fed #6A						
Location	**Date**	**TOC**	**Depth to Water (ft.)**	**Depth to LNAPL (ft.)**	**LNAPL Thickness (ft.)**	**GW Elevation (ft.)**
MW-2	03/05/09	6001.82	37.38	ND		5964.44
MW-2	06/02/09	6001.82	37.40	ND		5964.42
MW-2	08/28/09	6001.82	37.60	ND		5964.22
MW-2	11/04/09	6001.82	37.73	ND		5964.09
MW-2	02/17/10	6001.82	37.76	ND		5964.06
MW-2	05/24/10	6001.82	37.77	ND		5964.05
MW-2	09/24/10	6001.82	37.97	ND		5963.85
MW-2	11/02/10	6001.82	38.01	ND		5963.81
MW-2	02/07/11	6001.82	38.05	ND		5963.77
MW-2	05/02/11	6001.82	38.09	ND		5963.73
MW-2	09/23/11	6001.82	38.25	38.23	0.02	5963.59
MW-2	11/01/11	6001.82	38.26	ND		5963.56
MW-2	02/21/12	6001.82	38.31	ND		5963.51
MW-2	05/14/12	6001.82	38.36	ND		5963.46
MW-2	06/09/13	6001.82	38.56	ND		5963.26
MW-2	09/09/13	6001.82	38.68	ND		5963.14
MW-2	12/12/13	6001.82	38.67	ND		5963.15
MW-2	04/02/14	6001.82	38.63	ND		5963.19
MW-2	10/23/14	6001.82	38.79	ND		5963.03
MW-2	05/30/15	6001.82	38.82	ND		5963.00
MW-2	11/19/15	6001.82	38.56	ND		5963.26

TABLE 2 - GROUNDWATER ELEVATION RESULTS

Johnston Fed #6A						
Location	Date	TOC	Depth to Water (ft.)	Depth to LNAPL (ft.)	LNAPL Thickness (ft.)	GW Elevation (ft.)
MW-3	12/13/95	6001.21	37.11	NR		5964.10
MW-3	04/11/96	6001.21	37.17	NR		5964.04
MW-3	07/25/96	6001.21	37.30	NR		5963.91
MW-3	10/14/96	6001.21	37.40	NR		5963.81
MW-3	01/22/97	6001.21	37.35	NR		5963.86
MW-3	04/11/97	6001.21	37.29	NR		5963.92
MW-3	06/18/01	6001.21	37.26	NR		5963.95
MW-3	09/04/01	6001.21	37.42	NR		5963.79
MW-3	06/03/02	6001.21	37.55	NR		5963.66
MW-3	12/12/02	6001.21	37.70	NR		5963.51
MW-3	03/14/03	6001.21	37.66	ND		5963.55
MW-3	06/18/03	6001.21	37.87	37.63	0.24	5963.52
MW-3	09/16/03	6001.21	37.89	37.87	0.02	5963.34
MW-3	12/17/03	6001.21	37.80	ND		5963.41
MW-3	03/16/04	6001.21	37.85	37.72	0.13	5963.46
MW-3	06/22/04	6001.21	37.88	37.72	0.16	5963.45
MW-3	09/22/04	6001.21	38.07	37.96	0.11	5963.23
MW-3	12/21/04	6001.21	37.96	37.93	0.03	5963.28
MW-3	03/23/05	6001.21	37.88	37.80	0.08	5963.39
MW-3	06/17/05	6001.21	37.92	ND		5963.29
MW-3	09/20/05	6001.21	38.16	ND		5963.05
MW-3	12/14/05	6001.21	38.09	ND		5963.12
MW-3	03/25/06	6001.21	38.09	ND		5963.12
MW-3	03/27/06	6001.21	37.88	ND		5963.33
MW-3	06/06/06	6001.21	37.98	ND		5963.23
MW-3	09/25/06	6001.21	38.16	ND		5963.05
MW-3	12/07/06	6001.21	38.06	ND		5963.15
MW-3	03/28/07	6001.21	37.87	ND		5963.34
MW-3	06/18/07	6001.21	37.86	ND		5963.35
MW-3	09/17/07	6001.21	38.10	ND		5963.11
MW-3	12/17/07	6001.21	38.09	ND		5963.12
MW-3	03/10/08	6001.21	37.80	ND		5963.41
MW-3	06/17/08	6001.21	37.10	ND		5964.11
MW-3	09/10/08	6001.21	37.13	ND		5964.08
MW-3	12/02/08	6001.21	37.14	ND		5964.07

TABLE 2 - GROUNDWATER ELEVATION RESULTS

Johnston Fed #6A						
Location	**Date**	**TOC**	**Depth to Water (ft.)**	**Depth to LNAPL (ft.)**	**LNAPL Thickness (ft.)**	**GW Elevation (ft.)**
MW-3	03/05/09	6001.21	37.14	ND		5964.07
MW-3	06/02/09	6001.21	37.12	ND		5964.09
MW-3	08/28/09	6001.21	37.40	ND		5963.81
MW-3	11/04/09	6001.21	37.52	ND		5963.69
MW-3	02/17/10	6001.21	37.53	ND		5963.68
MW-3	05/24/10	6001.21	37.53	ND		5963.68
MW-3	09/24/10	6001.21	37.72	ND		5963.49
MW-3	11/02/10	6001.21	37.79	ND		5963.42
MW-3	02/07/11	6001.21	37.83	ND		5963.38
MW-3	05/02/11	6001.21	38.86	ND		5962.35
MW-3	09/23/11	6001.21	38.02	ND		5963.19
MW-3	11/01/11	6001.21	38.06	ND		5963.15
MW-3	02/21/12	6001.21	38.11	ND		5963.10
MW-3	05/14/12	6001.21	38.15	ND		5963.06
MW-3	06/09/13	6001.21	38.32	ND		5962.89
MW-3	09/09/13	6001.21	38.48	ND		5962.73
MW-3	12/12/13	6001.21	38.45	ND		5962.76
MW-3	04/02/14	6001.21	38.42	ND		5962.79
MW-3	10/23/14	6001.21	38.57	ND		5962.64
MW-3	05/30/15	6001.21	38.60	ND		5962.61
MW-3	11/19/15	6001.21	38.31	ND		5962.90

TABLE 2 - GROUNDWATER ELEVATION RESULTS

Johnston Fed #6A						
Location	Date	TOC	Depth to Water (ft.)	Depth to LNAPL (ft.)	LNAPL Thickness (ft.)	GW Elevation (ft.)
MW-4	12/13/95	6001.26	37.34	NR		5963.92
MW-4	04/11/96	6001.26	37.42	NR		5963.84
MW-4	07/25/96	6001.26	37.54	NR		5963.72
MW-4	10/14/96	6001.26	37.64	NR		5963.62
MW-4	01/22/97	6001.26	37.60	NR		5963.66
MW-4	04/11/97	6001.26	37.47	NR		5963.79
MW-4	10/09/00	6001.26	37.56	NR		5963.70
MW-4	06/18/01	6001.26	37.53	NR		5963.73
MW-4	09/04/01	6001.26	37.66	NR		5963.60
MW-4	06/03/02	6001.26	37.80	NR		5963.46
MW-4	09/10/02	6001.26	37.95	NR		5963.32
MW-4	12/12/02	6001.26	38.95	NR		5962.31
MW-4	03/14/03	6001.26	37.91	ND		5963.36
MW-4	06/18/03	6001.26	37.95	ND		5963.31
MW-4	09/16/03	6001.26	38.17	ND		5963.09
MW-4	12/17/03	6001.26	38.06	ND		5963.20
MW-4	03/16/04	6001.26	38.00	ND		5963.26
MW-4	06/22/04	6001.26	38.04	ND		5963.22
MW-4	09/22/04	6001.26	38.27	ND		5962.99
MW-4	12/21/04	6001.26	38.23	ND		5963.03
MW-4	03/23/05	6001.26	38.11	ND		5963.15
MW-4	06/17/05	6001.26	38.08	ND		5963.18
MW-4	09/20/05	6001.26	38.35	ND		5962.91
MW-4	12/14/05	6001.26	38.24	ND		5963.02
MW-4	03/27/06	6001.26	38.16	ND		5963.10
MW-4	06/06/06	6001.26	38.24	ND		5963.02
MW-4	09/25/06	6001.26	38.45	ND		5962.81
MW-4	12/07/06	6001.26	38.34	ND		5962.92
MW-4	03/28/07	6001.26	38.16	ND		5963.10
MW-4	06/18/07	6001.26	38.14	ND		5963.12
MW-4	09/17/07	6001.26	38.37	ND		5962.89
MW-4	12/17/07	6001.26	38.36	ND		5962.90
MW-4	03/10/08	6001.26	38.05	ND		5963.21
MW-4	06/17/08	6001.26	37.35	ND		5963.91
MW-4	09/10/08	6001.26	37.43	ND		5963.83
MW-4	12/02/08	6001.26	37.40	ND		5963.86

TABLE 2 - GROUNDWATER ELEVATION RESULTS

Johnston Fed #6A						
Location	**Date**	**TOC**	**Depth to Water (ft.)**	**Depth to LNAPL (ft.)**	**LNAPL Thickness (ft.)**	**GW Elevation (ft.)**
MW-4	03/05/09	6001.26	37.40	ND		5963.86
MW-4	06/02/09	6001.26	37.43	ND		5963.83
MW-4	08/28/09	6001.26	37.64	ND		5963.62
MW-4	11/04/09	6001.26	37.76	ND		5963.50
MW-4	02/17/10	6001.26	37.80	ND		5963.46
MW-4	05/24/10	6001.26	37.80	ND		5963.46
MW-4	09/24/10	6001.26	38.03	ND		5963.23
MW-4	11/02/10	6001.26	38.05	ND		5963.21
MW-4	02/07/11	6001.26	38.08	ND		5963.18
MW-4	05/02/11	6001.26	38.15	ND		5963.11
MW-4	09/23/11	6001.26	38.30	ND		5962.96
MW-4	11/01/11	6001.26	38.32	ND		5962.94
MW-4	02/21/12	6001.26	38.37	ND		5962.89
MW-4	05/14/12	6001.26	38.40	ND		5962.86
MW-4	06/09/13	6001.26	38.62	ND		5962.64
MW-4	09/09/13	6001.26	38.79	ND		5962.47
MW-4	12/12/13	6001.26	38.77	ND		5962.49
MW-4	04/02/14	6001.26	38.74	ND		5962.52
MW-4	10/23/14	6001.26	38.94	ND		5962.32
MW-4	05/30/15	6001.26	38.61	ND		5962.65
MW-4	11/19/15	6001.26	38.62	ND		5962.64

TABLE 2 - GROUNDWATER ELEVATION RESULTS

Johnston Fed #6A						
Location	**Date**	**TOC**	**Depth to Water (ft.)**	**Depth to LNAPL (ft.)**	**LNAPL Thickness (ft.)**	**GW Elevation (ft.)**
MW-5	08/30/00	6001.96	38.11	NR		5963.85
MW-5	06/18/01	6001.96	38.13	NR		5963.83
MW-5	09/04/01	6001.96	38.33	NR		5963.63
MW-5	06/04/02	6001.96	38.51	NR		5963.45
MW-5	09/10/02	6001.96	39.13	NR		5962.84
MW-5	12/12/02	6001.96	38.83	NR		5963.13
MW-5	03/14/03	6001.96	38.70	ND		5963.26
MW-5	06/18/03	6001.96	38.85	ND		5963.11
MW-5	09/16/03	6001.96	38.88	ND		5963.08
MW-5	12/17/03	6001.96	38.75	ND		5963.21
MW-5	03/16/04	6001.96	38.72	ND		5963.24
MW-5	06/22/04	6001.96	38.74	ND		5963.22
MW-5	09/22/04	6001.96	38.74	ND		5963.22
MW-5	12/21/04	6001.96	38.93	ND		5963.03
MW-5	03/23/05	6001.96	38.72	ND		5963.24
MW-5	06/17/05	6001.96	38.72	ND		5963.24
MW-5	09/20/05	6001.96	39.06	ND		5962.90
MW-5	12/14/05	6001.96	38.94	ND		5963.02
MW-5	03/27/06	6001.96	38.86	ND		5963.10
MW-5	06/06/06	6001.96	38.97	ND		5962.99
MW-5	09/25/06	6001.96	37.20	ND		5964.76
MW-5	12/07/06	6001.96	39.07	ND		5962.89
MW-5	03/28/07	6001.96	38.83	ND		5963.13
MW-5	06/18/07	6001.96	38.84	ND		5963.12
MW-5	09/17/07	6001.96	39.09	ND		5962.87
MW-5	12/17/07	6001.96	39.04	ND		5962.92
MW-5	03/10/08	6001.96	38.48	ND		5963.48
MW-5	06/17/08	6001.96	37.83	ND		5964.13
MW-5	09/10/08	6001.96	37.91	ND		5964.05
MW-5	12/02/08	6001.96	37.95	ND		5964.01

TABLE 2 - GROUNDWATER ELEVATION RESULTS

Johnston Fed #6A						
Location	**Date**	**TOC**	**Depth to Water (ft.)**	**Depth to LNAPL (ft.)**	**LNAPL Thickness (ft.)**	**GW Elevation (ft.)**
MW-5	03/05/09	6001.96	37.93	ND		5964.03
MW-5	06/02/09	6001.96	37.95	ND		5964.01
MW-5	08/28/09	6001.96	38.19	ND		5963.77
MW-5	11/04/09	6001.96	38.32	ND		5963.64
MW-5	02/17/10	6001.96	38.38	ND		5963.58
MW-5	05/24/10	6001.96	38.35	ND		5963.61
MW-5	09/24/10	6001.96	38.61	ND		5963.35
MW-5	11/02/10	6001.96	38.66	ND		5963.30
MW-5	02/07/11	6001.96	38.74	ND		5963.22
MW-5	05/02/11	6001.96	38.81	ND		5963.15
MW-5	09/23/11	6001.96	38.99	ND		5962.97
MW-5	11/01/11	6001.96	39.09	ND		5962.87
MW-5	02/21/12	6001.96	39.09	ND		5962.87
MW-5	05/14/12	6001.96	39.16	ND		5962.80
MW-5	06/09/13	6001.96	39.38	ND		5962.58
MW-5	09/09/13	6001.96	39.56	ND		5962.40
MW-5	12/12/13	6001.96	39.55	ND		5962.41
MW-5	04/02/14	6001.96	39.52	ND		5962.44
MW-5	10/23/14	6001.96	39.71	ND		5962.25
MW-5	05/30/15	6001.96	39.73	ND		5962.23
MW-5	11/19/15	6001.96	39.33	ND		5962.63

TABLE 2 - GROUNDWATER ELEVATION RESULTS

Johnston Fed #6A						
Location	**Date**	**TOC**	**Depth to Water (ft.)**	**Depth to LNAPL (ft.)**	**LNAPL Thickness (ft.)**	**GW Elevation (ft.)**
MW-6	12/07/06	6001.33	39.62	ND		5961.71
MW-6	03/28/07	6001.33	39.43	ND		5961.90
MW-6	06/18/07	6001.33	39.43	ND		5961.90
MW-6	09/17/07	6001.33	39.43	ND		5961.90
MW-6	12/17/07	6001.33	38.65	ND		5962.68
MW-6	03/10/08	6001.33	39.21	ND		5962.12
MW-6	03/05/09	6001.33	37.61	ND		5963.72
MW-6	06/02/09	6001.33	37.46	ND		5963.87
MW-6	08/28/09	6001.33	37.89	ND		5963.44
MW-6	11/04/09	6001.33	38.03	ND		5963.30
MW-6	05/24/10	6001.33	38.07	ND		5963.26
MW-6	09/24/10	6001.33	38.30	ND		5963.03
MW-6	11/02/10	6001.33	38.36	ND		5962.97
MW-6	02/07/11	6001.33	38.39	ND		5962.94
MW-6	05/02/11	6001.33	36.42	ND		5964.91
MW-6	09/23/11	6001.33	38.65	ND		5962.68
MW-6	11/01/11	6001.33	38.70	ND		5962.63
MW-6	02/21/12	6001.33	38.75	ND		5962.58
MW-6	05/14/12	6001.33	38.79	ND		5962.54
MW-6	06/09/13	6001.33	39.08	ND		5962.25
MW-6	09/09/13	6001.33	39.28	ND		5962.05
MW-6	12/12/13	6001.33	39.26	ND		5962.07
MW-6	10/23/14	6001.33	39.43	ND		5961.90
MW-6	04/02/14	6001.33	39.24	ND		5962.09
MW-6	05/30/15	6001.33	39.45	ND		5961.88
MW-6	11/19/15	6001.33	39.02	ND		5962.31

TABLE 2 - GROUNDWATER ELEVATION RESULTS

Johnston Fed #6A						
Location	**Date**	**TOC**	**Depth to Water (ft.)**	**Depth to LNAPL (ft.)**	**LNAPL Thickness (ft.)**	**GW Elevation (ft.)**
MW-7	11/19/15	6001.26	37.80	ND		5963.46
MW-8	11/19/15	6001.06	37.71	ND		5963.35
MW-9	11/19/15	6001.39	38.35	ND		5963.04
PZ-1	08/28/97	NS	34.8	NR		NS
PZ-2	08/28/97	NS	34.88	NR		NS
PZ(PH)-3	08/29/97	NS	34.9	NR		NS

Notes:
"ft" = feet
"TOC" = Top of casing
"LNAPL" - Light non-aqueous phase liquid
"ND" = LNAPL not detected
"NR" = LNAPL not recorded
"NS" = well points (PZ/PH) completed on August 28 and 29, 1997 were not surveyed.
No water level data was collected from Geoprobe points completed on January 5, 2006.

