2015 ANNUAL GROUNDWATER REPORT

Gallegos Canyon Unit #142E
NMOCD Case#: 3RP-179-0
Meter Code: 03906
T29N, R12W Sec 25, Unit G

SITE DETAILS

Site Location: Latitude: 36.699300 N, Longitude: -108.046700 W
Land Type: State
Operator: BP America Production Company

SITE BACKGROUND

- **Site Assessment:** 4/94
- **Excavation:** 4/94 (20 cy)
- **Re-excavation:** 10/98 (882 cy)

Environmental Remediation activities at the Gallegos Canyon Unit #142 (Site) are being managed pursuant to the procedures set forth in the document entitled, "Remediation Plan for Groundwater Encountered during Pit Closure Activities" (Remediation Plan, El Paso Natural Gas Company / El Paso Field Services Company, 1995). This Remediation Plan was conditionally approved by the New Mexico Oil Conservation Division (OCD) in correspondence dated November 30, 1995; and the OCD approval conditions were adopted into El Paso CGP Company, LLC's (EPCGP's) program methods. Currently, the Site is operated by BP America Production Company and is active.

The Site is located on private land (T29N, R12W, Sec25, Unit G). Various site investigations have occurred from 1997 through 2014. Monitoring wells were installed in 1997 (MW-1), 2001 (MW-2), and 2014 (MW-3 and MW-5 through MW-8). Temporary piezometers PZ-1 through PZ-6 were installed and removed in 1997. Free product has been observed and periodically recovered. Currently, groundwater sampling is conducted on a semi-annual basis and free product was not observed in 2015.

SUMMARY OF 2015 ACTIVITIES

On May 30 and November 18, 2015, water levels were gauged at MW-1, MW-2, MW-3, MW-5, MW-6, MW-7, and MW-8. Groundwater samples were collected from each well that did not contain free product using HydraSleeve™ (HydraSleeve) no-purge passive groundwater sampling devices. The HydraSleeves were set during the previous sampling event approximately 0.5 foot above termination depth of the monitoring wells using a suspension tether and stainless steel weights to collect a sample from the screened interval. Groundwater samples were placed into laboratory-supplied sample containers, packed on ice, and shipped under standard chain-of-custody protocols to TestAmerica Laboratories, Inc. in Pensacola, Florida where they were analyzed for benzene, toluene, ethylbenzene, and total xylenes (BTEX). Additional field parameters were 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 analytical and water level data are summarized in Table 1 and Table 2, respectively. When free product was present, static water level elevations were corrected for measurable thicknesses of free product (specific gravity of 0.75).

SITE MAPS

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

ANALYTICAL LAB REPORTS

The groundwater analytical lab reports are included as Appendix A.

GROUNDWATER RESULTS

- The groundwater flow direction is generally to the south-southeast at the Site (see Figures 2 and 4).
- Groundwater samples collected in 2015 from MW-1, MW-2, MW-6, and MW-8 exceeded the New Mexico Water Quality Control Commission (NMWQCC) standard (10 micrograms per liter [µg/L]) for benzene in groundwater. Monitoring wells MW-3, MW-5, and MW-7 were either below the NMWQCC standard or not detected.
- All site monitoring wells that were sampled in 2015 were either below the NMWQCC standard for toluene in groundwater or not detected.
- All site monitoring wells that were sampled in 2015 were either below the NMWQCC standard for ethylbenzene in groundwater or not detected.
- Groundwater samples collected in 2015 from MW-2 exceeded the NMWQCC standard (600 µg/L) for total xylenes in groundwater. Groundwater samples collected from monitoring wells MW-1, MW-3, MW-5, MW-6, MW-7, and MW-8 were either below the NMWQCC standard for total xylenes or not detected.

PLANNED FUTURE ACTIVITIES

MW-1, MW-2, MW-3, and MW-5 through MW-8 will continue to be sampled on a semi-annual basis. EPCGP will continue to monitor the current operator's site activities as they address a recent release at the Site. The 2016 Annual Report will be submitted in early 2017.

TABLES

TABLE 1 – GROUNDWATER ANALYTICAL RESULTS
TABLE 2 – GROUNDWATER ELEVATION RESULTS

TABLE 1 - GROUNDWATER ANALYTICAL RESULTS

Gallegos Canyon Unit #142E					
Location	Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)
NMWQCC Standards:		10	750	750	620
MW-1	03/10/97	4010	7960	213	2050
MW-1	08/06/97	1040	1310	49.4	647
MW-1	11/05/97	543	719	33.9	342
MW-1	02/13/98	343	354	27.6	394
MW-1	05/06/98	429	216	13.6	176
MW-1	05/04/99	143	20.4	7.78	63.3
MW-1	05/25/00	230	4.4	6	450
MW-1	06/01/01	130	0.5	3.5	6.1
MW-1	05/14/02	34	4.9	1	3.3
MW-1	03/07/03	270	36.8	8.3	21.1
MW-1	09/17/03	150	77	1.9	12.8
MW-1	03/22/04	1.4	<0.14	<0.029	<0.082
MW-1	03/17/05	169	1.3	2.7	6.6
MW-1	06/23/05	810	1.9	0.62	8.1
MW-1	09/26/05	232	14.9	4	15.1
MW-1	12/14/05	354	10.6	5.9	25.6
MW-1	01/09/06	NS	NS	NS	NS
MW-1	01/18/06	NS	NS	NS	NS
MW-1	03/28/06	362	0.37 J	15	15.7
MW-1	06/14/06	210	6.5	2.3	6.1
MW-1	06/28/07	109	12.6	1.1	5.5
MW-1	06/23/08	2320	305	140	934
MW-1	06/02/09	35.3	<1	0.75 J	1.4 J
MW-1	12/30/09	597	10.7 J	26.5	159
MW-1	01/25/10	NS	NS	NS	NS
MW-1	05/25/10	NS	NS	NS	NS
MW-1	09/24/10	NS	NS	NS	NS
MW-1	11/09/10	8610	2770	348	2810
MW-1	02/01/11	NS	NS	NS	NS
MW-1	05/03/11	NS	NS	NS	NS
MW-1	09/27/11	NS	NS	NS	NS
MW-1	11/16/11	229	36.2	5.3	39.3
MW-1	02/16/12	NS	NS	NS	NS
MW-1	05/07/12	NS	NS	NS	NS
MW-1	06/07/13	810	<0.30	<0.20	4.3 J
MW-1	09/11/13	25	<0.30	<0.20	0.39 J
MW-1	12/13/13	330	<0.90	6.9	20
MW-1	04/03/14	560	<3.8	<2.0	<6.5
MW-1	10/25/14	57	<0.70	1.9	3.0 J
MW-1	05/30/15	270	<5.0	1.6	32
MW-1	11/18/15	990	1.6	26	250

TABLE 1 - GROUNDWATER ANALYTICAL RESULTS

Gallegos Canyon Unit #142E					
Location	**Date**	**Benzene (µg/L)**	**Toluene (µg/L)**	**Ethylbenzene (µg/L)**	**Total Xylenes (µg/L)**
NMWQCC Standards:		10	750	750	620
MW-2	12/13/01	22000	25000	500	4300
MW-2	05/14/02	NS	NS	NS	NS
MW-2	09/17/03	6890	4760	219	1770
MW-2	03/22/04	13000	8880	321	2850
MW-2	03/17/05	2800	1640	125	978
MW-2	09/14/05	1980	915	63.8	391
MW-2	01/09/06	NS	NS	NS	NS
MW-2	01/18/06	NS	NS	NS	NS
MW-2	06/14/06	2140	811	83.5	610
MW-2	06/28/07	2100	492	140	1050
MW-2	06/23/08	221	1.5 J	3.9	5.8
MW-2	06/02/09	NS	NS	NS	NS
MW-2	12/30/09	6660	6750	764	6210
MW-2	01/25/10	NS	NS	NS	NS
MW-2	05/25/10	NS	NS	NS	NS
MW-2	09/24/10	NS	NS	NS	NS
MW-2	11/09/10	3900	2450	342	2660
MW-2	02/01/11	NS	NS	NS	NS
MW-2	05/03/11	NS	NS	NS	NS
MW-2	09/27/11	NS	NS	NS	NS
MW-2	11/16/11	2040	1020	231	1520
MW-2	02/16/12	NS	NS	NS	NS
MW-2	05/07/12	NS	NS	NS	NS
MW-2	06/07/13	6000	1100	500	3800
MW-2	09/11/13	2200	470	240	1900
MW-2	12/13/13	5500	830	510	3700
MW-2	04/03/14	NS	NS	NS	NS
MW-2	10/25/14	NS	NS	NS	NS
MW-2	05/30/15	3300	140	570	3400
MW-2	11/18/15	4000	120	520	1500

