

2017 ANNUAL GROUNDWATER REPORT

Lateral L-40 Line Drip
NMOCD CASE#: 3RP-212-0
Meter Code: LD174
T28N, R4W, Sec13, Unit H

SITE DETAILS

Site Location: Latitude: 36.659672 N, Longitude: -107.194520 W
Land Type: Federal
Operator: Enterprise

SITE BACKGROUND

Environmental Remediation activities at the Lateral L-40 Line Drip (Site) are 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 (NMOCD) in correspondence dated November 30, 1995; and the NMOCD approval conditions were adopted into El Paso CGP Company (EPCPG) program methods. Currently, the Site is operated by Enterprise and is not active.

The Site is located on Federal land. An initial site assessment was completed in January 1995, and an excavation to approximately 12 feet below ground surface (bgs) was completed in January of 1995, removing approximately 60 cubic yards (cy) of soil. Various site investigations have occurred since 1995. A monitoring well was installed in 1995 (MW-1), two soil borings were advanced in 1999, and one additional soil boring (SB-1) and additional monitoring wells were installed in 2016 (MW-2, MW-3, MW-4, MW-5). Historically, free product has been observed and recovered at the Site. Free product was not observed in 2017. Currently, groundwater sampling is conducted on a semi-annual basis.

SUMMARY OF 2017 ACTIVITIES

Pursuant to the Remediation Plan, Stantec provided field work notifications via email to the NMOCD on May 30, 2017, and November 6, 2017, prior to initiating groundwater sampling activities at the Site. Copies of the 2017 NMOCD notifications are provided in Appendix A. On June 11, 2017 and November 11, 2017, water levels were gauged at MW-1, through MW-5. Groundwater samples were collected from each well using HydraSleeve™ (HydraSleeve) no-purge groundwater sampling devices. The HydraSleeves were set during the previous sampling event. HydraSleeves were suspended 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). As requested by the NMOCD on November 13, 2017, BTEX constituents were analyzed using United States Environmental Protection Agency (EPA)

2017 ANNUAL GROUNDWATER REPORT

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Method 8260 during the November sampling event. The unused sample water was combined in a waste container and taken to Basin Disposal, Inc. for disposal. Waste disposal documentation is included as Appendix B.

SUMMARY TABLES

Historic groundwater analytical results and well gauging data are summarized in Tables 1 and 2, respectively.

SITE MAPS

Groundwater analytical maps (Figures 1 and 3) and groundwater elevation contour maps (Figures 2 and 4) summarize results of the 2017 groundwater sampling and gauging events.

ANALYTICAL LAB REPORTS

The groundwater analytical lab reports are included as Appendix C.

GROUNDWATER RESULTS

- Groundwater elevations indicate a general flow direction to the south (see Figures 2 and 4).
- Groundwater samples collected from all Site monitoring wells sampled in 2017 exceeded the New Mexico Water Quality Control Commission (NMWQCC) standard (10 micrograms per liter [$\mu\text{g/L}$]) for benzene in groundwater.
- Concentrations of toluene were either below the NMWQCC standard (750 $\mu\text{g/L}$) or not detected in all of the Site monitoring wells sampled in 2017.
- Concentrations of ethylbenzene were either below the NMWQCC standard (750 $\mu\text{g/L}$) or not detected in all of the Site monitoring wells sampled in 2017.
- Groundwater samples collected in 2017 from MW-1 and MW-5 exceeded the NMWQCC standard (620 $\mu\text{g/L}$) for total xylenes in groundwater. Total Xylenes were either below the NMWQCC standard or not detected in monitoring wells MW-2, MW-3, and MW-4.

2017 ANNUAL GROUNDWATER REPORT

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PLANNED FUTURE ACTIVITIES

Groundwater monitoring events will continue to be conducted on a semi-annual basis. Groundwater samples will be collected from monitoring wells not containing free product and analyzed for BTEX constituents using EPA Method 8260.

Five additional monitoring wells are planned for installation in 2018 to better define the extent of hydrocarbons in groundwater. A work plan to complete the monitoring well installation activities will be submitted under separate cover for NMOCD approval.

The activities completed in 2018 and their results will be summarized in the 2018 Annual Report, completed for submittal in early 2019.