TABLE 3 - SOIL ANALYTICAL RESULTS

Johnson Federal #6A											
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)**	**GRO C28-35 (mg/kg)**	**TPH (mg/kg)**	**Chloride (mg/kg)**
NMOCD Criteria:		10	NE	NE	NE	50	NE	NE	NE	100	600
MW-7 (27-28.9)	10/30/15	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL
MW-8 (33-34.4)	10/30/15	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL
MW-9 (35-36.5)	10/31/15	BRL	BRL	BRL	BRL	BRL	0.56	BRL	BRL	BRL	BRL
SB-1 (16.5-18)	10/31/15	BRL	190	170	1,500	**1,860**	11,000	460	32	**11,492**	BRL
SB-1 (16.5-18)	10/31/15	0.52	0.52	0.24	0.45	1.73	60	74	BRL	**134**	BRL

Notes:

mg/kg	Milligrams per kilogram
BRL	Below Reporting Limit
NE	New Mexico Oil Conservation Division (NMOCD) Standard Not Established
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

FIGURE 1: MAY 30, 2015 GROUNDWATER ANALYTICAL RESULTS MAP
FIGURE 2: MAY 30, 2015 GROUNDWATER ELEVATION MAP
FIGURE 3: NOVEMBER 19, 2015 GROUNDWATER ANALYTICAL RESULTS MAP
FIGURE 4: NOVEMBER 19, 2015 GROUNDWATER ELEVATION MAP

L:\San Juan River Basin\SJRB GENERAL\GIS-NEW_MXDs\JOHNSTON FED#6A\2015 MAPS\JFed6_GARM_1SA_2015.mxd

UNDERGROUND ELECTRIC BOX

ELECTRIC VAULT

6003

6002

6001

6000

OVHD

SMA BENCHMARK
ELEV. 5999.94'
NAD 83 NAVD 88
STATE PLANE COORDINATE SYSTEM
NEW MEXICO WEST

PUMPJACK

TANK

PIT

SEPARATOR

COMPRESSOR

FORMER 300 BBL TANKS

JOHNSTON FED #6A WELLHEAD

GP-1

MW-6

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

GP-2

MW-5

MW-5
B: <1.0
T: <5.0
E: <1.0
X: 2.1 J

FORMER SUMP

MW-4

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

METER HOUSE

GP-3

MW-3

MW-3
B: <1.0
T: <5.0
E: 4.6
X: 17

MW-1

MW-1
NS

GP-4

MW-2

FORMER EPC PIT
EXCAVATED TO 12 FEET

MW-2
B: <1.0
T: <5.0
E: <1.0
X: <5.0

AERIAL IMAGERY FROM GOOGLE EARTH, DATED 5/2/2013.

LEGEND:

- 6002 — APPROXIMATE GROUND SURFACE CONTOUR AND ELEVATION, FEET
- ACCESS ROAD
- FENCE
- OVHD — OVERHEAD POWER LINE
- MONITORING WELL
- MONITORING WELL WITH MEASUREABLE FREE PRODUCT
- GAS VALVE
- OTHER MONITORING WELL
- SOIL BORING
- SMA BENCHMARK
- RIG ANCHOR
- WELLHEAD

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
<1.0 = BELOW METHOD DETECTION LIMIT
J = RESULT IS LESS THAN THE RL, BUT GREATER THAN OR EQUAL TO THE MDL AND THE CONCENTRATION IS AN APPROXIMATE VALUE.
MDL = METHOD DETECTION LIMIT
RL = REPORTING LIMIT OR REQUESTED LIMIT (RADIOCHEMISTRY)

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

N

SCALE IN FEET
0 30 60

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

TITLE:

GROUNWATER ANALYTICAL RESULTS
MAY 30, 2015

PROJECT:

JOHNSTON FED #6
SAN JUAN RIVER BASIN
SAN JUAN COUNTY, NEW MEXICO

MWH

Figure No.:

1

L:\San Juan River Basin\SJRB GENERAL\GIS-NEW_MXDs\JOHNSTON FED#6A\2015 MAPS\JFed6_GECM_1SA_2015.mxd

UNDERGROUND ELECTRIC BOX
ELECTRIC VAULT
6003
6002
6001
6000
OVHD
SMA BENCHMARK
ELEV. 5999.94'
NAD 83 NAVD 88
STATE PLANE COORDINATE SYSTEM
NEW MEXICO WEST
PUMPJACK
TANK
5961.6
5961.4
GP-1
JOHNSTON FED #6A
WELLHEAD
MW-6
MW-6
5961.88
PIT
FORMER 300
BBL TANKS
5961.8
GP-2
5962
SEPARATOR
5999
MW-5
5962.23
MW-5
5962.2
FORMER
SUMP
5962.4
COMPRESSOR
MW-4
MW-4
5962.65
5962.6
GP-3
METER
HOUSE
MW-3
MW-3
5962.61
5962.8
MW-1
5962.98
FORMER EPC PIT
EXCAVATED TO 12 FEET
MW-1
GP-4
5963
MW-2
5963.00
MW-2
AERIAL IMAGERY FROM GOOGLE EARTH, DATED 5/2/2013.

LEGEND:

- 6002 — APPROXIMATE GROUND SURFACE CONTOUR AND ELEVATION, FEET
- ACCESS ROAD
- FENCE
- OVHD — OVERHEAD POWER LINE
- MONITORING WELL
- MONITORING WELL WITH MEASUREABLE FREE PRODUCT
- GAS VALVE
- OTHER MONITORING WELL
- SOIL BORING
- SMA BENCHMARK
- RIG ANCHOR
- WELLHEAD

NOTES:

5962.23 — GROUNDWATER ELEVATION (CORRECTED FOR PRODUCT THICKNESS WHEN PRESENT) FEET ABOVE MEAN SEA LEVEL

5962.4 — CORRECTED WATER LEVEL ELEVATION CONTOUR DASHED WHERE INFERRED (FEET ABOVE MEAN SEA LEVEL, 0.2 FOOT CONTOUR INTERVAL)

DIRECTION OF APPARENT GROUNDWATER FLOW

N

SCALE IN FEET
0 30 60

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

TITLE:

GROUNWATER ELEVATION MAP
MAY 30, 2015

PROJECT:

SAN JUAN RIVER BASIN
MONITORING AND REMEDIATION
SAN JUAN COUNTY, NEW MEXICO

MWH

Figure No.: **2**

L:\San Juan River Basin\SJRB GENERAL\GIS-NEW_MXDs\JOHNSTON FED#6A\2015 MAPS\JFed6_GARM_2SA_2015.mxd

UNDERGROUND ELECTRIC BOX

ELECTRIC VAULT

6003

6002

6001

6000

OVHD

SMA BENCHMARK
ELEV. 5999.94'
NAD 83 NAVD 88
STATE PLANE COORDINATE SYSTEM
NEW MEXICO WEST

PUMPJACK

TANK

GP-1

PIT

FORMER 300 BBL TANKS

JOHNSTON FED #6A WELLHEAD

MW-6

MW-6
B: <1.0
T: <1.0
E: <1.0
X: <3.0

SEPARATOR

5999

GP-2

MW-9

MW-9
B: <1.0
T: <1.0
E: <1.0
X: <3.0

MW-5

MW-5
B: <1.0
T: <1.0
E: <1.0
X: <3.0

FORMER SUMP

MW-4

MW-4
B: <1.0
T: <1.0
E: <1.0
X: <3.0

COMPRESSOR

METER HOUSE

GP-3

MW-3

MW-3
B: <1.0
T: **2.5**
E: **2.1**
X: <3.0

MW-1

MW-1
NS

MW-8

MW-8
B: <1.0
T: <1.0
E: <1.0
X: <3.0

GP-4

MW-2

MW-2
B: <1.0
T: <1.0
E: <1.0
X: <3.0

FORMER EPC PIT
EXCAVATED TO 12 FEET

MW-7

MW-7
B: <1.0
T: <1.0
E: <1.0
X: <3.0

AERIAL IMAGERY FROM GOOGLE EARTH, DATED 5/2/2013.

LEGEND:

- 6002 — APPROXIMATE GROUND SURFACE CONTOUR AND ELEVATION, FEET
- ACCESS ROAD
- FENCE
- OVHD — OVERHEAD POWER LINE
- MONITORING WELL
- MONITORING WELL WITH MEASUREABLE FREE PRODUCT
- GAS VALVE
- OTHER MONITORING WELL
- SOIL BORING
- SMA BENCHMARK
- RIG ANCHOR
- WELLHEAD

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
A	2/12/2016	CCL	CCL	SRV

TITLE:

GROUNWATER ANALYTICAL RESULTS
NOVEMBER 19, 2015

PROJECT:

JOHNSTON FED #6
SAN JUAN RIVER BASIN
SAN JUAN COUNTY, NEW MEXICO

MWH

Figure No.: 3

L:\San Juan River Basin\SJRB GENERAL\GIS-NEW_MXDs\JOHNSTON FED#6A\2015 MAPS\JFed6_GECM_2SA_2015.mxd

UNDERGROUND ELECTRIC BOX

ELECTRIC VAULT

6003

6002

6001

6000

OVHD

SMA BENCHMARK
ELEV. 5999.94'
NAD 83 NAVD 88
STATE PLANE COORDINATE SYSTEM
NEW MEXICO WEST

PUMPJACK

TANK

PIT

FORMER 300 BBL TANKS

5962.8

5962.7

5962.6

5962.5

5962.4

5962.9

GP-1

MW-6
5962.31

JOHNSTON FED #6A WELLHEAD

MW-6

SEPARATOR

GP-2

5963

5999

MW-9
5963.04

MW-9

MW-5
5962.63

MW-5

MW-4
5962.64

MW-4

COMPRESSOR

5963.1

FORMER SUMP

5963.2

METER HOUSE

GP-3

MW-3
5962.90

MW-3

5963.3

MW-8
5963.35

MW-8

MW-1
5963.27

MW-1

GP-4

MW-2
5963.26

MW-2

5963.4

FORMER EPC PIT
EXCAVATED TO 12 FEET

MW-7
5963.46

MW-7

AERIAL IMAGERY FROM GOOGLE EARTH, DATED 5/2/2013.

LEGEND:

- 6002 — APPROXIMATE GROUND SURFACE CONTOUR AND ELEVATION, FEET
- ACCESS ROAD
- FENCE
- OVERHEAD POWER LINE
- MONITORING WELL
- MONITORING WELL WITH MEASUREABLE FREE PRODUCT
- GAS VALVE
- OTHER MONITORING WELL
- SOIL BORING
- SMA BENCHMARK
- RIG ANCHOR
- WELLHEAD

NOTES:

- 5962.23 — GROUNDWATER ELEVATION (CORRECTED FOR PRODUCT THICKNESS WHEN PRESENT) FEET ABOVE MEAN SEA LEVEL
- 5962.4 — CORRECTED WATER LEVEL ELEVATION CONTOUR DASHED WHERE INFERRED (FEET ABOVE MEAN SEA LEVEL, 0.2 FOOT CONTOUR INTERVAL)
- DIRECTION OF APPARENT GROUNDWATER FLOW

N

SCALE IN FEET
0 30 60

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

TITLE:

GROUNWATER ELEVATION MAP
NOVEMBER 19, 2015

PROJECT:

JOHNSTON FED #6
SAN JUAN RIVER BASIN
SAN JUAN COUNTY, NEW MEXICO

MWH

Figure No.: **4**

APPENDICES

APPENDIX A – BOREHOLE AND WELL CONSTRUCTION LOGS

APPENDIX B – SOIL SAMPLING ANALYTICAL REPORTS

APPENDIX C – SOIL DISPOSAL DOCUMENTATION

APPENDIX D – MAY 31, 2015 GROUNDWATER SAMPLING ANALYTICAL REPORT
NOVEMBER 24, 2015 GROUNDWATER SAMPLING ANALYTICAL REPORT

APPENDIX A

Drilling Log

MWH

Monitoring Well **MW-7**

Project *Johnston Fed 6A* Owner *El Paso Remediation Company*

Location *San Juan County, New Mexico* Project Number *10508022.0102*

Surface Elev. *5998.86 ft* North *NA* East *NA*

Top of Casing *6001.26 ft* Water Level Initial ▽ *5963.45* 11/01/15 00:00 Static ▼ *5963.46* 11/19/15 00:00

Hole Depth *49.0ft* Screen: Diameter *2 in* Length *20.0 ft* Type/Size *PVC/0.01 in*

Hole Diameter *8.25 in* Casing: Diameter *2 in* Length *30.0 ft* Type *PVC*

Drill Co. *National EWP* Drilling Method *Hollow Stem Auger* Sand Pack *12/20 Silica Sand*

Driller *Matt Cain* Driller Reg. # *WD 1210* Log By *Brad Barton*

Start Date *10/21/2015* Completion Date *11/1/2015* Checked By *S. Varsa*

COMMENTS

Bentonite Grout | Bentonite Granules | Grout | Portland Cement | Sand Pack | Sand Pack

Depth (ft)	PID (ppm)	% Recovery	Blow Count Recovery	Graphic Log	USCS	Description (Color, Moisture, Texture, Structure, Odor) Geologic Descriptions are Based on the USCS.	Well Completion	Elevation (ft)
						Dirt with vegetation		5998.86
0	0.0					0-8 Hydro-Vac		
	0.0					(0 - 8) Silty SAND: medium brown, loose, minor clay content, fine to medium sand, dry to slight moist, wet from hydro vac, no cementation, no hydrocarbon odor.		5995
5	0.0				SM			
	0.0					⇩less clay content.		
	0.0	100%						
	0.0					(8 - 13.5) Silty SAND: continued		5990
10	0.0	100%			SM			
	0.0							
						(13.5 - 15) No Recovery		5985
15	0.0	70%				(15 - 18.4) Silty SAND: continued, increasing clay content, low plasticity.		
	0.0				SM			
						(18.4 - 20) No Recovery		5980
20	0.0	68%				(20 - 24.8) Silty SAND: medium brown to reddish brown with white cementation at 24 feet bgs, loose to stiff, dry, no hydrocarbon odor, fine sand.		
	0.0				SM			5975
25		96%				⇩white cementation in matrix, stiff.		