TABLE 1 - GROUNDWATER ANALYTICAL RESULTS

Gallegos Canyon Unit #142E					
Location	**Date**	**Benzene (µg/L)**	**Toluene (µg/L)**	**Ethylbenzene (µg/L)**	**Total Xylenes (µg/L)**
NMWQCC Standards:		10	750	750	620
TMW-1	01/06/06	NS	NS	NS	NS
TMW-1	01/09/06	NS	NS	NS	NS
TMW-1	01/18/06	NS	NS	NS	NS
TMW-1	06/23/08	NS	NS	NS	NS
TMW-1	12/30/09	3660	1550	520	4110
TMW-1	01/25/10	NS	NS	NS	NS
TMW-1	05/25/10	NS	NS	NS	NS
TMW-1	09/24/10	NS	NS	NS	NS
TMW-1	11/09/10	8880	14400	956	9040
TMW-1	02/01/11	NS	NS	NS	NS
TMW-1	05/03/11	NS	NS	NS	NS
TMW-1	09/27/11	NS	NS	NS	NS
TMW-1	11/16/11	3890	6250	420	3610
TMW-1	02/16/12	NS	NS	NS	NS
TMW-1	05/07/12	NS	NS	NS	NS
TMW-1	06/07/13	5100	1100	190	2600
TMW-1	09/11/13	6600	960	190	2600
TMW-1	12/13/13	6500	2200	410	4000
TMW-1	04/03/14	NS	NS	NS	NS

TABLE 1 - GROUNDWATER ANALYTICAL RESULTS

Gallegos Canyon Unit #142E					
Location	**Date**	**Benzene (µg/L)**	**Toluene (µg/L)**	**Ethylbenzene (µg/L)**	**Total Xylenes (µg/L)**
NMWQCC Standards:		10	750	750	620
MW-3	10/25/14	<0.38	<0.70	<0.50	<1.6
MW-3	05/30/15	<1.0	<5.0	<1.0	<5.0
MW-3	11/18/15	<1.0	<1.0	<1.0	<3.0
MW-5	10/25/14	1.8	<0.70	0.89 J	11
MW-5	05/30/15	<1.0	<5.0	<1.0	<5.0
MW-5	11/18/15	<1.0	<1.0	<1.0	<3.0
MW-6	10/25/14	1.1	<0.70	<0.50	<1.6
MW-6	05/30/15	190	<25	<5.0	110
MW-6	11/18/15	<1.0	<1.0	<1.0	<3.0
MW-7	10/25/14	4.7	0.70 J	1.7	5.7 J
MW-7	05/30/15	6.5	<5.0	<1.0	1.8 J
MW-7	11/18/15	4.3	<1.0	<1.0	<3.0
MW-8	10/25/14	0.77 J	<0.70	<0.50	<1.6
MW-8	05/30/15	36	<5.0	3.1	19
MW-8	11/18/15	6.6	<1.0	<1.0	<3.0

Notes:
µg/L = micrograms per liter
Results highlighted yellow exceed their respective New Mexico Water Quality Control Commission (NMWQCC) standards.
"J" = Result is less than the reporting limit but greater than or equal to the method detection limit and the result in an approximate value.
"<" = analyte was not detected at the indicated reporting limit (some historic data were reported at the detection limit).
"NS" = Monitoring well not sampled

TABLE 2 - GROUNDWATER ELEVATION RESULTS

Gallegos Canyon Unit #142E						
Location	Date	TOC	Depth to Water (ft.)	Depth to LNAPL (ft.)	LNAPL Thickness (ft.)	GW Elevation (ft.)
MW-1	03/10/97	5481.83	16.78	NR		5465.05
MW-1	08/06/97	5481.83	14.46	NR		5467.37
MW-1	11/05/97	5481.83	15.02	NR		5466.81
MW-1	02/13/98	5481.83	18.18	NR		5463.65
MW-1	05/06/98	5481.83	18.69	NR		5463.14
MW-1	05/04/99	5481.83	17.61	NR		5464.22
MW-1	05/25/00	5481.83	16.44	NR		5465.39
MW-1	06/01/01	5481.83	17.08	NR		5464.75
MW-1	05/14/02	5481.83	14.70	NR		5467.13
MW-1	03/07/03	5481.83	15.32	ND		5466.52
MW-1	09/17/03	5481.83	DRY	ND		DRY
MW-1	03/22/04	5481.83	17.38	ND		5464.45
MW-1	03/17/05	5481.83	18.15	ND		5463.69
MW-1	06/23/05	5481.83	14.72	ND		5467.11
MW-1	09/26/05	5481.83	11.95	ND		5469.88
MW-1	12/14/05	5481.83	14.67	ND		5467.16
MW-1	01/09/06	5481.83	15.67	ND		5466.16
MW-1	01/18/06	5481.83	15.97	ND		5465.86
MW-1	03/28/06	5481.83	18.16	ND		5463.67
MW-1	06/14/06	5481.83	13.08	ND		5468.75
MW-1	06/28/07	5481.83	16.18	ND		5465.65
MW-1	06/23/08	5481.83	15.45	ND		5466.38
MW-1	06/02/09	5481.83	17.80	ND		5464.03
MW-1	12/30/09	5481.83	16.82	ND		5465.01
MW-1	01/25/10	5481.83	17.61	ND		5464.22
MW-1	05/25/10	5481.83	18.45	ND		5463.38
MW-1	09/24/10	5481.83	14.59	ND		5467.24
MW-1	11/09/10	5481.83	14.86	ND		5466.97
MW-1	02/01/11	5481.83	17.46	ND		5464.37
MW-1	05/03/11	5481.83	19.22	ND		5462.61
MW-1	09/27/11	5481.83	11.12	ND		5470.71
MW-1	11/16/11	5481.83	12.75	ND		5469.08
MW-1	02/16/12	5481.83	15.47	ND		5466.36
MW-1	05/07/12	5481.83	16.21	ND		5465.62
MW-1	06/07/13	5481.83	14.06	ND		5467.77
MW-1	09/11/13	5481.83	12.61	ND		5469.22
MW-1	12/13/13	5481.83	14.22	ND		5467.61
MW-1	04/03/14	5481.83	17.66	ND		5464.17
MW-1	10/25/14	5481.83	12.69	ND		5469.14
MW-1	05/30/15	5481.83	16.29	ND		5465.54
MW-1	11/18/15	5481.83	14.52	ND		5467.31

TABLE 2 - GROUNDWATER ELEVATION RESULTS

Gallegos Canyon Unit #142E						
Location	Date	TOC	Depth to Water (ft.)	Depth to LNAPL (ft.)	LNAPL Thickness (ft.)	GW Elevation (ft.)
MW-2	12/13/01	5481.56	14.52	NR		5467.04
MW-2	05/14/02	5481.56	14.37	NR		5467.19
MW-2	09/17/03	5481.56	DRY	ND		DRY
MW-2	03/22/04	5481.56	17.06	ND		5464.50
MW-2	03/17/05	5481.56	17.83	ND		5463.73
MW-2	09/14/05	5481.56	11.45	ND		5470.11
MW-2	01/09/06	5481.56	15.35	ND		5466.21
MW-2	01/18/06	5481.56	15.65	ND		5465.91
MW-2	06/14/06	5481.56	12.64	ND		5468.92
MW-2	06/28/07	5481.56	16.86	ND		5464.70
MW-2	06/23/08	5481.56	15.15	ND		5466.41
MW-2	06/02/09	5481.56	17.84	17.42	0.42	5464.04
MW-2	12/30/09	5481.56	16.48	16.45	0.03	5465.10
MW-2	01/25/10	5481.56	17.45	17.27	0.18	5464.25
MW-2	05/25/10	5481.56	18.55	18.05	0.50	5463.39
MW-2	09/24/10	5481.56	14.25	ND		5467.31
MW-2	11/09/10	5481.56	14.50	14.49	0.01	5467.07
MW-2	02/01/11	5481.56	17.15	ND		5464.41
MW-2	05/03/11	5481.56	18.91	ND		5462.65
MW-2	09/27/11	5481.56	12.65	ND		5468.91
MW-2	11/16/11	5481.56	12.37	ND		5469.19
MW-2	02/16/12	5481.56	15.13	ND		5466.43
MW-2	05/07/12	5481.56	16.91	ND		5464.65
MW-2	06/07/13	5481.56	13.63	ND		5467.93
MW-2	09/11/13	5481.56	12.18	ND		5469.38
MW-2	12/13/13	5481.56	13.92	ND		5467.64
MW-2	04/03/14	5481.56	17.42	17.31	0.11	5464.22
MW-2	10/25/14	5481.56	12.14	ND		5469.42
MW-2	05/30/15	5481.56	15.92	ND		5465.64
MW-2	11/18/15	5481.56	14.26	ND		5467.30

