

3R – 192

2015 AGWMR

01 / 04 / 2016

January 4, 2016

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

RE: Addendum to the October 9, 2015 Groundwater Monitoring Report and Request for Site Closure:

Horton #1E Site
NMOCD Case No. 3RP-190-0
METER CODE: 9388
T31N, R9W, Sec16, Unit H

Mr. Glenn von Gonten:

MWH, on behalf of El Paso CGP Company, LLC (EPCGP), is submitting this addendum to the October 9, 2015 Groundwater Monitoring Report and Request for Site Closure for the Horton #1E site (NMOCD Case No. 3RP-190-0 [Site]). On November 23, 2015, MWH completed a one additional site visit to gauge and sample the seven site monitoring wells. A summary of the gauging data is included as Table 1. Groundwater elevation data as determined from the November 23, 2015 gauging event is depicted on Figure 1.

Groundwater samples were collected using dedicated HydraSleeves® set in the wells following the previous sampling event, placed in laboratory-provided containers, sealed, placed on ice, and shipped under chain of custody protocols to TestAmerica, in Pensacola Florida (TestAmerica). The groundwater samples, in addition to a trip blank that accompanies the sample containers, were analyzed for benzene, toluene, ethylbenzene, and xylenes (BTEX). Detectable concentrations of BTEX constituents were not reported in the groundwater samples or trip blank. A copy of Test America's laboratory report is attached for reference. A tabular summary of the historical groundwater analytical results is provided in Table 1. Figure 2 depicts the groundwater sampling locations and analytical results from the November 23, 2015 sampling event.

This sampling event is the fifth consecutive quarterly groundwater sampling event that documents achievement of New Mexico Groundwater Quality Control Commission standards at the Site. Pursuant to the Remediation Plan approved by the New Mexico Oil Conservation Division on November 30, 1995, EPCGP has met the closure criteria outlined in the Remediation Plan, and regulatory closure of NMOCD Case No. 3RP-190-0 is warranted. No

further groundwater sampling or monitoring is planned, and EPCGP respectfully requests site closure.

We look forward to discussing this project with you in the near future. Please feel free to contact me at (515) 251-1020, or Joseph Wiley with EPCGP at (713) 420-3475, if you have any questions.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Stephen Varsa', with a long horizontal flourish extending to the right.

Stephen Varsa
Lead Hydrogeologist/Project Manager

/srv:imd

cc: Joseph Wiley, EPCGP

TABLE



MWH

TABLE 1 - GROUNDWATER ANALYTICAL RESULTS

HORTON #1E

Location	Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	Depth to Water (ft.)	LNAPL Thickness (ft.)	GW Elevation (ft.)
NMWQCC Standards:		10	750	750	620	NA	NA	NA
MW-1	8/7/1995	308	483	16.9	190	48.99	0.00	6082.10
MW-1	12/17/1996	86.8	55.5	1	6.66	48.96	0.00	6082.13
MW-1	3/10/1997	93.3	55.3	1.02	6.34	48.93	0.00	6082.16
MW-1	6/2/1997	96.1	58.8	1.07	6.82	48.94	0.00	6082.15
MW-1	9/8/1997	132	80.7	1.59	9.46	48.88	0.00	6082.21
MW-1	12/10/1997	74.9	47.1	1	5.94	48.76	0.00	6082.33
MW-1	3/23/1998	63.6	35.9	1	6.93	48.78	0.00	6082.31
MW-1	6/4/1998	68.1	30.6	1	6.6	48.76	0.00	6082.33
MW-1	9/14/1998	67.7	19.4	1	3.26	48.85	0.00	6082.24
MW-1	12/17/1998	100	29	1.1	5.8	48.87	0.00	6082.22
MW-1	3/23/1999	70.1	30.6	1	3	48.88	0.00	6082.21
MW-1	6/11/1999	71	19	0.8	2.6	48.92	0.00	6082.17
MW-1	9/2/1999	120	30	1.8	5.8	48.91	0.00	6082.18
MW-1	12/9/1999	50	9.1	0.5	1.8	48.89	0.00	6082.20
MW-1	4/12/2000	67	16	3.6	7.2	48.77	0.00	6082.32
MW-1	6/9/2000	110	37	1.1	7.4	48.75	0.00	6082.34
MW-1	9/8/2000	140	18	0.8	7.6	48.81	0.00	6082.28
MW-1	12/11/2000	93	7.2	0.6	5.3	48.75	0.00	6082.34
MW-1	3/13/2001	130	3.8	0.7	6.6	48.81	0.00	6082.28
MW-1	9/7/2001	80	43	1.3	11	48.83	0.00	6082.26
MW-1	3/20/2002	60	30	0.6	4.9	49.07	0.00	6082.02
MW-1	9/10/2002	167	49.9	2.4	12.7	49.96	0.00	6081.13
MW-1	3/14/2003	100	25.5	0.5	6.1	49.00	0.00	6082.09
MW-1	9/16/2003	95.5	95.8	1.3	12.5	49.18	0.00	6081.91
MW-1	10/10/2003					49.10	0.00	6081.99
MW-1	3/23/2004	27.8	6.1	0.029	1.2	49.01	0.00	6082.08
MW-1	9/22/2004	12.8	4.5	0.5	1	49.12	0.00	6081.97
MW-1	3/23/2005	22.8	3.7	1	1.4	49.12	0.00	6081.97
MW-1	6/23/2005	30.6	4.4	1	1.8	49.18	0.00	6081.91
MW-1	9/20/2005	12.8	0.47	1	2	49.24	0.00	6081.85
MW-1	12/14/2005	8.8	2.4	1	0.74	49.14	0.00	6081.95
MW-1	3/27/2006	12.5	2.7	1	0.82	49.17	0.00	6081.92
MW-1	6/7/2006	5.6	1.3	1	2	49.21	0.00	6081.88
MW-1	9/25/2006	6.5	1	1	2	49.28	0.00	6081.81
MW-1	12/27/2006	4.3	2.9	1	0.39	49.19	0.00	6081.90
MW-1	3/28/2007	11.9	11.3	1	1.5	49.20	0.00	6081.89
MW-1	6/18/2007	12.6	12.5	1	2	49.23	0.00	6081.86
MW-1	9/17/2007	2.5	1	1	2	49.27	0.00	6081.82
MW-1	12/17/2007	14.2	7.6	2	1.1	49.27	0.00	6081.82
MW-1	3/11/2008	14.7	15.5	0.46	2.2	49.17	0.00	6081.92
MW-1	6/17/2008	16.2	10.3	1	0.99	48.75	0.00	6082.34
MW-1	9/10/2008	11.6	1	1	3	48.78	0.00	6082.31
MW-1	12/2/2008	3.7	1.8	1	2	48.85	0.00	6082.24

