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2013 AGWMR

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March 4, 2014

Mr. Glenn von Gonten
New Mexico Oil Conservation Division (NMOCD)
1220 South St., Francis Drive
Santa Fe, NM 87505

RE: 2013 Annual Report Submittals
San Juan River Basin Program - Pit Sites

Dear Mr. von Gonten

On behalf of El Paso CGP Company (EPCGPC), MWH is submitting the enclosed 2013 Annual Reports for 18 of its remaining San Juan River Basin pit groundwater remediation sites. The reports present the 2013 sampling data and planned activities for 2014 at these sites.

If you have any questions concerning the enclosed reports, please contact either Joe Wiley (representing EPCGPC) at 713-420-3475 or me at 515-253-0830.

Sincerely,

David C. Wombacher
Principal Engineer

/mja:dcw:hls
Enclosures
cc: Bill Freeman – NNEPA, Shiprock, NM (Navajo Nation Lands, See Table 1)
Mark Kelly – BLM, Farmington, NM (Federal Lands, See Table 1)
Brandon Powell – NMOCD, Aztec, NM (all 18 reports)
Joe Wiley – EPCGP Company (all 18 reports, electronic)

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TABLE 1

REPORT LISTING AND LAND TYPE
SAN JUAN RIVER BASIN PROGRAM – PIT SITES

METER or LINE ID	NMOCD CASE NO.	SITE NAME	Land Type
87640	3RP-155-0	Canada Mesa #2	Federal
89961	3RP-170-0	Fields A#7A	Federal
73220	3RP-068-0	Fogelson 4-1 Com. #14	Federal
95608	3RP-407-0	Gallegos Canyon Unit #124E	Navajo
03906	3RP-179-0	GCU Com A #142E	State/Fee
89894	3RP-186-0	Hammond #41A	Federal
94715	3RP-196-0	James F. Bell #1E	Federal
70194	3RP-201-0	Johnston Fed #4	State/Fee
89232	3RP-202-0	Johnston Fed #6A	Federal
LD072	3RP-204-0	K27 LD072	Federal
LD087	3RP-205-0	K-31 Line Drip	State/Fee
72556	3RP-207-0	Knight #1	State/Fee
LD174	3RP-212-0	Lateral L 40	Federal
LD151	3RP-213-0	Lateral 0-21 Line Drip	Federal
94810	3RP-223-0	Miles Fed 1A	Federal
89620	3RP-235-0	Sandoval GC A #1A	Federal
70445	3RP-074-0	Standard Oil Com #1	State/Fee
71669	3RP-239-0	State Gas Com N #1	State/Fee

2013 ANNUAL GROUNDWATER REPORT

Johnston Fed #6A
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)

Johnston Fed #6A (Site) is 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 2006. Monitoring wells were installed in 1994 (MW-1 through MW-4), 1997 (temporary monitoring wells PZ-01 through PZ-07), 2000 (MW-5), and 2006 (MW-6). 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 2013.

SUMMARY OF 2013 ACTIVITIES

In July 2013, a site survey was completed to re-develop a base site map and to confirm the accuracy of existing monitoring well elevations and locations.

On June 9, September 9, and December 12, 2013, 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 a HydraSleeve™ (HydraSleeve); a disposable, no-purge passive groundwater sampling device. The HydraSleeves were set during the previous sampling event approximately 0.5 foot above termination depth of the monitoring wells using a suspension tether and weights to collect a sample from the screened interval. Monitoring well MW-1 was sampled during the June quarterly event using a 2 inch disposable bailer. Groundwater samples were placed into laboratory supplied sample containers, packed on ice and shipped under standard chain of custody protocols to Test America Laboratories in Corpus Christi, Texas where they were analyzed for benzene, toluene, ethylbenzene, and total xylenes (BTEX). A selective free product recovery sock kit was removed from monitoring well MW-5 during the June 2013 sampling event. Additional field parameters were collected including dissolved oxygen, temperature, conductivity, pH, and ORP using a YSI multi-parameter instrument, if free product was not present. The de minimis water remaining in HydraSleeves was combined

in a waste container and transferred to an off-site 55-gallon drum for later disposal by Safety-Kleen.

SUMMARY TABLES

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

SITE MAPS

Groundwater analytical maps (Figures 1, 3, and 5) and groundwater elevation contour maps (Figures 2, 4, and 6) summarize the results of the 2013 groundwater sampling and gauging events.

ANALYTICAL LAB REPORTS

The groundwater analytical lab reports are included in Appendix A.

RESULTS

- The groundwater flow direction at the Site is generally to the north-northeast (see Figures 2, 4, and 6).

- Approximately 0.81 foot of free product was detected in MW-1 during the June sampling event. Concentrations of benzene, toluene, ethylbenzene and total xylenes in groundwater collected from MW-1 were above their respective New Mexico Water Quality Control Commission (NMWQCC) standards for the June sampling event. Approximately 0.61 foot of free product was detected in September and 0.36 foot of free product was detected in December. Groundwater samples were not collected from MW-1 during September and December due to the presence of free product.

- BTEX was not detected or was reported as estimated values below the reporting limit (J-flagged) at MW-2, MW-4, MW-5, and MW-6 for each of the three sampling events. When BTEX compounds were detected at MW-3, the reported concentrations were an order of magnitude below the NMWQCC standards.

PLANNED FUTURE ACTIVITIES

Following the completion of a Site access agreement with the current Site operator, the installation of additional monitoring wells is planned, to further assess the extent of dissolved phase hydrocarbons and to confirm and/or further define the groundwater gradient at the Site. MW-1 through MW-6 and the newly installed monitoring wells will be sampled on a semi-annual basis.

TABLE

TABLE 1 – GROUNDWATER ANALYTICAL AND WATER LEVEL RESULTS

TABLE 1 - GROUNDWATER ANALYTICAL RESULTS

Johnston Fed #6								
Location	**Date**	**Benzene (µg/L)**	**Toluene (µg/L)**	**Ethylbenzene (µg/L)**	**Total Xylenes (µg/L)**	**Depth to Water (ft.)**	**Depth to LNAPL (ft.)**	**LNAPL Thickness (ft.)**
NMWQCC Standards:		10	750	750	620	NA	NA	NA
MW-1	08/10/95	605	1380	74.6	718	37.24	-	-
MW-1	12/13/95	1330	1610	235	1540	37.35	-	-
MW-1	04/11/96	775	1070	124	810	37.48	-	-
MW-1	07/23/96	676	1980	233	2090	37.55	-	-
MW-1	10/14/96	1790	8350	580	6200	37.22	37.07	0.15
MW-1	01/22/97	6420	19800	934	10700	38.26	37.43	0.83
MW-1	04/11/97	7310	23500	1010	10800	38.31	37.20	1.11
MW-1	06/18/01					38.21	37.34	0.87
MW-1	09/04/01					38.27	37.54	0.73
MW-1	03/04/02					38.35	37.74	0.61
MW-1	06/04/02					38.14	37.81	0.33
MW-1	09/10/02					38.24	38.00	0.23
MW-1	12/12/02					38.11	38.01	0.10
MW-1	03/14/03					38.08	37.95	0.13
MW-1	06/18/03					38.47	37.88	0.59
MW-1	09/16/03					38.25	38.17	0.08
MW-1	12/17/03					38.23	38.13	0.10
MW-1	03/16/04					38.57	37.90	0.67
MW-1	06/22/04					38.65	37.90	0.75
MW-1	09/22/04					38.60	38.21	0.39
MW-1	12/21/04					38.38	38.20	0.18
MW-1	03/23/05					38.50	37.95	0.55
MW-1	06/17/05					38.62	38.13	0.49
MW-1	09/20/05					38.83	38.40	0.43
MW-1	12/14/05					38.72	38.31	0.41
MW-1	03/25/06					38.66	38.15	0.51
MW-1	03/27/06					38.62	38.05	0.57
MW-1	06/06/06					38.84	38.29	0.55
MW-1	09/25/06					39.01	38.51	0.50
MW-1	12/07/06					38.33	-	-
MW-1	03/28/07					38.09	38.02	0.07
MW-1	06/18/07					38.86	38.09	0.77
MW-1	09/17/07					39.32	38.40	0.92
MW-1	12/17/07					39.13	38.42	0.71
MW-1	03/10/08					38.24	37.90	0.34
MW-1	06/17/08					37.71	37.38	0.33
MW-1	09/10/08					37.72	37.41	0.31
MW-1	12/02/08					37.89	37.51	0.38
MW-1	03/05/09					37.63	37.20	0.43
MW-1	06/02/09					37.83	37.49	0.34
MW-1	08/28/09					37.99	37.65	0.34
MW-1	11/04/09					37.77	-	-
MW-1	02/17/10					38.11	37.60	0.51
MW-1	05/24/10					38.27	37.81	0.46
MW-1	09/24/10					38.46	38.05	0.41
MW-1	11/02/10					38.55	38.16	0.39
MW-1	02/07/11	611	8260	1260	11600	38.37	37.93	0.44
MW-1	05/02/11					38.57	-	-
MW-1	09/23/11					38.75	38.32	0.43
MW-1	11/01/11					38.80	-	-
MW-1	02/21/12	577	5510	916	5420	38.65	38.21	0.44
MW-1	05/14/12					38.84	38.36	0.48
MW-1	06/09/13	510	17000	1400	15000	39.22	38.41	0.81
MW-1	09/09/13					39.21	38.60	0.61
MW-1	12/12/13					39.01	38.65	0.36