TABLE 2 - GROUNDWATER ELEVATION RESULTS

Gallegos Canyon Unit #142E						
Location	Date	TOC	Depth to Water (ft.)	Depth to LNAPL (ft.)	LNAPL Thickness (ft.)	GW Elevation (ft.)
TMW-1	01/06/06	5481.43	15.29	ND		5466.14
TMW-1	01/09/06	5481.43	15.27	ND		5466.16
TMW-1	01/18/06	5481.43	15.57	ND		5465.87
TMW-1	06/23/08	5481.43	15.04	ND		5466.39
TMW-1	12/30/09	5481.43	NA	ND		NA
TMW-1	01/25/10	5481.43	17.23	ND		5464.20
TMW-1	05/25/10	5481.43	18.70	17.80	0.90	5463.41
TMW-1	09/24/10	5481.43	14.45	14.10	0.35	5467.25
TMW-1	11/09/10	5481.43	14.62	14.37	0.25	5467.00
TMW-1	02/01/11	5481.43	17.45	17.00	0.45	5464.32
TMW-1	05/03/11	5481.43	19.76	18.55	1.21	5462.58
TMW-1	09/27/11	5481.43	12.43	12.03	0.40	5469.30
TMW-1	11/16/11	5481.43	12.44	12.31	0.13	5469.09
TMW-1	02/16/12	5481.43	14.25	12.03	2.22	5468.85
TMW-1	05/07/12	5481.43	14.20	14.18	0.02	5467.25
TMW-1	06/07/13	5481.43	13.65	ND		5467.78
TMW-1	09/11/13	5481.43	12.14	ND		5469.29
TMW-1	12/13/13	5481.43	13.90	ND		5467.53
TMW-1	04/03/14	5481.43	17.36	17.25	0.11	5464.16
MW-3	10/25/14	5481.87	12.53	ND		5469.34
MW-3	05/30/15	5481.87	16.32	ND		5465.55
MW-3	11/18/15	5481.87	14.65	ND		5467.22
MW-5	10/25/14	5482.04	12.73	ND		5469.31
MW-5	05/30/15	5482.04	16.50	ND		5465.54
MW-5	11/18/15	5482.04	14.80	ND		5467.24
MW-6	10/25/14	5481.45	12.31	ND		5469.14
MW-6	05/30/15	5481.45	16.01	ND		5465.44
MW-6	11/18/15	5481.45	14.36	ND		5467.09
MW-7	10/25/14	5481.80	12.59	ND		5469.21
MW-7	05/30/15	5481.80	16.32	ND		5465.48
MW-7	11/18/15	5481.80	14.67	ND		5467.13
MW-8	10/25/14	5481.83	12.50	ND		5469.33
MW-8	05/30/15	5481.83	16.28	ND		5465.55
MW-8	11/18/15	5481.83	14.60	ND		5467.23

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

FIGURES

FIGURE 1: MAY 30, 2015 GROUNDWATER ANALYTICAL RESULTS MAP
FIGURE 2: MAY 30, 2015 GROUNDWATER ELEVATION MAP
FIGURE 3: NOVEMBER 18, 2015 GROUNDWATER ANALYTICAL RESULTS MAP
FIGURE 4: NOVEMBER 18, 2015 GROUNDWATER ELEVATION MAP

L:\San Juan River Basin\SJRB GENERAL\GIS-NEW_MXDs\GALLEGOS CAYON UNIT #142E\2015 MAPS\GCU#142E_GARM_1SA_2015.mxd

BP MW #11

BP MW #9

BP MW #8

BP MW #6

BP MW #5

BP MW #12

BP MW #7

MW-1
MW-1
B: 270
T: <5.0
E: 1.6
X: 32

MW-2
MW-2
B: 3300
T: 140
E: 570
X: 3400

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

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

MW-6
MW-6
B: 190
T: <25
E: <5.0
X: 110

MW-7
MW-7
B: 6.5
T: <5.0
E: <1.0
X: 1.8 J

MW-8
MW-8
B: 36
T: <5.0
E: 3.1
X: 19

TMW-1

FORMER EPC PIT

SOLAR PANEL

FOUND BM

SMA BENCHMARK
ELEV 5478.19'
NAD 83 NAVD 88
STATE PLANE COORDINATE SYSTEM
NEW MEXICO WEST

AERIAL IMAGE FROM GOOGLE EARTH, DATED 6/10/2011

LEGEND:

- 5795 — APPROX. GROUND SURFACE CONTOUR AND ELEVATION, FEET
- 5481.8 — CORRECTED GROUNDWATER ELEVATION CONTOUR
- ACCESS ROAD
- ABANDONED UNKNOWN LINE
- FENCE
- PRODUCED WATER LINE
- UNDERGROUND CABLE
- UNDERGROUND GAS LINE
- ABANDONED MONITORING WELL
- BENCHMARK
- MONITORING WELL
- MONITORING WELL ASSOCIATED WITH UNRELATED RELEASE
- PRODUCTION WELL
- RIG ANCHOR
- SOIL BORING

NOTE:
MW-4 was a soil boring only (no well constructed).

N

SCALE IN FEET
0 30 60

REVISION	DATE	DESIGN BY	DRAWN BY	REVIEWED BY
A	6/19/2015	CCL	CCL	DAW

TITLE:
GALLEGOS CANYON UNIT #142E
GROUNDWATER ANALYTICAL RESULTS
SAMPLED MAY 30, 2015

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\GALLEGOS CAYON UNIT #142E\2015 MAPS\GCU#142E_GECM_1SA_2015.mxd

BP MW #11
BP MW #9
BP MW #8
BP MW #6
BP MW #5
BP MW #12
BP MW #7
TANK
TANK
SEPARATOR
MW-2
5465.64
MW-4
MW-5
5465.54
MW-1
5465.54
MW-8
5465.55
MW-3
5465.55
MW-7
5465.48
MW-6
5465.44
TMW-1
5465.63
5465.58
5465.53
5465.48
FORMER EPC PIT
EXCAVATED TO 9 FEET
SMA BENCHMARK
ELEV 5478.19'
NAD 83 NAVD 88
STATE PLANE COORDINATE SYSTEM
NEW MEXICO WEST
SOLAR PANEL
FOUND BENCHMARK
AERIAL IMAGE FROM GOOGLE EARTH, DATED 6/10/2011

LEGEND:

- APPROX. GROUND SURFACE CONTOUR AND ELEVATION, FEET
- ACCESS ROAD
- ABANDONED UNKNOWN LINE
- FENCE
- PRODUCED WATER LINE
- UNDERGROUND CABLE
- UNDERGROUND GAS LINE
- ABANDONED MONITORING WELL
- SMA BENCHMARK
- MONITORING WELL
- MONITORING WELL ASSOCIATED WITH UNRELATED RELEASE
- PRODUCTION WELL
- RIG ANCHOR
- SOIL BORING

NOTES:

5465.44 GROUNDWATER ELEVATION (FEET ABOVE MEAN SEA LEVEL)

5465.48 WATER LEVEL ELEVATION CONTOUR (DASHED WHERE INFERRED, FEET ABOVE MEAN SEA LEVEL, 0.05 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:

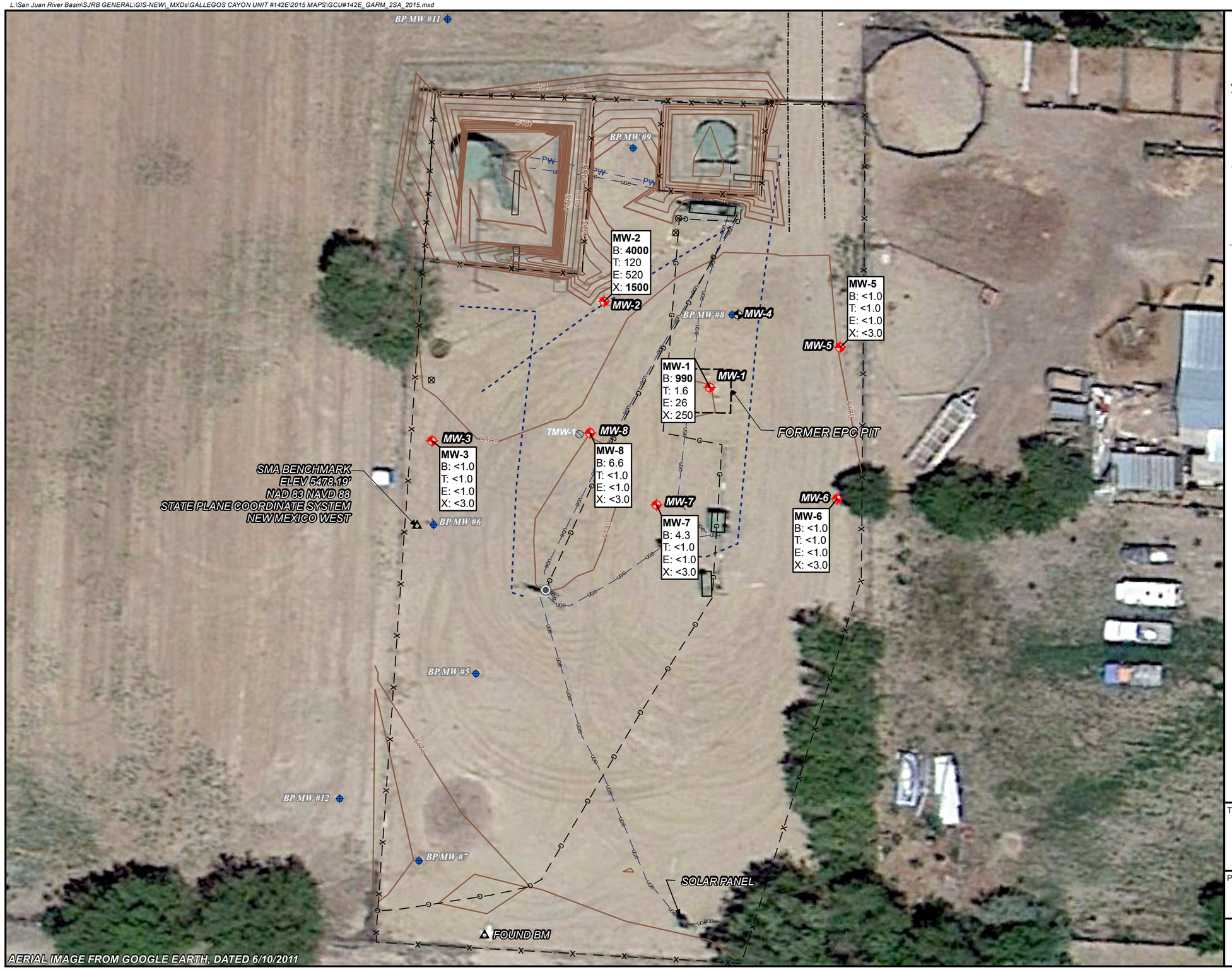
GROUNDWATER ELEVATION MAP
MAY 30, 2015

PROJECT: **GALLEGOS CANYON UNIT #142E**
SAN JUAN RIVER BASIN
SAN JUAN COUNTY, NEW MEXICO

MWH

Figure No.: **2**

L:\San Juan River Basin\SJRB GENERAL\GIS-NEW_MXDs\GALLEGOS CAYON UNIT #142E\2015 MAPS\GCU#142E_GARM_2SA_2015.mxd



LEGEND:

- 5795 — APPROX. GROUND SURFACE CONTOUR AND ELEVATION, FEET
- ACCESS ROAD
- ABANDONED UNKNOWN LINE
- FENCE
- PRODUCED WATER LINE
- UNDERGROUND CABLE
- UNDERGROUND GAS LINE
- ABANDONED MONITORING WELL
- BENCHMARK
- MONITORING WELL
- MONITORING WELL ASSOCIATED WITH UNRELATED RELEASE
- PRODUCTION WELL
- RIG ANCHOR
- SOIL BORING

NOTE:
MW-4 was a soil boring only (no well constructed).

N

SCALE IN FEET
0 30 60

REVISION	DATE	DESIGN BY	DRAWN BY	REVIEWED BY
	12/15/2015	CCL	CCL	DAW

TITLE:
GALLEGOS CANYON UNIT #142E
GROUNDWATER ANALYTICAL RESULTS
SAMPLED NOVEMBER 18, 2015

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\GALLEGOS CAYON UNIT #142E\2015 MAPS\GCU#142E_GECM_2SA_2015.mxd

BP MW #11
BP MW #9
BP MW #8
BP MW #6
BP MW #5
BP MW #12
BP MW #7
TANK
TANK
SEPARATOR
MW-2
MW-2
5467.3
MW-4
MW-5
MW-5
5467.24
MW-1
5467.31
MW-1
5467.25
MW-3
MW-3
5467.22
TMW-1
MW-8
MW-8
5467.23
FORMER EPC PIT -
EXCAVATED TO 9 FEET
SMA BENCHMARK
ELEV 5478.19'
NAD 83 NAVD 88
STATE PLANE COORDINATE SYSTEM
NEW MEXICO WEST
5467.2
MW-7
MW-7
5467.13
5467.15
MW-6
MW-6
5467.09
5467.1
SOLAR PANEL
FOUND BM
AERIAL IMAGE FROM GOOGLE EARTH, DATED 6/10/2011

LEGEND:

- 5795 — APPROX. GROUND SURFACE CONTOUR AND ELEVATION, FEET
- ACCESS ROAD
- ABANDONED UNKNOWN LINE
- FENCE
- PW — PRODUCED WATER LINE
- UGC — UNDERGROUND CABLE
- G — UNDERGROUND GAS LINE
- ABANDONED MONITORING WELL
- SMA BENCHMARK
- MONITORING WELL
- MONITORING WELL ASSOCIATED WITH UNRELATED RELEASE
- PRODUCTION WELL
- RIG ANCHOR
- SOIL BORING

NOTES:

5467.31 GROUNDWATER ELEVATION (FEET ABOVE MEAN SEA LEVEL)

5467.3 WATER LEVEL ELEVATION CONTOUR (DASHED WHERE INFERRED, FEET ABOVE MEAN SEA LEVEL, 0.05 FOOT CONTOUR INTERVAL)

DIRECTION OF APPARENT GROUNDWATER FLOW

N

SCALE IN FEET

0 30 60

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

TITLE:

GROUNDWATER ELEVATION MAP
NOVEMBER 18, 2015

PROJECT: **GALLEGOS CANYON UNIT #142E**
SAN JUAN RIVER BASIN
SAN JUAN COUNTY, NEW MEXICO

MWH

Figure No.: **4**

APPENDIX

APPENDIX A – MAY 30, 2015 GROUNDWATER SAMPLING ANALYTICAL REPORT
– NOV. 18, 2015 GROUNDWATER SAMPLING ANALYTICAL REPORT

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: 400-106464-1
Client Project/Site: NM-GW Pits, GCU Com A #142E

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

Attn: Ms. Sarah Gardner

Authorized for release by:
6/16/2015 4:57:21 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, GCU Com A #142E

TestAmerica Job ID: 400-106464-1

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, GCU Com A #142E

TestAmerica Job ID: 400-106464-1

Job ID: 400-106464-1

Laboratory: TestAmerica Pensacola

Narrative

Job Narrative
400-106464-1

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, GCU Com A #142E

TestAmerica Job ID: 400-106464-1

Client Sample ID: GCU COMA COM #142E MW-1 — Lab Sample ID: 400-106464-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	270		1.0	0.56	ug/L	1		8021B	Total/NA
Ethylbenzene	1.6		1.0	0.64	ug/L	1		8021B	Total/NA
Xylenes, Total	32		5.0	1.7	ug/L	1		8021B	Total/NA

Client Sample ID: GCU COMA COM #142E MW-2 — Lab Sample ID: 400-106464-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	3300		25	14	ug/L	25		8021B	Total/NA
Ethylbenzene	570		25	16	ug/L	25		8021B	Total/NA
Toluene	140		130	25	ug/L	25		8021B	Total/NA
Xylenes, Total	3400		130	43	ug/L	25		8021B	Total/NA

Client Sample ID: GCU COMA COM #142E MW-3 — Lab Sample ID: 400-106464-3

No Detections.

Client Sample ID: GCU COMA COM #142E MW-5 — Lab Sample ID: 400-106464-4

No Detections.

Client Sample ID: GCU COMA COM #142E MW-6 — Lab Sample ID: 400-106464-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	190		5.0	2.8	ug/L	5		8021B	Total/NA
Xylenes, Total	110		25	8.5	ug/L	5		8021B	Total/NA

Client Sample ID: GCU COMA COM #142E MW-7 — Lab Sample ID: 400-106464-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	6.5		1.0	0.56	ug/L	1		8021B	Total/NA
Xylenes, Total	1.8	J	5.0	1.7	ug/L	1		8021B	Total/NA

Client Sample ID: GCU COMA COM #142E MW-8 — Lab Sample ID: 400-106464-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	36		1.0	0.56	ug/L	1		8021B	Total/NA
Ethylbenzene	3.1		1.0	0.64	ug/L	1		8021B	Total/NA
Xylenes, Total	19		5.0	1.7	ug/L	1		8021B	Total/NA

Client Sample ID: GCU COMA COM #142E TRIP BLANK — Lab Sample ID: 400-106464-8

No Detections.

This Detection Summary does not include radiochemical test results.