TABLE 1 - GROUNDWATER ANALYTICAL RESULTS

HORTON #1E

Location	Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	Depth to Water (ft.)	LNAPL Thickness (ft.)	GW Elevation (ft.)
NMWQCC Standards:		10	750	750	620	NA	NA	NA
MW-1	3/3/2009	2.7	1.9	1	2	48.92	0.00	6082.17
MW-1	6/2/2009	3.6	1.4	1	2	48.96	0.00	6082.13
MW-1	9/16/2009	0.44	1	1	2	49.03	0.00	6082.06
MW-1	4/2/2014	4.6	13	<0.20	2.9	49.57	0.00	6081.52
MW-1	10/23/2014	<0.38	<0.70	<0.50	<1.6	49.83	0.00	6081.26
MW-1	1/21/2015	<1.0	<5.0	<1.0	<5.0	49.79	0.00	6081.30
MW-1	5/29/2015	<1.0	<5.0	<1.0	<5.0	49.84	0.00	6081.25
MW-1	9/13/2015	2.1	<5.0	<1.0	<5.0	49.71	0.00	6081.38
MW-1	11/23/2015	<1.0	<1.0	<1.0	<3.0	49.64	0.00	6081.45
MW-2	10/20/1999	0.5	0.5	0.5	0.5	43.95	0.00	6085.35
MW-2	10/9/2000	0.5	0.7	0.5	1.1	46.41	0.00	6082.89
MW-2	3/13/2001	0.5	0.5	0.5	0.5	46.47	0.00	6082.83
MW-2	9/7/2001					46.59	0.00	6082.71
MW-2	3/20/2002	0.5	0.5	0.5	1	46.75	0.00	6082.55
MW-2	9/10/2002					46.76	0.00	6082.54
MW-2	9/16/2003					46.86	0.00	6082.44
MW-2	3/23/2004					46.67	0.00	6082.63
MW-2	9/22/2004					46.80	0.00	6082.50
MW-2	3/23/2005					46.81	0.00	6082.49
MW-2	6/23/2005					46.88	0.00	6082.42
MW-2	9/20/2005					46.94	0.00	6082.36
MW-2	12/14/2005					46.85	0.00	6082.45
MW-2	3/27/2006					46.86	0.00	6082.44
MW-2	6/7/2006					46.90	0.00	6082.40
MW-2	9/25/2006					46.98	0.00	6082.32
MW-2	12/27/2006					46.88	0.00	6082.42
MW-2	3/31/2007	1	1	1	2	46.89	0.00	6082.41
MW-2	6/18/2007					46.00	0.00	6083.30
MW-2	9/17/2007					46.98	0.00	6082.32
MW-2	12/17/2007					47.04	0.00	6082.26
MW-2	3/11/2008					46.92	0.00	6082.38
MW-2	6/17/2008					46.37	0.00	6082.93
MW-2	9/10/2008					46.51	0.00	6082.79
MW-2	12/2/2008					46.47	0.00	6082.83
MW-2	3/3/2009					46.56	0.00	6082.74
MW-2	6/2/2009					46.71	0.00	6082.59
MW-2	9/16/2009	1	1	1	2	46.78	0.00	6082.52
MW-2	4/2/2014	<0.20	<0.38	<0.20	<0.65	47.34	0.00	6081.96
MW-2	10/23/2014	<0.38	<0.70	<0.50	<1.6	47.53	0.00	6081.77
MW-2	1/21/2015	<1.0	<5.0	<1.0	<5.0	47.50	0.00	6081.80
MW-2	5/29/2015	<1.0	<5.0	<1.0	<5.0	47.54	0.00	6081.76
MW-2	9/13/2015	<1.0	<5.0	<1.0	<5.0	47.38	0.00	6081.92
MW-2	11/23/2015	<1.0	<1.0	<1.0	<3.0	47.31	0.00	6081.99