Continued Next Page

Drilling Log

MWH

Monitoring Well **MW-7**

Project *Johnston Fed 6A* Owner *El Paso Remediation Company*

Location *San Juan County, New Mexico* Project Number *10508022.0102*

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	Elevation (ft)
						Continued		
25					SW	(24.8 - 25) No Recovery		
	7.4					(25 - 26) Silty SAND: continued, reddish brown, loose to medium stiff.		
	18.2	MW-7 (27-28ft) sample			SP	(26 - 28.9) Poorly Graded SAND: light brown, weekly cemented, very slight hydrocarbon odor, dry, fine sand, white cementation visible.		5970
		78%				(28.9 - 30) No Recovery		
30						Driller reports hard drilling 30 to 35 feet bgs.		
	4.1				SW	(30 - 31.5) Well Graded SAND: weakly cemented, all sand sizes mostly from fine and medium sand, minor coarse sand, subrounded to subangular, loose to weakly cemented, very slight hydrocarbon odor to no hydrocarbon odor, light brown.		
	1.1					(32.6 - 35) No Recovery		5965
35		52%				▼water at about 35 feet bgs.		
	0.1				SW	(35 - 37) Well Graded SAND: weakly to strongly cemented cobble of sandstone, cemented sand in matrix, wet, no hydrocarbon odor, all sand sizes, discoloration reddish brown, dark brown to light brown.		
	0.0					(37 - 40) No Recovery		5960
40		40%						
	0.0					(40 - 41.8) Shale pulverized to FAT CLAY: dark olive gray, wet to dry, high plasticity clay, no hydrocarbon odor. Very hard drilling 40 to 45 feet bgs.		
	0.0					⇩slight moist to dry.		
						(41.8 - 45) No Recovery		5955
45		36%				(45 - 47.9) SHALE pulverized to FAT CLAY: continued, dry, no hydrocarbon odor.		
	0.0							
	0.0							
						(47.9 - 49) No Recovery		5950
		73%						
50						Bottom of Boring 49 feet bgs. Monitoring Well TD = 48.05 feet bgs.		5945
55								

Drilling Log

MWH

Monitoring Well **MW-8**

Project *Johnston Fed 6A* Owner *El Paso Remediation Company*

Location *San Juan County, New Mexico* Project Number *10508022.0102*

Surface Elev. *5998.89 ft* North *NA* East *NA*

Top of Casing *6001.06 ft* Water Level Initial ▽ *5962.13* 11/01/15 00:00 Static ▼ *5963.35* 11/19/15 00:00

Hole Depth *49.0ft* Screen: Diameter *2 in* Length *20.0 ft* Type/Size *PVC/0.01 in*

Hole Diameter *8.25 in* Casing: Diameter *2 in* Length *30.0 ft* Type *PVC*

Drill Co. *National EWP* Drilling Method *Hollow Stem Auger* Sand Pack *12/20 Silica Sand*

Driller *Matt Cain* Driller Reg. # *WD 1210* Log By *Brad Barton*

Start Date *10/21/2015* Completion Date *11/1/2015* Checked By *S. Varsa*

COMMENTS

Bentonite Grout | Bentonite Granules | Grout | Portland Cement | Sand Pack | Sand Pack

Depth (ft)	PID (ppm)	% Recovery	Blow Count Recovery	Graphic Log	USCS	Description (Color, Moisture, Texture, Structure, Odor) Geologic Descriptions are Based on the USCS.	Well Completion	Elevation (ft)
						Dirt with vegetation		5998.89
0	0.0					0-8 Hydro-Vac		
	0.0					(0 - 8) Silty SAND: medium brown, loose, minor clay content, dry to slight moist, wet form hydro vac, no cementation, fine to medium sand, no hydrocarbon odor.		5995
5	0.0				SM			
	0.0	100%						
	0.0				SM	(8 - 9.7) Silty SAND: continued		5990
10	0.0	85%				(9.7 - 10) No Recovery		
	0.0				SP	(10 - 12.1) Poorly Graded SAND: fine sand, loose, dry, no cementation to very well cemented, no hydrocarbon odor, light brown.		
						⇩light brown, loose, very fine sand, dry, no hydrocarbon odor.		
						(12.1 - 15) No Recovery		5985
15		42%						
	0.0				SP	(15 - 17.5) Poorly Graded SAND: continued		
	0.0				SW	(17.5 - 18.1) Well Graded SAND: fine and medium sand sizes, loose to weakly cemented, compacted in core barrel, no hydrocarbon odor.		5980
						(18.1 - 20) No Recovery		
20		62%				(20 - 23.4) Well Graded SAND: continued		
	0.0				SW			
	0.0					⇩minor discoloration - reddish brown Fe staining in sand, minor coarse sand in matrix.		5975
						(23.4 - 25) No Recovery		
25		68%						

Continued Next Page

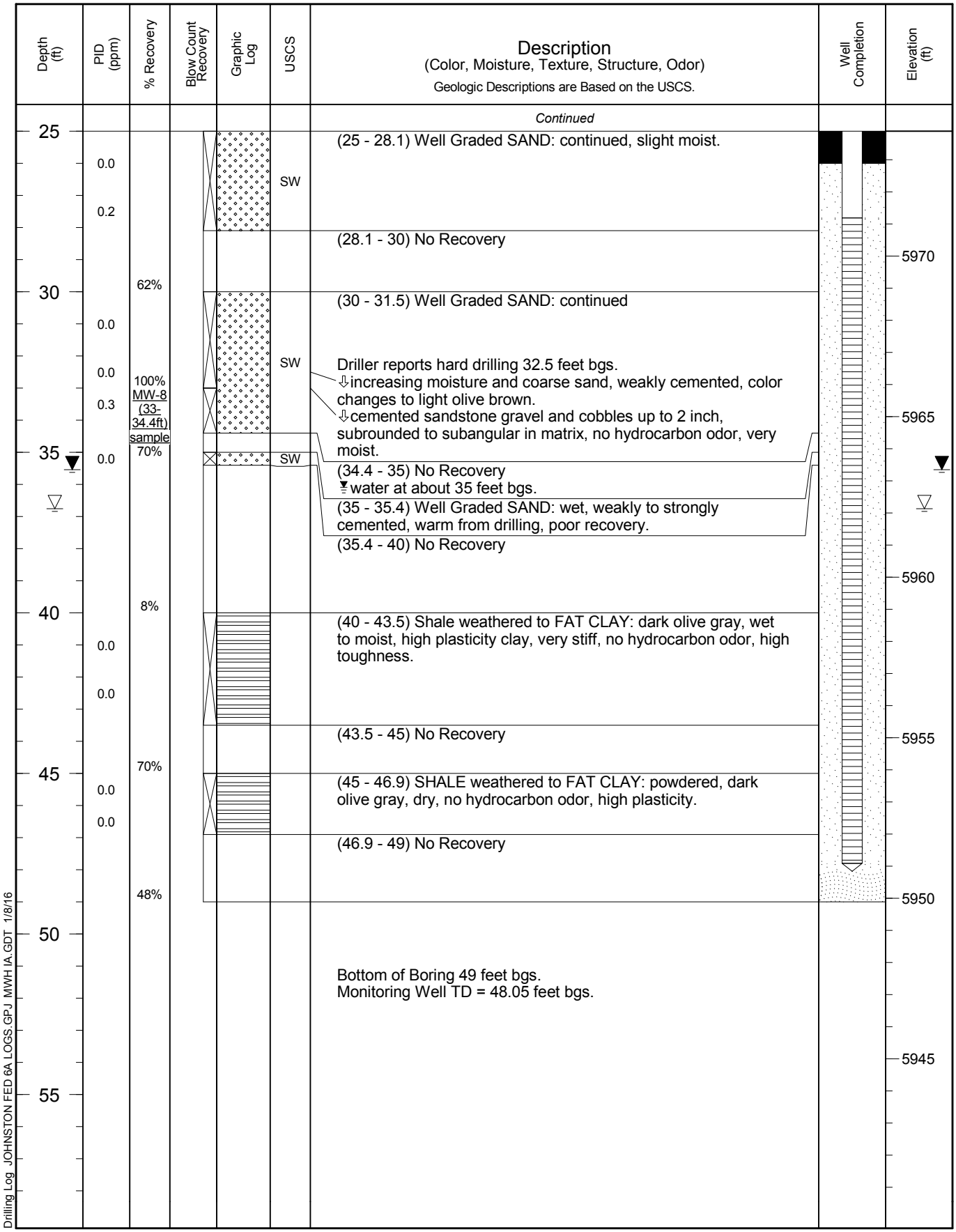
Drilling Log

MWH

Monitoring Well **MW-8**

Project *Johnston Fed 6A* Owner *El Paso Remediation Company*

Location *San Juan County, New Mexico* Project Number *10508022.0102*



Drilling Log

MWH

Monitoring Well **MW-9**

Project *Johnston Fed 6A* Owner *El Paso Remediation Company*

Location *San Juan County, New Mexico* Project Number *10508022.0102*

Surface Elev. *5998.98 ft* North *NA* East *NA*

Top of Casing *6001.39 ft* Water Level Initial ▽ *5962.74* 11/01/15 00:00 Static ▼ *5963.04* 11/19/15 00:00

Hole Depth *49.0ft* Screen: Diameter *2 in* Length *20.0 ft* Type/Size *PVC/0.01 in*

Hole Diameter *8.25 in* Casing: Diameter *2 in* Length *30.0 ft* Type *PVC*

Drill Co. *National EWP* Drilling Method *Hollow Stem Auger* Sand Pack *12/20 Silica Sand*

Driller *Matt Cain* Driller Reg. # *WD 1210* Log By *Brad Barton*

Start Date *10/21/2015* Completion Date *11/1/2015* Checked By *S. Varsa*

COMMENTS

Bentonite Grout | Bentonite Granules | Grout | Portland Cement | Sand Pack | Sand Pack

Depth (ft)	PID (ppm)	% Recovery	Blow Count Recovery	Graphic Log	USCS	Description (Color, Moisture, Texture, Structure, Odor) Geologic Descriptions are Based on the USCS.	Well Completion	Elevation (ft)
0						Dirt with vegetation		5998.98
	0.0					0-8 Hydro-Vac		
	0.0					(0 - 8) Silty SAND: medium brown, loose, fine to medium sand, increasing clay content with depth, dry to slight moist, wet from hydro vac, no hydrocarbon odor, no cementation.		
	0.0				SM			5995
5	0.0							
	0.0	100%						
	0.0					(8 - 12.4) Silty SAND: continued		5990
		85%						
10					SM			
	0.0							
	0.0					⇩increasing clay content, loose to medium stiff, low plasticity.		
						(12.4 - 15) No Recovery		5985
		48%						
15					SM	(15 - 15.5) Silty SAND: continued		
	0.0				SW	(15.5 - 16.4) Well Graded SAND: light brown, loose, medium and fine sand, trace coarse sand, subrounded to subangular, no cementation, no hydrocarbon odor.		
	0.0					(16.4 - 20) No Recovery		5980
		28%						
20						(20 - 23.2) Well Graded SAND: continued		
	0.0				SM			
	0.0					⇩increasing coarse sand from 15 to 30 percent.		
						(23.2 - 25) No Recovery		5975
		64%						
25						*Continued Next Page*		

Drilling Log

MWH

Monitoring Well **MW-9**

Project *Johnston Fed 6A* Owner *El Paso Remediation Company*

Location *San Juan County, New Mexico* Project Number *10508022.0102*

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	Elevation (ft)
						Continued		
25	0.0				SW	(25 - 27.1) Well Graded SAND: continued, slight moist, some discoloration in matrix, reddish brown iron staining, weakly cemented in some areas, trace gravel up to 1/4 inch, subrounded and subangular.		
	0.0					(27.1 - 30) No Recovery		5970
		42%				Driller reports hard drilling at 30 to 35 feet bgs.		
30	0.0				SW	(30 - 31.1) Well Graded SAND: continued, moist, iron staining, no hydrocarbon odor, weakly cemented, poor recovery.		
						(31.1 - 35) No Recovery		5965
		22% MW-9 (35-36.5ft) sample						
35 ▽	0.0				SW	(35 - 37.4) Well Graded SAND: continued, very moist to wet, loose cemented sands in matrix, no hydrocarbon odor cobbles up to 2 inch.		▽
	0.0					▼water at about 36.5 feet bgs.		
						(37.4 - 40) No Recovery		5960
						⇩increasing cementation, harder drilling.		
40		48%						
	0.0					(40 - 43) Shale pulverized to FAT CLAY: dry to moist, dark olive gray, high plasticity, no hydrocarbon odor, powdered shale.		
	0.0					Driller reports very hard drilling at 42 feet bgs.		
						(43 - 45) No Recovery		5955
		60%						
45	0.0					(45 - 47.3) SHALE pulverized to FAT CLAY: continued, dark gray, dry, no hydrocarbon odor, sample barrel hot from drilling.		
	0.0							
						(47.3 - 49) No Recovery		
		58%						5950
50						Bottom of Boring 49 feet bgs. Monitoring Well TD = 48.05 feet bgs.		
								5945
55								

Drilling Log JOHNSTON FED 6A LOGS.GPJ MWH IA.GDT 1/8/16

Drilling Log

MWH

Soil Boring **SB-1**

Project *Johnston Fed 6A* Owner *El Paso Remediation Company*

Location *San Juan County, New Mexico* Project Number *10508022.0102*

Surface Elev. *5999.02 ft* North *NA* East *NA*

Top of Casing *NA* Water Level Initial ▽ *36.5ft* 10/31/15 00:00 Static ▼ *NA*

Hole Depth *40.0ft* Screen: Diameter *NA* Length *NA* Type/Size *NA*

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

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

Driller *Matt Cain* Driller Reg. # *WD 1210* Log By *Brad Barton*

Start Date *10/21/2015* Completion Date *10/31/2015* Checked By *S. Varsa*

COMMENTS

Bentonite Grout | Bentonite Granules | Grout | Portland Cement | Sand Pack | Sand Pack

Depth (ft)	PID (ppm)	% Recovery	Blow Count Recovery	Graphic Log	USCS	Description (Color, Moisture, Texture, Structure, Odor) Geologic Descriptions are Based on the USCS.	Elevation (ft)
						Dirt with vegetation	5999.02
0						0-8 Hydro-Vac	
	0.0					(0 - 8) Silty SAND with gravels and trace cobbles: medium brown, dry to slight moist, wet from hydro vac, loose, fine to medium sand gravels and cobbles up to 3/4 inch, no cementation, no hydrocarbon odor.	
	0.0						
					SM		5995
5	0.0						
	0.0						
		100%					
	0.0					(8 - 11.5) Silty SAND: continued Excess recovery due to slough in hole.	5990
10		100%			SM		
	0.0						
	0.0				SP	(11.5 - 12.2) Poorly Graded SAND: light brown, loose, very weakly cemented, dry, no hydrocarbon odor, fine sand, trace medium sand.	
						(13.5 - 15) No Recovery	5985
15		44%					
	33.7	SB-1 (16.5-18ft) sample			SP	(15 - 16.5) Poorly Graded SAND: continued, slight moist, slight hydrocarbon odor.	
	3955				CL	(16.5 - 18) LEAN CLAY with silt and fime sand: moist, dark brown with reddish brown iron staining, strong hydrocarbon odor, medium plasticity, stiff to medium stiff.	
						(18 - 20) No Recovery	5980
20		60%					
	3699				CL	(20 - 21.5) LEAN CLAY: continued, strong hydrocarbon odor, increasing fine sand.	
	3694				SW	Well Graded SAND: all sand sizes, loose, strong hydrocarbon odor, slight moist, very weakly cemented, subrounded to subangular.	
						(22.2 - 25) No Recovery	5975
25		44%					