Sample Summary

Client: MWH Americas Inc
Project/Site: NM-GW Pits, GCU Com A #142E

TestAmerica Job ID: 400-106464-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-106464-1	GCU COMA COM #142E MW-1	Water	05/30/15 15:55	06/02/15 09:37
400-106464-2	GCU COMA COM #142E MW-2	Water	05/30/15 15:50	06/02/15 09:37
400-106464-3	GCU COMA COM #142E MW-3	Water	05/30/15 15:15	06/02/15 09:37
400-106464-4	GCU COMA COM #142E MW-5	Water	05/30/15 15:35	06/02/15 09:37
400-106464-5	GCU COMA COM #142E MW-6	Water	05/30/15 15:20	06/02/15 09:37
400-106464-6	GCU COMA COM #142E MW-7	Water	05/30/15 15:30	06/02/15 09:37
400-106464-7	GCU COMA COM #142E MW-8	Water	05/30/15 15:25	06/02/15 09:37
400-106464-8	GCU COMA COM #142E TRIP BLANK	Water	05/30/15 15:00	06/02/15 09:37

Client Sample Results

Client: MWH Americas Inc
Project/Site: NM-GW Pits, GCU Com A #142E

TestAmerica Job ID: 400-106464-1

Client Sample ID: GCU COMA COM #142E MW-1
Date Collected: 05/30/15 15:55
Date Received: 06/02/15 09:37

Lab Sample ID: 400-106464-1
Matrix: Water

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**270**		1.0	0.56	ug/L			06/06/15 02:23	1
Ethylbenzene	**1.6**		1.0	0.64	ug/L			06/06/15 02:23	1
Toluene	<5.0		5.0	0.98	ug/L			06/06/15 02:23	1
Xylenes, Total	**32**		5.0	1.7	ug/L			06/06/15 02:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (pid)	*97*		*78 - 124*		*06/06/15 02:23*	*1*

Client: MWH Americas Inc
Project/Site: NM-GW Pits, GCU Com A #142E

TestAmerica Job ID: 400-106464-1

Client Sample ID: GCU COMA COM #142E MW-2
Date Collected: 05/30/15 15:50
Date Received: 06/02/15 09:37

Lab Sample ID: 400-106464-2
Matrix: Water

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	3300		25	14	ug/L			06/06/15 02:55	25
Ethylbenzene	570		25	16	ug/L			06/06/15 02:55	25
Toluene	140		130	25	ug/L			06/06/15 02:55	25
Xylenes, Total	3400		130	43	ug/L			06/06/15 02:55	25

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (pid)	*90*		*78 - 124*		*06/06/15 02:55*	*25*

Client: MWH Americas Inc
Project/Site: NM-GW Pits, GCU Com A #142E

TestAmerica Job ID: 400-106464-1

Client Sample ID: GCU COMA COM #142E MW-3
Date Collected: 05/30/15 15:15
Date Received: 06/02/15 09:37

Lab Sample ID: 400-106464-3
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 03:27	1
Ethylbenzene	<1.0		1.0	0.64	ug/L			06/06/15 03:27	1
Toluene	<5.0		5.0	0.98	ug/L			06/06/15 03:27	1
Xylenes, Total	<5.0		5.0	1.7	ug/L			06/06/15 03:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (pid)	*100*		*78 - 124*		*06/06/15 03:27*	*1*

Client: MWH Americas Inc
Project/Site: NM-GW Pits, GCU Com A #142E

TestAmerica Job ID: 400-106464-1

Client Sample ID: GCU COMA COM #142E MW-5
Date Collected: 05/30/15 15:35
Date Received: 06/02/15 09:37

Lab Sample ID: 400-106464-4
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 03:58	1
Ethylbenzene	<1.0		1.0	0.64	ug/L			06/06/15 03:58	1
Toluene	<5.0		5.0	0.98	ug/L			06/06/15 03:58	1
Xylenes, Total	<5.0		5.0	1.7	ug/L			06/06/15 03:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (pid)	*101*		*78 - 124*		*06/06/15 03:58*	*1*

Client: MWH Americas Inc
Project/Site: NM-GW Pits, GCU Com A #142E

TestAmerica Job ID: 400-106464-1

Client Sample ID: GCU COMA COM #142E MW-6
Date Collected: 05/30/15 15:20
Date Received: 06/02/15 09:37

Lab Sample ID: 400-106464-5
Matrix: Water

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**190**		5.0	2.8	ug/L			06/06/15 04:30	5
Ethylbenzene	<5.0		5.0	3.2	ug/L			06/06/15 04:30	5
Toluene	<25		25	4.9	ug/L			06/06/15 04:30	5
Xylenes, Total	**110**		25	8.5	ug/L			06/06/15 04:30	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (pid)	*91*		*78 - 124*		*06/06/15 04:30*	*5*

Client: MWH Americas Inc
Project/Site: NM-GW Pits, GCU Com A #142E

TestAmerica Job ID: 400-106464-1

Client Sample ID: GCU COMA COM #142E MW-7
Date Collected: 05/30/15 15:30
Date Received: 06/02/15 09:37

Lab Sample ID: 400-106464-6
Matrix: Water

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**6.5**		1.0	0.56	ug/L			06/08/15 22:41	1
Ethylbenzene	<1.0		1.0	0.64	ug/L			06/08/15 22:41	1
Toluene	<5.0		5.0	0.98	ug/L			06/08/15 22:41	1
Xylenes, Total	**1.8**	**J**	5.0	1.7	ug/L			06/08/15 22:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (pid)	*99*		*78 - 124*		*06/08/15 22:41*	*1*

Client Sample ID: GCU COMA COM #142E MW-8

Lab Sample ID: 400-106464-7

Date Collected: 05/30/15 15:25

Matrix: Water

Date Received: 06/02/15 09:37

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**36**		1.0	0.56	ug/L			06/06/15 05:33	1
Ethylbenzene	**3.1**		1.0	0.64	ug/L			06/06/15 05:33	1
Toluene	<5.0		5.0	0.98	ug/L			06/06/15 05:33	1
Xylenes, Total	**19**		5.0	1.7	ug/L			06/06/15 05:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (pid)	*99*		*78 - 124*		*06/06/15 05:33*	*1*

Client: MWH Americas Inc
Project/Site: NM-GW Pits, GCU Com A #142E

TestAmerica Job ID: 400-106464-1

Client Sample ID: GCU COMA COM #142E TRIP BLANK
Lab Sample ID: 400-106464-8
Date Collected: 05/30/15 15:00
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 06:05	1
Ethylbenzene	<1.0		1.0	0.64	ug/L			06/06/15 06:05	1
Toluene	<5.0		5.0	0.98	ug/L			06/06/15 06:05	1
Xylenes, Total	<5.0		5.0	1.7	ug/L			06/06/15 06:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (pid)	*97*		*78 - 124*		*06/06/15 06:05*	*1*

QC Association Summary

Client: MWH Americas Inc
Project/Site: NM-GW Pits, GCU Com A #142E

TestAmerica Job ID: 400-106464-1

GC VOA

Analysis Batch: 260177

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-106334-A-14 MS	Matrix Spike	Total/NA	Water	8021B	
400-106334-A-14 MSD	Matrix Spike Duplicate	Total/NA	Water	8021B	
400-106464-1	GCU COMA COM #142E MW-1	Total/NA	Water	8021B	
400-106464-2	GCU COMA COM #142E MW-2	Total/NA	Water	8021B	
400-106464-3	GCU COMA COM #142E MW-3	Total/NA	Water	8021B	
400-106464-4	GCU COMA COM #142E MW-5	Total/NA	Water	8021B	
400-106464-5	GCU COMA COM #142E MW-6	Total/NA	Water	8021B	
400-106464-7	GCU COMA COM #142E MW-8	Total/NA	Water	8021B	
400-106464-8	GCU COMA COM #142E TRIP BLANK	Total/NA	Water	8021B	
LCS 400-260177/1001	Lab Control Sample	Total/NA	Water	8021B	
MB 400-260177/2	Method Blank	Total/NA	Water	8021B	

Analysis Batch: 260285

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-106464-6	GCU COMA COM #142E MW-7	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 400-260177/2
Matrix: Water
Analysis Batch: 260177

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			06/05/15 19:32	1
Ethylbenzene	<1.0		1.0	0.64	ug/L			06/05/15 19:32	1
Toluene	<5.0		5.0	0.98	ug/L			06/05/15 19:32	1
Xylenes, Total	<5.0		5.0	1.7	ug/L			06/05/15 19:32	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (pid)	*99*		*78 - 124*		*06/05/15 19:32*	*1*

Lab Sample ID: LCS 400-260177/1001
Matrix: Water
Analysis Batch: 260177

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			50.0	51.5		ug/L		103	85 - 115		
Ethylbenzene			50.0	51.7		ug/L		103	85 - 115		
Toluene			50.0	51.3		ug/L		103	85 - 115		
Xylenes, Total			150	152		ug/L		101	85 - 115		

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

Lab Sample ID: 400-106334-A-14 MS
Matrix: Water
Analysis Batch: 260177

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene	11.5		50.0	69.9		ug/L		117	44 - 150		
Ethylbenzene	2.78		50.0	61.6		ug/L		118	70 - 142		
Toluene	7.16		50.0	65.7		ug/L		117	69 - 136		
Xylenes, Total	15.8		150	190		ug/L		116	68 - 142		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
a,a,a-Trifluorotoluene (pid)	*100*		*78 - 124*