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TABLES

TABLE 1 – GROUNDWATER ANALYTICAL RESULTS

TABLE 2 – GROUNDWATER ELEVATION RESULTS

TABLE 1 - GROUNDWATER ANALYTICAL RESULTS

Lat. L-40 Line Drip					
Location	Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)
NMWQCC Standards:		10	750	750	620
MW-1	09/26/95	121	218	7.4	75.1
MW-1	11/11/96	12000	20400	612	6075
MW-1	03/31/97	11100	24700	702	7440
MW-1	05/09/97	12900	22900	761	7730
MW-1	11/06/00	8.2	<0.5	15	6.9
MW-1	04/17/08	396	<50	484	2770
MW-1	04/08/09	387	7.9 J	466	2680
MW-1	06/03/10	272	<50	384	2240
MW-1	05/03/11	115	4.8	430	2160
MW-1	05/09/12	302	10.2	404	1830
MW-1	06/09/13	150	13	330	2800
MW-1	09/11/13	160	330	15 J	2600
MW-1	12/14/13	160	15	320	2500
MW-1	04/06/14	150	30 J	400	2900
MW-1	10/26/14	120	9.9 J	350	2000
MW-1	06/01/15	83	12 J	250	1500
MW-1	11/23/15	150	<100	360	2100
MW-1	04/19/16	100	<25	300	1900
MW-1	10/16/16	180	<50	410	2500
MW-1	06/11/17	120	<50	350	2000
MW-1	11/11/17	120	<10	370	2000
MW-2	10/16/16	180	430	17	150
MW-2	06/11/17	2300	21	11	180
MW-2	11/11/17	1900	230	13	280
MW-3	10/16/16	3.4	<5.0	<1.0	<5.0
MW-3	06/11/17	130	<5.0	<1.0	<5.0
MW-3	11/11/17	170	<1.0	<1.0	<10
MW-4	10/16/16	8.7	15	<1.0	6.1
MW-4	06/11/17	47	6.8	<1.0	<5.0
MW-4	11/11/17	26	<1.0	<1.0	<10

TABLE 1 - GROUNDWATER ANALYTICAL RESULTS

Lat. L-40 Line Drip					
Location	Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)
NMWQCC Standards:		10	750	750	620
MW-5	10/16/16	750	3000	190	1600
MW-5	06/11/17	2000	230	75	710
MW-5	11/11/17	1100	550	85	820

Notes:

The groundwater monitoring dates for each monitoring well where no groundwater samples were collected and analyzed have been omitted.

"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 is an approximate value.

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

TABLE 2 GROUNDWATER ELEVATION TABLE

Lat. L-40 Line Drip						
Location	Date	TOC	Depth to Water (ft.)	Depth to LNAPL (ft.)	LNAPL Thickness (ft.)	GW Elevation (ft.)
MW-1	09/26/95	7259.57	36.68	NR		7222.89
MW-1	11/11/96	7259.57	36.62	36.16	0.46	7223.30
MW-1	03/31/97	7259.57	36.68	36.18	0.50	7223.27
MW-1	05/09/97	7259.57	36.57	36.45	0.12	7223.09
MW-1	11/06/00	7259.57	35.06	NR		7224.51
MW-1	01/02/01	7259.57	39.08	37.95	1.13	7221.34
MW-1	06/08/01	7259.57	39.00	37.89	1.11	7221.40
MW-1	07/02/01	7259.57	39.14	37.93	1.21	7221.34
MW-1	08/03/01	7259.57	39.10	37.83	1.27	7221.42
MW-1	09/12/01	7259.57	38.96	38.02	0.94	7221.32
MW-1	10/12/01	7259.57	38.43	38.19	0.24	7221.32
MW-1	12/13/01	7259.57	38.75	38.40	0.35	7221.08
MW-1	03/12/02	7259.57	38.76	38.42	0.34	7221.07
MW-1	04/03/02	7259.57	38.66	38.39	0.27	7221.11
MW-1	05/20/02	7259.57	38.56	38.46	0.10	7221.09
MW-1	06/10/02	7259.57	38.56	38.51	0.05	7221.05
MW-1	07/19/02	7259.57	38.64	NR		7220.93
MW-1	10/11/02	7259.57	38.87	38.84	0.03	7220.72
MW-1	05/06/03	7259.57	37.97	37.94	0.03	7221.62
MW-1	07/17/03	7259.57	38.95	ND		7220.62
MW-1	10/13/03	7259.57	39.06	ND		7220.51
MW-1	04/20/04	7259.57	39.18	ND		7220.39
MW-1	07/27/04	7259.57	39.22	ND		7220.35
MW-1	10/26/04	7259.57	39.35	ND		7220.22
MW-1	04/22/05	7259.57	39.52	ND		7220.05
MW-1	07/19/05	7259.57	39.34	ND		7220.23
MW-1	10/21/05	7259.57	39.57	ND		7220.00
MW-1	01/24/06	7259.57	38.67	ND		7220.90
MW-1	05/10/06	7259.57	38.72	ND		7220.85
MW-1	07/26/06	7259.57	38.72	ND		7220.85
MW-1	10/22/06	7259.57	38.91	ND		7220.66
MW-1	04/29/07	7259.57	38.92	ND		7220.65
MW-1	07/31/07	7259.57	38.85	ND		7220.72
MW-1	10/30/07	7259.57	38.79	ND		7220.78
MW-1	04/17/08	7259.57	38.98	ND		7220.59
MW-1	07/23/08	7259.57	38.99	ND		7220.58
MW-1	10/09/08	7259.57	38.95	ND		7220.62
MW-1	04/08/09	7259.57	39.04	ND		7220.53
MW-1	06/03/10	7259.57	39.40	ND		7220.17
MW-1	09/24/10	7259.57	39.45	ND		7220.12
MW-1	11/02/10	7259.57	39.47	ND		7220.10

