3R - 213

2013 AGWMR

04 / 03 / 2014

MWH

BUILDING A BETTER WORLD

March 4, 2014

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

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

Dear Mr. von Gonten

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

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

Sincerely,

David C. Wombacher
Principal Engineer

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

P:\Word Processing\EL PASO\NEW MEXICO\SAN JUAN RIVER BASIN PROGRAM\PIT SITES\LTR-03-14-2013 ANNUAL REPORT SUBMITTALS\Ltr-03-14-von Gonten-2013 Annual Report Submittals.docx

11153 Aurora Avenue
Des Moines, IA 50322-7904
TEL 515 253 0830
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TABLE 1

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

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

2013 ANNUAL GROUNDWATER REPORT

Lateral O-21 Line Drip
Meter Code: LD151
T30N, R9W, Sec12, Unit O

SITE DETAILS

Site Location: Latitude: 36.818600 N, Longitude: -107.730400 W
Land Type: Federal
Operator: Enterprise

SITE BACKGROUND

- **Site Assessment:** 1/95
- **Excavation:** 1/95

Lateral O-21 Line Drip (Site) is managed pursuant to the procedures set forth in the document entitled, "Remediation Plan for Groundwater Encountered during Pit Closure Activities" (Remediation Plan, El Paso Natural Gas Company / El Paso Field Services Company, 1995). This remediation plan was conditionally approved by the New Mexico Oil Conservation Division (OCD) in correspondence dated November 30, 1995; and the OCD approval conditions were adopted into El Paso CGP Company (EPCGP's) program methods. Currently, the site is operated by Enterprise and is not active.

The site is located on Federal land. Several Site investigations were conducted from 1995 to 2000. Monitoring wells were installed in 1995 (MW-1) and 2000 (MW-2 and MW-3). Temporary piezometers were installed in 1997 (PZ-1 and PZ-2). Free product recovery has been periodically conducted at the Site. Currently, groundwater sampling is conducted on a semi-annual basis. Free product was observed in 2013.

SUMMARY OF 2013 ACTIVITIES

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

On June 6, September 9, and December 12, 2013, water levels were gauged at MW-1, MW-2, and MW-3. For each sampling event in 2013, monitoring wells MW-2 and MW-3 were dry. Groundwater samples were collected from monitoring well MW-1 during the June 2013 quarterly sampling event using a HydraSleeve™ (HydraSleeve); a disposable, no-purge passive groundwater sampling device. Groundwater samples were not collected from MW-1 during the September and December sampling event due to the presence of free product. The HydraSleeves were set during the previous sampling event approximately 0.5 feet above termination depth of the monitoring wells using a suspension tether and 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 Test America Laboratories in Corpus Christi, Texas where they were analyzed for benzene, toluene, ethylbenzene, and total xylenes (BTEX). Additional field parameters were collected including dissolved oxygen, temperature, conductivity, pH, and ORP using a YSI multi-parameter instrument, when free product was not present. The de minimis water remaining in HydraSleeves was combined in a waste container and transferred to an off-site 55-gallon drum for later disposal by Safety-Kleen.

2013 ANNUAL GROUNDWATER REPORT

Lateral O-21 Line Drip
Meter Code: LD151
T30N, R9W, Sec12, Unit O

SUMMARY TABLES

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

SITE MAPS

Groundwater analytical and groundwater elevation contour maps from each sampling event are included as Figures 1 through 6.

ANALYTICAL LAB REPORTS

The groundwater analytical lab reports are included as Appendix A.

RESULTS

- The groundwater flow direction cannot be determined based on our observations. MW-1 was the only monitoring well where groundwater elevation data is presented, due to the other wells onsite being dry (see Figures 2, 4, and 6).

- Concentrations of total xylenes in groundwater collected from MW-1 was above the New Mexico Water Quality Control Commission (NMWQCC) standard during the June sampling event. Benzene, toluene and ethylbenzene were not detected above NMWQCC standards during the June sampling event. Approximately 0.07 feet of free product was detected in June, 0.27 feet of free product was detected in September, and 0.07 feet of free product was detected in December at MW-1. Groundwater samples were not collected from MW-1 during the September or December 2013 monitoring events due to the presence of free product.

- Monitoring wells MW-2 and MW-3 were dry during each sampling event in 2013.

PLANNED FUTUREACTIVITIES

Following the completion of a Site access agreement with the current Site operator, the installation of five additional monitoring wells is proposed at the Site to further assess the extent of dissolved phase hydrocarbons and to confirm and/or further define the groundwater gradient at the Site. MW-1 and the newly installed monitoring well will be sampled on a semi-annual basis. Monitoring wells MW-2 and MW-3 will be plugged and abandoned in accordance with NMED, Ground Water Quality Bureau, Monitoring Well Construction and Abandonment Guidelines, dated March 2011.