TABLE 1 - GROUNDWATER ANALYTICAL RESULTS

Johnston Fed #6								
Location	**Date**	**Benzene (µg/L)**	**Toluene (µg/L)**	**Ethylbenzene (µg/L)**	**Total Xylenes (µg/L)**	**Depth to Water (ft.)**	**Depth to LNAPL (ft.)**	**LNAPL Thickness (ft.)**
NMWQCC Standards:		10	750	750	620	NA	NA	NA
MW-2	12/13/95	15.1	50.8	<2.5	53.8	37.39	-	-
MW-2	04/11/96	<1	<1	<1	3.13	37.47	-	-
MW-2	07/23/96	<1	1.15	<1	4.06	37.60	-	-
MW-2	10/14/96	<1	1.04	<1	4.85	37.70	-	-
MW-2	01/22/97	<1	<1	<1	<3	37.66	-	-
MW-2	04/11/97	<1	<1	<1	<3	37.58	-	-
MW-2	10/09/00	<0.5	<0.5	<0.5	<0.5	37.56	-	-
MW-2	06/18/01	<0.5	<0.5	<0.5	<0.5	37.58	-	-
MW-2	09/04/01					37.75	-	-
MW-2	06/03/02	<0.5	<0.5	<0.5	<1	37.88	-	-
MW-2	09/10/02					38.02	-	-
MW-2	12/12/02					38.01	-	-
MW-2	03/14/03					37.97	-	-
MW-2	06/18/03					38.01	-	-
MW-2	09/16/03					38.18	-	-
MW-2	12/17/03					38.13	-	-
MW-2	03/16/04					38.04	-	-
MW-2	06/22/04					38.05	-	-
MW-2	09/22/04					38.26	-	-
MW-2	12/21/04					38.20	-	-
MW-2	03/23/05					38.07	-	-
MW-2	06/17/05					38.07	-	-
MW-2	09/20/05					38.33	-	-
MW-2	12/14/05					38.24	-	-
MW-2	03/27/06					38.16	-	-
MW-2	06/06/06					38.22	-	-
MW-2	09/25/06					38.42	-	-
MW-2	12/07/06					38.35	-	-
MW-2	03/28/07					38.13	-	-
MW-2	06/18/07					38.14	-	-
MW-2	09/17/07					38.35	-	-
MW-2	12/17/07					38.33	-	-
MW-2	03/10/08					37.80	-	-
MW-2	06/17/08					37.41	-	-
MW-2	09/10/08					37.40	-	-
MW-2	12/02/08					37.39	-	-
MW-2	03/05/09					37.38	-	-
MW-2	06/02/09					37.40	-	-
MW-2	08/28/09					37.60	-	-
MW-2	11/04/09					37.73	-	-
MW-2	02/17/10					37.76	-	-
MW-2	05/24/10					37.77	-	-
MW-2	09/24/10					37.97	-	-
MW-2	11/02/10					38.01	-	-
MW-2	02/07/11					38.05	-	-
MW-2	05/02/11					38.09	-	-
MW-2	09/23/11					38.25	38.23	0.02
MW-2	11/01/11					38.26	-	-
MW-2	02/21/12					38.31	-	-
MW-2	05/14/12					38.36	-	-
MW-2	06/09/13	<0.14	<0.30	<0.20	<0.23	38.56	-	-
MW-2	09/09/13	<0.14	<0.30	<0.20	<0.23	38.68	-	-
MW-2	12/12/13	<0.20	<0.38	<0.20	<0.65	38.67	-	-

TABLE 1 - GROUNDWATER ANALYTICAL RESULTS

Johnston Fed #6								
Location	**Date**	**Benzene (µg/L)**	**Toluene (µg/L)**	**Ethylbenzene (µg/L)**	**Total Xylenes (µg/L)**	**Depth to Water (ft.)**	**Depth to LNAPL (ft.)**	**LNAPL Thickness (ft.)**
NMWQCC Standards:		10	750	750	620	NA	NA	NA
MW-3	12/13/95	488	1020	104	1120	37.11	-	-
MW-3	04/11/96	772	231	113	379	37.17	-	-
MW-3	07/25/96	687	112	115	209	37.30	-	-
MW-3	10/14/96	900	240	140	340	37.40	-	-
MW-3	01/22/97	907	234	215	340	37.35	-	-
MW-3	04/11/97	944	209	223	322	37.29	-	-
MW-3	06/18/01	510	23	160	98	37.26	-	-
MW-3	09/04/01					37.42	-	-
MW-3	06/03/02	380	<5	110	29	37.55	-	-
MW-3	12/12/02					37.70	-	-
MW-3	03/14/03					37.66	-	-
MW-3	06/18/03					37.87	37.63	0.24
MW-3	09/16/03					37.89	37.87	0.02
MW-3	12/17/03					37.80	-	-
MW-3	03/16/04					37.85	37.72	0.13
MW-3	06/22/04					37.88	37.72	0.16
MW-3	09/22/04					38.07	37.96	0.11
MW-3	12/21/04					37.96	37.93	0.03
MW-3	03/23/05					37.88	37.80	0.08
MW-3	06/17/05					37.92	-	-
MW-3	09/20/05					38.16	-	-
MW-3	12/14/05					38.09	-	-
MW-3	03/25/06					38.09	-	-
MW-3	03/27/06					37.88	-	-
MW-3	06/06/06					37.98	-	-
MW-3	09/25/06					38.16	-	-
MW-3	12/07/06					38.06	-	-
MW-3	03/28/07					37.87	-	-
MW-3	06/18/07					37.86	-	-
MW-3	09/17/07					38.10	-	-
MW-3	12/17/07					38.09	-	-
MW-3	03/10/08					37.80	-	-
MW-3	06/17/08					37.10	-	-
MW-3	09/10/08					37.13	-	-
MW-3	12/02/08					37.14	-	-
MW-3	03/05/09	1.2	17.9	9.4	59	37.14	-	-
MW-3	06/02/09					37.12	-	-
MW-3	08/28/09					37.40	-	-
MW-3	11/04/09					37.52	-	-
MW-3	02/17/10	3.2	4.5	3.4	25.9	37.53	-	-
MW-3	05/24/10					37.53	-	-
MW-3	09/24/10					37.72	-	-
MW-3	11/02/10					37.79	-	-
MW-3	02/07/11	8.6	1.3	6	13.1	37.83	-	-
MW-3	05/02/11					38.86	-	-
MW-3	09/23/11					38.02	-	-
MW-3	11/01/11					38.06	-	-
MW-3	02/21/12	4.7	7.6	23.1	19.1	38.11	-	-
MW-3	05/14/12					38.15	-	-
MW-3	06/09/13	<0.14	0.71 J	49	12	38.32	-	-
MW-3	09/09/13	0.78 J	0.48 J	30	2.2 J	38.48	-	-
MW-3	12/12/13	<0.20	51	23	5.4	38.45	-	-

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Location	Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	Depth to Water (ft.)	Depth to LNAPL (ft.)	LNAPL Thickness (ft.)
NMWQCC Standards:		10	750	750	620	NA	NA	NA
MW-4	12/13/95	545	121	114	177	37.34	-	-
MW-4	04/11/96	591	160	133	193	37.42	-	-
MW-4	07/25/96	793	96.4	172	174	37.54	-	-
MW-4	10/14/96	800	100	130	235	37.64	-	-
MW-4	01/22/97	899	26.7	157	186	37.60	-	-
MW-4	04/11/97	703	20.1	149	138	37.47	-	-
MW-4	10/09/00	81	36	45	20	37.56	-	-
MW-4	06/18/01	490	70	91	96	37.53	-	-
MW-4	09/04/01					37.66	-	-
MW-4	06/03/02	16	<5	17	2.2	37.80	-	-
MW-4	09/10/02					37.95	-	-
MW-4	12/12/02					38.95	-	-
MW-4	03/14/03					37.91	-	-
MW-4	06/18/03	<1	<1	1.7	<3	37.95	-	-
MW-4	09/16/03					38.17	-	-
MW-4	12/17/03					38.06	-	-
MW-4	03/16/04					38.00	-	-
MW-4	06/22/04	0.56 J	1.1	2.8	<1	38.04	-	-
MW-4	09/22/04					38.27	-	-
MW-4	12/21/04					38.23	-	-
MW-4	03/23/05	<1	<1	<1	0.99	38.11	-	-
MW-4	06/17/05					38.08	-	-
MW-4	09/20/05					38.35	-	-
MW-4	12/14/05					38.24	-	-
MW-4	03/27/06	0.39 J	<1	<1	0.83 J	38.16	-	-
MW-4	06/06/06					38.24	-	-
MW-4	09/25/06					38.45	-	-
MW-4	12/07/06					38.34	-	-
MW-4	03/28/07	0.39 J	0.6 J	<1	1.7 J	38.16	-	-
MW-4	06/18/07					38.14	-	-
MW-4	09/17/07					38.37	-	-
MW-4	12/17/07					38.36	-	-
MW-4	03/10/08	0.25 J	<1	<1	<2	38.05	-	-
MW-4	06/17/08					37.35	-	-
MW-4	09/10/08					37.43	-	-
MW-4	12/02/08					37.40	-	-
MW-4	03/05/09					37.40	-	-
MW-4	06/02/09					37.43	-	-
MW-4	08/28/09					37.64	-	-
MW-4	11/04/09					37.76	-	-
MW-4	02/17/10					37.80	-	-
MW-4	05/24/10					37.80	-	-
MW-4	09/24/10					38.03	-	-
MW-4	11/02/10					38.05	-	-
MW-4	02/07/11					38.08	-	-
MW-4	05/02/11					38.15	-	-
MW-4	09/23/11					38.30	-	-
MW-4	11/01/11					38.32	-	-
MW-4	02/21/12					38.37	-	-
MW-4	05/14/12					38.40	-	-
MW-4	06/09/13	<0.14	<0.30	<0.20	<0.23	38.62	-	-
MW-4	09/09/13	<0.14	<0.30	<0.20	<0.23	38.79	-	-
MW-4	12/12/13	<0.20	0.51 J	<0.20	<0.65	38.77	-	-