TABLE 2 GROUNDWATER ELEVATION TABLE

Lat. L-40 Line Drip						
Location	Date	TOC	Depth to Water (ft.)	Depth to LNAPL (ft.)	LNAPL Thickness (ft.)	GW Elevation (ft.)
MW-1	05/03/11	7259.57	39.55	ND		7220.02
MW-1	09/28/11	7259.57	39.63	ND		7219.94
MW-1	11/02/11	7259.57	39.73	ND		7219.84
MW-1	05/09/12	7259.57	39.73	ND		7219.84
MW-1	06/09/13	7259.57	37.97	ND		7221.60
MW-1	09/11/13	7259.57	38.86	ND		7220.71
MW-1	12/14/13	7259.57	40.09	ND		7219.48
MW-1	04/06/14	7259.57	40.09	ND		7219.48
MW-1	10/26/14	7259.57	40.22	ND		7219.35
MW-1	06/01/15	7259.57	46.45	ND		7213.12
MW-1	11/23/15	7259.57	42.13	ND		7217.44
MW-1	04/19/16	7259.57	40.59	ND		7218.98
MW-1	10/16/16	7259.57	40.71	ND		7218.86
MW-1	06/11/17	7259.57	40.73	ND		7218.84
MW-1	11/11/17	7259.57	40.85	ND		7218.72
MW-2	10/16/16	7259.65	40.65	ND		7219.00
MW-2	06/11/17	7259.65	40.71	ND		7218.94
MW-2	11/11/17	7259.65	40.81	ND		7218.84
MW-3	10/16/16	7259.10	40.21	ND		7218.89
MW-3	06/11/17	7259.10	40.29	ND		7218.81
MW-3	11/11/17	7259.10	40.36	ND		7218.74
MW-4	10/16/16	7261.59	42.80	ND		7218.79
MW-4	06/11/17	7261.59	42.69	ND		7218.90
MW-4	11/11/17	7261.59	42.77	ND		7218.82
MW-5	10/16/16	7260.08	41.23	ND		7218.85
MW-5	06/11/17	7260.08	41.33	ND		7218.75
MW-5	11/11/17	7260.08	41.40	ND		7218.68

Notes:

"ft" = feet

"TOC" = Top of casing

"LNAPL" = Light non-aqueous phase liquid

"ND" = LNAPL not detected

"NR" = LNAPL not recorded

FIGURES

FIGURE 1: JUNE 11, 2017 GROUNDWATER ANALYTICAL RESULTS MAP

FIGURE 2: JUNE 11, 2017 GROUNDWATER ELEVATION MAP

FIGURE 3: NOVEMBER 11, 2017 GROUNDWATER ANALYTICAL RESULTS
MAP

FIGURE 4: NOVEMBER 11, 2017 GROUNDWATER ELEVATION MAP









APPENDICES

APPENDIX A – NOTIFICATIONS OF GROUNDWATER SAMPLING ACTIVITIES

APPENDIX B – WASTE DISPOSAL DOCUMENTATION

APPENDIX C – JUNE 11, 2017 GROUNDWATER SAMPLING ANALYTICAL REPORT
NOVEMBER 11, 2017 GROUNDWATER SAMPLING ANALYTICAL
REPORT

APPENDIX A

From: [Varsa, Steve](#)
To: Randolph.Bayliss@state.nm.us
Cc: brandon.powell@state.nm.us; [Wiley, Joe](#)
Subject: El Paso CGP Company - Notice of upcoming groundwater sampling activities
Date: Tuesday, May 30, 2017 3:05:18 PM