TABLES

TABLE 1 – GROUNDWATER ANALYTICAL AND WATER LEVEL RESULTS

TABLE 1 - GROUNDWATER ANALYTICAL RESULTS

LAT 0-21 Line Drip								
Location	Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	Depth to Water (ft.)	Depth to LNAPL (ft.)	LNAPL Thickness (ft.)
NMWQCC Standards:		10	750	750	620	NA	NA	NA
MW-1	11/06/95	935	2700	168	1890	34.45	-	-
MW-1	11/12/96	741	1620	99	1100	34.75	-	-
MW-1	02/11/97	202	313	15.6	230	33.82	-	-
MW-1	05/08/97	1050	1220	50.8	764	33.54	-	-
MW-1	08/05/97	99.5	179	8.42	160	34.20	-	-
MW-1	11/04/97	1370	3040	174	2530	35.42	-	-
MW-1	02/03/98	3000	3600	138	2180	35.08	-	-
MW-1	05/07/98	5380	7500	247	3500	34.83	-	-
MW-1	05/18/99	4860	6810	183	3450	34.64	-	-
MW-1	05/26/00	620	900	49	580	34.76	-	-
MW-1	06/18/01	1400	2000	37	2500	35.60	-	-
MW-1	06/04/02	270	170	12	1900	35.98	-	-
MW-1	09/10/02					37.15	36.85	0.30
MW-1	12/30/02					36.39	36.08	0.31
MW-1	03/27/03					35.96	-	-
MW-1	06/18/03	137	<10	<10	1730	36.26	-	-
MW-1	09/16/03					37.06	-	-
MW-1	12/17/03					36.72	-	-
MW-1	03/16/04					36.22	-	-
MW-1	06/22/04					36.38	-	-
MW-1	06/23/04	59.9	11.8	23.8	44.1	36.38	-	-
MW-1	09/21/04					37.43	-	-
MW-1	12/21/04					36.98	-	-
MW-1	04/18/05	66.6	9.3	21.5	56.5	35.93	-	-
MW-1	10/22/05	8.9	1.4	5.6	9.1	36.99	-	-
MW-1	01/19/06	37.6	3.6	17.4	42	36.18	-	-
MW-1	04/24/06	81.4	24.5	21.8	152	35.71	-	-
MW-1	10/24/06	9.4	1.7	2.3	8.2	36.81	-	-
MW-1	01/19/07	28.7	5.5	7.3	19.8	36.14	-	-
MW-1	04/24/07	104	82.1	41	244	35.73	-	-
MW-1	05/29/07					36.90	-	-
MW-1	10/25/07	3.8	4	4.4	8.8	37.39	-	-
MW-1	04/21/08	11.6	1.6 J	5.7	15.1	35.97	-	-
MW-1	07/23/08	11.2	1.4	3.2	9.3	36.55	-	-
MW-1	10/08/08	7.6	0.61 J	1.6 J	5.8 J	36.88	-	-
MW-1	01/07/09	3.1	<1	1	2.6	36.52	-	-
MW-1	04/06/09	6	2.2	1.6	6.2	36.03	-	-
MW-1	07/27/09	6.8	0.86 J	1.6	4.8	36.83	-	-
MW-1	06/06/13	<0.42	<0.90	69	1000	39.98	39.91	0.07
MW-1	09/09/13					40.04	39.77	0.27
MW-1	12/12/13					39.39	39.32	0.07

TABLE 1 - GROUNDWATER ANALYTICAL RESULTS

LAT 0-21 Line Drip								
Location	Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	Depth to Water (ft.)	Depth to LNAPL (ft.)	LNAPL Thickness (ft.)
NMWQCC Standards:		10	750	750	620	NA	NA	NA
MW-2	08/30/00	1.3	<0.5	<0.5	9.5	33.62	-	-
MW-2	06/18/01	<0.5	<0.5	<0.5	2	33.16	-	-
MW-2	06/04/02	<0.5	<0.5	<0.5	<1	33.42	-	-
MW-2	09/10/02					41.48	-	-
MW-2	12/30/02					33.91	-	-
MW-2	03/27/03					33.45	-	-
MW-2	06/18/03	<1	<1	<1	<3	33.80	-	-
MW-2	06/18/03					34.61	-	-
MW-2	09/16/03					34.23	-	-
MW-2	12/17/03					33.70	-	-
MW-2	03/16/04					33.92	-	-
MW-2	06/22/04					33.92	-	-
MW-2	06/23/04	<0.5	<0.5	<0.5	<1	34.99	-	-
MW-2	09/21/04					34.49	-	-
MW-2	12/21/04					33.40	-	-
MW-2	04/18/05					34.49	-	-
MW-2	10/22/05					33.68	-	-
MW-2	01/19/06					33.21	-	-
MW-2	04/24/06					34.31	-	-
MW-2	10/24/06					33.66	-	-
MW-2	01/18/07					32.70	-	-
MW-2	04/24/07					33.44	-	-
MW-2	05/29/07					34.78	-	-
MW-2	10/25/07					33.45	-	-
MW-2	04/21/08					34.10	-	-
MW-2	07/23/08					34.45	-	-
MW-2	10/08/08					34.03	-	-
MW-2	01/07/09	<1	<1	<1	<2	33.53	-	-
MW-2	07/27/09	<1	<1	<1	<2	34.42	-	-
MW-2	06/06/13					DRY	-	-
MW-2	09/09/13					DRY	-	-
MW-2	12/12/13					DRY	-	-