TABLE 1 - GROUNDWATER ANALYTICAL RESULTS

HORTON #1E

Location	Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	Depth to Water (ft.)	LNAPL Thickness (ft.)	GW Elevation (ft.)
NMWQCC Standards:		10	750	750	620	NA	NA	NA
MW-3	10/20/1999	0.5	0.5	0.5	0.8	47.65	0.00	6081.81
MW-3	10/10/2000	0.5	1	0.5	2	50.12	0.00	6079.34
MW-3	3/13/2001	0.5	0.5	0.5	0.5	50.18	0.00	6079.28
MW-3	9/7/2001					50.18	0.00	6079.28
MW-3	3/20/2002	0.5	0.5	0.5	1	50.40	0.00	6079.06
MW-3	9/10/2002					50.38	0.00	6079.08
MW-3	9/16/2003					50.45	0.00	6079.01
MW-3	3/23/2004					50.40	0.00	6079.06
MW-3	9/22/2004					50.46	0.00	6079.00
MW-3	3/23/2005					50.46	0.00	6079.00
MW-3	6/23/2005					50.51	0.00	6078.95
MW-3	9/20/2005					50.57	0.00	6078.89
MW-3	12/14/2005					50.52	0.00	6078.94
MW-3	3/27/2006					50.52	0.00	6078.94
MW-3	6/7/2006					50.54	0.00	6078.92
MW-3	9/25/2006					50.61	0.00	6078.85
MW-3	12/27/2006					50.51	0.00	6078.95
MW-3	3/31/2007	1	1	1	2	50.52	0.00	6078.94
MW-3	6/18/2007					50.56	0.00	6078.90
MW-3	9/17/2007					50.60	0.00	6078.86
MW-3	12/17/2007					50.60	0.00	6078.86
MW-3	3/11/2008					50.55	0.00	6078.91
MW-3	6/17/2008					50.29	0.00	6079.17
MW-3	9/10/2008					50.25	0.00	6079.21
MW-3	12/2/2008					50.25	0.00	6079.21
MW-3	3/3/2009					50.30	0.00	6079.16
MW-3	6/2/2009					50.33	0.00	6079.13
MW-3	9/16/2009	1	1	1	2	50.42	0.00	6079.04
MW-3	4/2/2014	<0.20	1.0J	<0.20	1.5J	50.82	0.00	6078.64
MW-3	10/23/2014	<0.38	<0.70	<0.50	<1.6	50.92	0.00	6078.54
MW-3	1/21/2015	<1.0	<5.0	<1.0	<5.0	50.86	0.00	6078.60
MW-3	5/29/2015	<1.0	<5.0	<1.0	3.7 J	50.94	0.00	6078.52
MW-3	9/13/2015	<1.0	<5.0	<1.0	<5.0	50.89	0.00	6078.57
MW-3	11/23/2015	<1.0	<1.0	<1.0	<3.0	50.80	0.00	6078.66
MW-4	10/23/2014	<0.38	<0.70	<0.50	<1.6	53.22	0.00	6078.88
MW-4	1/21/2015	<1.0	<5.0	<1.0	<5.0	53.16	0.00	6078.94
MW-4	5/29/2015	<1.0	<5.0	<1.0	<5.0	53.23	0.00	6078.87
MW-4	9/13/2015	<1.0	<5.0	<1.0	<5.0	53.15	0.00	6078.95
MW-4	11/23/2015	<1.0	<1.0	<1.0	<3.0	53.12	0.00	6078.98

TABLE 1 - GROUNDWATER ANALYTICAL RESULTS

HORTON #1E

Location	Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	Depth to Water (ft.)	LNAPL Thickness (ft.)	GW Elevation (ft.)
NMWQCC Standards:		10	750	750	620	NA	NA	NA
MW-5	10/23/2014	<0.38	<0.70	<0.50	<1.6	50.45	0.00	6079.76
MW-5	1/21/2015	<1.0	<5.0	<1.0	<5.0	50.34	0.00	6079.87
MW-5	5/29/2015	<1.0	<5.0	<1.0	<5.0	50.38	0.00	6079.83
MW-5	9/13/2015	<1.0	<5.0	<1.0	<5.0	50.28	0.00	6079.93
MW-5	11/23/2015	<1.0	<1.0	<1.0	<3.0	50.23	0.00	6079.98
MW-6	10/23/2014	<0.38	<0.70	<0.50	<1.6	48.98	0.00	6081.40
MW-6	1/21/2015	<1.0	<5.0	<1.0	<5.0	48.97	0.00	6081.41
MW-6	5/29/2015	<1.0	<5.0	<1.0	<5.0	49.01	0.00	6081.37
MW-6	9/13/2015	<1.0	<5.0	<1.0	<5.0	48.86	0.00	6081.52
MW-6	11/23/2015	<1.0	<1.0	<1.0	<3.0	48.80	0.00	6081.58
MW-7	10/23/2014	<0.38	<0.70	<0.50	<1.6	50.44	0.00	6081.55
MW-7	1/21/2015	<1.0	<5.0	<1.0	<5.0	50.38	0.00	6081.61
MW-7	5/29/2015	<1.0	<5.0	<1.0	<5.0	50.42	0.00	6081.57
MW-7	9/13/2015	<1.0	<5.0	<1.0	<5.0	50.30	0.00	6081.69
MW-7	11/23/2015	<1.0	<1.0	<1.0	<3.0	50.18	0.00	6081.81

Notes:

Results highlighted yellow exceed their respective New Mexico Water Quality Control Commission standards.