Hi Randy –

This correspondence is to provide notice to the NMOCD of upcoming semi-annual groundwater sampling and monitoring activities at the following project sites:

Site Name	NMOCD Case #
Canada Mesa #2	3RP-155-0
Fields A#7A	3RP-170-0
Fogelson 4-1	3RP-068-0
Gallegos Canyon Unit #124E	3RP-407-0
GCU Com A #142E	3RP-179-0
Hammond #41A	3RP-186-0
James F. Bell #1E	3RP-196-0
Johnston Fed #4	3RP-201-0
Johnston Fed #6A	3RP-202-0
K27 LDO72	3RP-204-0
Knight #1	3RP-207-0
Lateral L 40 Line Drip	3RP-212-0
Lat O-21 Line Drip	3RP-213-0
Lindrith B #24	3RP-214-0
Miles Fed #1A	3RP-223-0
Sandoval GC A #1A	3RP-235-0
Standard Oil Com #1	3RP-238-0
State Gas Com N #1	3RP-239-0

Groundwater sampling and monitoring is planned to be conducted the week of June 5, 2017.

Thank you,
Steve

Stephen Varsa, P.G.
Supervising Hydrogeologist
MWH, now part of Stantec
11153 Aurora Avenue
Des Moines, Iowa 50322
Direct: (515) 251-1020
Cell: (515) 710-7523

Office: (515) 253-0830
steve.varsa@stantec.com



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From: [Varsa, Steve](#)
To: [Bayliss, Randolph, EMNRD](#)
Cc: [Smith, Cory, EMNRD](#); [Fields, Vanessa, EMNRD](#); [Wiley, Joe](#)
Subject: El Paso CGP Company - Notice of upcoming groundwater sampling activities
Date: Monday, November 06, 2017 11:41:36 AM

Hi Randy –

This correspondence is to provide notice to the NMOCD of upcoming semiannual groundwater sampling and monitoring activities at the following project sites:

Site Name	NMOCD Case #
Canada Mesa #2	3RP-155-0
Fields A#7A	3RP-170-0
Fogelson 4-1	3RP-068-0
Gallegos Canyon Unit #124E	3RP-407-0
GCU Com A #142E	3RP-179-0
James F. Bell #1E	3RP-196-0
Johnston Fed #4	3RP-201-0
Johnston Fed #6A	3RP-202-0
K27 LDO72	3RP-204-0
Knight #1	3RP-207-0
Lateral L 40 Line Drip	3RP-212-0
Lat O-21 Line Drip	3RP-213-0
Miles Fed #1A	3RP-223-0
Sandoval GC A #1A	3RP-235-0
Standard Oil Com #1	3RP-238-0
State Gas Com N #1	3RP-239-0

Groundwater sampling and monitoring is planned to be conducted November 10-14, 2017.

Please contact Joe Wiley, remediation manager with El Paso CGP Company, at (713) 420-3475, or me, if you have any questions.

Thank you,
Steve

Stephen Varsa, P.G.

Supervising Hydrogeologist
MWH, now part of Stantec
11153 Aurora Avenue
Des Moines, Iowa 50322
Direct: (515) 251-1020
Cell: (515) 710-7523
Office: (515) 253-0830
steve.varsa@stantec.com



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APPENDIX B

BASIN DISPOSAL

30 Years of Environmental Health and Safety Excellence

200 Montana, Bloomfield, NM 87413

505-632-8936 or 505-334-3013

OPEN 24 Hours per Day

688185

NO.

NMOC D PERMIT: NM -001-0005

Oil Field Waste Document, Form C138

INVOICE:

DATE 6/11/17

GENERATOR: El Paso CGP

HAULING CO. Stanton-Starter

ORDERED BY: Joseph Wiley

DEL. TKT#.

BILL TO: El Paso CGP

DRIVER:

(Print Full Name)

CODES:

WASTE DESCRIPTION: ☒ Exempt Oilfield Waste

☐ Produced Water

☐ Drilling/Completion Fluids

☐ Reserve Pit

STATE: ☐ NM ☐ CO ☐ AZ ☐ UT

TREATMENT/DISPOSAL METHODS: ☒ EVAPORATION ☒ INJECTION ☒ TREATING PLANT

NO.	TRUCK	LOCATION(S)	VOLUME	COST	H2S	COST	TOTAL	TIME
1		Fogelson 4-1, Gallegos CU 124E	50 BB1					
2		GCUCOMA 142E Johnson Fed 4						
3		Johnston Lateral L-40 Fed 6A Lato-21 line						
4		Sandoval GC standard A#1A oil com 1						
5								

I, Samuel J. Wiley representative or authorized agent for the above generator and hauler hereby certify that according to the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988 regulatory determination that the above described waste is RCRA Exempt Oil field wastes.