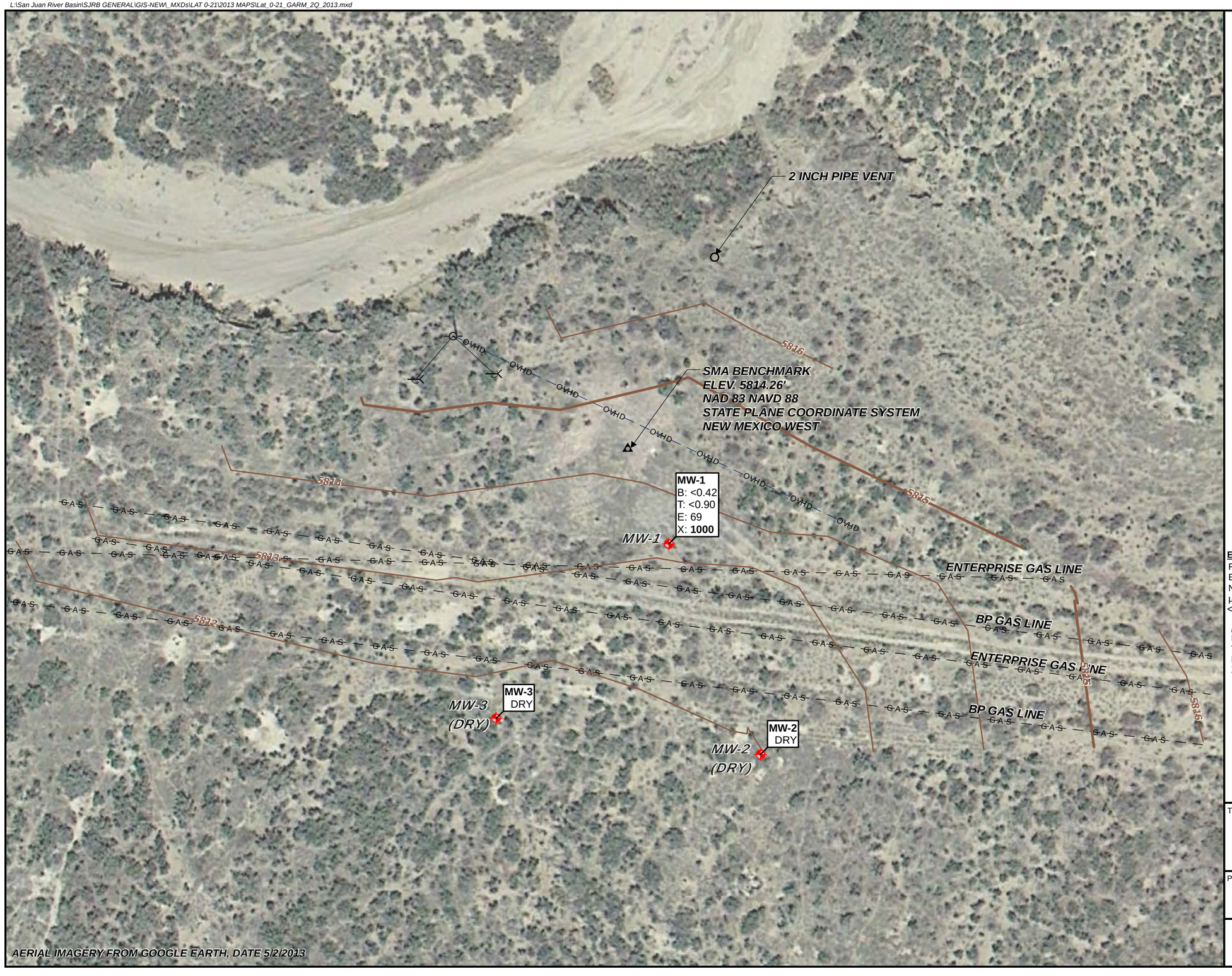
TABLE 1 - GROUNDWATER ANALYTICAL RESULTS