Lab Sample ID: 400-106334-A-14 MSD
Matrix: Water
Analysis Batch: 260177

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	11.5		50.0	69.2		ug/L		115	44 - 150	1	16
Ethylbenzene	2.78		50.0	61.0		ug/L		116	70 - 142	1	16
Toluene	7.16		50.0	64.8		ug/L		115	69 - 136	1	16
Xylenes, Total	15.8		150	188		ug/L		115	68 - 142	1	15

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
a,a,a-Trifluorotoluene (pid)	*100*		*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, GCU Com A #142E

TestAmerica Job ID: 400-106464-1

Client Sample ID: GCU COMA COM #142E MW-1
Lab Sample ID: 400-106464-1
Date Collected: 05/30/15 15:55
Matrix: Water
Date Received: 06/02/15 09:37

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	5 mL	5 mL	260177	06/06/15 02:23	MKA	TAL PEN
	Instrument ID: CH_PAULA									

Client Sample ID: GCU COMA COM #142E MW-2
Lab Sample ID: 400-106464-2
Date Collected: 05/30/15 15:50
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		25	5 mL	5 mL	260177	06/06/15 02:55	MKA	TAL PEN
	Instrument ID: CH_PAULA									

Client Sample ID: GCU COMA COM #142E MW-3
Lab Sample ID: 400-106464-3
Date Collected: 05/30/15 15:15
Matrix: Water
Date Received: 06/02/15 09:37

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	5 mL	5 mL	260177	06/06/15 03:27	MKA	TAL PEN
	Instrument ID: CH_PAULA									

Client Sample ID: GCU COMA COM #142E MW-5
Lab Sample ID: 400-106464-4
Date Collected: 05/30/15 15:35
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	260177	06/06/15 03:58	MKA	TAL PEN
	Instrument ID: CH_PAULA									

Client Sample ID: GCU COMA COM #142E MW-6
Lab Sample ID: 400-106464-5
Date Collected: 05/30/15 15:20
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		5	5 mL	5 mL	260177	06/06/15 04:30	MKA	TAL PEN
	Instrument ID: CH_PAULA									

Client Sample ID: GCU COMA COM #142E MW-7
Lab Sample ID: 400-106464-6
Date Collected: 05/30/15 15:30
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	260285	06/08/15 22:41	MKA	TAL PEN
	Instrument ID: CH_PAULA									

Lab Chronicle

Client: MWH Americas Inc
Project/Site: NM-GW Pits, GCU Com A #142E

TestAmerica Job ID: 400-106464-1

Client Sample ID: GCU COMA COM #142E MW-8

Lab Sample ID: 400-106464-7
Matrix: Water
Date Collected: 05/30/15 15:25
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	260177	06/06/15 05:33	MKA	TAL PEN
	Instrument ID: CH_PAULA									

Client Sample ID: GCU COMA COM #142E TRIP BLANK

Lab Sample ID: 400-106464-8
Matrix: Water
Date Collected: 05/30/15 15:00
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	260177	06/06/15 06:05	MKA	TAL PEN
	Instrument ID: CH_PAULA									

Laboratory References:

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

Certification Summary

Client: MWH Americas Inc
Project/Site: NM-GW Pits, GCU Com A #142E

TestAmerica Job ID: 400-106464-1

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, GCU Com A #142E

TestAmerica Job ID: 400-106464-1

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: 80223

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 Denver co 80202
PAGE: 1 OF 1

PROJECT NAME: NM-GW Pit ~~SJE~~ 142E GCU Com A #~~SJE~~ 142E
PROJECT NO.: 40005479
CLIENT PROJECT MANAGER: Steve Varsa
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@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:

REQUESTED ANALYSIS

BTEX - 8021B

400-106464 COC

POSSIBLE HAZARD IDENTIFICATION
~~Δ~~ NON-HAZARD
Δ FLAMMABLE
Δ RADIOACTIVE
Δ POISON B
Δ UNKNOWN
Δ 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
5/30/15	1555	GCU Com A #~~SJE~~ 142E MW-1		X									X				2
5/30/15	1550	GCU Com A #142E MW-2		X									X				2
5/30/15	1515	GCU Com A #142E MW-3		X									X				2
5/30/15	1535	GCU Com A #142E MW-5		X									X				2
5/30/15	1520	GCU Com A #142E MW-6		X									X				2
5/30/15	1530	GCU Com A #142E MW-7		X									X				2
5/30/15	1525	GCU Com A #142E MW-8		X									X				2
5/30/15	1500	GCU Com A #142E TRIP BLANK		X									X				2

RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME
EMPTY CONTAINERS			[signature]	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:
[signature]	6/2/15	0937	Δ YES Δ NO		IRC 0.6C

TAL-8251 (1207)

Login Sample Receipt Checklist

Client: MWH Americas Inc

Job Number: 400-106464-1

Login Number: 106464
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	0.6°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

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ANALYTICAL REPORT

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

TestAmerica Job ID: 400-114169-1
Client Project/Site: GCU Com A #142E

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

Attn: Ms. Sarah Gardner

Authorized for release by:
11/30/2015 8:44:22 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: GCU Com A #142E

TestAmerica Job ID: 400-114169-1

Qualifiers

GC VOA

Qualifier	Qualifier Description
X	Surrogate is outside control limits

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	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: 400-114169-1

Laboratory: TestAmerica Pensacola

Narrative

Job Narrative
400-114169-1

Comments
No additional comments.

Receipt
The samples were received on 11/20/2015 8:20 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 0.0º C.

GC VOA
Method 8021B: Surrogate recovery for the following sample was outside control limits: MW-2 (400-114169-2). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

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

Detection Summary

Client: MWH Americas Inc
Project/Site: GCU Com A #142E

TestAmerica Job ID: 400-114169-1

Client Sample ID: MW-1 — Lab Sample ID: 400-114169-1

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Benzene	990		10		ug/L	10		8021B	Total/NA
Toluene	1.6		1.0		ug/L	1		8021B	Total/NA
Ethylbenzene	26		1.0		ug/L	1		8021B	Total/NA
Xylenes, Total	250		3.0		ug/L	1		8021B	Total/NA

Client Sample ID: MW-2 — Lab Sample ID: 400-114169-2

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Benzene	4000		50		ug/L	50		8021B	Total/NA
Toluene	120		1.0		ug/L	1		8021B	Total/NA
Ethylbenzene	520		50		ug/L	50		8021B	Total/NA
Xylenes, Total	1500		3.0		ug/L	1		8021B	Total/NA

Client Sample ID: MW-3 — Lab Sample ID: 400-114169-3

No Detections.

Client Sample ID: MW-5 — Lab Sample ID: 400-114169-4

No Detections.

Client Sample ID: MW-6 — Lab Sample ID: 400-114169-5

No Detections.

Client Sample ID: MW-7 — Lab Sample ID: 400-114169-6

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Benzene	4.3		1.0		ug/L	1		8021B	Total/NA

Client Sample ID: MW-8 — Lab Sample ID: 400-114169-7

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Benzene	6.6		1.0		ug/L	1		8021B	Total/NA

Client Sample ID: TRIP BLANK — Lab Sample ID: 400-114169-8

No Detections.

This Detection Summary does not include radiochemical test results.

Sample Summary

Client: MWH Americas Inc
Project/Site: GCU Com A #142E

TestAmerica Job ID: 400-114169-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-114169-1	MW-1	Water	11/18/15 16:00	11/20/15 08:20
400-114169-2	MW-2	Water	11/18/15 16:20	11/20/15 08:20
400-114169-3	MW-3	Water	11/18/15 16:10	11/20/15 08:20
400-114169-4	MW-5	Water	11/18/15 16:55	11/20/15 08:20
400-114169-5	MW-6	Water	11/18/15 16:50	11/20/15 08:20
400-114169-6	MW-7	Water	11/18/15 16:30	11/20/15 08:20
400-114169-7	MW-8	Water	11/18/15 16:40	11/20/15 08:20
400-114169-8	TRIP BLANK	Water	11/18/15 16:55	11/20/15 08:20

Client Sample Results

Client: MWH Americas Inc
Project/Site: GCU Com A #142E

TestAmerica Job ID: 400-114169-1

Client Sample ID: MW-1
Date Collected: 11/18/15 16:00
Date Received: 11/20/15 08:20

Lab Sample ID: 400-114169-1
Matrix: Water

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**990**		10		ug/L			11/29/15 18:38	10
Toluene	**1.6**		1.0		ug/L			11/29/15 07:07	1
Ethylbenzene	**26**		1.0		ug/L			11/29/15 07:07	1
Xylenes, Total	**250**		3.0		ug/L			11/29/15 07:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*131*		*50 - 150*		*11/29/15 07:07*	*1*
a,a,a-Trifluorotoluene	*96*		*50 - 150*		*11/29/15 18:38*	*10*