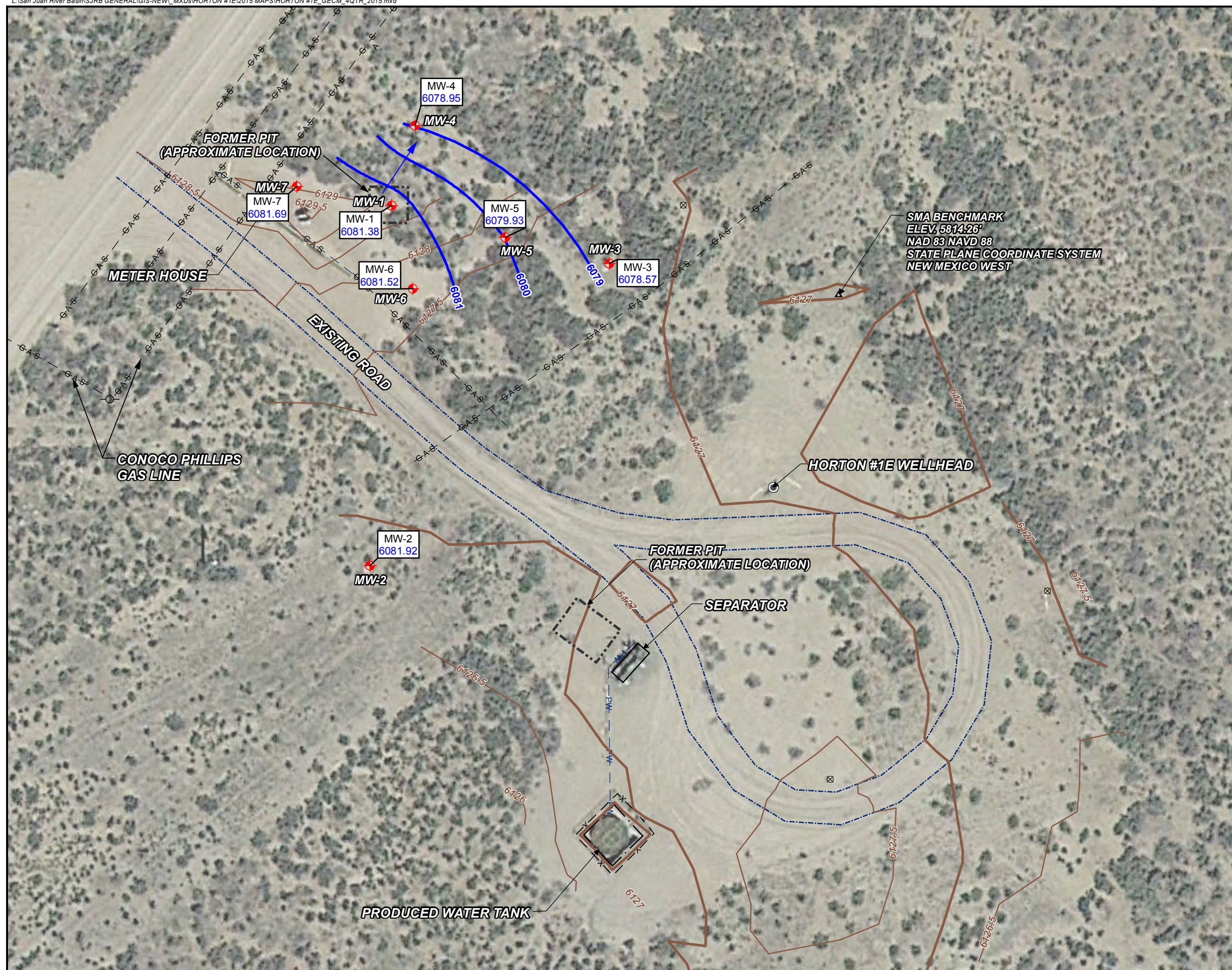
"J" = Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

"<" = analyte was not detected at the indicated reporting limit (some historic data were reported at the detection limit).

FIGURES



MWH



LEGEND:

- | | |
|---|---|
|  | APPROXIMATE GROUND SURFACE
CONTOUR AND ELEVATION, FEET |
|  | CORRECTED GROUNDWATER
ELEVATION CONTOUR |
|  | ACCESS ROAD |
|  | NATURAL GAS LINE |
|  | PRODUCED WATER LINE |
|  | MONITORING WELL |
|  | SMA BENCHMARK |
|  | RIG ANCHOR |

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, 0.5 FOOT CONTOUR INTERVAL)
- DIRECTION OF GROUNDWATER FLOW

REVISION	DATE	DESIGN BY	DRAWN BY	REVIEWED BY
A	12/28/2015	CCL	CCL	DCW

TITLE:

HORTON #1E
GROUNDWATER ELEVATION MAP
GAUGED NOVEMBER 23, 2015

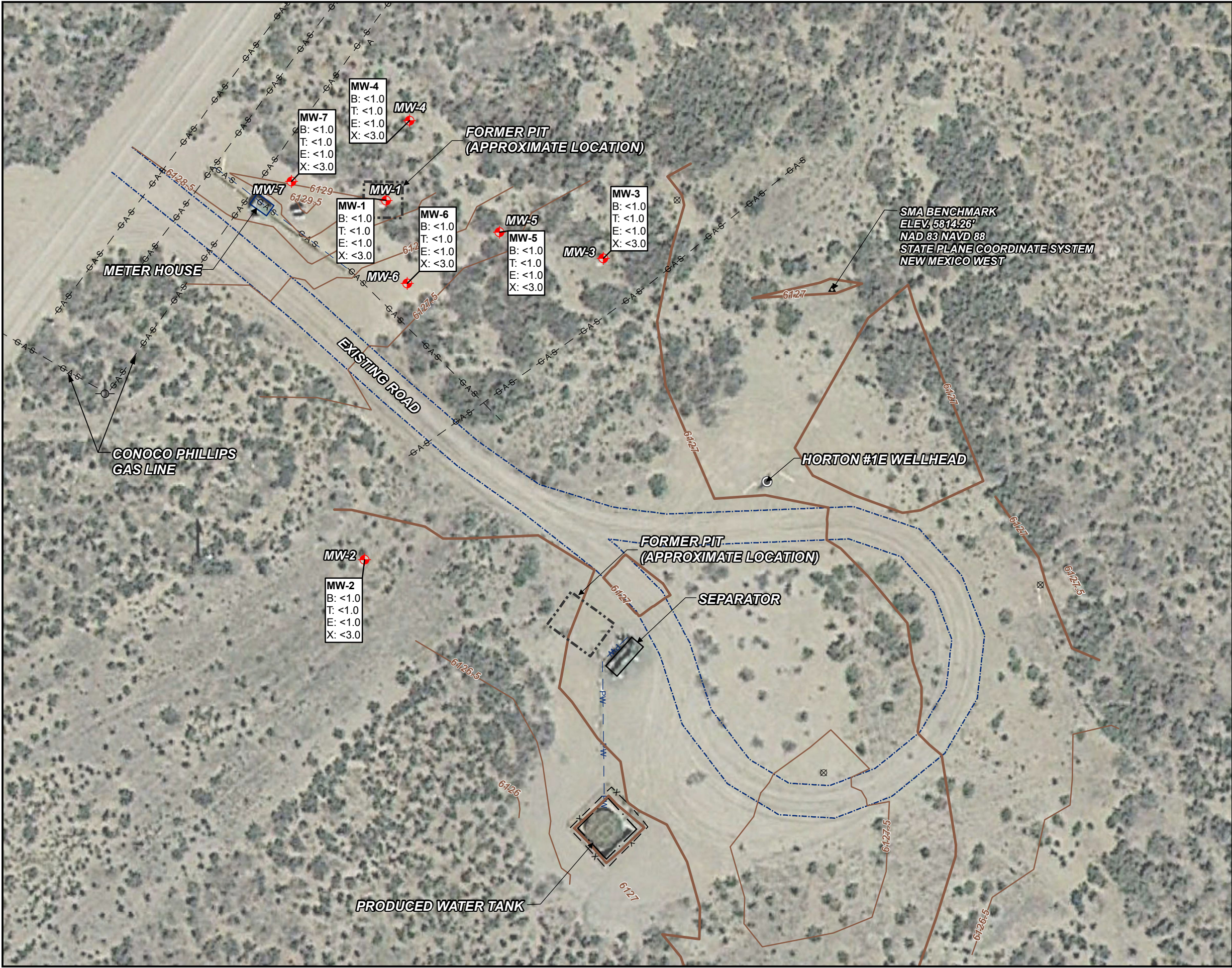
PROJECT:

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



Figure No.:

1



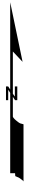
LEGEND:

- APPROXIMATE GROUND SURFACE CONTOUR AND ELEVATION, FEET
- ACCESS ROAD
- NATURAL GAS LINE
- PRODUCED WATER LINE
- MONITORING WELL
- 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
J = RESULT IS LESS THAN THE RL, BUT GREATER THAN OR EQUAL TO THE MDL AND THE CONCENTRATION IS AN APPROXIMATE VALUE.
MDL = METHOD DETECTION LIMIT
RL = REPORTING LIMIT OR REQUESTED LIMIT (RADIOCHEMISTRY)

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



REVISION	DATE	DESIGN BY	DRAWN BY	REVIEWED BY
A	12/28/2015	CCL	CCL	DCW

TITLE:
**HORTON #1E
GROUNDWATER ANALYTICAL RESULTS
SAMPLED NOVEMBER 23, 2015**

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



Figure No.:
2

ATTACHMENT



MWH

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

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

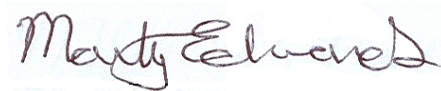
TestAmerica Job ID: 400-114382-1

Client Project/Site: Horton #1E

For:

MWH Americas Inc
1560 Broadway
Suite 1800
Denver, Colorado 80202

Attn: Ms. Sarah Gardner



Authorized for release by:
12/14/2015 7:49:01 PM

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

LINKS

Review your project
results through

TotalAccess

Have a Question?



Visit us at:

www.testamericainc.com

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

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

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

Table of Contents

Cover Page	1
Table of Contents	2
Definitions	3
Case Narrative	4
Detection Summary	5
Sample Summary	6
Client Sample Results	7
QC Association	15
QC Sample Results	16
Chronicle	17
Certification Summary	19
Method Summary	21
Chain of Custody	22
Receipt Checklists	23



Definitions/Glossary

Client: MWH Americas Inc
Project/Site: Horton #1E

TestAmerica Job ID: 400-114382-1

Glossary

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

Case Narrative

Client: MWH Americas Inc
Project/Site: Horton #1E

TestAmerica Job ID: 400-114382-1

Job ID: 400-114382-1

Laboratory: TestAmerica Pensacola

Narrative

Job Narrative
400-114382-1

Comments

No additional comments.

Receipt

The samples were received on 11/25/2015 9:29 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 0.9° 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: Horton #1E

TestAmerica Job ID: 400-114382-1

Client Sample ID: MW-1

Lab Sample ID: 400-114382-1

☐ No Detections.

Client Sample ID: MW-2

Lab Sample ID: 400-114382-2

☐ No Detections.

Client Sample ID: MW-3

Lab Sample ID: 400-114382-3

☐ No Detections.

Client Sample ID: MW-4

Lab Sample ID: 400-114382-4

☐ No Detections.