Continued Next Page

Drilling Log

MWH

Soil Boring **SB-1**

Project *Johnston Fed 6A* Owner *El Paso Remediation Company*

Location *San Juan County, New Mexico* Project Number *10508022.0102*

Depth (ft)	PID (ppm)	% Recovery	Blow Count Recovery	Graphic Log	USCS	Description (Color, Moisture, Texture, Structure, Odor) Geologic Descriptions are Based on the USCS.	Elevation (ft)
						Continued	
25	1492				SW	(25 - 27) Well Graded SAND: loose, increasing coarse sand with depth, strong hydrocarbon odor, dry to slight moist, weak cementation, trace cobbles, light brown, minor gravels, subrounded to subangular cemented sands.	
	3145				CL	(27 - 28) LEAN CLAY: light brown, clay seam, strong hydrocarbon odor, moist.	
					SW	(28 - 28.1) Well Graded SAND: continued	5970
		62%				(28.1 - 30) No Recovery	
30	2882				SW	(30 - 33.1) Well Graded SAND: very moist, loose, strong hydrocarbon odor, weak cementation, dark brown to reddish brown (iron staining).	
	2242					⇩color grades to olive brown, slight moist to moist.	
						(33.1 - 35) No Recovery	5965
35	1047	62% SB-1 (35-36.5ft) sample			SW	(35 - 37.1) Well Graded SAND: strongly cementation, olive gray, very moist, loose to strongly cemented, increasing coarse sand with depth, moderate hydrocarbon odor, minor clay seams.	
	157.4 2.6					⧗water at about 36.5 feet bgs.	
						⇩Medium to dark brown, wet, slight hydrocarbon odor to no hydrocarbon odor.	
						(37.1 - 40) No Recovery	5960
40		42%					
						Bottom of Boring 40 feet bgs.	
							5955
45							
							5950
50							
							5945
55							

APPENDIX B

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

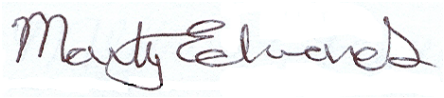
ANALYTICAL REPORT

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

TestAmerica Job ID: 400-113299-1
Client Project/Site: Johnstson Federal #6A
Revision: 1

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

Attn: Ms. Sarah Gardner



Authorized for release by:
1/25/2016 5:02:17 PM

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

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Definitions/Glossary

Client: MWH Americas Inc
Project/Site: Johnstson Federal #6A

TestAmerica Job ID: 400-113299-1

Qualifiers

GC VOA

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.
F2	MS/MSD RPD exceeds control limits
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
E	Result exceeded calibration range.

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: Johnstson Federal #6A

TestAmerica Job ID: 400-113299-1

Job ID: 400-113299-1

Laboratory: TestAmerica Pensacola

Narrative

Job Narrative
400-113299-1

Comments
No additional comments.

Receipt
The samples were received on 11/3/2015 9:09 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 0.7º C.

Revised Report
The report was revised to change the analyte descriptions for the 8015 DRO/ORO analysis.

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

GC VOA
Method 8015B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 400-283249 and analytical batch 400-283246 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 400-283249 and analytical batch 400-283245 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

No additional analytical or quality issues were noted, other than those described above or 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: Johnstson Federal #6A

TestAmerica Job ID: 400-113299-1

Client Sample ID: MW-8 (33-34.4) — Lab Sample ID: 400-113299-1

No Detections.

Client Sample ID: MW-7 (27-28.9) — Lab Sample ID: 400-113299-2

No Detections.

Client Sample ID: MW-9 (35-36.5) — Lab Sample ID: 400-113299-3

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Gasoline Range Organics (GRO) C6--C10	0.56		0.11		mg/Kg	1	☼	8015B	Total/NA

Client Sample ID: SB-1 (16.5-18) — Lab Sample ID: 400-113299-4

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Gasoline Range Organics (GRO) C6--C10	11000	F2	220		mg/Kg	2000	☼	8015B	Total/NA
Ethylbenzene	170	F1	2.2		mg/Kg	2000	☼	8021B	Total/NA
Toluene	190	F1	11		mg/Kg	2000	☼	8021B	Total/NA
Xylenes, Total	1500		11		mg/Kg	2000	☼	8021B	Total/NA
Diesel Range Organics [C10-C28]	460		13		mg/Kg	1	☼	8015B	Total/NA
Oil Range Organics (C28-C35)	32		13		mg/Kg	1	☼	8015B	Total/NA

Client Sample ID: SB-1 (35-36.5) — Lab Sample ID: 400-113299-5

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Gasoline Range Organics (GRO) C6--C10	60		4.8		mg/Kg	50	☼	8015B	Total/NA
Benzene	0.052		0.048		mg/Kg	50	☼	8021B	Total/NA
Ethylbenzene	0.24		0.048		mg/Kg	50	☼	8021B	Total/NA
Toluene	0.52		0.24		mg/Kg	50	☼	8021B	Total/NA
Xylenes, Total	0.45		0.24		mg/Kg	50	☼	8021B	Total/NA
Diesel Range Organics [C10-C28]	74		12		mg/Kg	1	☼	8015B	Total/NA

This Detection Summary does not include radiochemical test results.

Sample Summary

Client: MWH Americas Inc
Project/Site: Johnstson Federal #6A

TestAmerica Job ID: 400-113299-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-113299-1	MW-8 (33-34.4)	Solid	10/30/15 10:30	11/03/15 09:09
400-113299-2	MW-7 (27-28.9)	Solid	10/30/15 14:45	11/03/15 09:09
400-113299-3	MW-9 (35-36.5)	Solid	10/31/15 10:10	11/03/15 09:09
400-113299-4	SB-1 (16.5-18)	Solid	10/31/15 13:35	11/03/15 09:09
400-113299-5	SB-1 (35-36.5)	Solid	10/31/15 14:45	11/03/15 09:09

Client Sample Results

Client: MWH Americas Inc
Project/Site: Johnstson Federal #6A

TestAmerica Job ID: 400-113299-1

Client Sample ID: MW-8 (33-34.4)
Date Collected: 10/30/15 10:30
Date Received: 11/03/15 09:09

Lab Sample ID: 400-113299-1
Matrix: Solid
Percent Solids: 71.3

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	☼	11/12/15 10:30	11/12/15 15:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (fid)	*100*		*65 - 125*	*11/12/15 10:30*	*11/12/15 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	☼	11/12/15 10:30	11/12/15 15:57	1
Ethylbenzene	<0.0014		0.0014		mg/Kg	☼	11/12/15 10:30	11/12/15 15:57	1
Toluene	<0.0070		0.0070		mg/Kg	☼	11/12/15 10:30	11/12/15 15:57	1
Xylenes, Total	<0.0070		0.0070		mg/Kg	☼	11/12/15 10:30	11/12/15 15:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (pid)	*97*		*40 - 150*	*11/12/15 10:30*	*11/12/15 15:57*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	<14		14		mg/Kg	☼	11/04/15 07:59	11/04/15 19:26	1
Oil Range Organics (C28-C35)	<14		14		mg/Kg	☼	11/04/15 07:59	11/04/15 19:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*111*		*27 - 151*	*11/04/15 07:59*	*11/04/15 19:26*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<27		27		mg/Kg	☼		11/11/15 10:35	1

Client: MWH Americas Inc
Project/Site: Johnstson Federal #6A

TestAmerica Job ID: 400-113299-1

Client Sample ID: MW-7 (27-28.9)
Date Collected: 10/30/15 14:45
Date Received: 11/03/15 09:09

Lab Sample ID: 400-113299-2
Matrix: Solid
Percent Solids: 92.2

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	☼	11/12/15 10:30	11/12/15 21:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (fid)	*101*		*65 - 125*	*11/12/15 10:30*	*11/12/15 21:06*	*1*

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0010		0.0010		mg/Kg	☼	11/12/15 10:30	11/12/15 21:06	1
Ethylbenzene	<0.0010		0.0010		mg/Kg	☼	11/12/15 10:30	11/12/15 21:06	1
Toluene	<0.0051		0.0051		mg/Kg	☼	11/12/15 10:30	11/12/15 21:06	1
Xylenes, Total	<0.0051		0.0051		mg/Kg	☼	11/12/15 10:30	11/12/15 21:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (pid)	*92*		*40 - 150*	*11/12/15 10:30*	*11/12/15 21:06*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	<11		11		mg/Kg	☼	11/04/15 07:59	11/04/15 19:36	1
Oil Range Organics (C28-C35)	<11		11		mg/Kg	☼	11/04/15 07:59	11/04/15 19:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*119*		*27 - 151*	*11/04/15 07:59*	*11/04/15 19:36*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<22		22		mg/Kg	☼		11/11/15 10:57	1

Client Sample ID: MW-9 (35-36.5)

Date Collected: 10/31/15 10:10
Date Received: 11/03/15 09:09

Lab Sample ID: 400-113299-3

Matrix: Solid
Percent Solids: 79.3

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) C6--C10	0.56		0.11		mg/Kg	☼	11/12/15 10:30	11/12/15 20:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (fid)	*101*		*65 - 125*	*11/12/15 10:30*	*11/12/15 20:32*	*1*

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0011		0.0011		mg/Kg	☼	11/12/15 10:30	11/12/15 20:32	1
Ethylbenzene	<0.0011		0.0011		mg/Kg	☼	11/12/15 10:30	11/12/15 20:32	1
Toluene	<0.0053		0.0053		mg/Kg	☼	11/12/15 10:30	11/12/15 20:32	1
Xylenes, Total	<0.0053		0.0053		mg/Kg	☼	11/12/15 10:30	11/12/15 20:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (pid)	*95*		*40 - 150*	*11/12/15 10:30*	*11/12/15 20:32*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	<13		13		mg/Kg	☼	11/04/15 07:59	11/04/15 19:56	1
Oil Range Organics (C28-C35)	<13		13		mg/Kg	☼	11/04/15 07:59	11/04/15 19:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*115*		*27 - 151*	*11/04/15 07:59*	*11/04/15 19:56*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<25		25		mg/Kg	☼		11/12/15 12:55	1

Client Sample ID: SB-1 (16.5-18)

Date Collected: 10/31/15 13:35
Date Received: 11/03/15 09:09

Lab Sample ID: 400-113299-4

Matrix: Solid
Percent Solids: 78.0

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) C6--C10	11000	F2	220		mg/Kg	☼	11/12/15 13:00	11/12/15 17:35	2000

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (fid)	*81*		*65 - 125*	*11/12/15 13:00*	*11/12/15 17:35*	*2000*

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<2.2		2.2		mg/Kg	☼	11/12/15 13:00	11/12/15 17:35	2000
Ethylbenzene	170	F1	2.2		mg/Kg	☼	11/12/15 13:00	11/12/15 17:35	2000
Toluene	190	F1	11		mg/Kg	☼	11/12/15 13:00	11/12/15 17:35	2000
Xylenes, Total	1500		11		mg/Kg	☼	11/12/15 13:00	11/12/15 17:35	2000

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (pid)	*114*		*40 - 150*	*11/12/15 13:00*	*11/12/15 17:35*	*2000*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	460		13		mg/Kg	☼	11/04/15 07:59	11/04/15 20:06	1
Oil Range Organics (C28-C35)	32		13		mg/Kg	☼	11/04/15 07:59	11/04/15 20:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*125*		*27 - 151*	*11/04/15 07:59*	*11/04/15 20:06*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<26		26		mg/Kg	☼		11/12/15 13:18	1

Client: MWH Americas Inc
Project/Site: Johnstson Federal #6A

TestAmerica Job ID: 400-113299-1

Client Sample ID: SB-1 (35-36.5)
Date Collected: 10/31/15 14:45
Date Received: 11/03/15 09:09

Lab Sample ID: 400-113299-5
Matrix: Solid
Percent Solids: 82.4

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) C6--C10	60		4.8		mg/Kg	☼	11/12/15 13:00	11/12/15 15:04	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (fid)	*97*		*65 - 125*	*11/12/15 13:00*	*11/12/15 15:04*	*50*

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.052		0.048		mg/Kg	☼	11/12/15 13:00	11/12/15 15:04	50
Ethylbenzene	0.24		0.048		mg/Kg	☼	11/12/15 13:00	11/12/15 15:04	50
Toluene	0.52		0.24		mg/Kg	☼	11/12/15 13:00	11/12/15 15:04	50
Xylenes, Total	0.45		0.24		mg/Kg	☼	11/12/15 13:00	11/12/15 15:04	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (pid)	*110*		*40 - 150*	*11/12/15 13:00*	*11/12/15 15:04*	*50*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	74		12		mg/Kg	☼	11/04/15 07:59	11/04/15 20:15	1
Oil Range Organics (C28-C35)	<12		12		mg/Kg	☼	11/04/15 07:59	11/04/15 20:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*119*		*27 - 151*	*11/04/15 07:59*	*11/04/15 20:15*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<24		24		mg/Kg	☼		11/12/15 13:40	1

GC VOA

Analysis Batch: 283149

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-113299-1	MW-8 (33-34.4)	Total/NA	Solid	8021B	283255
400-113299-1 MS	MW-8 (33-34.4)	Total/NA	Solid	8021B	283255
400-113299-1 MSD	MW-8 (33-34.4)	Total/NA	Solid	8021B	283255
400-113299-2	MW-7 (27-28.9)	Total/NA	Solid	8021B	283255
400-113299-3	MW-9 (35-36.5)	Total/NA	Solid	8021B	283255
LCS 400-283255/2-A	Lab Control Sample	Total/NA	Solid	8021B	283255
MB 400-283255/1-A	Method Blank	Total/NA	Solid	8021B	283255

Analysis Batch: 283245

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-113299-4	SB-1 (16.5-18)	Total/NA	Solid	8021B	283249
400-113299-4 MS	SB-1 (16.5-18)	Total/NA	Solid	8021B	283249
400-113299-4 MSD	SB-1 (16.5-18)	Total/NA	Solid	8021B	283249
400-113299-5	SB-1 (35-36.5)	Total/NA	Solid	8021B	283249
LCS 400-283249/2-A	Lab Control Sample	Total/NA	Solid	8021B	283249
MB 400-283249/1-A	Method Blank	Total/NA	Solid	8021B	283249

Analysis Batch: 283246

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-113299-4	SB-1 (16.5-18)	Total/NA	Solid	8015B	283249
400-113299-4 MS	SB-1 (16.5-18)	Total/NA	Solid	8015B	283249
400-113299-4 MSD	SB-1 (16.5-18)	Total/NA	Solid	8015B	283249
400-113299-5	SB-1 (35-36.5)	Total/NA	Solid	8015B	283249
LCS 400-283249/3-A	Lab Control Sample	Total/NA	Solid	8015B	283249
MB 400-283249/1-A	Method Blank	Total/NA	Solid	8015B	283249

Prep Batch: 283249

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-113299-4	SB-1 (16.5-18)	Total/NA	Solid	5035	
400-113299-4 MS	SB-1 (16.5-18)	Total/NA	Solid	5035	
400-113299-4 MS	SB-1 (16.5-18)	Total/NA	Solid	5035	
400-113299-4 MSD	SB-1 (16.5-18)	Total/NA	Solid	5035	
400-113299-4 MSD	SB-1 (16.5-18)	Total/NA	Solid	5035	
400-113299-5	SB-1 (35-36.5)	Total/NA	Solid	5035	
LCS 400-283249/2-A	Lab Control Sample	Total/NA	Solid	5035	
LCS 400-283249/3-A	Lab Control Sample	Total/NA	Solid	5035	
MB 400-283249/1-A	Method Blank	Total/NA	Solid	5035	