TABLE 1 - GROUNDWATER ANALYTICAL RESULTS

Johnston Fed #6								
Location	**Date**	**Benzene (µg/L)**	**Toluene (µg/L)**	**Ethylbenzene (µg/L)**	**Total Xylenes (µg/L)**	**Depth to Water (ft.)**	**Depth to LNAPL (ft.)**	**LNAPL Thickness (ft.)**
NMWQCC Standards:		10	750	750	620	NA	NA	NA
MW-5	08/30/00	130	180	56	650	38.11	-	-
MW-5	06/18/01	170	300	68	630	38.13	-	-
MW-5	09/04/01					38.33	-	-
MW-5	06/04/02	43	87	31	360	38.51	-	-
MW-5	09/10/02					39.13	-	-
MW-5	12/12/02					38.83	-	-
MW-5	03/14/03					38.70	-	-
MW-5	06/18/03					38.85	-	-
MW-5	09/16/03					38.88	-	-
MW-5	12/17/03					38.75	-	-
MW-5	03/16/04					38.72	-	-
MW-5	06/22/04					38.74	-	-
MW-5	09/22/04					38.74	-	-
MW-5	12/21/04					38.93	-	-
MW-5	03/23/05					38.72	-	-
MW-5	06/17/05					38.72	-	-
MW-5	09/20/05					39.06	-	-
MW-5	12/14/05					38.94	-	-
MW-5	03/27/06					38.86	-	-
MW-5	06/06/06					38.97	-	-
MW-5	09/25/06					37.20	-	-
MW-5	12/07/06					39.07	-	-
MW-5	03/28/07					38.83	-	-
MW-5	06/18/07					38.84	-	-
MW-5	09/17/07					39.09	-	-
MW-5	12/17/07					39.04	-	-
MW-5	03/10/08					38.48	-	-
MW-5	06/17/08					37.83	-	-
MW-5	09/10/08					37.91	-	-
MW-5	12/02/08					37.95	-	-
MW-5	03/05/09	1.9	9.8	44	120	37.93	-	-
MW-5	06/02/09					37.95	-	-
MW-5	08/28/09					38.19	-	-
MW-5	11/04/09					38.32	-	-
MW-5	02/17/10	1.7	2.6	2.7	19.2	38.38	-	-
MW-5	05/24/10					38.35	-	-
MW-5	09/24/10					38.61	-	-
MW-5	11/02/10					38.66	-	-
MW-5	02/07/11	11.9	920	177	1870	38.74	-	-
MW-5	05/02/11					38.81	-	-
MW-5	09/23/11					38.99	-	-
MW-5	11/01/11					39.09	-	-
MW-5	02/21/12	2.7	1.7	5.2	85.5	39.09	-	-
MW-5	05/14/12					39.16	-	-
MW-5	06/09/13	<0.14	<0.30	0.31 J	0.79 J	39.38	-	-
MW-5	09/09/13	<0.14	<0.30	<0.20	<0.23	39.56	-	-
MW-5	12/12/13	<0.20	<0.38	<0.20	<0.65	39.55	-	-

TABLE 1 - GROUNDWATER ANALYTICAL RESULTS

Johnston Fed #6								
Location	**Date**	**Benzene (µg/L)**	**Toluene (µg/L)**	**Ethylbenzene (µg/L)**	**Total Xylenes (µg/L)**	**Depth to Water (ft.)**	**Depth to LNAPL (ft.)**	**LNAPL Thickness (ft.)**
NMWQCC Standards:		10	750	750	620	NA	NA	NA
MW-6	12/07/06					39.62	-	-
MW-6	03/28/07	<1	<1	<1	<2	39.43	-	-
MW-6	06/18/07					39.43	-	-
MW-6	09/17/07					39.43	-	-
MW-6	12/17/07					38.65	-	-
MW-6	03/10/08	9.4	<1	0.5 J	139	39.21	-	-
MW-6	03/05/09	<1	<1	<1	<2	37.61	-	-
MW-6	06/02/09					37.46	-	-
MW-6	08/28/09					37.89	-	-
MW-6	11/04/09					38.03	-	-
MW-6	05/24/10					38.07	-	-
MW-6	09/24/10					38.30	-	-
MW-6	11/02/10					38.36	-	-
MW-6	02/07/11	<1	<1	<1	<2	38.39	-	-
MW-6	05/02/11					36.42	-	-
MW-6	09/23/11					38.65	-	-
MW-6	11/01/11					38.70	-	-
MW-6	02/21/12	<1	<1	<1	<2	38.75	-	-
MW-6	05/14/12					38.79	-	-
MW-6	06/09/13	<0.14	<0.30	<0.20	<0.23	39.08	-	-
MW-6	09/09/13	<0.14	<0.30	<0.20	<0.23	39.28	-	-
MW-6	12/12/13	<0.20	<0.38	<0.20	<0.65	39.26	-	-

Notes:
"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).

FIGURES

L:\San Juan River Basin\SJRB GENERAL\GIS-NEW_MXDs\JOHNSTON FED#6A\2013 MAPS\JFed6_GARM_2Q_2013.mxd

UNDERGROUND ELECTRIC BOX

ELECTRIC VAULT

6003

6002

6001

6000

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: <0.14
T: <0.30
E: <0.20
X: <0.23

GP-2

MW-5

MW-5
B: <0.14
T: <0.30
E: J0.31
X: J0.79

FORMER SUMP

METER HOUSE

MW-4

MW-4
B: <0.14
T: <0.30
E: <0.20
X: <0.23

MW-3

MW-3
B: <0.14
T: J0.71
E: 49
X: 12

MW-1

MW-1
B: **510**
T: **17000**
E: **1400**
X: **15000**

FORMER UNLINED PIT

GP-4

MW-2

MW-2
B: <0.14
T: <0.30
E: <0.20
X: <0.23

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

LEGEND:

- 6508 — APPROXIMATE GROUND SURFACE CONTOUR AND ELEVATION, FEET
- 5961.75 — CORRECTED GROUNDWATER ELEVATION CONTOUR
- ACCESS ROAD
- OVHD — OVERHEAD POWER LINE
- PW — PRODUCED WATER LINE
- MONITORING WELL
- OTHER MONITORING WELL
- SOIL BORING LOCATIONS
- SMA BENCHMARK
- RIG ANCHOR

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
<0.30 = 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	10/15/2013	CCL	CCL	DAW

TITLE:

JOHNSTON FED #6
GROUNDWATER ANALYTICAL RESULTS
SAMPLED JUNE 9, 2013

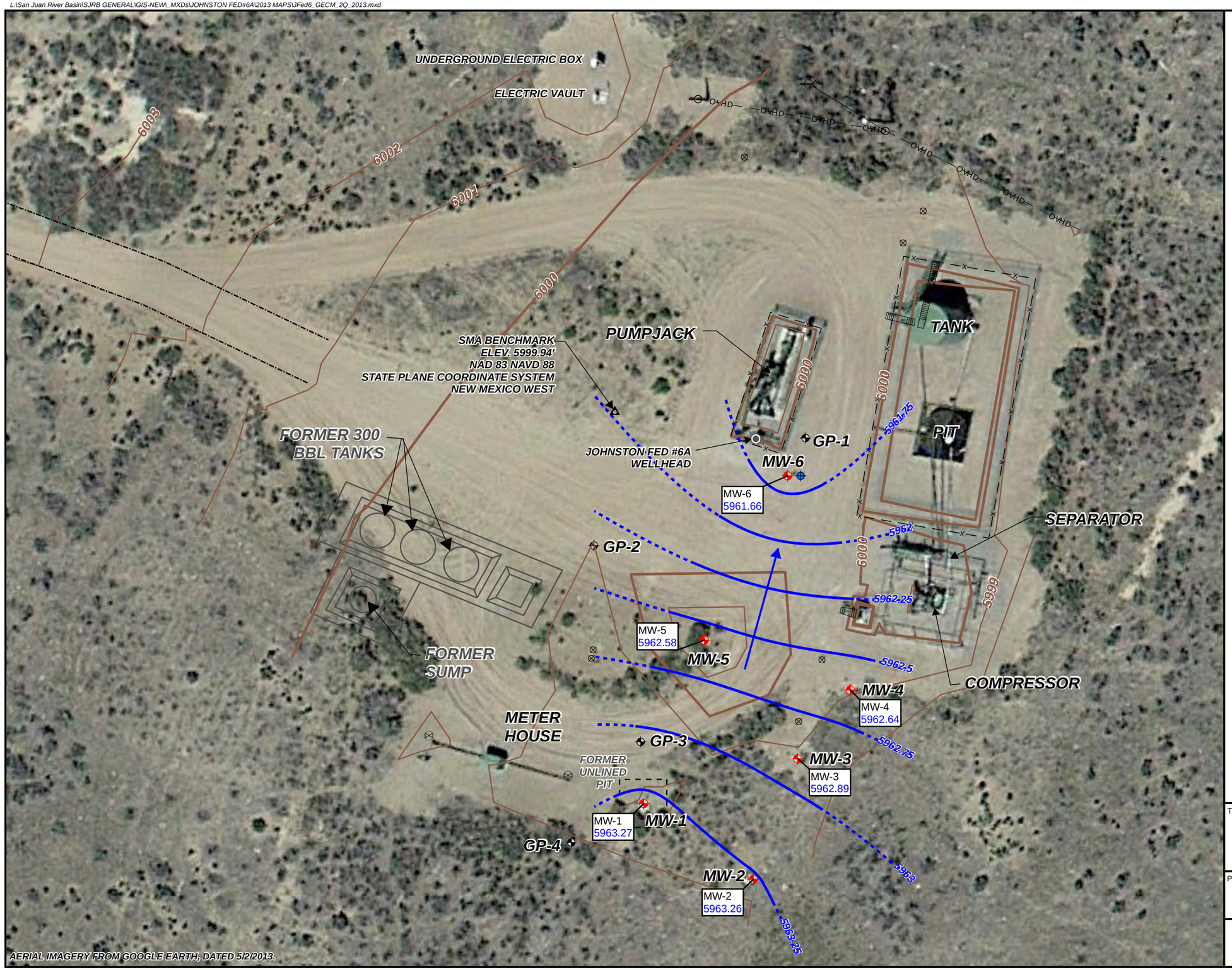
PROJECT:

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

MWH

Figure No.: 1

L:\San Juan River Basin\SJRB GENERAL\GIS-NEW_MXDs\JOHNSTON FED#6A\2013 MAPS\JFed6_GECM_2Q_2013.mxd



LEGEND:

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- SOIL BORING LOCATIONS
- SMA BENCHMARK
- RIG ANCHOR
- FP — FREE PRODUCT

NOTES:

5318.24 — GROUNDWATER ELEVATION CORRECTED FOR PRODUCT THICKNESS. FEET ABOVE MEAN SEA LEVEL

5317 — CORRECTED WATER LEVEL ELEVATION CONTOUR DASHED WHERE INFERRED (FEET ABOVE MEAN SEA LEVEL, 0.25 FOOT CONTOUR INTERVAL)

DIRECTION OF GROUNDWATER FLOW

N

SCALE IN FEET

0 30 60

REVISION	DATE	DESIGN BY	DRAWN BY	REVIEWED BY
A	10/15/2013	CCL	CCL	DAW

TITLE:

JOHNSTON FED #6
GROUNDWATER ELEVATION MAP
SAMPLED JUNE 9, 2013

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\2013 MAPS\JFed6_GARM_3Q_2013.mxd

UNDERGROUND ELECTRIC BOX

ELECTRIC VAULT

6003

6002

6001

6000

5999

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

PUMPJACK

TANK

PIT

GP-1

JOHNSTON FED #6A
WELLHEAD

MW-6
MW-6
B: <0.14
T: <0.30
E: <0.20
X: <0.23

SEPARATOR

FORMER 300
BBL TANKS

GP-2

MW-5
B: <0.14
T: <0.30
E: <0.20
X: <0.23

MW-5

FORMER
SUMP

COMPRESSOR

MW-4
MW-4
B: <0.14
T: <0.30
E: <0.20
X: <0.23

METER
HOUSE

GP-3

MW-3
MW-3
B: J0.78
T: J0.48
E: 30
X: J2.2

MW-1
FP

FORMER
UNLINED
PIT

MW-1

GP-4

MW-2
MW-2
B: <0.14
T: <0.30
E: <0.20
X: <0.23

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

LEGEND:

- 6508 — APPROXIMATE GROUND SURFACE CONTOUR AND ELEVATION, FEET
- 5961.75 — CORRECTED GROUNDWATER ELEVATION CONTOUR
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<0.30 = 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	10/15/2013	CCL	CCL	DAW

TITLE:

JOHNSTON FED #6
GROUNDWATER ANALYTICAL RESULTS
SAMPLED SEPTEMBER 9, 2013

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

MWH

Figure No.:
3

L:\San Juan River Basin\SJRB GENERAL\GIS-NEW_MXDs\JOHNSTON FED#6A\2013 MAPS\JFed6_GECM_3Q_2013.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

JOHNSTON FED #6A WELLHEAD

GP-1

MW-6

MW-6
5961.46

5961.5

5961.75

SEPARATOR

GP-2

5962

5965

MW-5
5962.40

MW-5

5962.25

MW-4
5962.47

MW-4

COMPRESSOR

FORMER SUMP

METER HOUSE

GP-3

5962.5

MW-3
5962.73

MW-3

FORMER UNLINED PIT

MW-1
5963.13

MW-1

5962.75

GP-4

MW-2
5963.14

MW-2

5963

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

LEGEND:

- 6508 — APPROXIMATE GROUND SURFACE CONTOUR AND ELEVATION, FEET
- 5961.75 — CORRECTED GROUNDWATER ELEVATION CONTOUR
- ACCESS ROAD
- OVHD — OVERHEAD POWER LINE
- PW — PRODUCED WATER LINE
- MONITORING WELL
- OTHER MONITORING WELL
- SOIL BORING LOCATIONS
- SMA BENCHMARK
- RIG ANCHOR
- FP — FREE PRODUCT

NOTES:

5318.24 — GROUNDWATER ELEVATION CORRECTED FOR PRODUCT THICKNESS. FEET ABOVE MEAN SEA LEVEL

5317 — CORRECTED WATER LEVEL ELEVATION CONTOUR DASHED WHERE INFERRED (FEET ABOVE MEAN SEA LEVEL, 0.25 FOOT CONTOUR INTERVAL)

DIRECTION OF GROUNDWATER FLOW

N

SCALE IN FEET

0 30 60

REVISION	DATE	DESIGN BY	DRAWN BY	REVIEWED BY
A	10/15/2013	CCL	CCL	DAW

TITLE:

JOHNSTON FED #6
GROUNDWATER ELEVATION MAP
SAMPLED SEPTEMBER 9, 2013

PROJECT:

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

MWH

Figure No.: 4

L:\San Juan River Basin\SJRB GENERAL\GIS-NEW_MXDs\JOHNSTON FED#6A\2013 MAPS\JFed6_GARM_4Q_2013.mxd

UNDERGROUND ELECTRIC BOX

ELECTRIC VAULT

6003

6002

6001

6000

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: <0.20
T: <0.38
E: <0.20
X: <0.65

GP-2

MW-5

MW-5
B: <0.20
T: <0.38
E: <0.20
X: <0.65

FORMER SUMP

MW-4

MW-4
B: <0.20
T: 0.51J
E: <0.20
X: <0.65

METER HOUSE

GP-3

MW-3

MW-3
B: <0.20
T: 51
E: 23
X: 5.4

MW-1
FP

FORMER UNLINED PIT

MW-1

GP-4

MW-2

MW-2
B: <0.20
T: <0.38
E: <0.20
X: <0.65

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

LEGEND:

- 6503 — APPROXIMATE GROUND SURFACE CONTOUR AND ELEVATION, FEET
- 5961.75 — CORRECTED GROUNDWATER ELEVATION CONTOUR
- ACCESS ROAD
- OVHD — OVERHEAD POWER LINE
- PW — PRODUCED WATER LINE
- MONITORING WELL
- OTHER MONITORING WELL
- SOIL BORING LOCATIONS
- SMA BENCHMARK
- RIG ANCHOR
- FP — FREE PRODUCT
- PROPOSED GROUNDWATER MONITORING WELL LOCATIONS

N

SCALE IN FEET

0 30 60

REVISION	DATE	DESIGN BY	DRAWN BY	REVIEWED BY
A	1/15/2014	CCL	CCL	DAW

TITLE:

JOHNSTON FED #6
GROUNWATER ANALYTICAL RESULTS
SAMPLED DECEMBER 12, 2013

PROJECT:

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

MWH

Figure No.: 5

L:\San Juan River Basin\SJRB GENERAL\GIS-NEW_MXDs\JOHNSTON FED#6A\2013 MAPS\JFed6_GECM_4Q_2013.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

5999

6000

PIT

FORMER 300
BBL TANKS

JOHNSTON FED #6A
WELLHEAD

GP-1

MW-6
MW-6
5961.46

5961.6

5961.8

SEPARATOR

GP-2

5962

5962.2

6000

5999

FORMER
SUMP

MW-5
MW-5
5962.40

5962.4

MW-4
MW-4
5962.47

COMPRESSOR

METER
HOUSE

GP-3

MW-3
5962.73

MW-3

5962.6

FORMER
UNLINED
PIT

MW-1
5963.13

MW-1

5962.8

GP-4

MW-2

MW-2
5963.14

5963

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

LEGEND:

- 6503 — APPROXIMATE GROUND SURFACE CONTOUR AND ELEVATION, FEET
- 5961.75 — CORRECTED GROUNDWATER ELEVATION CONTOUR
- ACCESS ROAD
- OVHD — OVERHEAD POWER LINE
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- SOIL BORING LOCATIONS
- SMA BENCHMARK
- RIG ANCHOR
- FP — FREE PRODUCT

NOTES:

5318.24 — GROUNDWATER ELEVATION CORRECTED FOR PRODUCT THICKNESS. FEET ABOVE MEAN SEA LEVEL

5317 — CORRECTED WATER LEVEL ELEVATION CONTOUR DASHED WHERE INFERRED (FEET ABOVE MEAN SEA LEVEL, 0.25 FOOT CONTOUR INTERVAL)

DIRECTION OF GROUNDWATER FLOW

N

SCALE IN FEET

0 30 60

REVISION	DATE	DESIGN BY	DRAWN BY	REVIEWED BY
A	1/15/2014	CCL	CCL	DAW

TITLE:

JOHNSTON FED #6
GROUNDWATER ELEVATION MAP
SAMPLED DECEMBER 12, 2013

PROJECT:

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

MWH

Figure No.: 6

APPENDIX A

JUNE 9, 2013 GROUNDWATER SAMPLING ANALYTICAL REPORT
SEPTEMBER 9, 2013 GROUNDWATER SAMPLING ANALYTICAL REPORT
DECEMBER 12, 2013 GROUNDWATER SAMPLING ANALYTICAL REPORT

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Corpus Christi
1733 N. Padre Island Drive
Corpus Christi, TX 78408
Tel: (361)289-2673

TestAmerica Job ID: 560-40560-1
TestAmerica Sample Delivery Group: June 2013
Client Project/Site: Johnston Fed #6

For:
MWH Americas Inc
1801 California Street
Suite 2900
Denver, Colorado 80202

Attn: Mr. Daniel Wade

Authorized for release by:
6/19/2013 7:28:59 PM

Timothy Kellogg, Lab Director
tim.kellogg@testamericainc.com

LINKS

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

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

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

Qualifiers

GC/MS 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
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
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: Johnston Fed #6

TestAmerica Job ID: 560-40560-1
SDG: June 2013

Job ID: 560-40560-1

Laboratory: TestAmerica Corpus Christi

Narrative

Receipt

The samples were received on 6/12/2013 10:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 4.0º C. No analytical or quality issues were noted.