Client Sample ID: MW-5

Lab Sample ID: 400-114382-5

☐ No Detections.

Client Sample ID: MW-6

Lab Sample ID: 400-114382-6

☐ No Detections.

Client Sample ID: MW-7

Lab Sample ID: 400-114382-7

☐ No Detections.

Client Sample ID: TRIP BLANK

Lab Sample ID: 400-114382-8

☐ No Detections.

This Detection Summary does not include radiochemical test results.

TestAmerica Pensacola

Sample Summary

Client: MWH Americas Inc
Project/Site: Horton #1E

TestAmerica Job ID: 400-114382-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-114382-1	MW-1	Water	11/23/15 13:00	11/25/15 09:29
400-114382-2	MW-2	Water	11/23/15 12:20	11/25/15 09:29
400-114382-3	MW-3	Water	11/23/15 12:50	11/25/15 09:29
400-114382-4	MW-4	Water	11/23/15 12:35	11/25/15 09:29
400-114382-5	MW-5	Water	11/23/15 12:30	11/25/15 09:29
400-114382-6	MW-6	Water	11/23/15 12:25	11/25/15 09:29
400-114382-7	MW-7	Water	11/23/15 12:15	11/25/15 09:29
400-114382-8	TRIP BLANK	Water	11/23/15 12:10	11/25/15 09:29

Client Sample Results

Client: MWH Americas Inc
Project/Site: Horton #1E

TestAmerica Job ID: 400-114382-1

Client Sample ID: MW-1

Date Collected: 11/23/15 13:00

Date Received: 11/25/15 09:29

Lab Sample ID: 400-114382-1

Matrix: Water

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0	0.36	ug/L			12/02/15 17:35	1
Ethylbenzene	<1.0		1.0	0.37	ug/L			12/02/15 17:35	1
Toluene	<1.0		1.0	0.33	ug/L			12/02/15 17:35	1
Xylenes, Total	<3.0		3.0	0.60	ug/L			12/02/15 17:35	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	81		50 - 150					12/02/15 17:35	1

Client Sample Results

Client: MWH Americas Inc
Project/Site: Horton #1E

TestAmerica Job ID: 400-114382-1

Client Sample ID: MW-2
Date Collected: 11/23/15 12:20
Date Received: 11/25/15 09:29

Lab Sample ID: 400-114382-2
Matrix: Water

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0	0.36	ug/L			12/02/15 18:04	1
Ethylbenzene	<1.0		1.0	0.37	ug/L			12/02/15 18:04	1
Toluene	<1.0		1.0	0.33	ug/L			12/02/15 18:04	1
Xylenes, Total	<3.0		3.0	0.60	ug/L			12/02/15 18:04	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	80		50 - 150					12/02/15 18:04	1

Client Sample Results

Client: MWH Americas Inc
Project/Site: Horton #1E

TestAmerica Job ID: 400-114382-1

Client Sample ID: MW-3

Date Collected: 11/23/15 12:50

Date Received: 11/25/15 09:29

Lab Sample ID: 400-114382-3

Matrix: Water

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0	0.36	ug/L			12/02/15 18:34	1
Ethylbenzene	<1.0		1.0	0.37	ug/L			12/02/15 18:34	1
Toluene	<1.0		1.0	0.33	ug/L			12/02/15 18:34	1
Xylenes, Total	<3.0		3.0	0.60	ug/L			12/02/15 18:34	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	84		50 - 150					12/02/15 18:34	1

Client Sample Results

Client: MWH Americas Inc
Project/Site: Horton #1E

TestAmerica Job ID: 400-114382-1

Client Sample ID: MW-4

Date Collected: 11/23/15 12:35

Date Received: 11/25/15 09:29

Lab Sample ID: 400-114382-4

Matrix: Water

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0	0.36	ug/L			12/02/15 19:03	1
Ethylbenzene	<1.0		1.0	0.37	ug/L			12/02/15 19:03	1
Toluene	<1.0		1.0	0.33	ug/L			12/02/15 19:03	1
Xylenes, Total	<3.0		3.0	0.60	ug/L			12/02/15 19:03	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	84		50 - 150					12/02/15 19:03	1

Client Sample Results

Client: MWH Americas Inc
Project/Site: Horton #1E

TestAmerica Job ID: 400-114382-1

Client Sample ID: MW-5
Date Collected: 11/23/15 12:30
Date Received: 11/25/15 09:29

Lab Sample ID: 400-114382-5
Matrix: Water

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0	0.36	ug/L			12/02/15 19:33	1
Ethylbenzene	<1.0		1.0	0.37	ug/L			12/02/15 19:33	1
Toluene	<1.0		1.0	0.33	ug/L			12/02/15 19:33	1
Xylenes, Total	<3.0		3.0	0.60	ug/L			12/02/15 19:33	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	82		50 - 150					12/02/15 19:33	1

Client Sample Results

Client: MWH Americas Inc
Project/Site: Horton #1E

TestAmerica Job ID: 400-114382-1

Client Sample ID: MW-6
Date Collected: 11/23/15 12:25
Date Received: 11/25/15 09:29

Lab Sample ID: 400-114382-6
Matrix: Water

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0	0.36	ug/L			12/02/15 20:02	1
Ethylbenzene	<1.0		1.0	0.37	ug/L			12/02/15 20:02	1
Toluene	<1.0		1.0	0.33	ug/L			12/02/15 20:02	1
Xylenes, Total	<3.0		3.0	0.60	ug/L			12/02/15 20:02	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	88		50 - 150					12/02/15 20:02	1