Prep Batch: 283255

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-113299-1	MW-8 (33-34.4)	Total/NA	Solid	5035	
400-113299-1 MS	MW-8 (33-34.4)	Total/NA	Solid	5035	
400-113299-1 MS	MW-8 (33-34.4)	Total/NA	Solid	5035	
400-113299-1 MSD	MW-8 (33-34.4)	Total/NA	Solid	5035	
400-113299-1 MSD	MW-8 (33-34.4)	Total/NA	Solid	5035	
400-113299-2	MW-7 (27-28.9)	Total/NA	Solid	5035	
400-113299-3	MW-9 (35-36.5)	Total/NA	Solid	5035	
LCS 400-283255/2-A	Lab Control Sample	Total/NA	Solid	5035	
LCS 400-283255/3-A	Lab Control Sample	Total/NA	Solid	5035	
MB 400-283255/1-A	Method Blank	Total/NA	Solid	5035	

GC VOA (Continued)

Analysis Batch: 283256

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-113299-1	MW-8 (33-34.4)	Total/NA	Solid	8015B	283255
400-113299-1 MS	MW-8 (33-34.4)	Total/NA	Solid	8015B	283255
400-113299-1 MSD	MW-8 (33-34.4)	Total/NA	Solid	8015B	283255
400-113299-2	MW-7 (27-28.9)	Total/NA	Solid	8015B	283255
400-113299-3	MW-9 (35-36.5)	Total/NA	Solid	8015B	283255
LCS 400-283255/3-A	Lab Control Sample	Total/NA	Solid	8015B	283255
MB 400-283255/1-A	Method Blank	Total/NA	Solid	8015B	283255

GC Semi VOA

Prep Batch: 281851

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-113295-B-3-B MS	Matrix Spike	Total/NA	Solid	3546	
400-113295-B-3-C MSD	Matrix Spike Duplicate	Total/NA	Solid	3546	
400-113299-1	MW-8 (33-34.4)	Total/NA	Solid	3546	
400-113299-2	MW-7 (27-28.9)	Total/NA	Solid	3546	
400-113299-3	MW-9 (35-36.5)	Total/NA	Solid	3546	
400-113299-4	SB-1 (16.5-18)	Total/NA	Solid	3546	
400-113299-5	SB-1 (35-36.5)	Total/NA	Solid	3546	
LCS 400-281851/22-A	Lab Control Sample	Total/NA	Solid	3546	
MB 400-281851/23-A	Method Blank	Total/NA	Solid	3546	

Analysis Batch: 282002

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-113295-B-3-B MS	Matrix Spike	Total/NA	Solid	8015B	281851
400-113295-B-3-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B	281851
400-113299-1	MW-8 (33-34.4)	Total/NA	Solid	8015B	281851
400-113299-2	MW-7 (27-28.9)	Total/NA	Solid	8015B	281851
400-113299-3	MW-9 (35-36.5)	Total/NA	Solid	8015B	281851
400-113299-4	SB-1 (16.5-18)	Total/NA	Solid	8015B	281851
400-113299-5	SB-1 (35-36.5)	Total/NA	Solid	8015B	281851
LCS 400-281851/22-A	Lab Control Sample	Total/NA	Solid	8015B	281851

Analysis Batch: 282312

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 400-281851/23-A	Method Blank	Total/NA	Solid	8015B	281851

HPLC/IC

Leach Batch: 282638

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-113299-1	MW-8 (33-34.4)	Soluble	Solid	DI Leach	
400-113299-2	MW-7 (27-28.9)	Soluble	Solid	DI Leach	
LCS 400-282638/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 400-282638/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
MB 400-282638/1-A	Method Blank	Soluble	Solid	DI Leach	

Analysis Batch: 282862

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-113299-1	MW-8 (33-34.4)	Soluble	Solid	300.0	282638

HPLC/IC (Continued)

Analysis Batch: 282862 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-113299-2	MW-7 (27-28.9)	Soluble	Solid	300.0	282638
LCS 400-282638/2-A	Lab Control Sample	Soluble	Solid	300.0	282638
LCSD 400-282638/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	282638
MB 400-282638/1-A	Method Blank	Soluble	Solid	300.0	282638

Leach Batch: 282951

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-113299-3	MW-9 (35-36.5)	Soluble	Solid	DI Leach	
400-113299-4	SB-1 (16.5-18)	Soluble	Solid	DI Leach	
400-113299-5	SB-1 (35-36.5)	Soluble	Solid	DI Leach	
LCS 400-282951/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 400-282951/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
MB 400-282951/1-A	Method Blank	Soluble	Solid	DI Leach	

Analysis Batch: 283312

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-113299-3	MW-9 (35-36.5)	Soluble	Solid	300.0	282951
400-113299-4	SB-1 (16.5-18)	Soluble	Solid	300.0	282951
400-113299-5	SB-1 (35-36.5)	Soluble	Solid	300.0	282951
LCS 400-282951/2-A	Lab Control Sample	Soluble	Solid	300.0	282951
LCSD 400-282951/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	282951
MB 400-282951/1-A	Method Blank	Soluble	Solid	300.0	282951

General Chemistry

Analysis Batch: 282061

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-113299-1	MW-8 (33-34.4)	Total/NA	Solid	Moisture	
400-113299-2	MW-7 (27-28.9)	Total/NA	Solid	Moisture	
400-113299-3	MW-9 (35-36.5)	Total/NA	Solid	Moisture	
400-113299-4	SB-1 (16.5-18)	Total/NA	Solid	Moisture	
400-113299-5	SB-1 (35-36.5)	Total/NA	Solid	Moisture	
400-113299-5 DU	SB-1 (35-36.5)	Total/NA	Solid	Moisture	

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

Lab Sample ID: MB 400-283249/1-A
Matrix: Solid
Analysis Batch: 283246

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 283249

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) C6--C10	<5.0		5.0		mg/Kg		11/12/15 13:00	11/13/15 15:21	50

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (fid)	*103*		*65 - 125*	*11/12/15 13:00*	*11/13/15 15:21*	*50*

Lab Sample ID: LCS 400-283249/3-A
Matrix: Solid
Analysis Batch: 283246

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 283249

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO) C6--C10			50.0	63.6		mg/Kg		127	62 - 141		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
a,a,a-Trifluorotoluene (fid)	*105*		*65 - 125*

Lab Sample ID: 400-113299-4 MS
Matrix: Solid
Analysis Batch: 283246

Client Sample ID: SB-1 (16.5-18)
Prep Type: Total/NA
Prep Batch: 283249

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO) C6--C10	11000	F2	2210	6860	4	mg/Kg	☼	-195	10 - 150		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
a,a,a-Trifluorotoluene (fid)	*84*		*65 - 125*

Lab Sample ID: 400-113299-4 MSD
Matrix: Solid
Analysis Batch: 283246

Client Sample ID: SB-1 (16.5-18)
Prep Type: Total/NA
Prep Batch: 283249

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	11000	F2	2210	10500	E 4 F2	mg/Kg	☼	-29	10 - 150	42	32

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
a,a,a-Trifluorotoluene (fid)	*84*		*65 - 125*

Lab Sample ID: MB 400-283255/1-A
Matrix: Solid
Analysis Batch: 283256

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 283255

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) C6--C10	<0.10		0.10		mg/Kg		11/12/15 10:30	11/12/15 14:15	1

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

Lab Sample ID: MB 400-283255/1-A
Matrix: Solid
Analysis Batch: 283256

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 283255

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid)	99		65 - 125	11/12/15 10:30	11/12/15 14:15	1

Lab Sample ID: LCS 400-283255/3-A
Matrix: Solid
Analysis Batch: 283256

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 283255

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO) C6--C10			1.00	1.12		mg/Kg		112	62 - 141		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
a,a,a-Trifluorotoluene (fid)	103		65 - 125

Lab Sample ID: 400-113299-1 MS
Matrix: Solid
Analysis Batch: 283256

Client Sample ID: MW-8 (33-34.4)
Prep Type: Total/NA
Prep Batch: 283255

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO) C6--C10	<0.14		1.37	1.73		mg/Kg	☼	126	10 - 150		

Surrogate	MS %Recovery	MS Qualifier	Limits
a,a,a-Trifluorotoluene (fid)	102		65 - 125

Lab Sample ID: 400-113299-1 MSD
Matrix: Solid
Analysis Batch: 283256

Client Sample ID: MW-8 (33-34.4)
Prep Type: Total/NA
Prep Batch: 283255

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	<0.14		1.36	1.66		mg/Kg	☼	122	10 - 150	4	32

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

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 400-283249/1-A
Matrix: Solid
Analysis Batch: 283245

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 283249

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.050		0.050		mg/Kg		11/12/15 13:00	11/13/15 15:21	50
Ethylbenzene	<0.050		0.050		mg/Kg		11/12/15 13:00	11/13/15 15:21	50
Toluene	<0.25		0.25		mg/Kg		11/12/15 13:00	11/13/15 15:21	50
Xylenes, Total	<0.25		0.25		mg/Kg		11/12/15 13:00	11/13/15 15:21	50

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

Lab Sample ID: MB 400-283249/1-A
Matrix: Solid
Analysis Batch: 283245

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 283249

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (pid)	101		40 - 150	11/12/15 13:00	11/13/15 15:21	50

Lab Sample ID: LCS 400-283249/2-A
Matrix: Solid
Analysis Batch: 283245

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 283249

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	2.50	3.04		mg/Kg		122	74 - 127
Ethylbenzene	2.50	3.04		mg/Kg		122	79 - 131
Toluene	2.50	3.08		mg/Kg		123	76 - 127
Xylenes, Total	7.50	9.29		mg/Kg		124	80 - 129

Surrogate	LCS %Recovery	LCS Qualifier	Limits
a,a,a-Trifluorotoluene (pid)	101		40 - 150

Lab Sample ID: 400-113299-4 MS
Matrix: Solid
Analysis Batch: 283245

Client Sample ID: SB-1 (16.5-18)
Prep Type: Total/NA
Prep Batch: 283249

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	<2.2		111	99.3		mg/Kg	☼	88	10 - 150
Ethylbenzene	170	F1	111	146	F1	mg/Kg	☼	-21	10 - 150
Toluene	190	F1	111	177	F1	mg/Kg	☼	-8	10 - 150
Xylenes, Total	1500		332	848	4	mg/Kg	☼	-198	50 - 150

Surrogate	MS %Recovery	MS Qualifier	Limits
a,a,a-Trifluorotoluene (pid)	88		40 - 150

Lab Sample ID: 400-113299-4 MSD
Matrix: Solid
Analysis Batch: 283245

Client Sample ID: SB-1 (16.5-18)
Prep Type: Total/NA
Prep Batch: 283249

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<2.2		111	107		mg/Kg	☼	95	10 - 150	7	34
Ethylbenzene	170	F1	111	158	F1	mg/Kg	☼	-10	10 - 150	8	66
Toluene	190	F1	111	193	F1	mg/Kg	☼	6	10 - 150	9	44
Xylenes, Total	1500		332	922	4	mg/Kg	☼	-175	50 - 150	8	46

Surrogate	MSD %Recovery	MSD Qualifier	Limits
a,a,a-Trifluorotoluene (pid)	86		40 - 150

Lab Sample ID: MB 400-283255/1-A
Matrix: Solid
Analysis Batch: 283149

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 283255

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0010		0.0010		mg/Kg		11/12/15 10:30	11/12/15 14:15	1

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

Lab Sample ID: MB 400-283255/1-A
Matrix: Solid
Analysis Batch: 283149

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 283255

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	<0.0010		0.0010		mg/Kg		11/12/15 10:30	11/12/15 14:15	1
Toluene	<0.0050		0.0050		mg/Kg		11/12/15 10:30	11/12/15 14:15	1
Xylenes, Total	<0.0050		0.0050		mg/Kg		11/12/15 10:30	11/12/15 14:15	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (pid)	*88*		*40 - 150*	*11/12/15 10:30*	*11/12/15 14:15*	*1*

Lab Sample ID: LCS 400-283255/2-A
Matrix: Solid
Analysis Batch: 283149

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 283255

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.0500	0.0523		mg/Kg		105	74 - 127		
Ethylbenzene			0.0500	0.0532		mg/Kg		106	79 - 131		
Toluene			0.0500	0.0525		mg/Kg		105	76 - 127		
Xylenes, Total			0.150	0.157		mg/Kg		104	80 - 129		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
a,a,a-Trifluorotoluene (pid)	*91*		*40 - 150*

Lab Sample ID: 400-113299-1 MS
Matrix: Solid
Analysis Batch: 283149

Client Sample ID: MW-8 (33-34.4)
Prep Type: Total/NA
Prep Batch: 283255

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene	<0.0014		0.0693	0.0659		mg/Kg	☼	95	10 - 150		
Ethylbenzene	<0.0014		0.0693	0.0710		mg/Kg	☼	102	10 - 150		
Toluene	<0.0070		0.0693	0.0692		mg/Kg	☼	100	10 - 150		
Xylenes, Total	<0.0070		0.208	0.210		mg/Kg	☼	101	50 - 150		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
a,a,a-Trifluorotoluene (pid)	*99*		*40 - 150*

Lab Sample ID: 400-113299-1 MSD
Matrix: Solid
Analysis Batch: 283149

Client Sample ID: MW-8 (33-34.4)
Prep Type: Total/NA
Prep Batch: 283255

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.0014		0.0700	0.0714		mg/Kg	☼	102	10 - 150	8	34
Ethylbenzene	<0.0014		0.0700	0.0706		mg/Kg	☼	101	10 - 150	0	66
Toluene	<0.0070		0.0700	0.0689		mg/Kg	☼	98	10 - 150	0	44
Xylenes, Total	<0.0070		0.210	0.209		mg/Kg	☼	100	50 - 150	0	46

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
a,a,a-Trifluorotoluene (pid)	*97*		*40 - 150*

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

Lab Sample ID: MB 400-281851/23-A
Matrix: Solid
Analysis Batch: 282312

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 281851

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	<10		10		mg/Kg		11/04/15 07:59	11/06/15 12:04	1
Oil Range Organics (C28-C35)	<10		10		mg/Kg		11/04/15 07:59	11/06/15 12:04	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*123*		*27 - 151*	*11/04/15 07:59*	*11/06/15 12:04*	*1*

Lab Sample ID: LCS 400-281851/22-A
Matrix: Solid
Analysis Batch: 282002

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 281851

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Diesel Range Organics [C10-C28]			335	348		mg/Kg		104	63 - 153		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
o-Terphenyl	*143*		*27 - 151*

Lab Sample ID: 400-113295-B-3-B MS
Matrix: Solid
Analysis Batch: 282002

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 281851

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Diesel Range Organics [C10-C28]	<14		453	432		mg/Kg	☼	95	62 - 204		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
o-Terphenyl	*138*		*27 - 151*

Lab Sample ID: 400-113295-B-3-C MSD
Matrix: Solid
Analysis Batch: 282002

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 281851

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Diesel Range Organics [C10-C28]	<14		445	423		mg/Kg	☼	95	62 - 204	2	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
o-Terphenyl	*92*		*27 - 151*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 400-282638/1-A
Matrix: Solid
Analysis Batch: 282862

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			11/10/15 23:31	1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 400-282638/2-A
Matrix: Solid
Analysis Batch: 282862

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	100	99.6		mg/Kg		100	80 - 120

Lab Sample ID: LCSD 400-282638/3-A
Matrix: Solid
Analysis Batch: 282862

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	102		mg/Kg		102	80 - 120	2	15

Lab Sample ID: MB 400-282951/1-A
Matrix: Solid
Analysis Batch: 283312

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			11/12/15 11:46	1

Lab Sample ID: LCS 400-282951/2-A
Matrix: Solid
Analysis Batch: 283312

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	100	105		mg/Kg		105	80 - 120