Client Sample Results

Client: MWH Americas Inc
Project/Site: GCU Com A #142E

TestAmerica Job ID: 400-114169-1

Client Sample ID: MW-2
Date Collected: 11/18/15 16:20
Date Received: 11/20/15 08:20

Lab Sample ID: 400-114169-2
Matrix: Water

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	4000		50		ug/L			11/29/15 18:06	50
Toluene	120		1.0		ug/L			11/29/15 07:39	1
Ethylbenzene	520		50		ug/L			11/29/15 18:06	50
Xylenes, Total	1500		3.0		ug/L			11/29/15 07:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*156*	*X*	*50 - 150*		*11/29/15 07:39*	*1*
a,a,a-Trifluorotoluene	*97*		*50 - 150*		*11/29/15 18:06*	*50*

Client Sample Results

Client: MWH Americas Inc
Project/Site: GCU Com A #142E

TestAmerica Job ID: 400-114169-1

Client Sample ID: MW-3
Date Collected: 11/18/15 16:10
Date Received: 11/20/15 08:20

Lab Sample ID: 400-114169-3
Matrix: Water

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0		ug/L			11/30/15 13:50	1
Toluene	<1.0		1.0		ug/L			11/30/15 13:50	1
Ethylbenzene	<1.0		1.0		ug/L			11/30/15 13:50	1
Xylenes, Total	<3.0		3.0		ug/L			11/30/15 13:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*96*		*50 - 150*		*11/30/15 13:50*	*1*

Client: MWH Americas Inc
Project/Site: GCU Com A #142E

TestAmerica Job ID: 400-114169-1

Client Sample ID: MW-5
Date Collected: 11/18/15 16:55
Date Received: 11/20/15 08:20

Lab Sample ID: 400-114169-4
Matrix: Water

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0		ug/L			11/29/15 08:42	1
Toluene	<1.0		1.0		ug/L			11/29/15 08:42	1
Ethylbenzene	<1.0		1.0		ug/L			11/29/15 08:42	1
Xylenes, Total	<3.0		3.0		ug/L			11/29/15 08:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*94*		*50 - 150*		*11/29/15 08:42*	*1*

Client: MWH Americas Inc
Project/Site: GCU Com A #142E

TestAmerica Job ID: 400-114169-1

Client Sample ID: MW-6
Date Collected: 11/18/15 16:50
Date Received: 11/20/15 08:20

Lab Sample ID: 400-114169-5
Matrix: Water

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0		ug/L			11/29/15 09:13	1
Toluene	<1.0		1.0		ug/L			11/29/15 09:13	1
Ethylbenzene	<1.0		1.0		ug/L			11/29/15 09:13	1
Xylenes, Total	<3.0		3.0		ug/L			11/29/15 09:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*96*		*50 - 150*		*11/29/15 09:13*	*1*

Client: MWH Americas Inc
Project/Site: GCU Com A #142E

TestAmerica Job ID: 400-114169-1

Client Sample ID: MW-7
Date Collected: 11/18/15 16:30
Date Received: 11/20/15 08:20

Lab Sample ID: 400-114169-6
Matrix: Water

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**4.3**		1.0		ug/L			11/29/15 09:44	1
Toluene	<1.0		1.0		ug/L			11/29/15 09:44	1
Ethylbenzene	<1.0		1.0		ug/L			11/29/15 09:44	1
Xylenes, Total	<3.0		3.0		ug/L			11/29/15 09:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*96*		*50 - 150*		*11/29/15 09:44*	*1*

Client: MWH Americas Inc
Project/Site: GCU Com A #142E

TestAmerica Job ID: 400-114169-1

Client Sample ID: MW-8
Date Collected: 11/18/15 16:40
Date Received: 11/20/15 08:20

Lab Sample ID: 400-114169-7
Matrix: Water

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**6.6**		1.0		ug/L			11/29/15 10:16	1
Toluene	<1.0		1.0		ug/L			11/29/15 10:16	1
Ethylbenzene	<1.0		1.0		ug/L			11/29/15 10:16	1
Xylenes, Total	<3.0		3.0		ug/L			11/29/15 10:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*96*		*50 - 150*		*11/29/15 10:16*	*1*

Client: MWH Americas Inc
Project/Site: GCU Com A #142E

TestAmerica Job ID: 400-114169-1

Client Sample ID: TRIP BLANK
Date Collected: 11/18/15 16:55
Date Received: 11/20/15 08:20

Lab Sample ID: 400-114169-8
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			11/28/15 18:50	1
Toluene	<1.0		1.0		ug/L			11/28/15 18:50	1
Ethylbenzene	<1.0		1.0		ug/L			11/28/15 18:50	1
Xylenes, Total	<3.0		3.0		ug/L			11/28/15 18:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*97*		*50 - 150*		*11/28/15 18:50*	*1*

QC Association Summary

Client: MWH Americas Inc
Project/Site: GCU Com A #142E

TestAmerica Job ID: 400-114169-1

GC VOA

Analysis Batch: 302291

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-114169-8	TRIP BLANK	Total/NA	Water	8021B	
LCS 490-302291/3	Lab Control Sample	Total/NA	Water	8021B	
LCSD 490-302291/4	Lab Control Sample Dup	Total/NA	Water	8021B	
MB 490-302291/19	Method Blank	Total/NA	Water	8021B	
MB 490-302291/6	Method Blank	Total/NA	Water	8021B	

Analysis Batch: 302418

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-114169-1	MW-1	Total/NA	Water	8021B	
400-114169-1	MW-1	Total/NA	Water	8021B	
400-114169-2	MW-2	Total/NA	Water	8021B	
400-114169-2	MW-2	Total/NA	Water	8021B	
400-114169-3	MW-3	Total/NA	Water	8021B	
400-114169-4	MW-5	Total/NA	Water	8021B	
400-114169-5	MW-6	Total/NA	Water	8021B	
400-114169-6	MW-7	Total/NA	Water	8021B	
400-114169-7	MW-8	Total/NA	Water	8021B	
LCS 490-302418/53	Lab Control Sample	Total/NA	Water	8021B	
LCS 490-302418/58	Lab Control Sample	Total/NA	Water	8021B	
LCSD 490-302418/59	Lab Control Sample Dup	Total/NA	Water	8021B	
MB 490-302418/2	Method Blank	Total/NA	Water	8021B	
MB 490-302418/46	Method Blank	Total/NA	Water	8021B	
MB 490-302418/63	Method Blank	Total/NA	Water	8021B	

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 490-302291/19
Matrix: Water
Analysis Batch: 302291

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			11/28/15 23:33	1
Toluene	<1.0		1.0		ug/L			11/28/15 23:33	1
Ethylbenzene	<1.0		1.0		ug/L			11/28/15 23:33	1
Xylenes, Total	<3.0		3.0		ug/L			11/28/15 23:33	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*100*		*50 - 150*		*11/28/15 23:33*	*1*

Lab Sample ID: MB 490-302291/6
Matrix: Water
Analysis Batch: 302291

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			11/28/15 16:45	1
Toluene	<1.0		1.0		ug/L			11/28/15 16:45	1
Ethylbenzene	<1.0		1.0		ug/L			11/28/15 16:45	1
Xylenes, Total	<3.0		3.0		ug/L			11/28/15 16:45	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*101*		*50 - 150*		*11/28/15 16:45*	*1*

Lab Sample ID: LCS 490-302291/3
Matrix: Water
Analysis Batch: 302291

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			100	99.5		ug/L		99	69 - 129		
Toluene			100	101		ug/L		101	66 - 127		
Ethylbenzene			100	105		ug/L		105	70 - 130		
Xylenes, Total			300	312		ug/L		104	69 - 123		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
a,a,a-Trifluorotoluene	*102*		*50 - 150*

Lab Sample ID: LCSD 490-302291/4
Matrix: Water
Analysis Batch: 302291

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			100	101		ug/L		101	69 - 129	2	33
Toluene			100	103		ug/L		103	66 - 127	1	34
Ethylbenzene			100	106		ug/L		106	70 - 130	1	35
Xylenes, Total			300	316		ug/L		105	69 - 123	1	37

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
a,a,a-Trifluorotoluene	*104*		*50 - 150*

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

Lab Sample ID: MB 490-302418/2
Matrix: Water
Analysis Batch: 302418

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			11/29/15 06:36	1
Toluene	<1.0		1.0		ug/L			11/29/15 06:36	1
Ethylbenzene	<1.0		1.0		ug/L			11/29/15 06:36	1
Xylenes, Total	<3.0		3.0		ug/L			11/29/15 06:36	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*99*		*50 - 150*		*11/29/15 06:36*	*1*

Lab Sample ID: MB 490-302418/46
Matrix: Water
Analysis Batch: 302418

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			11/29/15 13:24	1
Toluene	<1.0		1.0		ug/L			11/29/15 13:24	1
Ethylbenzene	<1.0		1.0		ug/L			11/29/15 13:24	1
Xylenes, Total	<3.0		3.0		ug/L			11/29/15 13:24	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*100*		*50 - 150*		*11/29/15 13:24*	*1*