LAT 0-21 Line Drip								
Location	Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	Depth to Water (ft.)	Depth to LNAPL (ft.)	LNAPL Thickness (ft.)
NMWQCC Standards:		10	750	750	620	NA	NA	NA
MW-3	08/30/00	190	20	37	460	34.56	-	-
MW-3	06/18/01	34	4.7	68	130	34.14	-	-
MW-3	06/04/02	5.7	0.52	19	30	34.42	-	-
MW-3	09/10/02					35.92	35.29	0.64
MW-3	12/30/02					34.97	34.42	0.55
MW-3	03/27/03					34.49	-	-
MW-3	06/18/03	<50	<50	540	6490	34.80	-	-
MW-3	09/16/03					35.64	35.62	0.02
MW-3	12/17/03					35.24	-	-
MW-3	03/16/04					34.75	-	-
MW-3	06/22/04					34.95	-	-
MW-3	06/23/04	3.3	28.9	34	48.4	34.95	-	-
MW-3	09/21/04					35.95	-	-
MW-3	12/21/04					35.51	-	-
MW-3	04/18/05	<1	<1	5.3	<2	34.48	-	-
MW-3	10/22/05	<1	<1	<1	1.1	35.52	-	-
MW-3	01/19/06	<1	<1	<1	<2	34.71	-	-
MW-3	04/24/06	<1	<1	<1	<2	34.23	-	-
MW-3	10/24/06	<1	<1	<1	1.2 J	35.33	-	-
MW-3	01/19/07	<1	<1	<1	<2	34.66	-	-
MW-3	04/24/07	<1	<1	<1	<2	33.25	-	-
MW-3	05/29/07					34.42	-	-
MW-3	10/25/07	<1	<1	<1	<2	35.88	-	-
MW-3	04/21/08	<2	<2	<2	<6	34.50	-	-
MW-3	07/23/08	<1	<1	<1	2.3	35.06	-	-
MW-3	10/08/08	<2	<2	<2	<6	35.41	-	-
MW-3	01/07/09	<1	<1	0.44 J	2.2	35.05	-	-
MW-3	04/06/09					34.53	-	-
MW-3	07/27/09					DRY	-	-
MW-3	06/06/13					DRY	-	-
MW-3	09/09/13					DRY	-	-
MW-3	12/12/13					DRY	-	-

Notes:
Results highlighted yellow exceed their respective New Mexico Water Quality Control Comission 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

L:\San Juan River Basin\SJRB GENERAL\GIS-NEW_MXDs\LAT 0-21\2013 MAPS\Lat_0-21_GARM_2Q_2013.mxd



LEGEND:

- 5816 — APPROXIMATE GROUND SURFACE CONTOUR AND ELEVATION, FEET
- OVHD — OVERHEAD ELECTRIC LINE
- GAS — NATURAL GAS LINE
- MONITORING WELL
- SMA BENCHMARK

EXPLANATION OF ANALYTES AND APPLICABLE STANDARDS:

RESULTS IN **BOLDFACE** TYPE INDICATE CONCENTRATION IN EXCESS OF THE STANDARD FOR THAT ANALYTE.
NS = NOT SAMPLED
µg/L = MICROGRAMS PER LITER
<0.30 = BELOW METHOD DETECTION LIMIT

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

N

SCALE IN FEET
0 40 80

REVISION	DATE	DESIGN BY	DRAWN BY	REVIEWED BY
A	10/18/2013	CCL	CCL	DAW

TITLE:

LAT 0-21
GROUNDWATER ANALYTICAL RESULTS
GAUGED JUNE 6, 2013

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

MWH

Figure No.: 1

L:\San Juan River Basin\SJRB GENERAL\GIS-NEW_MXDs\LAT 0-21\2013 MAPS\Lat_0-21_GECM_2Q_2013.mxd

2 INCH PIPE VENT

SMA BENCHMARK
ELEV. 5814.26'
NAD 83 NAVD 88
STATE PLANE COORDINATE SYSTEM
NEW MEXICO WEST

OVHD

5816

5814

5815

5813

5812

GAS

MW-1
5776.17

MW-1

ENTERPRISE GAS LINE

BP GAS LINE

ENTERPRISE GAS LINE

BP GAS LINE

MW-3
DRY

MW-3
(DRY)

MW-2
DRY

MW-2
(DRY)

AERIAL IMAGERY FROM GOOGLE EARTH, DATE 5/2/2013

LEGEND:

- 5816 — APPROXIMATE GROUND SURFACE CONTOUR AND ELEVATION, FEET
- OVHD — OVERHEAD ELECTRIC LINE
- GAS — NATURAL GAS LINE
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- SMA BENCHMARK