Client Sample ID: MW-1

Lab Sample ID: 560-40560-1

Date Collected: 06/09/13 11:30
Matrix: Water
Date Received: 06/12/13 10:00

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.51**		0.15	0.021	mg/L			06/17/13 14:02	150
Ethylbenzene	**1.4**		0.15	0.030	mg/L			06/17/13 14:02	150
Toluene	**17**		0.15	0.045	mg/L			06/17/13 14:02	150
Xylenes, Total	**15**		0.45	0.034	mg/L			06/17/13 14:02	150

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*98*		*70 - 130*		*06/17/13 14:02*	*150*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*		*06/17/13 14:02*	*150*
Dibromofluoromethane (Surr)	*97*		*70 - 130*		*06/17/13 14:02*	*150*
1,2-Dichloroethane-d4 (Surr)	*105*		*70 - 130*		*06/17/13 14:02*	*150*

Client Sample ID: MW-2

Lab Sample ID: 560-40560-2

Date Collected: 06/09/13 11:05
Matrix: Water
Date Received: 06/12/13 10:00

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00014		0.0010	0.00014	mg/L			06/17/13 14:27	1
Ethylbenzene	<0.00020		0.0010	0.00020	mg/L			06/17/13 14:27	1
Toluene	<0.00030		0.0010	0.00030	mg/L			06/17/13 14:27	1
Xylenes, Total	<0.00023		0.0030	0.00023	mg/L			06/17/13 14:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*96*		*70 - 130*		*06/17/13 14:27*	*1*
4-Bromofluorobenzene (Surr)	*93*		*70 - 130*		*06/17/13 14:27*	*1*
Dibromofluoromethane (Surr)	*101*		*70 - 130*		*06/17/13 14:27*	*1*
1,2-Dichloroethane-d4 (Surr)	*108*		*70 - 130*		*06/17/13 14:27*	*1*

Client Sample ID: MW-3

Lab Sample ID: 560-40560-3

Date Collected: 06/09/13 10:50
Matrix: Water
Date Received: 06/12/13 10:00

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00014		0.0010	0.00014	mg/L			06/17/13 14:52	1
Ethylbenzene	**0.049**		0.0010	0.00020	mg/L			06/17/13 14:52	1
Toluene	**0.00071**	**J**	0.0010	0.00030	mg/L			06/17/13 14:52	1
Xylenes, Total	**0.012**		0.0030	0.00023	mg/L			06/17/13 14:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*122*		*70 - 130*		*06/17/13 14:52*	*1*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*		*06/17/13 14:52*	*1*
Dibromofluoromethane (Surr)	*94*		*70 - 130*		*06/17/13 14:52*	*1*
1,2-Dichloroethane-d4 (Surr)	*105*		*70 - 130*		*06/17/13 14:52*	*1*

Client Sample ID: MW-4

Lab Sample ID: 560-40560-4

Date Collected: 06/09/13 10:40
Matrix: Water
Date Received: 06/12/13 10:00

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00014		0.0010	0.00014	mg/L			06/17/13 15:17	1
Ethylbenzene	<0.00020		0.0010	0.00020	mg/L			06/17/13 15:17	1
Toluene	<0.00030		0.0010	0.00030	mg/L			06/17/13 15:17	1
Xylenes, Total	<0.00023		0.0030	0.00023	mg/L			06/17/13 15:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*98*		*70 - 130*		*06/17/13 15:17*	*1*
4-Bromofluorobenzene (Surr)	*92*		*70 - 130*		*06/17/13 15:17*	*1*
Dibromofluoromethane (Surr)	*101*		*70 - 130*		*06/17/13 15:17*	*1*
1,2-Dichloroethane-d4 (Surr)	*108*		*70 - 130*		*06/17/13 15:17*	*1*

Client Sample ID: MW-5

Lab Sample ID: 560-40560-5

Date Collected: 06/09/13 11:10
Matrix: Water
Date Received: 06/12/13 10:00

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00014		0.0010	0.00014	mg/L			06/17/13 16:44	1
Ethylbenzene	**0.00031**	**J**	0.0010	0.00020	mg/L			06/17/13 16:44	1
Toluene	<0.00030		0.0010	0.00030	mg/L			06/17/13 16:44	1
Xylenes, Total	**0.00079**	**J**	0.0030	0.00023	mg/L			06/17/13 16:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*109*		*70 - 130*		*06/17/13 16:44*	*1*
4-Bromofluorobenzene (Surr)	*126*		*70 - 130*		*06/17/13 16:44*	*1*
Dibromofluoromethane (Surr)	*110*		*70 - 130*		*06/17/13 16:44*	*1*
1,2-Dichloroethane-d4 (Surr)	*103*		*70 - 130*		*06/17/13 16:44*	*1*

Client Sample ID: MW-6

Lab Sample ID: 560-40560-6

Date Collected: 06/09/13 10:45
Matrix: Water
Date Received: 06/12/13 10:00

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00014		0.0010	0.00014	mg/L			06/17/13 17:10	1
Ethylbenzene	<0.00020		0.0010	0.00020	mg/L			06/17/13 17:10	1
Toluene	<0.00030		0.0010	0.00030	mg/L			06/17/13 17:10	1
Xylenes, Total	<0.00023		0.0030	0.00023	mg/L			06/17/13 17:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*105*		*70 - 130*		*06/17/13 17:10*	*1*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*		*06/17/13 17:10*	*1*
Dibromofluoromethane (Surr)	*107*		*70 - 130*		*06/17/13 17:10*	*1*
1,2-Dichloroethane-d4 (Surr)	*105*		*70 - 130*		*06/17/13 17:10*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 560-89167/8
Matrix: Water
Analysis Batch: 89167

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00014		0.0010	0.00014	mg/L			06/17/13 11:31	1
Ethylbenzene	<0.00020		0.0010	0.00020	mg/L			06/17/13 11:31	1
Toluene	<0.00030		0.0010	0.00030	mg/L			06/17/13 11:31	1
Xylenes, Total	<0.00023		0.0030	0.00023	mg/L			06/17/13 11:31	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*97*		*70 - 130*		*06/17/13 11:31*	*1*
4-Bromofluorobenzene (Surr)	*89*		*70 - 130*		*06/17/13 11:31*	*1*
Dibromofluoromethane (Surr)	*99*		*70 - 130*		*06/17/13 11:31*	*1*
1,2-Dichloroethane-d4 (Surr)	*104*		*70 - 130*		*06/17/13 11:31*	*1*

Lab Sample ID: LCS 560-89167/3
Matrix: Water
Analysis Batch: 89167

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.0250	0.0251		mg/L		101	70 - 130
Ethylbenzene	0.0250	0.0255		mg/L		102	70 - 130
Toluene	0.0250	0.0254		mg/L		102	70 - 130
Xylenes, Total	0.0750	0.0771		mg/L		103	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Toluene-d8 (Surr)	*99*		*70 - 130*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*
Dibromofluoromethane (Surr)	*97*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 130*

Lab Sample ID: MB 560-89169/8
Matrix: Water
Analysis Batch: 89169

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00014		0.0010	0.00014	mg/L			06/17/13 12:32	1
Ethylbenzene	<0.00020		0.0010	0.00020	mg/L			06/17/13 12:32	1
Toluene	<0.00030		0.0010	0.00030	mg/L			06/17/13 12:32	1
Xylenes, Total	<0.00023		0.0030	0.00023	mg/L			06/17/13 12:32	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*103*		*70 - 130*		*06/17/13 12:32*	*1*
4-Bromofluorobenzene (Surr)	*91*		*70 - 130*		*06/17/13 12:32*	*1*
Dibromofluoromethane (Surr)	*110*		*70 - 130*		*06/17/13 12:32*	*1*
1,2-Dichloroethane-d4 (Surr)	*105*		*70 - 130*		*06/17/13 12:32*	*1*

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

Lab Sample ID: LCS 560-89169/3
Matrix: Water
Analysis Batch: 89169

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.0250	0.0276		mg/L		110	70 - 130		
Ethylbenzene			0.0250	0.0245		mg/L		98	70 - 130		
Toluene			0.0250	0.0278		mg/L		111	70 - 130		
Xylenes, Total			0.0750	0.0736		mg/L		98	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Toluene-d8 (Surr)	*103*		*70 - 130*
4-Bromofluorobenzene (Surr)	*108*		*70 - 130*
Dibromofluoromethane (Surr)	*103*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*96*		*70 - 130*

Lab Chronicle

Client: MWH Americas Inc
Project/Site: Johnston Fed #6

TestAmerica Job ID: 560-40560-1
SDG: June 2013

Client Sample ID: MW-1
Lab Sample ID: 560-40560-1
Date Collected: 06/09/13 11:30
Matrix: Water
Date Received: 06/12/13 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		150	89167	06/17/13 14:02	RT	TAL CC

Client Sample ID: MW-2
Lab Sample ID: 560-40560-2
Date Collected: 06/09/13 11:05
Matrix: Water
Date Received: 06/12/13 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	89167	06/17/13 14:27	RT	TAL CC

Client Sample ID: MW-3
Lab Sample ID: 560-40560-3
Date Collected: 06/09/13 10:50
Matrix: Water
Date Received: 06/12/13 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	89167	06/17/13 14:52	RT	TAL CC

Client Sample ID: MW-4
Lab Sample ID: 560-40560-4
Date Collected: 06/09/13 10:40
Matrix: Water
Date Received: 06/12/13 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	89167	06/17/13 15:17	RT	TAL CC