Lab Sample ID: LCSD 400-282951/3-A
Matrix: Solid
Analysis Batch: 283312

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	100		mg/Kg		100	80 - 120	4	15

Lab Chronicle

Client: MWH Americas Inc
Project/Site: Johnstson Federal #6A

TestAmerica Job ID: 400-113299-1

Client Sample ID: MW-8 (33-34.4)
Date Collected: 10/30/15 10:30
Date Received: 11/03/15 09:09

Lab Sample ID: 400-113299-1
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			282061	11/05/15 08:31	TMP	TAL PEN
	Instrument ID: NOEQUIP									

Client Sample ID: MW-8 (33-34.4)
Date Collected: 10/30/15 10:30
Date Received: 11/03/15 09:09

Lab Sample ID: 400-113299-1
Matrix: Solid
Percent Solids: 71.3

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 g	5.0 g	283255	11/12/15 10:30	GRK	TAL PEN
Total/NA	Analysis	8015B		1	5.00 g	5.0 g	283256	11/12/15 15:57	GRK	TAL PEN
	Instrument ID: CH_JOAN									
Total/NA	Prep	5035			5.00 g	5.0 g	283255	11/12/15 10:30	GRK	TAL PEN
Total/NA	Analysis	8021B		1	5.00 g	5.0 g	283149	11/12/15 15:57	GRK	TAL PEN
	Instrument ID: CH_JOAN									
Total/NA	Prep	3546			15.01 g	2.0 mL	281851	11/04/15 07:59	RDT	TAL PEN
Total/NA	Analysis	8015B		1	15.01 g	2.0 mL	282002	11/04/15 19:26	RM	TAL PEN
	Instrument ID: WALLE									
Soluble	Leach	DI Leach			2.56 g	50 mL	282638	11/09/15 16:16	TAJ	TAL PEN
Soluble	Analysis	300.0		1	1 mL		282862	11/11/15 10:35	TAJ	TAL PEN
	Instrument ID: IC2									

Client Sample ID: MW-7 (27-28.9)
Date Collected: 10/30/15 14:45
Date Received: 11/03/15 09:09

Lab Sample ID: 400-113299-2
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			282061	11/05/15 08:31	TMP	TAL PEN
	Instrument ID: NOEQUIP									

Client Sample ID: MW-7 (27-28.9)
Date Collected: 10/30/15 14:45
Date Received: 11/03/15 09:09

Lab Sample ID: 400-113299-2
Matrix: Solid
Percent Solids: 92.2

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.36 g	5.0 g	283255	11/12/15 10:30	GRK	TAL PEN
Total/NA	Analysis	8015B		1	5.36 g	5.0 g	283256	11/12/15 21:06	GRK	TAL PEN
	Instrument ID: CH_JOAN									
Total/NA	Prep	5035			5.36 g	5.0 g	283255	11/12/15 10:30	GRK	TAL PEN
Total/NA	Analysis	8021B		1	5.36 g	5.0 g	283149	11/12/15 21:06	GRK	TAL PEN
	Instrument ID: CH_JOAN									
Total/NA	Prep	3546			15.09 g	2.0 mL	281851	11/04/15 07:59	RDT	TAL PEN
Total/NA	Analysis	8015B		1	15.09 g	2.0 mL	282002	11/04/15 19:36	RM	TAL PEN
	Instrument ID: WALLE									

Lab Chronicle

Client: MWH Americas Inc
Project/Site: Johnstson Federal #6A

TestAmerica Job ID: 400-113299-1

Client Sample ID: MW-7 (27-28.9)

Lab Sample ID: 400-113299-2
Date Collected: 10/30/15 14:45
Matrix: Solid
Date Received: 11/03/15 09:09
Percent Solids: 92.2

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			2.44 g	50 mL	282638	11/09/15 16:16	TAJ	TAL PEN
Soluble	Analysis	300.0		1	1 mL		282862	11/11/15 10:57	TAJ	TAL PEN
	Instrument ID: IC2									

Client Sample ID: MW-9 (35-36.5)

Lab Sample ID: 400-113299-3
Date Collected: 10/31/15 10:10
Matrix: Solid
Date Received: 11/03/15 09:09

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			282061	11/05/15 08:31	TMP	TAL PEN
	Instrument ID: NOEQUIP									

Client Sample ID: MW-9 (35-36.5)

Lab Sample ID: 400-113299-3
Date Collected: 10/31/15 10:10
Matrix: Solid
Date Received: 11/03/15 09:09
Percent Solids: 79.3

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.98 g	5.0 g	283255	11/12/15 10:30	GRK	TAL PEN
Total/NA	Analysis	8015B		1	5.98 g	5.0 g	283256	11/12/15 20:32	GRK	TAL PEN
	Instrument ID: CH_JOAN									
Total/NA	Prep	5035			5.98 g	5.0 g	283255	11/12/15 10:30	GRK	TAL PEN
Total/NA	Analysis	8021B		1	5.98 g	5.0 g	283149	11/12/15 20:32	GRK	TAL PEN
	Instrument ID: CH_JOAN									
Total/NA	Prep	3546			15.04 g	2.0 mL	281851	11/04/15 07:59	RDT	TAL PEN
Total/NA	Analysis	8015B		1	15.04 g	2.0 mL	282002	11/04/15 19:56	RM	TAL PEN
	Instrument ID: WALLE									
Soluble	Leach	DI Leach			2.50 g	50 mL	282951	11/11/15 11:23	TAJ	TAL PEN
Soluble	Analysis	300.0		1	1 mL		283312	11/12/15 12:55	TAJ	TAL PEN
	Instrument ID: IC2									

Client Sample ID: SB-1 (16.5-18)

Lab Sample ID: 400-113299-4
Date Collected: 10/31/15 13:35
Matrix: Solid
Date Received: 11/03/15 09:09

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			282061	11/05/15 08:31	TMP	TAL PEN
	Instrument ID: NOEQUIP									

Lab Chronicle

Client: MWH Americas Inc
Project/Site: Johnstson Federal #6A

TestAmerica Job ID: 400-113299-1

Client Sample ID: SB-1 (16.5-18)

Date Collected: 10/31/15 13:35
Date Received: 11/03/15 09:09

Lab Sample ID: 400-113299-4

Matrix: Solid
Percent Solids: 78.0

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.79 g	5.0 g	283249	11/12/15 13:00	GRK	TAL PEN
Total/NA	Analysis	8015B		2000	5.79 g	5.0 g	283246	11/12/15 17:35	GRK	TAL PEN
	Instrument ID: CH_RITA									
Total/NA	Prep	5035			5.79 g	5.0 g	283249	11/12/15 13:00	GRK	TAL PEN
Total/NA	Analysis	8021B		2000	5.79 g	5.0 g	283245	11/12/15 17:35	GRK	TAL PEN
	Instrument ID: CH_RITA									
Total/NA	Prep	3546			15.20 g	2.0 mL	281851	11/04/15 07:59	RDT	TAL PEN
Total/NA	Analysis	8015B		1	15.20 g	2.0 mL	282002	11/04/15 20:06	RM	TAL PEN
	Instrument ID: WALLE									
Soluble	Leach	DI Leach			2.50 g	50 mL	282951	11/11/15 11:23	TAJ	TAL PEN
Soluble	Analysis	300.0		1	1 mL		283312	11/12/15 13:18	TAJ	TAL PEN
	Instrument ID: IC2									

Client Sample ID: SB-1 (35-36.5)

Date Collected: 10/31/15 14:45
Date Received: 11/03/15 09:09

Lab Sample ID: 400-113299-5

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			282061	11/05/15 08:31	TMP	TAL PEN
	Instrument ID: NOEQUIP									

Client Sample ID: SB-1 (35-36.5)

Date Collected: 10/31/15 14:45
Date Received: 11/03/15 09:09

Lab Sample ID: 400-113299-5

Matrix: Solid
Percent Solids: 82.4

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			6.31 g	5.0 g	283249	11/12/15 13:00	GRK	TAL PEN
Total/NA	Analysis	8015B		50	6.31 g	5.0 g	283246	11/12/15 15:04	GRK	TAL PEN
	Instrument ID: CH_RITA									
Total/NA	Prep	5035			6.31 g	5.0 g	283249	11/12/15 13:00	GRK	TAL PEN
Total/NA	Analysis	8021B		50	6.31 g	5.0 g	283245	11/12/15 15:04	GRK	TAL PEN
	Instrument ID: CH_RITA									
Total/NA	Prep	3546			15.07 g	2.0 mL	281851	11/04/15 07:59	RDT	TAL PEN
Total/NA	Analysis	8015B		1	15.07 g	2.0 mL	282002	11/04/15 20:15	RM	TAL PEN
	Instrument ID: WALLE									
Soluble	Leach	DI Leach			2.50 g	50 mL	282951	11/11/15 11:23	TAJ	TAL PEN
Soluble	Analysis	300.0		1	1 mL		283312	11/12/15 13:40	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: Johnstson Federal #6A

TestAmerica Job ID: 400-113299-1

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	01-31-16
Arizona	State Program	9	AZ0710	01-11-17
Arkansas DEQ	State Program	6	88-0689	09-01-16
Florida	NELAP	4	E81010	06-30-16
Georgia	State Program	4	N/A	06-30-16
Illinois	NELAP	5	200041	10-09-16
Iowa	State Program	7	367	07-31-16
Kansas	NELAP	7	E-10253	01-31-16 *
Kentucky (UST)	State Program	4	53	06-30-16
Kentucky (WW)	State Program	4	98030	12-31-16
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	12-31-15 *
Oklahoma	State Program	6	9810	08-31-16
Pennsylvania	NELAP	3	68-00467	01-31-16
Rhode Island	State Program	1	LAO00307	12-30-16
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: Johnstson Federal #6A

TestAmerica Job ID: 400-113299-1

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			
Client Contact: Clint Oberbroeckling	Sampler: Brad Barton	Lab PM: Edwards, Marty P	Carrier Tracking No(s):
Company: MWH Americas inc	Phone: 311 305 2789	E-Mail: marty.edwards@testamericainc.com	COC No: 400-49255-22804.1
Address: 11153 Aurora Avenue	Due Date Requested:		Page: Page 1 of 1
City: Des Moines	TAT Requested (days): Normal		Job #:
State, Zip: IA, 50322-7904			
Phone: 303-291-2239(Tel)	PO #: Purchase Order Requested		
Email: clint.w.oberbroeckling@mwhglobal.com	~~WO~~ #: ARF # ERG-MWH-10-9-15-CWD-01		
Project Name: Pit GW:Johnston Federal #6A	Project #: 40005479		
Site: ↑	SSOW#:		

Analysis Requested

400-113299 COC

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8015B_DRO, 9056_ORGFM_28D	8021B - 8021 BTEX/ 8015 GRO	Total Number of containers	Special Instructions/Note:
Preservation Code:										
MW-8 (33-34.4)	10/30/15	1030	G	S	N	N	1	1		
MW-7 (27-28.9)	10/30/15	1445	G	S	N	N	1	1		
MW-9 (35-36.5)	10/31/15	1010	G	S	N	N	1	1		
SB-1 (16.5-18)	10/31/15	1335	G	S	N	N	1	1		
SB-1 (35-36.5)	10/31/15	1445	G	S	N	N	1	1		

Brad Bart 11/2/15

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2SO3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

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: [signature]	Date/Time: 11-3-15 9:09am	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: △ Yes △ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks: 3.7°C IR6

Login Sample Receipt Checklist

Client: MWH Americas Inc

Job Number: 400-113299-1

Login Number: 113299
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	0.7°C IR-6
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <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 # 53589
GENERATOR El PASO
POINT OF ORIGIN Johnston Federal 6A
TRANSPORTER Sierra
DATE 11-13-15 JOB # 14073-0010

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	Cont Soil	K-2		11	–	22	15:30	[signature]
					11				

RESULTS		LANDFARM EMPLOYEE	NOTES
<305	CHLORIDE TEST	[signature]	BBl's need to Be Dumped And Decond
	PAINT FILTER TEST	Certification of above receival & placement	

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

san juan reproduction 578-126

envirotech

BOL# 53589

CHLORIDE TESTING / PAINT FILTER TESTING

DATE 11-13-15 TIME 15:30

Attach test strip here

CUSTOMER El Paso

SITE Johnston Fed 6 A

DRIVER Jeremy Vokaly

SAMPLE (Soil) Straight _____ With Dirt _____

CHLORIDE TEST 305 mg/Kg

ACCEPTED YES ✓ NO _____

PAINT FILTER TEST Time started 15:30 Time completed 15:35

PASS YES ✓ NO _____

SAMPLER/ANALYST Dave

5796 US Hwy 64, Farmington, NM 87401 | Ph (505) 632-0615 Fr (800) 362-1879 Fx (505) 632-1865 | info@envirotech-inc.com envirotech-inc.com

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: 400-106465-1
Client Project/Site: NM-GW Pits, Johnston Fed #6A

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

Attn: Ms. Sarah Gardner

Authorized for release by:
6/16/2015 4:59:31 PM

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

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Definitions/Glossary

Client: MWH Americas Inc
Project/Site: NM-GW Pits, Johnston Fed #6A

TestAmerica Job ID: 400-106465-1

Qualifiers

GC VOA

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

Glossary

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

Case Narrative

Client: MWH Americas Inc
Project/Site: NM-GW Pits, Johnston Fed #6A

TestAmerica Job ID: 400-106465-1

Job ID: 400-106465-1

Laboratory: TestAmerica Pensacola

Narrative

Job Narrative
400-106465-1

Comments
No additional comments.

Receipt
The samples were received on 6/2/2015 9:37 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 0.6º C.

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

Detection Summary

Client: MWH Americas Inc
Project/Site: NM-GW Pits, Johnston Fed #6A

TestAmerica Job ID: 400-106465-1

Client Sample ID: JOHNSTON FED #6A MW-2 — Lab Sample ID: 400-106465-1

No Detections.

Client Sample ID: JOHNSTON FED #6A MW-3 — Lab Sample ID: 400-106465-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Ethylbenzene	4.6		1.0	0.64	ug/L	1		8021B	Total/NA
Xylenes, Total	17		5.0	1.7	ug/L	1		8021B	Total/NA

Client Sample ID: JOHNSTON FED #6A MW-4 — Lab Sample ID: 400-106465-3

No Detections.

Client Sample ID: JOHNSTON FED #6A MW-5 — Lab Sample ID: 400-106465-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Xylenes, Total	2.1	J	5.0	1.7	ug/L	1		8021B	Total/NA

Client Sample ID: JOHNSTON FED #6A MW-6 — Lab Sample ID: 400-106465-5

No Detections.

Client Sample ID: JOHNSTON FED #6A TRIP BLANK — Lab Sample ID: 400-106465-6

No Detections.

This Detection Summary does not include radiochemical test results.