N

SCALE IN FEET
0 40 80

REVISION	DATE	DESIGN BY	DRAWN BY	REVIEWED BY
A	10/18/2013	CCL	CCL	DAW

TITLE:
LAT 0-21
GROUNDWATER ELEVATION MAP
GAUGED JUNE 6, 2013

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

MWH

Figure No.:
2

L:\San Juan River Basin\SJRB GENERAL\GIS-NEW_MXDs\LAT 0-21\2013 MAPS\Lat_0-21_GARM_3Q_2013.mxd

2 INCH PIPE VENT

SMA BENCHMARK
ELEV. 5814.26'
NAD 83 NAVD 88
STATE PLANE COORDINATE SYSTEM
NEW MEXICO WEST

MW-1
FP

MW-3
DRY

MW-2
DRY

ENTERPRISE GAS LINE

BP GAS LINE

ENTERPRISE GAS LINE

BP GAS LINE

5811

5812

5813

5814

5815

5816

AERIAL IMAGERY FROM GOOGLE EARTH, DATE 5/2/2013

LEGEND:

- 5816 — APPROXIMATE GROUND SURFACE CONTOUR AND ELEVATION, FEET
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SCALE IN FEET
0 40 80

REVISION	DATE	DESIGN BY	DRAWN BY	REVIEWED BY
A	10/18/2013	CCL	CCL	DAW

TITLE:
LAT 0-21
GROUNDWATER ANALYTICAL RESULTS
GAUGED SEPTEMBER 9, 2013

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

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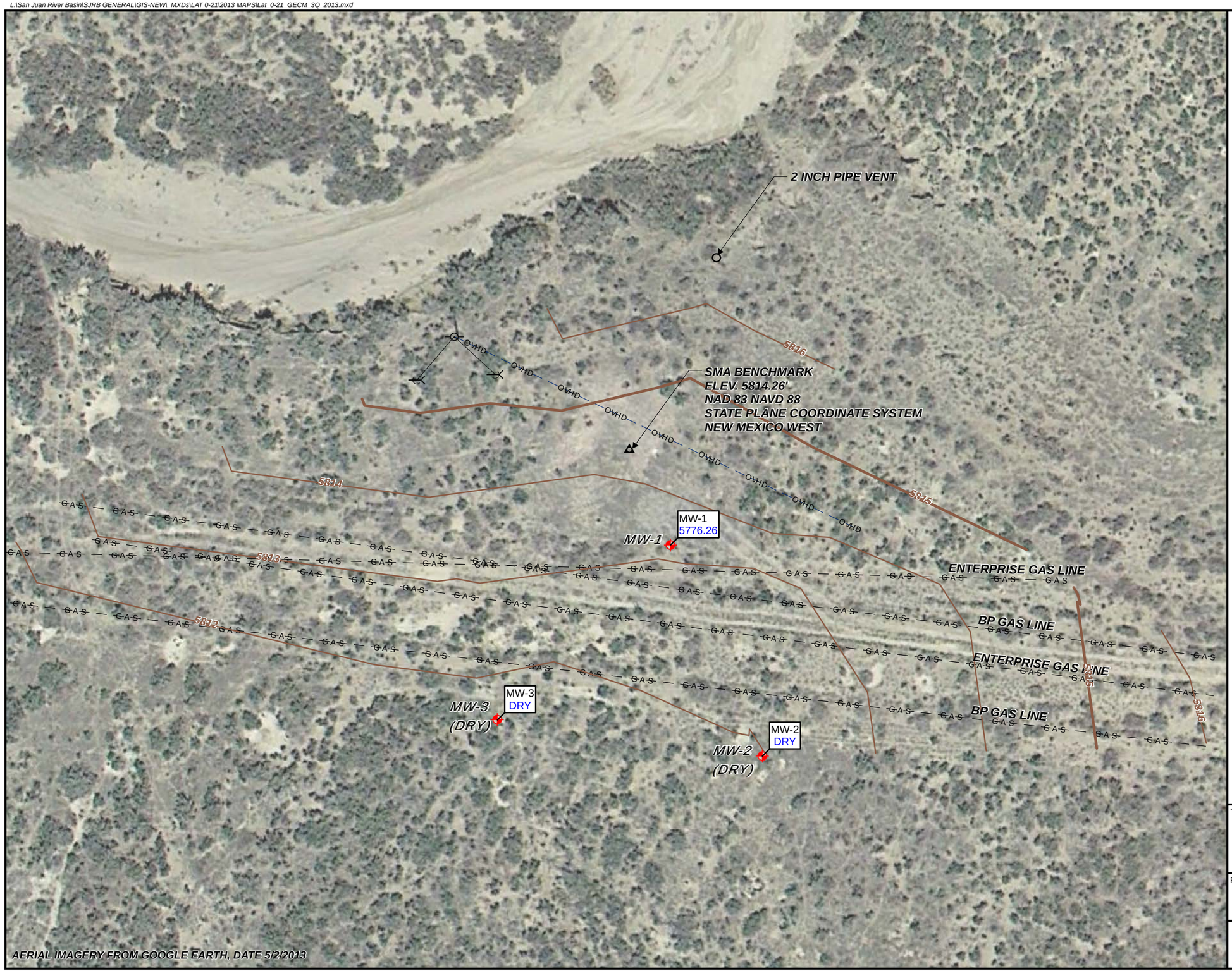
Figure No.: 3