Client Sample ID: MW-5
Lab Sample ID: 560-40560-5
Date Collected: 06/09/13 11:10
Matrix: Water
Date Received: 06/12/13 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	89169	06/17/13 16:44	RT	TAL CC

Client Sample ID: MW-6
Lab Sample ID: 560-40560-6
Date Collected: 06/09/13 10:45
Matrix: Water
Date Received: 06/12/13 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	89169	06/17/13 17:10	RT	TAL CC

Laboratory References:

TAL CC = TestAmerica Corpus Christi, 1733 N. Padre Island Drive, Corpus Christi, TX 78408, TEL (361)289-2673

Certification Summary

Client: MWH Americas Inc
Project/Site: Johnston Fed #6

TestAmerica Job ID: 560-40560-1
SDG: June 2013

Laboratory: TestAmerica Corpus Christi

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

Authority	Program	EPA Region	Certification ID	Expiration Date
Kansas	NELAP	7	E-10362	10-31-13
Oklahoma	State Program	6	9968	08-31-13
Texas	NELAP	6	T104704210-12-8	03-31-14
USDA	Federal		P330-11-00060	02-03-14

Method Summary

Client: MWH Americas Inc
Project/Site: Johnston Fed #6

TestAmerica Job ID: 560-40560-1
SDG: June 2013

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL CC

Protocol References:

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

Laboratory References:

TAL CC = TestAmerica Corpus Christi, 1733 N. Padre Island Drive, Corpus Christi, TX 78408, TEL (361)289-2673

Sample Summary

Client: MWH Americas Inc
Project/Site: Johnston Fed #6

TestAmerica Job ID: 560-40560-1
SDG: June 2013

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
560-40560-1	MW-1	Water	06/09/13 11:30	06/12/13 10:00
560-40560-2	MW-2	Water	06/09/13 11:05	06/12/13 10:00
560-40560-3	MW-3	Water	06/09/13 10:50	06/12/13 10:00
560-40560-4	MW-4	Water	06/09/13 10:40	06/12/13 10:00
560-40560-5	MW-5	Water	06/09/13 11:10	06/12/13 10:00
560-40560-6	MW-6	Water	06/09/13 10:45	06/12/13 10:00

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

No. 48411

CHAIN OF CUSTODY RECORD

Loc: 560
40560

CUSTOMER INFORMATION	PROJECT INFORMATION
COMPANY: MWH	PROJECT NAME/NUMBER: Johnston Fed #6
SEND REPORT TO: Daniel Wade	**BILLING INFORMATION**
ADDRESS: 1801 California St. Suite 2900 Denver, CO 80202	BILL TO: Kinder Morgan ADDRESS: Houston, Tx
PHONE: 303-291-2250	PHONE:
FAX:	FAX: PO NO:

560-40560 Chain of Custody

L (

SEAL INTACT: YES
TEMP C: 4.8
CORR TEMP C: 4.0
IR GUN ID: 4
INITIAL/DATE: VFW 06/12

SAMPLE NO.	SAMPLE DESCRIPTION	SAMPLE DATE	SAMPLE TIME	SAMPLE MATRIX	CONTAINER	PRESERV.	RS NUMBER	8260	REMARKS/PRECAUTIONS.
	MW-1	6/9/13	1130	GW	VOA	HCL	3	x	
	MW-2	6/9/13	1105	GW	VOA	HCL	3	x	
	MW-3	6/9/13	1050	GW	VOA	HCL	3	x	
	MW-4	6/9/13	1040	GW	VOA	HCL	3	x	
	MW-5	6/9/13	1110	GW	VOA	HCL	2	x	
	MW-6	6/9/13	1045	GW	VOA	HCL	3	x	

SAMPLER: Daniel Wade
SHIPMENT METHOD: FedEx
AIRBILL NO.: 795788553891

REQUIRED TURNAROUND: [X] ROUTINE TAT (10 BUSINESS DAYS) [ ] RUSH TAT (MAY REQUIRE SURCHARGE)

1. RELINQUISHED BY: Daniel Wade	DATE	2. RELINQUISHED BY:	DATE	3. RELINQUISHED BY:	DATE
SIGNATURE:	6/11	SIGNATURE:		SIGNATURE.	
PRINTED NAME/COMPANY: MWH	TIME 1000	PRINTED NAME/COMPANY:	TIME	PRINTED NAME/COMPANY:	TIME
1. RECEIVED BY:	DATE	2. RECEIVED BY:	DATE	3. RECEIVED BY:	DATE
SIGNATURE:	6/12/13	SIGNATURE:		SIGNATURE.	
PRINTED NAME/COMPANY:	TIME 1000	PRINTED NAME/COMPANY:	TIME	PRINTED NAME/COMPANY:	TIME

TAL-8222-560 (0412)

TestAmerica
1733 N. Padre Island Drive
Corpus Christi, TX 78408
Phone: 361.289.2673/Fax: 361.289.2471

Login Sample Receipt Checklist

Client: MWH Americas Inc

Job Number: 560-40560-1
SDG Number: June 2013

Login Number: 40560
List Number: 1
Creator: McDermott, Vivian

List Source: TestAmerica Corpus Christi

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.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	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 Corpus Christi
1733 N. Padre Island Drive
Corpus Christi, TX 78408
Tel: (361)289-2673

TestAmerica Job ID: 560-42533-1
TestAmerica Sample Delivery Group: September 2013
Client Project/Site: Johnston Fed #6 Groundwater Analysis

For:
MWH Americas Inc
1801 California Street
Suite 2900
Denver, Colorado 80202

Attn: Mr. Daniel Wade

Authorized for release by:
10/3/2013 10:41:23 AM
Lindy Maingot, Project Manager I
lindy.maingot@testamericainc.com

Designee for

Timothy Kellogg, Lab Director
tim.kellogg@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

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

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

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

Qualifiers

GC/MS 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
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: 560-42533-1

Laboratory: TestAmerica Corpus Christi

Narrative

Job Narrative
560-42533-1

Comments
No additional comments.

Receipt
The samples were received on 9/16/2013 10:05 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.0º C.

GC/MS VOA
No analytical or quality issues were noted.

Organic Prep
No analytical or quality issues were noted.

Detection Summary

Client: MWH Americas Inc
Project/Site: Johnston Fed #6 Groundwater Analysis

TestAmerica Job ID: 560-42533-1
SDG: September 2013

Client Sample ID: MW-2 — Lab Sample ID: 560-42533-2

No Detections.

Client Sample ID: MW-3 — Lab Sample ID: 560-42533-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.00078	J	0.0010	0.00014	mg/L	1		8260B	Total/NA
Ethylbenzene	0.030		0.0010	0.00020	mg/L	1		8260B	Total/NA
Toluene	0.00048	J	0.0010	0.00030	mg/L	1		8260B	Total/NA
Xylenes, Total	0.0022	J	0.0030	0.00023	mg/L	1		8260B	Total/NA

Client Sample ID: MW-4 — Lab Sample ID: 560-42533-4

No Detections.

Client Sample ID: MW-5 — Lab Sample ID: 560-42533-5

No Detections.

Client Sample ID: MW-6 — Lab Sample ID: 560-42533-6

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample ID: MW-2

Lab Sample ID: 560-42533-2

Date Collected: 09/09/13 13:10

Matrix: Water

Date Received: 09/16/13 10:05

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00014		0.0010	0.00014	mg/L			09/18/13 14:16	1
Ethylbenzene	<0.00020		0.0010	0.00020	mg/L			09/18/13 14:16	1
Toluene	<0.00030		0.0010	0.00030	mg/L			09/18/13 14:16	1
Xylenes, Total	<0.00023		0.0030	0.00023	mg/L			09/18/13 14:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*99*		*70 - 130*		*09/18/13 14:16*	*1*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*		*09/18/13 14:16*	*1*
Dibromofluoromethane (Surr)	*102*		*70 - 130*		*09/18/13 14:16*	*1*
1,2-Dichloroethane-d4 (Surr)	*96*		*70 - 140*		*09/18/13 14:16*	*1*

Client Sample ID: MW-3

Lab Sample ID: 560-42533-3

Date Collected: 09/09/13 13:05

Matrix: Water

Date Received: 09/16/13 10:05

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.00078**	**J**	0.0010	0.00014	mg/L			09/18/13 14:41	1
Ethylbenzene	**0.030**		0.0010	0.00020	mg/L			09/18/13 14:41	1
Toluene	**0.00048**	**J**	0.0010	0.00030	mg/L			09/18/13 14:41	1
Xylenes, Total	**0.0022**	**J**	0.0030	0.00023	mg/L			09/18/13 14:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*117*		*70 - 130*		*09/18/13 14:41*	*1*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*		*09/18/13 14:41*	*1*
Dibromofluoromethane (Surr)	*96*		*70 - 130*		*09/18/13 14:41*	*1*
1,2-Dichloroethane-d4 (Surr)	*92*		*70 - 140*		*09/18/13 14:41*	*1*

Client Sample ID: MW-4

Lab Sample ID: 560-42533-4

Date Collected: 09/09/13 10:30

Matrix: Water

Date Received: 09/16/13 10:05

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00014		0.0010	0.00014	mg/L			09/18/13 15:06	1
Ethylbenzene	<0.00020		0.0010	0.00020	mg/L			09/18/13 15:06	1
Toluene	<0.00030		0.0010	0.00030	mg/L			09/18/13 15:06	1
Xylenes, Total	<0.00023		0.0030	0.00023	mg/L			09/18/13 15:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*101*		*70 - 130*		*09/18/13 15:06*	*1*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*		*09/18/13 15:06*	*1*
Dibromofluoromethane (Surr)	*104*		*70 - 130*		*09/18/13 15:06*	*1*
1,2-Dichloroethane-d4 (Surr)	*97*		*70 - 140*		*09/18/13 15:06*	*1*