Lab Sample ID: MB 490-302418/63
Matrix: Water
Analysis Batch: 302418

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			11/30/15 12:48	1
Toluene	<1.0		1.0		ug/L			11/30/15 12:48	1
Ethylbenzene	<1.0		1.0		ug/L			11/30/15 12:48	1
Xylenes, Total	<3.0		3.0		ug/L			11/30/15 12:48	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*92*		*50 - 150*		*11/30/15 12:48*	*1*

Lab Sample ID: LCS 490-302418/53
Matrix: Water
Analysis Batch: 302418

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			100	96.3		ug/L		96	69 - 129		
Toluene			100	98.4		ug/L		98	66 - 127		
Ethylbenzene			100	103		ug/L		103	70 - 130		
Xylenes, Total			300	304		ug/L		101	69 - 123		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
a,a,a-Trifluorotoluene	*106*		*50 - 150*

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

Lab Sample ID: LCS 490-302418/58
Matrix: Water
Analysis Batch: 302418

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			100	95.1		ug/L		95	69 - 129		
Toluene			100	96.6		ug/L		97	66 - 127		
Ethylbenzene			100	100		ug/L		100	70 - 130		
Xylenes, Total			300	297		ug/L		99	69 - 123		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
a,a,a-Trifluorotoluene	*93*		*50 - 150*

Lab Sample ID: LCSD 490-302418/59
Matrix: Water
Analysis Batch: 302418

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			100	91.8		ug/L		92	69 - 129	4	33
Toluene			100	94.7		ug/L		95	66 - 127	2	34
Ethylbenzene			100	95.9		ug/L		96	70 - 130	4	35
Xylenes, Total			300	286		ug/L		95	69 - 123	4	37

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
a,a,a-Trifluorotoluene	*98*		*50 - 150*

Lab Chronicle

Client: MWH Americas Inc
Project/Site: GCU Com A #142E

TestAmerica Job ID: 400-114169-1

Client Sample ID: MW-1
Date Collected: 11/18/15 16:00
Date Received: 11/20/15 08:20

Lab Sample ID: 400-114169-1
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	302418	11/29/15 07:07	BK	TAL NSH
	Instrument ID: HP62									
Total/NA	Analysis	8021B		10	5 mL	5 mL	302418	11/29/15 18:38	BK	TAL NSH
	Instrument ID: HP62									

Client Sample ID: MW-2
Date Collected: 11/18/15 16:20
Date Received: 11/20/15 08:20

Lab Sample ID: 400-114169-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	5 mL	5 mL	302418	11/29/15 07:39	BK	TAL NSH
	Instrument ID: HP62									
Total/NA	Analysis	8021B		50	5 mL	5 mL	302418	11/29/15 18:06	BK	TAL NSH
	Instrument ID: HP62									

Client Sample ID: MW-3
Date Collected: 11/18/15 16:10
Date Received: 11/20/15 08:20

Lab Sample ID: 400-114169-3
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	302418	11/30/15 13:50	BK	TAL NSH
	Instrument ID: HP62									

Client Sample ID: MW-5
Date Collected: 11/18/15 16:55
Date Received: 11/20/15 08:20

Lab Sample ID: 400-114169-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	5 mL	5 mL	302418	11/29/15 08:42	BK	TAL NSH
	Instrument ID: HP62									

Client Sample ID: MW-6
Date Collected: 11/18/15 16:50
Date Received: 11/20/15 08:20

Lab Sample ID: 400-114169-5
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	5 mL	5 mL	302418	11/29/15 09:13	BK	TAL NSH
	Instrument ID: HP62									

Lab Chronicle

Client: MWH Americas Inc
Project/Site: GCU Com A #142E

TestAmerica Job ID: 400-114169-1

Client Sample ID: MW-7

Lab Sample ID: 400-114169-6

Date Collected: 11/18/15 16:30

Matrix: Water

Date Received: 11/20/15 08:20

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	302418	11/29/15 09:44	BK	TAL NSH
	Instrument ID: HP62									

Client Sample ID: MW-8

Lab Sample ID: 400-114169-7

Date Collected: 11/18/15 16:40

Matrix: Water

Date Received: 11/20/15 08:20

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	302418	11/29/15 10:16	BK	TAL NSH
	Instrument ID: HP62									

Client Sample ID: TRIP BLANK

Lab Sample ID: 400-114169-8

Date Collected: 11/18/15 16:55

Matrix: Water

Date Received: 11/20/15 08:20

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	302291	11/28/15 18:50	BK	TAL NSH
	Instrument ID: HP62									

Laboratory References:

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

Certification Summary

Client: MWH Americas Inc
Project/Site: GCU Com A #142E

TestAmerica Job ID: 400-114169-1

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

Laboratory: TestAmerica Nashville

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

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

* Certification renewal pending - certification considered valid.

Certification Summary

Client: MWH Americas Inc
Project/Site: GCU Com A #142E

TestAmerica Job ID: 400-114169-1

Laboratory: TestAmerica Nashville (Continued)

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

Authority	Program	EPA Region	Certification ID	Expiration Date
Montana (UST)	State Program	8	NA	02-24-20
Nevada	State Program	9	TN00032	07-31-16
New Hampshire	NELAP	1	2963	10-09-16
New Jersey	NELAP	2	TN965	11-30-15 *
New York	NELAP	2	11342	03-31-16
North Carolina (WW/SW)	State Program	4	387	12-31-15
North Dakota	State Program	8	R-146	06-30-16
Ohio VAP	State Program	5	CL0033	07-10-17
Oklahoma	State Program	6	9412	08-31-16
Oregon	NELAP	10	TN200001	04-27-16
Pennsylvania	NELAP	3	68-00585	06-30-16
Rhode Island	State Program	1	LAO00268	12-30-15
South Carolina	State Program	4	84009 (001)	02-28-16
South Carolina (Do Not Use - DW)	State Program	4	84009 (002)	12-16-17
Tennessee	State Program	4	2008	02-23-17
Texas	NELAP	6	T104704077	08-31-16
USDA	Federal		S-48469	10-30-16
Utah	NELAP	8	TN00032	07-31-16
Virginia	NELAP	3	460152	06-14-16
Washington	State Program	10	C789	07-19-16
West Virginia DEP	State Program	3	219	02-28-16
Wisconsin	State Program	5	998020430	08-31-16
Wyoming (UST)	A2LA	8	453.07	12-31-15

* Certification renewal pending - certification considered valid.

Method Summary

Client: MWH Americas Inc
Project/Site: GCU Com A #142E

TestAmerica Job ID: 400-114169-1

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

Protocol References:

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

Laboratory References:

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

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

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: Chris Lee	Lab PM: Edwards, Marty P	Carrier Tracking No:	COC No: 400-50147-21715.1
Client Contact: Ms. Sarah Gardner	Phone: 303 291-2242	E-Mail: marty.edwards@testamericainc.com		e 1 of 1
Company: MWH Americas Inc				#:
Address: 1560 Broadway Suite 1800	Due Date Requested:	Analysis Requested		
City: Denver	TAT Requested (days): STANDARD			
State, Zip: CO, 80202	PO #: Purchase Order Requested			
Phone: 303-291-2239(Tel)	WO #:			
Email: sarah.gardner@mwhglobal.com	Project #: 40005479			
Project Name: GCU Com A #142E	SSOW#:			
Site: GCU #142E				

400-114169 COC

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:

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)	8021B - BTEX 8021	Total Number of containers	Special Instructions/Note:
Preservation Code:					X	X	A		
				Water			X X X		
MW-1	11/18/15	1600	G	Water			X	2	
MW-2	11/18/15	1620	G	Water			X	2	
MW-3	11/18/15	1610	G	Water			X	2	
MW-5	11/18/15	1655	G	Water			X	2	
MW-6	11/18/15	1650	G	Water			X	2	
MW-7	11/18/15	1630	G	Water			X	2	
MW-8	11/18/15	1640	G	Water			X	2	
TRIP	11/18/15	1655	G				X	2	

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)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:		
Relinquished by: Chris Lee	Date/Time: 11/19/15 1200	Company: MWH	Received by:	Date/Time: 11/20/15 0820	Company
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: 0-0 IRS

Login Sample Receipt Checklist

Client: MWH Americas Inc

Job Number: 400-114169-1

Login Number: 114169
List Number: 1
Creator: Menoher, Rachel C

List Source: TestAmerica Pensacola

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	0.0°C IR-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	

Login Sample Receipt Checklist

Client: MWH Americas Inc

Job Number: 400-114169-1

Login Number: 114169
List Number: 2
Creator: Huskey, Adam

List Source: TestAmerica Nashville
List Creation: 11/24/15 09:27 AM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	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.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	