L:\San Juan River Basin\SJRB GENERAL\GIS-NEW_MXDs\LAT 0-21\2013 MAPS\Lat_0-21_GECM_3Q_2013.mxd



LEGEND:

- 5816 — APPROXIMATE GROUND SURFACE CONTOUR AND ELEVATION, FEET
- OVHD — OVERHEAD ELECTRIC LINE
- GAS — NATURAL GAS LINE
- MONITORING WELL
- SMA BENCHMARK

N

SCALE IN FEET

0 40 80

REVISION	DATE	DESIGN BY	DRAWN BY	REVIEWED BY
A	10/18/2013	CCL	CCL	DAW

TITLE:

LAT 0-21
GROUNDWATER ELEVATION MAP
GAUGED SEPTEMBER 9, 2013

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

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Figure No.: **4**

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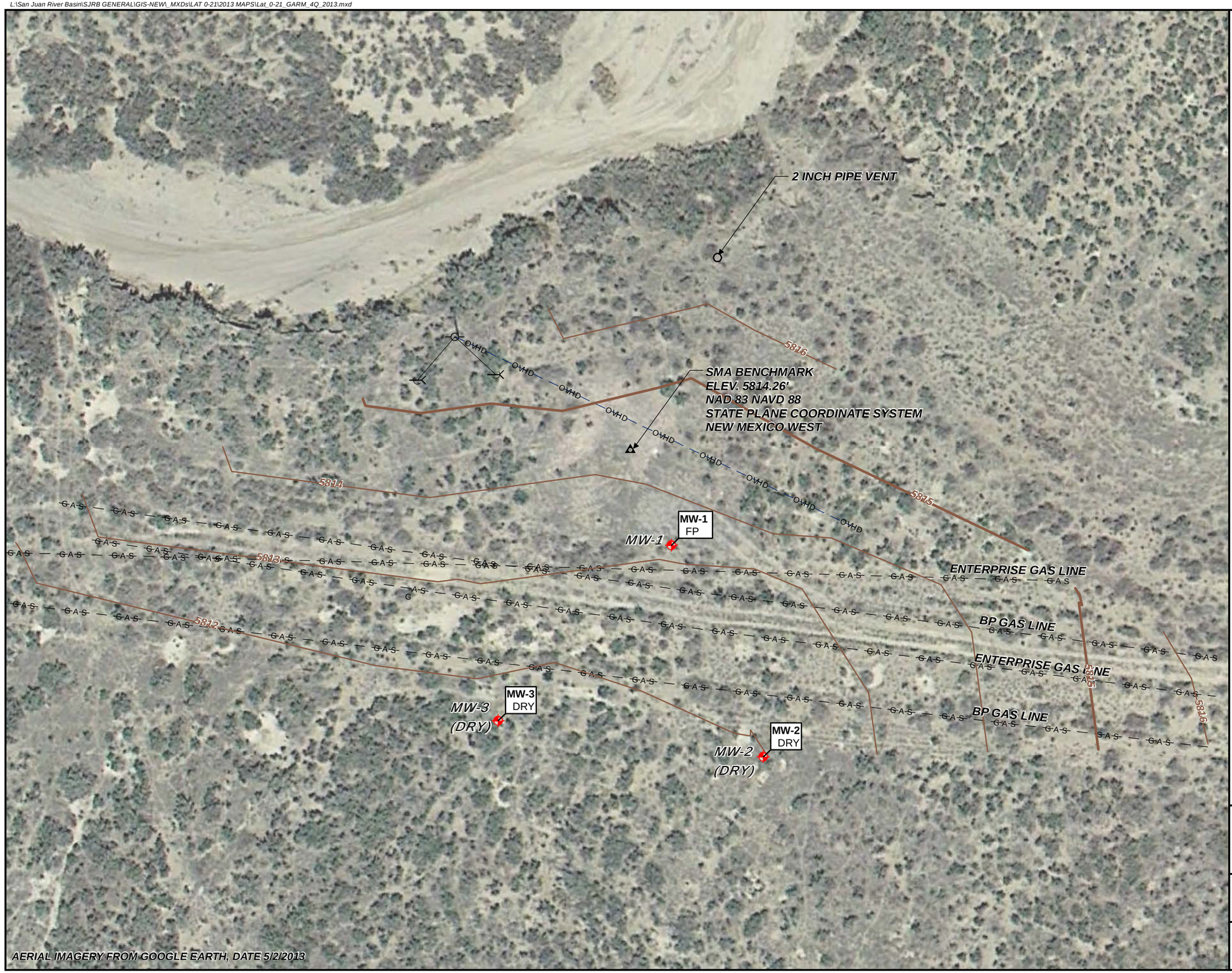