Sample Summary

Client: MWH Americas Inc
Project/Site: NM-GW Pits, Johnston Fed #6A

TestAmerica Job ID: 400-106465-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-106465-1	JOHNSTON FED #6A MW-2	Water	05/30/15 10:00	06/02/15 09:37
400-106465-2	JOHNSTON FED #6A MW-3	Water	05/30/15 09:50	06/02/15 09:37
400-106465-3	JOHNSTON FED #6A MW-4	Water	05/30/15 09:45	06/02/15 09:37
400-106465-4	JOHNSTON FED #6A MW-5	Water	05/30/15 09:40	06/02/15 09:37
400-106465-5	JOHNSTON FED #6A MW-6	Water	05/30/15 09:35	06/02/15 09:37
400-106465-6	JOHNSTON FED #6A TRIP BLANK	Water	05/30/15 09:30	06/02/15 09:37

Client Sample Results

Client: MWH Americas Inc
Project/Site: NM-GW Pits, Johnston Fed #6A

TestAmerica Job ID: 400-106465-1

Client Sample ID: JOHNSTON FED #6A MW-2
Date Collected: 05/30/15 10:00
Date Received: 06/02/15 09:37

Lab Sample ID: 400-106465-1
Matrix: Water

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0	0.56	ug/L			06/06/15 10:49	1
Ethylbenzene	<1.0		1.0	0.64	ug/L			06/06/15 10:49	1
Toluene	<5.0		5.0	0.98	ug/L			06/06/15 10:49	1
Xylenes, Total	<5.0		5.0	1.7	ug/L			06/06/15 10:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (pid)	*99*		*78 - 124*		*06/06/15 10:49*	*1*

Client: MWH Americas Inc
Project/Site: NM-GW Pits, Johnston Fed #6A

TestAmerica Job ID: 400-106465-1

Client Sample ID: JOHNSTON FED #6A MW-3
Date Collected: 05/30/15 09:50
Date Received: 06/02/15 09:37

Lab Sample ID: 400-106465-2
Matrix: Water

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0	0.56	ug/L			06/08/15 23:13	1
Ethylbenzene	**4.6**		1.0	0.64	ug/L			06/08/15 23:13	1
Toluene	<5.0		5.0	0.98	ug/L			06/08/15 23:13	1
Xylenes, Total	**17**		5.0	1.7	ug/L			06/08/15 23:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (pid)	*90*		*78 - 124*		*06/08/15 23:13*	*1*

Client: MWH Americas Inc
Project/Site: NM-GW Pits, Johnston Fed #6A

TestAmerica Job ID: 400-106465-1

Client Sample ID: JOHNSTON FED #6A MW-4
Date Collected: 05/30/15 09:45
Date Received: 06/02/15 09:37

Lab Sample ID: 400-106465-3
Matrix: Water

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0	0.56	ug/L			06/06/15 13:58	1
Ethylbenzene	<1.0		1.0	0.64	ug/L			06/06/15 13:58	1
Toluene	<5.0		5.0	0.98	ug/L			06/06/15 13:58	1
Xylenes, Total	<5.0		5.0	1.7	ug/L			06/06/15 13:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (pid)	*100*		*78 - 124*		*06/06/15 13:58*	*1*

Client: MWH Americas Inc
Project/Site: NM-GW Pits, Johnston Fed #6A

TestAmerica Job ID: 400-106465-1

Client Sample ID: JOHNSTON FED #6A MW-5
Date Collected: 05/30/15 09:40
Date Received: 06/02/15 09:37

Lab Sample ID: 400-106465-4
Matrix: Water

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0	0.56	ug/L			06/06/15 14:30	1
Ethylbenzene	<1.0		1.0	0.64	ug/L			06/06/15 14:30	1
Toluene	<5.0		5.0	0.98	ug/L			06/06/15 14:30	1
Xylenes, Total	**2.1**	**J**	5.0	1.7	ug/L			06/06/15 14:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (pid)	*102*		*78 - 124*		*06/06/15 14:30*	*1*

Client: MWH Americas Inc
Project/Site: NM-GW Pits, Johnston Fed #6A

TestAmerica Job ID: 400-106465-1

Client Sample ID: JOHNSTON FED #6A MW-6
Date Collected: 05/30/15 09:35
Date Received: 06/02/15 09:37

Lab Sample ID: 400-106465-5
Matrix: Water

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0	0.56	ug/L			06/06/15 15:01	1
Ethylbenzene	<1.0		1.0	0.64	ug/L			06/06/15 15:01	1
Toluene	<5.0		5.0	0.98	ug/L			06/06/15 15:01	1
Xylenes, Total	<5.0		5.0	1.7	ug/L			06/06/15 15:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (pid)	*99*		*78 - 124*		*06/06/15 15:01*	*1*

Client: MWH Americas Inc
Project/Site: NM-GW Pits, Johnston Fed #6A

TestAmerica Job ID: 400-106465-1

Client Sample ID: JOHNSTON FED #6A TRIP BLANK
Lab Sample ID: 400-106465-6
Date Collected: 05/30/15 09:30
Matrix: Water
Date Received: 06/02/15 09:37

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0	0.56	ug/L			06/06/15 15:33	1
Ethylbenzene	<1.0		1.0	0.64	ug/L			06/06/15 15:33	1
Toluene	<5.0		5.0	0.98	ug/L			06/06/15 15:33	1
Xylenes, Total	<5.0		5.0	1.7	ug/L			06/06/15 15:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (pid)	*98*		*78 - 124*		*06/06/15 15:33*	*1*

QC Association Summary

Client: MWH Americas Inc
Project/Site: NM-GW Pits, Johnston Fed #6A

TestAmerica Job ID: 400-106465-1

GC VOA

Analysis Batch: 260178

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-106465-1	JOHNSTON FED #6A MW-2	Total/NA	Water	8021B	
400-106465-1 MS	JOHNSTON FED #6A MW-2	Total/NA	Water	8021B	
400-106465-1 MSD	JOHNSTON FED #6A MW-2	Total/NA	Water	8021B	
400-106465-3	JOHNSTON FED #6A MW-4	Total/NA	Water	8021B	
400-106465-4	JOHNSTON FED #6A MW-5	Total/NA	Water	8021B	
400-106465-5	JOHNSTON FED #6A MW-6	Total/NA	Water	8021B	
400-106465-6	JOHNSTON FED #6A TRIP BLANK	Total/NA	Water	8021B	
LCS 400-260178/1034	Lab Control Sample	Total/NA	Water	8021B	
MB 400-260178/35	Method Blank	Total/NA	Water	8021B	

Analysis Batch: 260285

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-106465-2	JOHNSTON FED #6A MW-3	Total/NA	Water	8021B	
400-106530-B-3 MS	Matrix Spike	Total/NA	Water	8021B	
400-106530-B-3 MSD	Matrix Spike Duplicate	Total/NA	Water	8021B	
LCS 400-260285/1003	Lab Control Sample	Total/NA	Water	8021B	
MB 400-260285/5	Method Blank	Total/NA	Water	8021B	

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 400-260178/35
Matrix: Water
Analysis Batch: 260178

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

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

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

Lab Sample ID: LCS 400-260178/1034
Matrix: Water
Analysis Batch: 260178

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

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

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

Lab Sample ID: 400-106465-1 MS
Matrix: Water
Analysis Batch: 260178

Client Sample ID: JOHNSTON FED #6A MW-2
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene	<1.0		50.0	59.1		ug/L		118	44 - 150		
Ethylbenzene	<1.0		50.0	59.7		ug/L		119	70 - 142		
Toluene	<5.0		50.0	59.0		ug/L		118	69 - 136		
Xylenes, Total	<5.0		150	176		ug/L		117	68 - 142		

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

Lab Sample ID: 400-106465-1 MSD
Matrix: Water
Analysis Batch: 260178

Client Sample ID: JOHNSTON FED #6A MW-2
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<1.0		50.0	59.0		ug/L		118	44 - 150	0	16
Ethylbenzene	<1.0		50.0	60.4		ug/L		121	70 - 142	1	16
Toluene	<5.0		50.0	59.5		ug/L		119	69 - 136	1	16
Xylenes, Total	<5.0		150	178		ug/L		119	68 - 142	1	15

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

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

Lab Sample ID: MB 400-260285/5
Matrix: Water
Analysis Batch: 260285

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0	0.56	ug/L			06/08/15 13:15	1
Ethylbenzene	<1.0		1.0	0.64	ug/L			06/08/15 13:15	1
Toluene	<5.0		5.0	0.98	ug/L			06/08/15 13:15	1
Xylenes, Total	<5.0		5.0	1.7	ug/L			06/08/15 13:15	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (pid)	*98*		*78 - 124*		*06/08/15 13:15*	*1*

Lab Sample ID: LCS 400-260285/1003
Matrix: Water
Analysis Batch: 260285

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	50.0	49.5		ug/L		99	85 - 115
Ethylbenzene	50.0	50.3		ug/L		101	85 - 115
Toluene	50.0	49.6		ug/L		99	85 - 115
Xylenes, Total	150	150		ug/L		100	85 - 115

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

Lab Sample ID: 400-106530-B-3 MS
Matrix: Water
Analysis Batch: 260285

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	<1.0		50.0	55.6		ug/L		111	44 - 150
Ethylbenzene	5.4		50.0	61.8		ug/L		113	70 - 142
Toluene	<5.0		50.0	56.0		ug/L		112	69 - 136
Xylenes, Total	5.1		150	172		ug/L		112	68 - 142

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

Lab Sample ID: 400-106530-B-3 MSD
Matrix: Water
Analysis Batch: 260285

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	56.4		ug/L		113	44 - 150	1	16
Ethylbenzene	5.4		50.0	61.0		ug/L		111	70 - 142	1	16
Toluene	<5.0		50.0	56.1		ug/L		112	69 - 136	0	16
Xylenes, Total	5.1		150	169		ug/L		109	68 - 142	2	15

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

Lab Chronicle

Client: MWH Americas Inc
Project/Site: NM-GW Pits, Johnston Fed #6A

TestAmerica Job ID: 400-106465-1

Client Sample ID: JOHNSTON FED #6A MW-2
Lab Sample ID: 400-106465-1
Date Collected: 05/30/15 10:00
Matrix: Water
Date Received: 06/02/15 09:37

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	5 mL	5 mL	260178	06/06/15 10:49	MKA	TAL PEN
	Instrument ID: CH_PAULA									

Client Sample ID: JOHNSTON FED #6A MW-3
Lab Sample ID: 400-106465-2
Date Collected: 05/30/15 09:50
Matrix: Water
Date Received: 06/02/15 09:37

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	5 mL	5 mL	260285	06/08/15 23:13	MKA	TAL PEN
	Instrument ID: CH_PAULA									

Client Sample ID: JOHNSTON FED #6A MW-4
Lab Sample ID: 400-106465-3
Date Collected: 05/30/15 09:45
Matrix: Water
Date Received: 06/02/15 09:37

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	5 mL	5 mL	260178	06/06/15 13:58	MKA	TAL PEN
	Instrument ID: CH_PAULA									

Client Sample ID: JOHNSTON FED #6A MW-5
Lab Sample ID: 400-106465-4
Date Collected: 05/30/15 09:40
Matrix: Water
Date Received: 06/02/15 09:37

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	5 mL	5 mL	260178	06/06/15 14:30	MKA	TAL PEN
	Instrument ID: CH_PAULA									

Client Sample ID: JOHNSTON FED #6A MW-6
Lab Sample ID: 400-106465-5
Date Collected: 05/30/15 09:35
Matrix: Water
Date Received: 06/02/15 09:37

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	5 mL	5 mL	260178	06/06/15 15:01	MKA	TAL PEN
	Instrument ID: CH_PAULA									

Client Sample ID: JOHNSTON FED #6A TRIP BLANK
Lab Sample ID: 400-106465-6
Date Collected: 05/30/15 09:30
Matrix: Water
Date Received: 06/02/15 09:37

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	5 mL	5 mL	260178	06/06/15 15:33	MKA	TAL PEN
	Instrument ID: CH_PAULA									

Lab Chronicle

Client: MWH Americas Inc
Project/Site: NM-GW Pits, Johnston Fed #6A

TestAmerica Job ID: 400-106465-1

Laboratory References:

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

Certification Summary

Client: MWH Americas Inc
Project/Site: NM-GW Pits, Johnston Fed #6A

TestAmerica Job ID: 400-106465-1

Laboratory: TestAmerica Pensacola

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

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

* Certification renewal pending - certification considered valid.

Method Summary

Client: MWH Americas Inc
Project/Site: NM-GW Pits, Johnston Fed #6A

TestAmerica Job ID: 400-106465-1

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

Protocol References:

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

Laboratory References:

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

400-106465

SERIAL NUMBER: 80215

400-106465 COC

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	ADDRESS	PAGE	OF
MWH	1560 Broadway Suite 1800 Denver CO 80202	1	1

PROJECT NAME	PROJECT NO.	CLIENT PROJECT MANAGER	PROJECT LOC. (STATE)
NM-Pit GW Johnston Fed #6A	40005479	Steve Varsa	NM

SAMPLED BY	CONTRACT / P.O. NO.
Chris Lee / Sarah Gardner	

CLIENT PHONE	CLIENT E-MAIL OR FAX
303 291 2239	sarah.gardner@mwhglobal.com

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

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

SAMPLE DATE	SAMPLE TIME	SAMPLE IDENTIFICATION		PRESERVATIVE: No Preservative	HCL - Hydrochloric Acid	HNO3 - Nitric Acid	H2SO4 - Sulfuric Acid or H3PO4	NAOH - Sodium Hydroxide	CH3OH - Methanol	NAHSO4 - Sodium Bisulfate	NA2S2O3 - Sodium Thiosulfate	Other:	MATRIX: Drinking Water	Aqueous GW, SW, WW	Solid, Semisolid, Sediment	Air	NonAqueous (Oil, Solvent, etc.)	NUMBER OF CONTAINERS SUBMITTED: 8021B - BTEX
5/30/15	1000	Johnston Fed #6A	MW-2		X									X				2
5/30/15	950	Johnston Fed #6A	MW-3		X									X				2
5/30/15	945	Johnston Fed #6A	MW-4		X									X				2
5/30/15	940	Johnston Fed #6A	MW-5		X									X				2
5/30/15	935	Johnston Fed #6A	MW-6		X									X				2
5/30/15	930	Johnston Fed #6A	TRIP BLANK		X									X				2

REQUESTED ANALYSIS

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

RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME
EMPTY CONTAINERS			Sarah Gardner	6/1/15	1345			
RECEIVED BY: (SIGNATURE)	**DATE**	**TIME**	**RECEIVED BY: (SIGNATURE)**	**DATE**	**TIME**	**RECEIVED BY: (SIGNATURE)**	**DATE**	**TIME**
EMPTY CONTAINERS								

LABORATORY USE ONLY

RECEIVED FOR LABORATORY BY:	DATE	TIME	CUSTODY INTACT?	CUSTODY SEAL NO.	REMARKS:
	5937	6/2/15	△ YES △ NO		IR6 0.6°C

TAL-8251 (1207)

Login Sample Receipt Checklist

Client: MWH Americas Inc

Job Number: 400-106465-1

Login Number: 106465
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	0.6°C IR-6
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <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: 400-114400-1
Client Project/Site: Sandoval GC A#1
Revision: 1

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

Attn: Steve Varsa

Authorized for release by:
12/22/2015 1:48:15 PM

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

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Definitions/Glossary

Client: MWH Americas Inc
Project/Site: Sandoval GC A#1

TestAmerica Job ID: 400-114400-1

Qualifiers

GC VOA

Qualifier	Qualifier Description
X	Surrogate is outside control limits
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.

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: 400-114400-1

Laboratory: TestAmerica Pensacola

Narrative

Job Narrative
400-114400-1

Comments
No additional comments.

Receipt
The samples were received on 11/25/2015 9:29 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 0.7º C.

Revised Report
The deliverable was revised to report to the RL.

GC VOA
Method 8021B: The following sample was collected in properly preserved vials for analysis of volatile organic compounds (VOCs). However, the pH was outside the required criteria when verified by the laboratory, and corrective action was not possible: MW-1 (400-114400-1).

Method 8021B: Surrogate recovery for the following samples was outside control limits: MW-4 (400-114400-4), (400-114400-A-4 MS) and (400-114400-A-4 MSD). Evidence of matrix interference is present; therefore, re-analysis was not performed.