Client: MWH Americas Inc
Project/Site: Johnston Fed #6 Groundwater Analysis

TestAmerica Job ID: 560-42533-1
SDG: September 2013

Client Sample ID: MW-5

Lab Sample ID: 560-42533-5

Date Collected: 09/09/13 12:55
Matrix: Water
Date Received: 09/16/13 10:05

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00014		0.0010	0.00014	mg/L			09/18/13 15:31	1
Ethylbenzene	<0.00020		0.0010	0.00020	mg/L			09/18/13 15:31	1
Toluene	<0.00030		0.0010	0.00030	mg/L			09/18/13 15:31	1
Xylenes, Total	<0.00023		0.0030	0.00023	mg/L			09/18/13 15:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*101*		*70 - 130*		*09/18/13 15:31*	*1*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*		*09/18/13 15:31*	*1*
Dibromofluoromethane (Surr)	*100*		*70 - 130*		*09/18/13 15:31*	*1*
1,2-Dichloroethane-d4 (Surr)	*96*		*70 - 140*		*09/18/13 15:31*	*1*

Client Sample ID: MW-6

Lab Sample ID: 560-42533-6

Date Collected: 09/09/13 12:50
Matrix: Water
Date Received: 09/16/13 10:05

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00014		0.0010	0.00014	mg/L			09/18/13 15:56	1
Ethylbenzene	<0.00020		0.0010	0.00020	mg/L			09/18/13 15:56	1
Toluene	<0.00030		0.0010	0.00030	mg/L			09/18/13 15:56	1
Xylenes, Total	<0.00023		0.0030	0.00023	mg/L			09/18/13 15:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*100*		*70 - 130*		*09/18/13 15:56*	*1*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*		*09/18/13 15:56*	*1*
Dibromofluoromethane (Surr)	*101*		*70 - 130*		*09/18/13 15:56*	*1*
1,2-Dichloroethane-d4 (Surr)	*96*		*70 - 140*		*09/18/13 15:56*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 560-92870/8
Matrix: Water
Analysis Batch: 92870

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00014		0.0010	0.00014	mg/L			09/18/13 12:35	1
Ethylbenzene	<0.00020		0.0010	0.00020	mg/L			09/18/13 12:35	1
Toluene	<0.00030		0.0010	0.00030	mg/L			09/18/13 12:35	1
Xylenes, Total	<0.00023		0.0030	0.00023	mg/L			09/18/13 12:35	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*100*		*70 - 130*		*09/18/13 12:35*	*1*
4-Bromofluorobenzene (Surr)	*92*		*70 - 130*		*09/18/13 12:35*	*1*
Dibromofluoromethane (Surr)	*102*		*70 - 130*		*09/18/13 12:35*	*1*
1,2-Dichloroethane-d4 (Surr)	*96*		*70 - 140*		*09/18/13 12:35*	*1*

Lab Sample ID: LCS 560-92870/3
Matrix: Water
Analysis Batch: 92870

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.0250	0.0239		mg/L		96	70 - 130
Ethylbenzene	0.0250	0.0247		mg/L		99	70 - 130
Toluene	0.0250	0.0243		mg/L		97	70 - 130
Xylenes, Total	0.0750	0.0731		mg/L		97	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Toluene-d8 (Surr)	*100*		*70 - 130*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*
Dibromofluoromethane (Surr)	*99*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*93*		*70 - 140*

Certification Summary

Client: MWH Americas Inc
Project/Site: Johnston Fed #6 Groundwater Analysis

TestAmerica Job ID: 560-42533-1
SDG: September 2013

Laboratory: TestAmerica Corpus Christi

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

Authority	Program	EPA Region	Certification ID	Expiration Date
Kansas	NELAP	7	E-10362	10-31-13
Oklahoma	State Program	6	9968	08-31-14
Texas	NELAP	6	T104704210-12-8	03-31-14
USDA	Federal		P330-11-00060	02-03-14

Method Summary

Client: MWH Americas Inc
Project/Site: Johnston Fed #6 Groundwater Analysis

TestAmerica Job ID: 560-42533-1
SDG: September 2013

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL CC

Protocol References:

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

Laboratory References:

TAL CC = TestAmerica Corpus Christi, 1733 N. Padre Island Drive, Corpus Christi, TX 78408, TEL (361)289-2673

Sample Summary

Client: MWH Americas Inc
Project/Site: Johnston Fed #6 Groundwater Analysis

TestAmerica Job ID: 560-42533-1
SDG: September 2013

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
560-42533-2	MW-2	Water	09/09/13 13:10	09/16/13 10:05
560-42533-3	MW-3	Water	09/09/13 13:05	09/16/13 10:05
560-42533-4	MW-4	Water	09/09/13 10:30	09/16/13 10:05
560-42533-5	MW-5	Water	09/09/13 12:55	09/16/13 10:05
560-42533-6	MW-6	Water	09/09/13 12:50	09/16/13 10:05

TestAmerica Corpus Christi
1733 N. Padre Island Drive
Corpus Christi, TX 78408
Phone (361) 289-2673 Fax (361) 289-2471

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Loc: 560
42533

Client Information	Sampler: DAW	Lab PM: Kellogg, Timothy L.	Carrier Tracking No(s): 8031 5142 3491	COC No: 560-10718-1157
Client Contact: Mr. Daniel Wade	Phone: 303-912-2625	E-Mail: tim.kellogg@testamericainc.com		Page: Page 1 of 1
Company: MWH Americas Inc				Job #:
Address: 1801 California Street Suite 2900	Due Date Requested:			
City: Denver	TAT Requested (days): Standard			
State, Zip: CO, 80202				
Phone: 713-420-3414(Tel)	PO #: Purchase Order not required			
Email: Daniel.A.Wade@us.mwhglobal.com	WO #: TWO # C-STLI-			
Project Name: San Juan River Basin Pit Sites	Project #: 56000058			
Site: Johnston Fed #6	SSOW#:			

560-42533 Chain of Custody

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

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B - BTEX	Total Number of containers	Special Instructions/Note:
				Preservation Code:	X	X	A	X	
mw-1	9/9/13	1315	G	Water			X		
mw-2	9/9/13	1310	G	Water			X		
mw-3	9/9/13	1305	G	Water			X		
mw-4	9/9/13	1300	G	Water			X		
mw-5	9/9/13	1255	G	Water			X		
mw-6	9/9/13	1250	G	Water			X		
				Water					
				Water					
				Water					
				Water					
				Water					

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

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

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

Special Instructions/QC Requirements:

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

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
[signature]	9/13/13 1200		[signature]	9/14/13 1005	TACC

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

Cooler Temperature(s) °C and Other Remarks: Obs 1.9° Corr 2.0° IR4

Login Sample Receipt Checklist

Client: MWH Americas Inc

Job Number: 560-42533-1
SDG Number: September 2013

Login Number: 42533
List Number: 1
Creator: Wing, Randi

List Source: TestAmerica Corpus Christi

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	
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

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ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Corpus Christi
1733 N. Padre Island Drive
Corpus Christi, TX 78408
Tel: (361)289-2673

TestAmerica Job ID: 560-44355-1
TestAmerica Sample Delivery Group: December 2013
Client Project/Site: Johnston Federal #6 Groundwater Analysis

For:
MWH Americas Inc
2890 East Cottonwood Pkwy
Suite 300
Salt Lake City, Utah 84121

Attn: Mr. Cary Ruble

Authorized for release by:
12/30/2013 7:27:05 PM

Timothy Kellogg, Lab Director
(361)289-2673
tim.kellogg@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

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

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

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

Qualifiers

GC VOA

Qualifier	Qualifier Description
X	Surrogate is outside control limits
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
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: Johnston Federal #6 Groundwater Analysis

TestAmerica Job ID: 560-44355-1
SDG: December 2013

Job ID: 560-44355-1

Laboratory: TestAmerica Corpus Christi

Narrative

Receipt

The samples were received on 12/17/2013 10:40 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.1° C.

GC VOA

Method(s) 8021B: It was noted that some of the surrogate recoveries for sample 560-44355-2 were outside of the control limits. Evidence of matrix interference is present and it is suspected to be the cause of the recoveries. No other analytical or quality issues were noted.

Detection Summary

Client: MWH Americas Inc
Project/Site: Johnston Federal #6 Groundwater Analysis

TestAmerica Job ID: 560-44355-1
SDG: December 2013

Client Sample ID: MW-2 — Lab Sample ID: 560-44355-1

No Detections.

Client Sample ID: MW-3 — Lab Sample ID: 560-44355-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Toluene	0.051		0.0020	0.00038	mg/L	1		8021B	Total/NA
Ethylbenzene	0.023		0.0020	0.00020	mg/L	1		8021B	Total/NA
Xylenes, Total	0.0054		0.0020	0.00065	mg/L	1		8021B	Total/NA

Client Sample ID: MW-4 — Lab Sample ID: 560-44355-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Toluene	0.00051	J	0.0020	0.00038	mg/L	1		8021B	Total/NA

Client Sample ID: MW-5 — Lab Sample ID: 560-44355-4

No Detections.