LEGEND:

- 5816 — APPROXIMATE GROUND SURFACE CONTOUR AND ELEVATION, FEET
- OVHD — OVERHEAD ELECTRIC LINE
- GAS — NATURAL GAS LINE
- MONITORING WELL
- SMA BENCHMARK

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SCALE IN FEET
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REVISION	DATE	DESIGN BY	DRAWN BY	REVIEWED BY
A	1/14/2014	CCL	CCL	DAW

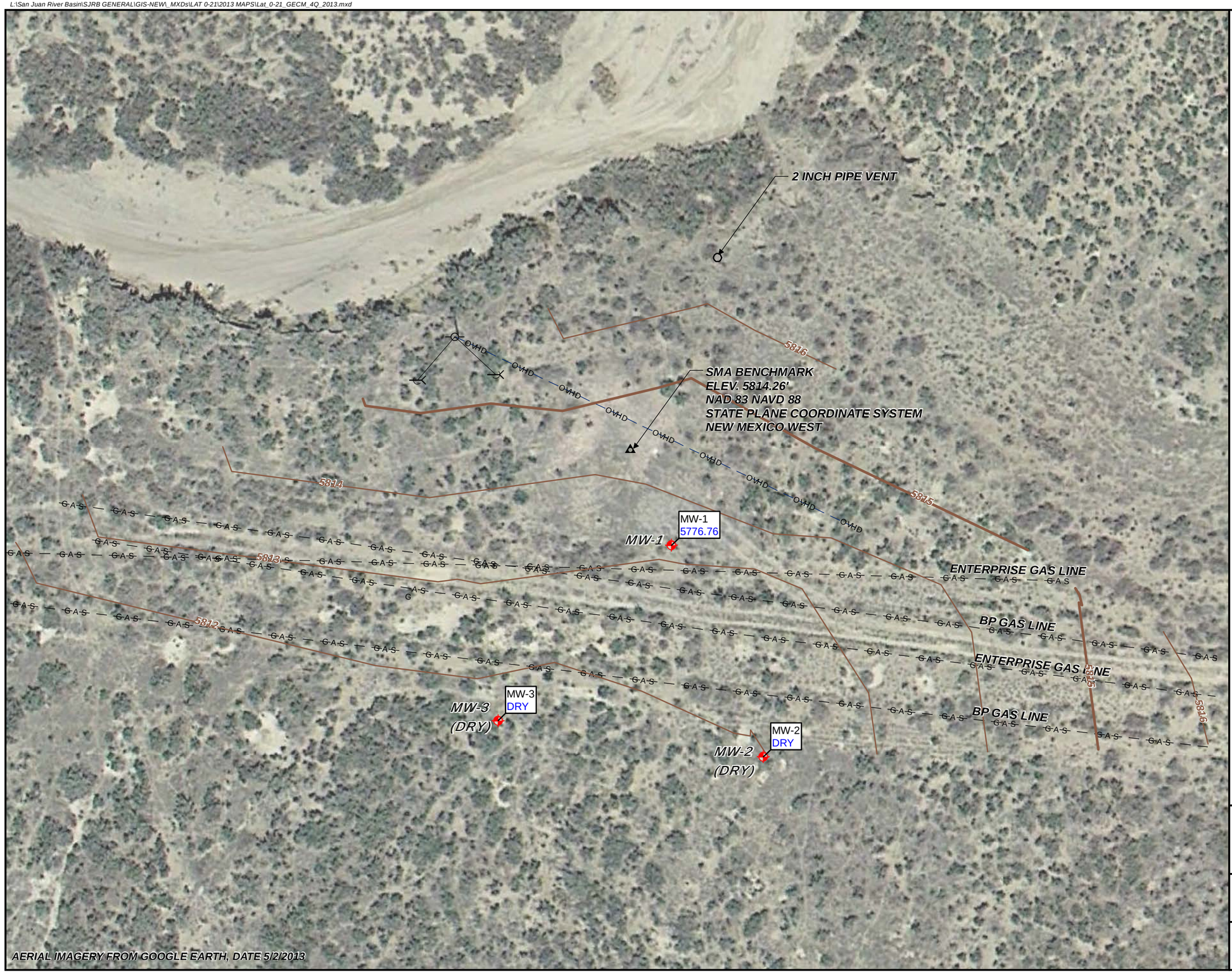
TITLE:
LAT 0-21
GROUNDWATER ANALYTICAL RESULTS
GAUGED DECEMBER 12, 2013

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

MWH

Figure No.: **5**

L:\San Juan River Basin\SJRB GENERAL\GIS-NEW_MXDs\LAT 0-21\2013 MAPS\Lat_0-21_GECM_4Q_2013.mxd