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

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

Detection Summary

Client: MWH Americas Inc
Project/Site: Sandoval GC A#1

TestAmerica Job ID: 400-114400-1

Client Sample ID: MW-1 — Lab Sample ID: 400-114400-1

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Benzene	8.3		1.0		ug/L	1		8021B	Total/NA
Ethylbenzene	5.2		1.0		ug/L	1		8021B	Total/NA
Xylenes, Total	14		5.0		ug/L	1		8021B	Total/NA

Client Sample ID: MW-2 — Lab Sample ID: 400-114400-2

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Benzene	2400		50		ug/L	50		8021B	Total/NA
Ethylbenzene	530		50		ug/L	50		8021B	Total/NA
Toluene	3700		250		ug/L	50		8021B	Total/NA
Xylenes, Total	7400		250		ug/L	50		8021B	Total/NA

Client Sample ID: MW-3 — Lab Sample ID: 400-114400-3

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Benzene	55		1.0		ug/L	1		8021B	Total/NA
Ethylbenzene	16		1.0		ug/L	1		8021B	Total/NA
Toluene	62		5.0		ug/L	1		8021B	Total/NA
Xylenes, Total	140		5.0		ug/L	1		8021B	Total/NA

Client Sample ID: MW-4 — Lab Sample ID: 400-114400-4

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Benzene	490		2.0		ug/L	2		8021B	Total/NA
Ethylbenzene	4.0		2.0		ug/L	2		8021B	Total/NA
Xylenes, Total	140		10		ug/L	2		8021B	Total/NA

Client Sample ID: MW-5 — Lab Sample ID: 400-114400-5

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Benzene	7500		50		ug/L	50		8021B	Total/NA
Ethylbenzene	590		50		ug/L	50		8021B	Total/NA
Xylenes, Total	7100		250		ug/L	50		8021B	Total/NA
Toluene - DL	17000		500		ug/L	100		8021B	Total/NA

Client Sample ID: TRIP BLANK — Lab Sample ID: 400-114400-6

No Detections.

This Detection Summary does not include radiochemical test results.

Sample Summary

Client: MWH Americas Inc
Project/Site: Sandoval GC A#1

TestAmerica Job ID: 400-114400-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-114400-1	MW-1	Water	11/20/15 11:50	11/25/15 09:29
400-114400-2	MW-2	Water	11/20/15 11:40	11/25/15 09:29
400-114400-3	MW-3	Water	11/20/15 11:30	11/25/15 09:29
400-114400-4	MW-4	Water	11/20/15 10:50	11/25/15 09:29
400-114400-5	MW-5	Water	11/20/15 11:00	11/25/15 09:29
400-114400-6	TRIP BLANK	Water	11/20/15 11:45	11/25/15 09:29

Client: MWH Americas Inc
Project/Site: Sandoval GC A#1

TestAmerica Job ID: 400-114400-1

Client Sample ID: MW-1
Date Collected: 11/20/15 11:50
Date Received: 11/25/15 09:29

Lab Sample ID: 400-114400-1
Matrix: Water

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**8.3**		1.0		ug/L			12/02/15 21:29	1
Ethylbenzene	**5.2**		1.0		ug/L			12/02/15 21:29	1
Toluene	<5.0		5.0		ug/L			12/02/15 21:29	1
Xylenes, Total	**14**		5.0		ug/L			12/02/15 21:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (pid)	*99*		*78 - 124*		*12/02/15 21:29*	*1*

Client: MWH Americas Inc
Project/Site: Sandoval GC A#1

TestAmerica Job ID: 400-114400-1

Client Sample ID: MW-2
Date Collected: 11/20/15 11:40
Date Received: 11/25/15 09:29

Lab Sample ID: 400-114400-2
Matrix: Water

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	2400		50		ug/L			12/03/15 16:36	50
Ethylbenzene	530		50		ug/L			12/03/15 16:36	50
Toluene	3700		250		ug/L			12/03/15 16:36	50
Xylenes, Total	7400		250		ug/L			12/03/15 16:36	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (pid)	*87*		*78 - 124*		*12/03/15 16:36*	*50*

Client: MWH Americas Inc
Project/Site: Sandoval GC A#1

TestAmerica Job ID: 400-114400-1

Client Sample ID: MW-3
Date Collected: 11/20/15 11:30
Date Received: 11/25/15 09:29

Lab Sample ID: 400-114400-3
Matrix: Water

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	55		1.0		ug/L			12/03/15 14:53	1
Ethylbenzene	16		1.0		ug/L			12/03/15 14:53	1
Toluene	62		5.0		ug/L			12/03/15 14:53	1
Xylenes, Total	140		5.0		ug/L			12/03/15 14:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (pid)	*82*		*78 - 124*		*12/03/15 14:53*	*1*

Client: MWH Americas Inc
Project/Site: Sandoval GC A#1

TestAmerica Job ID: 400-114400-1

Client Sample ID: MW-4
Date Collected: 11/20/15 10:50
Date Received: 11/25/15 09:29

Lab Sample ID: 400-114400-4
Matrix: Water

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**490**		2.0		ug/L			12/02/15 20:20	2
Ethylbenzene	**4.0**		2.0		ug/L			12/02/15 20:20	2
Toluene	<10		10		ug/L			12/02/15 20:20	2
Xylenes, Total	**140**		10		ug/L			12/02/15 20:20	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (pid)	*75*	*X*	*78 - 124*		*12/02/15 20:20*	*2*

Client: MWH Americas Inc
Project/Site: Sandoval GC A#1

TestAmerica Job ID: 400-114400-1

Client Sample ID: MW-5
Date Collected: 11/20/15 11:00
Date Received: 11/25/15 09:29

Lab Sample ID: 400-114400-5
Matrix: Water

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	7500		50		ug/L			12/03/15 17:11	50
Ethylbenzene	590		50		ug/L			12/03/15 17:11	50
Xylenes, Total	7100		250		ug/L			12/03/15 17:11	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (pid)	*86*		*78 - 124*		*12/03/15 17:11*	*50*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Toluene	17000		500		ug/L			12/03/15 20:02	100

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (pid)	*87*		*78 - 124*		*12/03/15 20:02*	*100*

Client: MWH Americas Inc
Project/Site: Sandoval GC A#1

TestAmerica Job ID: 400-114400-1

Client Sample ID: TRIP BLANK
Date Collected: 11/20/15 11:45
Date Received: 11/25/15 09:29

Lab Sample ID: 400-114400-6
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			12/02/15 23:47	1
Ethylbenzene	<1.0		1.0		ug/L			12/02/15 23:47	1
Toluene	<5.0		5.0		ug/L			12/02/15 23:47	1
Xylenes, Total	<5.0		5.0		ug/L			12/02/15 23:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (pid)	*84*		*78 - 124*		*12/02/15 23:47*	*1*

QC Association Summary

Client: MWH Americas Inc
Project/Site: Sandoval GC A#1

TestAmerica Job ID: 400-114400-1

GC VOA

Analysis Batch: 285674

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-114400-1	MW-1	Total/NA	Water	8021B	
400-114400-4	MW-4	Total/NA	Water	8021B	
400-114400-4 MS	MW-4	Total/NA	Water	8021B	
400-114400-4 MSD	MW-4	Total/NA	Water	8021B	
400-114400-6	TRIP BLANK	Total/NA	Water	8021B	
LCS 400-285674/1002	Lab Control Sample	Total/NA	Water	8021B	
MB 400-285674/4	Method Blank	Total/NA	Water	8021B	

Analysis Batch: 285834

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-114400-2	MW-2	Total/NA	Water	8021B	
400-114400-3	MW-3	Total/NA	Water	8021B	
400-114400-3 MS	MW-3	Total/NA	Water	8021B	
400-114400-3 MSD	MW-3	Total/NA	Water	8021B	
400-114400-5	MW-5	Total/NA	Water	8021B	
400-114400-5 - DL	MW-5	Total/NA	Water	8021B	
LCS 400-285834/1002	Lab Control Sample	Total/NA	Water	8021B	
MB 400-285834/4	Method Blank	Total/NA	Water	8021B	

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 400-285674/4
Matrix: Water
Analysis Batch: 285674

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			12/02/15 14:30	1
Ethylbenzene	<1.0		1.0		ug/L			12/02/15 14:30	1
Toluene	<5.0		5.0		ug/L			12/02/15 14:30	1
Xylenes, Total	<5.0		5.0		ug/L			12/02/15 14:30	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (pid)	*87*		*78 - 124*		*12/02/15 14:30*	*1*

Lab Sample ID: LCS 400-285674/1002
Matrix: Water
Analysis Batch: 285674

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	52.8		ug/L		106	85 - 115		
Ethylbenzene			50.0	53.6		ug/L		107	85 - 115		
Toluene			50.0	50.7		ug/L		101	85 - 115		
Xylenes, Total			150	161		ug/L		107	85 - 115		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
a,a,a-Trifluorotoluene (pid)	*88*		*78 - 124*

Lab Sample ID: 400-114400-4 MS
Matrix: Water
Analysis Batch: 285674

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	490		100	587	4	ug/L		97	44 - 150		
Ethylbenzene	4.0		100	105		ug/L		101	70 - 142		
Toluene	<10		100	101		ug/L		96	69 - 136		
Xylenes, Total	140		300	430		ug/L		96	68 - 142		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
a,a,a-Trifluorotoluene (pid)	*70*	*X*	*78 - 124*

Lab Sample ID: 400-114400-4 MSD
Matrix: Water
Analysis Batch: 285674

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	490		100	546	4	ug/L		56	44 - 150	7	16
Ethylbenzene	4.0		100	98.6		ug/L		95	70 - 142	6	16
Toluene	<10		100	95.9		ug/L		91	69 - 136	5	16
Xylenes, Total	140		300	407		ug/L		89	68 - 142	6	15

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
a,a,a-Trifluorotoluene (pid)	*74*	*X*	*78 - 124*

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

Lab Sample ID: MB 400-285834/4
Matrix: Water
Analysis Batch: 285834

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			12/03/15 13:10	1
Ethylbenzene	<1.0		1.0		ug/L			12/03/15 13:10	1
Toluene	<5.0		5.0		ug/L			12/03/15 13:10	1
Xylenes, Total	<5.0		5.0		ug/L			12/03/15 13:10	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (pid)	*83*		*78 - 124*		*12/03/15 13:10*	*1*

Lab Sample ID: LCS 400-285834/1002
Matrix: Water
Analysis Batch: 285834

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			50.0	55.8		ug/L		112	85 - 115		
Ethylbenzene			50.0	54.0		ug/L		108	85 - 115		
Toluene			50.0	51.5		ug/L		103	85 - 115		
Xylenes, Total			150	163		ug/L		109	85 - 115		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
a,a,a-Trifluorotoluene (pid)	*87*		*78 - 124*

Lab Sample ID: 400-114400-3 MS
Matrix: Water
Analysis Batch: 285834

Client Sample ID: MW-3
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene	55		50.0	107		ug/L		104	44 - 150		
Ethylbenzene	16		50.0	68.4		ug/L		105	70 - 142		
Toluene	62		50.0	110		ug/L		96	69 - 136		
Xylenes, Total	140		150	294		ug/L		101	68 - 142		

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

Lab Sample ID: 400-114400-3 MSD
Matrix: Water
Analysis Batch: 285834

Client Sample ID: MW-3
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	55		50.0	101		ug/L		94	44 - 150	5	16
Ethylbenzene	16		50.0	68.9		ug/L		106	70 - 142	1	16
Toluene	62		50.0	110		ug/L		97	69 - 136	0	16
Xylenes, Total	140		150	295		ug/L		102	68 - 142	0	15

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

Lab Chronicle

Client: MWH Americas Inc
Project/Site: Sandoval GC A#1

TestAmerica Job ID: 400-114400-1

Client Sample ID: MW-1
Date Collected: 11/20/15 11:50
Date Received: 11/25/15 09:29

Lab Sample ID: 400-114400-1
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	285674	12/02/15 21:29	GRK	TAL PEN
	Instrument ID: CH_JOAN									

Client Sample ID: MW-2
Date Collected: 11/20/15 11:40
Date Received: 11/25/15 09:29

Lab Sample ID: 400-114400-2
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		50	5 mL	5 mL	285834	12/03/15 16:36	GRK	TAL PEN
	Instrument ID: CH_JOAN									

Client Sample ID: MW-3
Date Collected: 11/20/15 11:30
Date Received: 11/25/15 09:29

Lab Sample ID: 400-114400-3
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	285834	12/03/15 14:53	GRK	TAL PEN
	Instrument ID: CH_JOAN									

Client Sample ID: MW-4
Date Collected: 11/20/15 10:50
Date Received: 11/25/15 09:29

Lab Sample ID: 400-114400-4
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		2	5 mL	5 mL	285674	12/02/15 20:20	GRK	TAL PEN
	Instrument ID: CH_JOAN									

Client Sample ID: MW-5
Date Collected: 11/20/15 11:00
Date Received: 11/25/15 09:29

Lab Sample ID: 400-114400-5
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		50	5 mL	5 mL	285834	12/03/15 17:11	GRK	TAL PEN
	Instrument ID: CH_JOAN									
Total/NA	Analysis	8021B	DL	100	5 mL	5 mL	285834	12/03/15 20:02	GRK	TAL PEN
	Instrument ID: CH_JOAN									

Lab Chronicle

Client: MWH Americas Inc
Project/Site: Sandoval GC A#1

TestAmerica Job ID: 400-114400-1

Client Sample ID: TRIP BLANK

Date Collected: 11/20/15 11:45
Date Received: 11/25/15 09:29

Lab Sample ID: 400-114400-6

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	285674	12/02/15 23:47	GRK	TAL PEN
	Instrument ID: CH_JOAN									

Laboratory References:

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

Certification Summary

Client: MWH Americas Inc
Project/Site: Sandoval GC A#1

TestAmerica Job ID: 400-114400-1

Laboratory: TestAmerica Pensacola

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

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

* Certification renewal pending - certification considered valid.

Method Summary

Client: MWH Americas Inc
Project/Site: Sandoval GC A#1

TestAmerica Job ID: 400-114400-1

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: 82729

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: MWH
ADDRESS: 1560 Broadway Suite 1800
PAGE: 1 OF: 1

PROJECT NAME: Sandoval GC A#1
PROJECT NO.:
CLIENT PROJECT MANAGER: Steve Varga
PROJECT LOC. (STATE): NM

SAMPLED BY: Sarah Gardner, Chris Lee
CONTRACT / P.O. NO.:

CLIENT PHONE: 303 291-2239
CLIENT E-MAIL OR FAX: sarah.gardner@mwglobal.com

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

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

REQUESTED ANALYSIS

400-114400 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: No Preservative	HCL - Hydrochloric Acid	HNO3 - Nitric Acid	H2SO4 - Sulfuric Acid or H3PO4	NAOH - Sodium Hydroxide	CH3OH - Methanol	NAHSO4 - Sodium Bisulfate	NA2S2O3 - Sodium Thiosulfate	Other:	MATRIX: Drinking Water	Aqueous GW, SW, WW	Solid, Semisolid, Sediment	Air	NonAqueous (Oil, Solvent, etc.)	NUMBER OF CONTAINERS SUBMITTED: 8021B - BTEX
11/20/15	1150	MW-1		X									X				2
11/20/15	1140	MW-2		X									X				2
11/20/15	1130	MW-3		X									X				2
11/23/15	~~1145~~ 1050	MW-4		X									X				2
11/23/15	1100	MW-5		X									X				2
11/20/15	1145	TRIP BLANK		X									X				2

RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME
EMPTY CONTAINERS			Sarah Gardner	11/24/15	1120			
RECEIVED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME
EMPTY CONTAINERS								

LABORATORY USE ONLY

RECEIVED FOR LABORATORY BY:	DATE	TIME	CUSTODY INTACT?	CUSTODY SEAL NO.	REMARKS:
Mark Elrod for Jessica Benforado	11/25/15	0929	△ YES △ NO		0.7°C - IR5

TAL-8251 (1207)

Login Sample Receipt Checklist

Client: MWH Americas Inc

Job Number: 400-114400-1

Login Number: 114400
List Number: 1
Creator: Benforado, Jessica L

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	0.7°C IR-5
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	