Client Sample ID: MW-6 — Lab Sample ID: 560-44355-5

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample ID: MW-2

Lab Sample ID: 560-44355-1

Date Collected: 12/12/13 12:10
Matrix: Water
Date Received: 12/17/13 10:40

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00020		0.0020	0.00020	mg/L			12/20/13 12:02	1
Toluene	<0.00038		0.0020	0.00038	mg/L			12/20/13 12:02	1
Ethylbenzene	<0.00020		0.0020	0.00020	mg/L			12/20/13 12:02	1
Xylenes, Total	<0.00065		0.0020	0.00065	mg/L			12/20/13 12:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*84*		*58 - 129*		*12/20/13 12:02*	*1*
Trifluorotoluene (Surr)	*85*		*54 - 130*		*12/20/13 12:02*	*1*

Client Sample ID: MW-3

Lab Sample ID: 560-44355-2

Date Collected: 12/12/13 12:00
Matrix: Water
Date Received: 12/17/13 10:40

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00020		0.0020	0.00020	mg/L			12/20/13 12:36	1
Toluene	**0.051**		0.0020	0.00038	mg/L			12/20/13 12:36	1
Ethylbenzene	**0.023**		0.0020	0.00020	mg/L			12/20/13 12:36	1
Xylenes, Total	**0.0054**		0.0020	0.00065	mg/L			12/20/13 12:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*82*		*58 - 129*		*12/20/13 12:36*	*1*
Trifluorotoluene (Surr)	*138*	*X*	*54 - 130*		*12/20/13 12:36*	*1*

Client Sample ID: MW-4

Lab Sample ID: 560-44355-3

Date Collected: 12/12/13 11:55
Matrix: Water
Date Received: 12/17/13 10:40

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00020		0.0020	0.00020	mg/L			12/20/13 13:06	1
Toluene	**0.00051**	**J**	0.0020	0.00038	mg/L			12/20/13 13:06	1
Ethylbenzene	<0.00020		0.0020	0.00020	mg/L			12/20/13 13:06	1
Xylenes, Total	<0.00065		0.0020	0.00065	mg/L			12/20/13 13:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*81*		*58 - 129*		*12/20/13 13:06*	*1*
Trifluorotoluene (Surr)	*83*		*54 - 130*		*12/20/13 13:06*	*1*

Client Sample ID: MW-5

Lab Sample ID: 560-44355-4

Date Collected: 12/12/13 11:50
Matrix: Water
Date Received: 12/17/13 10:40

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00020		0.0020	0.00020	mg/L			12/20/13 13:34	1
Toluene	<0.00038		0.0020	0.00038	mg/L			12/20/13 13:34	1
Ethylbenzene	<0.00020		0.0020	0.00020	mg/L			12/20/13 13:34	1
Xylenes, Total	<0.00065		0.0020	0.00065	mg/L			12/20/13 13:34	1

Client: MWH Americas Inc
Project/Site: Johnston Federal #6 Groundwater Analysis

TestAmerica Job ID: 560-44355-1
SDG: December 2013

Client Sample ID: MW-5

Lab Sample ID: 560-44355-4

Date Collected: 12/12/13 11:50
Matrix: Water
Date Received: 12/17/13 10:40

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	*81*		*58 - 129*		*12/20/13 13:34*	*1*
Trifluorotoluene (Surr)	*88*		*54 - 130*		*12/20/13 13:34*	*1*

Client Sample ID: MW-6

Lab Sample ID: 560-44355-5

Date Collected: 12/12/13 11:45
Matrix: Water
Date Received: 12/17/13 10:40

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00020		0.0020	0.00020	mg/L			12/20/13 14:03	1
Toluene	<0.00038		0.0020	0.00038	mg/L			12/20/13 14:03	1
Ethylbenzene	<0.00020		0.0020	0.00020	mg/L			12/20/13 14:03	1
Xylenes, Total	<0.00065		0.0020	0.00065	mg/L			12/20/13 14:03	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	*83*		*58 - 129*		*12/20/13 14:03*	*1*
Trifluorotoluene (Surr)	*84*		*54 - 130*		*12/20/13 14:03*	*1*

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 560-96456/5
Matrix: Water
Analysis Batch: 96456

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00020		0.0020	0.00020	mg/L			12/20/13 10:21	1
Toluene	<0.00038		0.0020	0.00038	mg/L			12/20/13 10:21	1
Ethylbenzene	<0.00020		0.0020	0.00020	mg/L			12/20/13 10:21	1
Xylenes, Total	<0.00065		0.0020	0.00065	mg/L			12/20/13 10:21	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*80*		*58 - 129*		*12/20/13 10:21*	*1*
Trifluorotoluene (Surr)	*85*		*54 - 130*		*12/20/13 10:21*	*1*

Lab Sample ID: LCS 560-96456/4
Matrix: Water
Analysis Batch: 96456

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.0400	0.0350		mg/L		87	70 - 130
Toluene	0.0400	0.0350		mg/L		87	70 - 130
Ethylbenzene	0.0400	0.0356		mg/L		89	70 - 130
Xylenes, Total	0.120	0.104		mg/L		87	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*89*		*58 - 129*
Trifluorotoluene (Surr)	*86*		*54 - 130*

Lab Chronicle

Client: MWH Americas Inc
Project/Site: Johnston Federal #6 Groundwater Analysis

TestAmerica Job ID: 560-44355-1
SDG: December 2013

Client Sample ID: MW-2
Lab Sample ID: 560-44355-1
Date Collected: 12/12/13 12:10
Matrix: Water
Date Received: 12/17/13 10:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	96456	12/20/13 12:02	RQH	TAL CC

Client Sample ID: MW-3
Lab Sample ID: 560-44355-2
Date Collected: 12/12/13 12:00
Matrix: Water
Date Received: 12/17/13 10:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	96456	12/20/13 12:36	RQH	TAL CC

Client Sample ID: MW-4
Lab Sample ID: 560-44355-3
Date Collected: 12/12/13 11:55
Matrix: Water
Date Received: 12/17/13 10:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	96456	12/20/13 13:06	RQH	TAL CC

Client Sample ID: MW-5
Lab Sample ID: 560-44355-4
Date Collected: 12/12/13 11:50
Matrix: Water
Date Received: 12/17/13 10:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	96456	12/20/13 13:34	RQH	TAL CC

Client Sample ID: MW-6
Lab Sample ID: 560-44355-5
Date Collected: 12/12/13 11:45
Matrix: Water
Date Received: 12/17/13 10:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	96456	12/20/13 14:03	RQH	TAL CC

Laboratory References:

TAL CC = TestAmerica Corpus Christi, 1733 N. Padre Island Drive, Corpus Christi, TX 78408, TEL (361)289-2673

Certification Summary

Client: MWH Americas Inc
Project/Site: Johnston Federal #6 Groundwater Analysis

TestAmerica Job ID: 560-44355-1
SDG: December 2013

Laboratory: TestAmerica Corpus Christi

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

Authority	Program	EPA Region	Certification ID	Expiration Date
Kansas	NELAP	7	E-10362	10-31-14
Oklahoma	State Program	6	9968	08-31-14
Texas	NELAP	6	T104704210-12-8	03-31-14
USDA	Federal		P330-11-00060	02-03-14

Method Summary

Client: MWH Americas Inc
Project/Site: Johnston Federal #6 Groundwater Analysis

TestAmerica Job ID: 560-44355-1
SDG: December 2013

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

Protocol References:

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

Laboratory References:

TAL CC = TestAmerica Corpus Christi, 1733 N. Padre Island Drive, Corpus Christi, TX 78408, TEL (361)289-2673

Sample Summary

Client: MWH Americas Inc
Project/Site: Johnston Federal #6 Groundwater Analysis

TestAmerica Job ID: 560-44355-1
SDG: December 2013

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
560-44355-1	MW-2	Water	12/12/13 12:10	12/17/13 10:40
560-44355-2	MW-3	Water	12/12/13 12:00	12/17/13 10:40
560-44355-3	MW-4	Water	12/12/13 11:55	12/17/13 10:40
560-44355-4	MW-5	Water	12/12/13 11:50	12/17/13 10:40
560-44355-5	MW-6	Water	12/12/13 11:45	12/17/13 10:40

TestAmerica Corpus Christi
1733 N. Padre Island Drive
Corpus Christi, TX 78408
Phone (361) 289-2673 Fax (361) 289-2471

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: CCL	Lab PM: Kellogg, Timothy L.	Carrier Tracking No(s):	COC No: 560-11604-1157.1
Client Contact: ~~Mr. Daniel Wade~~ Christopher Lee	Phone: 303 291 2242	E-Mail: tim.kellogg@testamericainc.com		Page: Page 1 Loc: 560
Company: MWH Americas Inc				Job #: 44355
Address: 1801 California Street Suite 2900	Due Date Requested:			
City: Denver	TAT Requested (days): STANDARD			
State, Zip: CO, 80202	PO #: Purchase Order not required			
Phone: 713-420-3414(Tel)	WO #: TWO # C-STLI-			
Email: ~~Daniel.A.Wade@us.mwhglobal.com~~ christopher.c.lee@mwhglobal.com	Project #: 56000058			
Project Name: San Juan River Basin Pit Sites	SSOW#:			
Site: Johnston Federal #6				

Analysis Requested

Preservation Codes:
A - HC
B - NaOH
C - Zn Acetate
D - Nitric Acid
E - NaHSO4
F - MeOH
G - Amchlor
H - Ascorbic Acid
I - Ice
J - DI Water
K - EDTA
L - EDA
M - Hexane
N - Na2O4S
Q - Na2SO3
R - Na2S2SO3
S - H2SO4
T - TSP Dodecahydrate
U - Acetone
V - MCAA
W - ph 4-5
Z - other (specify)
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B - BTEX	Total Number of containers	Special Instructions/Note:
			Preservation Code:				A		
MW-2	12/12/13	1210	G	Water			X		
MW-3	12/12/13	1200	G	Water			X		
MW-4	12/12/13	1155	G	Water			X		
MW-5	12/12/13	1150	G	Water			X		
MW-6	12/12/13	1145	G	Water			X		
				Water					
				Water					
Trip Blank				Water					

560-44355 Chain of Custody

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

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

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

Special Instructions/QC Requirements:

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

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
[signature]	12/16/13 0900		MWH	12-17-13 10:10	TAC
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No
Custody Seal No.:
Cooler Temperature(s) °C and Other Remarks: 1.6/2.1 IR4 Seal

Login Sample Receipt Checklist

Client: MWH Americas Inc

Job Number: 560-44355-1
SDG Number: December 2013

Login Number: 44355
List Number: 1
Creator: Rood, Vivian R

List Source: TestAmerica Corpus Christi

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.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	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	