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- OVHD — OVERHEAD ELECTRIC LINE
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- MONITORING WELL
- SMA BENCHMARK

N

SCALE IN FEET

0 40 80

REVISION	DATE	DESIGN BY	DRAWN BY	REVIEWED BY
A	1/14/2014	CCL	CCL	DAW

TITLE:

LAT 0-21
GROUNDWATER ELEVATION MAP
GAUGED DECEMBER 12, 2013

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

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Figure No.: **6**

APPENDIX A

JUNE 6, 2013 GROUNDWATER SAMPLING ANALYTICAL REPORT

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

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

TestAmerica Job ID: 560-40563-1
TestAmerica Sample Delivery Group: June 2013
Client Project/Site: Lat 0-21

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

Attn: Mr. Daniel Wade

Authorized for release by:
6/19/2013 7:35:57 PM

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

Glossary

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

Case Narrative

Client: MWH Americas Inc
Project/Site: Lat 0-21

TestAmerica Job ID: 560-40563-1
SDG: June 2013

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Laboratory: TestAmerica Corpus Christi

Narrative

Receipt

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

Client: MWH Americas Inc
Project/Site: Lat 0-21

TestAmerica Job ID: 560-40563-1
SDG: June 2013

Client Sample ID: MW-1
Date Collected: 06/09/13 12:15
Date Received: 06/12/13 10:00

Lab Sample ID: 560-40563-1
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00042		0.0030	0.00042	mg/L			06/17/13 19:41	3
Ethylbenzene	**0.069**		0.0030	0.00060	mg/L			06/17/13 19:41	3
Toluene	<0.00090		0.0030	0.00090	mg/L			06/17/13 19:41	3
Xylenes, Total	**1.0**		0.0090	0.00068	mg/L			06/17/13 19:41	3

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*123*		*70 - 130*		*06/17/13 19:41*	*3*
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*		*06/17/13 19:41*	*3*
Dibromofluoromethane (Surr)	*108*		*70 - 130*		*06/17/13 19:41*	*3*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 130*		*06/17/13 19:41*	*3*

Client: MWH Americas Inc
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TestAmerica Job ID: 560-40563-1
SDG: June 2013

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

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

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

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

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

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

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

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

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

Lab Chronicle

Client: MWH Americas Inc
Project/Site: Lat 0-21

TestAmerica Job ID: 560-40563-1
SDG: June 2013

Client Sample ID: MW-1
Date Collected: 06/09/13 12:15
Date Received: 06/12/13 10:00

Lab Sample ID: 560-40563-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		3	89169	06/17/13 19:41	RT	TAL CC

Laboratory References:

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

Certification Summary

Client: MWH Americas Inc
Project/Site: Lat 0-21

TestAmerica Job ID: 560-40563-1
SDG: June 2013

Laboratory: TestAmerica Corpus Christi

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

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

Method Summary

Client: MWH Americas Inc
Project/Site: Lat 0-21

TestAmerica Job ID: 560-40563-1
SDG: June 2013

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

Protocol References:

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

Laboratory References:

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

Sample Summary

Client: MWH Americas Inc
Project/Site: Lat 0-21

TestAmerica Job ID: 560-40563-1
SDG: June 2013

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
560-40563-1	MW-1	Water	06/09/13 12:15	06/12/13 10:00

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

No. 40563

C ORT

Loc: 560

40563

560-40563 Chain of Custody

CUSTOMER INFORMATION	PROJECT INFORMATION
COMPANY: MWH	PROJECT NAME/NUMBER: Lat 0-21
SEND REPORT TO: Daniel Wade	BILLING INFORMATION
ADDRESS: 1801 California St. Suite 2900 Denver, CO	BILL TO: Kinder Morgan ADDRESS: Houston, TX
PHONE: 303-291-2250	PHONE:
FAX:	FAX: PO NO:

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

SAMPLE NO.	SAMPLE DESCRIPTION	SAMPLE DATE	SAMPLE TIME	SAMPLE MATRIX	CONTAINER	PRESERV.	NUMBER OF CONTA	8260							REMARKS/PRECAUTIONS.
	mw-1	6/9/13	1215	GW	VOA	HCL	3	X							

SAMPLER: Daniel Wade

SHIPMENT METHOD: FedEx

AIRBILL NO.: 7957 8855 3894

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

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

TAL-8222-560 (0412)

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

Login Sample Receipt Checklist

Client: MWH Americas Inc

Job Number: 560-40563-1
SDG Number: June 2013

Login Number: 40563
List Number: 1
Creator: McDermott, Vivian

List Source: TestAmerica Corpus Christi

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