Client Sample Results

Client: MWH Americas Inc
Project/Site: Horton #1E

TestAmerica Job ID: 400-114382-1

Client Sample ID: MW-7
Date Collected: 11/23/15 12:15
Date Received: 11/25/15 09:29

Lab Sample ID: 400-114382-7
Matrix: Water

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0	0.36	ug/L			12/02/15 20:32	1
Ethylbenzene	<1.0		1.0	0.37	ug/L			12/02/15 20:32	1
Toluene	<1.0		1.0	0.33	ug/L			12/02/15 20:32	1
Xylenes, Total	<3.0		3.0	0.60	ug/L			12/02/15 20:32	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	86		50 - 150					12/02/15 20:32	1

Client Sample Results

Client: MWH Americas Inc
Project/Site: Horton #1E

TestAmerica Job ID: 400-114382-1

Client Sample ID: TRIP BLANK

Lab Sample ID: 400-114382-8

Date Collected: 11/23/15 12:10

Matrix: Water

Date Received: 11/25/15 09:29

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0	0.36	ug/L			12/02/15 17:05	1
Ethylbenzene	<1.0		1.0	0.37	ug/L			12/02/15 17:05	1
Toluene	<1.0		1.0	0.33	ug/L			12/02/15 17:05	1
Xylenes, Total	<3.0		3.0	0.60	ug/L			12/02/15 17:05	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	77		50 - 150					12/02/15 17:05	1

QC Association Summary

Client: MWH Americas Inc
Project/Site: Horton #1E

TestAmerica Job ID: 400-114382-1

GC VOA

Analysis Batch: 303784

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-114382-1	MW-1	Total/NA	Water	8021B	
400-114382-2	MW-2	Total/NA	Water	8021B	
400-114382-3	MW-3	Total/NA	Water	8021B	
400-114382-4	MW-4	Total/NA	Water	8021B	
400-114382-5	MW-5	Total/NA	Water	8021B	
400-114382-6	MW-6	Total/NA	Water	8021B	
400-114382-7	MW-7	Total/NA	Water	8021B	
400-114382-8	TRIP BLANK	Total/NA	Water	8021B	
LCS 490-303784/3	Lab Control Sample	Total/NA	Water	8021B	
LCSD 490-303784/4	Lab Control Sample Dup	Total/NA	Water	8021B	
MB 490-303784/10	Method Blank	Total/NA	Water	8021B	
MB 490-303784/23	Method Blank	Total/NA	Water	8021B	

QC Sample Results

Client: MWH Americas Inc
Project/Site: Horton #1E

TestAmerica Job ID: 400-114382-1

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 490-303784/10

Matrix: Water

Analysis Batch: 303784

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	0.36	ug/L			12/02/15 16:36	1
Ethylbenzene	<1.0		1.0	0.37	ug/L			12/02/15 16:36	1
Toluene	<1.0		1.0	0.33	ug/L			12/02/15 16:36	1
Xylenes, Total	<3.0		3.0	0.60	ug/L			12/02/15 16:36	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	77		50 - 150		12/02/15 16:36	1

Lab Sample ID: MB 490-303784/23

Matrix: Water

Analysis Batch: 303784

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	0.36	ug/L			12/02/15 22:59	1
Ethylbenzene	<1.0		1.0	0.37	ug/L			12/02/15 22:59	1
Toluene	<1.0		1.0	0.33	ug/L			12/02/15 22:59	1
Xylenes, Total	<3.0		3.0	0.60	ug/L			12/02/15 22:59	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	87		50 - 150		12/02/15 22:59	1

Lab Sample ID: LCS 490-303784/3

Matrix: Water

Analysis Batch: 303784

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	100	94.4		ug/L		94	69 - 129
Ethylbenzene	100	99.1		ug/L		99	70 - 130
Toluene	100	97.7		ug/L		98	66 - 127
Xylenes, Total	200	198		ug/L		99	69 - 123

Surrogate	LCS %Recovery	LCS Qualifier	Limits
a,a,a-Trifluorotoluene	71		50 - 150

Lab Sample ID: LCSD 490-303784/4

Matrix: Water

Analysis Batch: 303784

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	92.8		ug/L		93	69 - 129	2	33
Ethylbenzene	100	97.3		ug/L		97	70 - 130	2	35
Toluene	100	96.3		ug/L		96	66 - 127	1	34
Xylenes, Total	200	195		ug/L		98	69 - 123	1	37

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
a,a,a-Trifluorotoluene	71		50 - 150

TestAmerica Pensacola

Lab Chronicle

Client: MWH Americas Inc
Project/Site: Horton #1E

TestAmerica Job ID: 400-114382-1

Client Sample ID: MW-1

Date Collected: 11/23/15 13:00

Date Received: 11/25/15 09:29

Lab Sample ID: 400-114382-1

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	303784	12/02/15 17:35	GWM	TAL NSH
Instrument ID: HP52										

Client Sample ID: MW-2

Date Collected: 11/23/15 12:20

Date Received: 11/25/15 09:29

Lab Sample ID: 400-114382-2

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	303784	12/02/15 18:04	GWM	TAL NSH
Instrument ID: HP52										

Client Sample ID: MW-3

Date Collected: 11/23/15 12:50

Date Received: 11/25/15 09:29

Lab Sample ID: 400-114382-3

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	303784	12/02/15 18:34	GWM	TAL NSH
Instrument ID: HP52										

Client Sample ID: MW-4

Date Collected: 11/23/15 12:35

Date Received: 11/25/15 09:29

Lab Sample ID: 400-114382-4

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	303784	12/02/15 19:03	GWM	TAL NSH
Instrument ID: HP52										

Client Sample ID: MW-5

Date Collected: 11/23/15 12:30

Date Received: 11/25/15 09:29

Lab Sample ID: 400-114382-5

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	303784	12/02/15 19:33	GWM	TAL NSH
Instrument ID: HP52										

Client Sample ID: MW-6

Date Collected: 11/23/15 12:25

Date Received: 11/25/15 09:29

Lab Sample ID: 400-114382-6

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	5 mL	5 mL	303784	12/02/15 20:02	GWM	TAL NSH
Instrument ID: HP52										

TestAmerica Pensacola

Lab Chronicle

Client: MWH Americas Inc
Project/Site: Horton #1E

TestAmerica Job ID: 400-114382-1

Client Sample ID: MW-7

Date Collected: 11/23/15 12:15

Date Received: 11/25/15 09:29

Lab Sample ID: 400-114382-7

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	303784	12/02/15 20:32	GWM	TAL NSH
Instrument ID: HP52										

Client Sample ID: TRIP BLANK

Date Collected: 11/23/15 12:10

Date Received: 11/25/15 09:29

Lab Sample ID: 400-114382-8

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	303784	12/02/15 17:05	GWM	TAL NSH
Instrument ID: HP52										

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: Horton #1E

TestAmerica Job ID: 400-114382-1

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	12-09-16
Iowa	State Program	7	131	04-01-16
Kansas	NELAP	7	E-10229	01-31-16
Kentucky (UST)	State Program	4	19	06-30-16
Kentucky (WW)	State Program	4	90038	12-31-15
Louisiana	NELAP	6	30613	06-30-16
Maine	State Program	1	TN00032	11-03-17
Maryland	State Program	3	316	03-31-16
Massachusetts	State Program	1	M-TN032	06-30-16
Minnesota	NELAP	5	047-999-345	12-31-16
Mississippi	State Program	4	N/A	06-30-16

* Certification renewal pending - certification considered valid.

TestAmerica Pensacola

Certification Summary

Client: MWH Americas Inc
Project/Site: Horton #1E

TestAmerica Job ID: 400-114382-1

Laboratory: TestAmerica Nashville (Continued)

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

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

Method Summary

Client: MWH Americas Inc
Project/Site: Horton #1E

TestAmerica Job ID: 400-114382-1

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

Chain of Custody Record

Client Information Client Contact: Ms. Sarah Gardner Company: MWH Americas Inc Address: 1560 Broadway Suite 1800 City: Denver State, Zip: CO, 80202 Phone: 303-291-2239 (Tel) Email: sarah.gardner@mwhglobal.com Project Name: Horton #1E Site: Horton #1E		Sample Information Sample: Sarah Gardner & Chris Lee Phone: 303 291 2239 Lab Pmt: Edwards, Marty P E-Mail: marty.edwards@testamericainc.com Carrier Tracking No(s): COC No: 400-50150-21702.1 Page: Page 1 of 1 Job #:	
Analysis Requested Due Date Requested: TAT Requested (days): Standard PO #: Purchase Order Requested WO #: 4005479 Project #: 4005479 SOW#:		Preservation Codes: A - HCl B - NaOH C - Zn Acetate D - Nitric Acid E - Nitric Acid F - MeOH G - Anchlor H - Acetic Acid I - Ice J - DI Water K - EDTA L - EDA Other: M - Hexane N - None O - AsNaO2 P - Na2O4S Q - Na2SO3 R - Na2S2O3 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - 3% 4-5 Z - other (specify)	
Sample Identification Sample ID: MW-1 Sample Type: Water Sample Date: 11/23/2015 Sample Time: 1300 Matrix: Water Sample ID: MW-2 Sample Type: Water Sample Date: 11/23/2015 Sample Time: 1220 Matrix: Water Sample ID: MW-3 Sample Type: Water Sample Date: 11/23/2015 Sample Time: 1250 Matrix: Water Sample ID: MW-4 Sample Type: Water Sample Date: 11/23/2015 Sample Time: 1235 Matrix: Water Sample ID: MW-5 Sample Type: Water Sample Date: 11/23/2015 Sample Time: 1230 Matrix: Water Sample ID: MW-6 Sample Type: Water Sample Date: 11/23/2015 Sample Time: 1225 Matrix: Water Sample ID: MW-7 Sample Type: Water Sample Date: 11/23/2015 Sample Time: 1215 Matrix: Water Sample ID: TRIP BLANK Sample Type: Water Sample Date: 11/23/2015 Sample Time: 1210 Matrix: Water		Special Instructions/Note: 400-114382 COC 8021B - BTEX 8021	
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) Empty Kit Relinquished by:		Special Instructions/OC Requirements: Date: 11/24/2015 1120 Company: MWH Relinquished by: Sarah Gardner Date: 11/24/2015 1120 Company: MWH Relinquished by: Sarah Gardner Date: 11/24/2015 1120 Company: MWH Relinquished by: Sarah Gardner	
Custody Seals Intact: Δ Yes Δ No		Custody Seal No.: 090c IP-2	

Login Sample Receipt Checklist

Client: MWH Americas Inc

Job Number: 400-114382-1

Login Number: 114382

List Source: TestAmerica Pensacola

List Number: 1

Creator: Crawford, Lauren E

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	0.9°C IR-2
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: MWH Americas Inc

Job Number: 400-114382-1

Login Number: 114382

List Number: 2

Creator: Vest, Laura E

List Source: TestAmerica Nashville

List Creation: 11/28/15 02:42 PM

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	2.6
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.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	