☒ Approved

☐ Denied

ATTENDANT SIGNATURE

Samuel J. Wiley

BASIN DISPOSAL

30 Years of Environmental Health and Safety Excellence

200 Montana, Bloomfield, NM 87413

505-632-8936 or 505-334-3013

OPEN 24 Hours per Day

NO. **699930**

NMOCD PERMIT: NM -001-0005

Oil Field Waste Document, Form C138

INVOICE:

DATE

11.12.17

GENERATOR:

El Paso

HAULING CO.

Stantec

ORDERED BY:

Joe Wiley

DEL. TKT#.

BILL TO:

Stantec

DRIVER:

Sam Spiering

(Print Full Name)

CODES:

WASTE DESCRIPTION: ☒ Exempt Oilfield Waste

☐ Produced Water

☒ Drilling/Completion Fluids

☐ Reserve Pit

STATE: ☒ NM ☐ CO ☐ AZ ☐ UT

TREATMENT/DISPOSAL METHODS: ☒ EVAPORATION ☒ INJECTION ☒ TREATING PLANT

NO.	TRUCK	LOCATION(S)	VOLUME	COST	H2S	COST	TOTAL	TIME
1		Fogelson 4-1	1	704			1770012	1:45 PM
2		State Gas Con, Knight, JF Bell Lot L-40, 5th Oil Con						
3		Sandoval, GCU124E, J-Fed 4 J-Fed 6						
4								
5								

I, [Signature] representative or authorized agent for the above generator and hauler hereby certify that according to the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988 regulatory determination that the above described waste is RCRA Exempt Oil field wastes.

☒ Approved

☐ Denied

ATTENDANT SIGNATURE

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APPENDIX C

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

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

TestAmerica Job ID: 400-139217-1

Client Project/Site: ElPaso CGP Company, LLC - Lat L-40

For:

Stantec Consulting Services Inc
1560 Broadway
Suite 1800
Denver, Colorado 80202

Attn: Ms. Sarah Gardner

Madonna Myers

Authorized for release by:

6/22/2017 10:59:59 AM

Madonna Myers, Project Manager II
(615)796-1870

madonna.myers@testamericainc.com

Designee for

Carol Webb, Project Manager II
(850)471-6250

carol.webb@testamericainc.com

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

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

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

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	13
QC Sample Results	14
Chronicle	16
Certification Summary	18
Method Summary	19
Chain of Custody	20
Receipt Checklists	21



Definitions/Glossary

Client: Stantec Consulting Services Inc
Project/Site: EIPaso CGP Company, LLC - Lat L-40

TestAmerica Job ID: 400-139217-1

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	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
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 (Radiochemistry)
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: Stantec Consulting Services Inc
Project/Site: ElPaso CGP Company, LLC - Lat L-40

TestAmerica Job ID: 400-139217-1

Job ID: 400-139217-1

Laboratory: TestAmerica Pensacola

Narrative

Job Narrative
400-139217-1

Comments

No additional comments.

Receipt

The samples were received on 6/13/2017 8:53 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.5° C.

GC VOA

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

VOA Prep

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

Detection Summary

Client: Stantec Consulting Services Inc
Project/Site: EIPaso CGP Company, LLC - Lat L-40

TestAmerica Job ID: 400-139217-1

Client Sample ID: MW-1

Lab Sample ID: 400-139217-1

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Benzene	120		10	ug/L	10		8021B	Total/NA
Ethylbenzene	350		10	ug/L	10		8021B	Total/NA
Xylenes, Total	2000		50	ug/L	10		8021B	Total/NA

Client Sample ID: MW-2

Lab Sample ID: 400-139217-2

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Benzene	2300		20	ug/L	20		8021B	Total/NA
Ethylbenzene	11		2.0	ug/L	2		8021B	Total/NA
Toluene	21		10	ug/L	2		8021B	Total/NA
Xylenes, Total	180		10	ug/L	2		8021B	Total/NA

Client Sample ID: MW-3

Lab Sample ID: 400-139217-3

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Benzene	130		1.0	ug/L	1		8021B	Total/NA

Client Sample ID: MW-4

Lab Sample ID: 400-139217-4

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Benzene	47		1.0	ug/L	1		8021B	Total/NA
Toluene	6.8		5.0	ug/L	1		8021B	Total/NA

Client Sample ID: MW-5

Lab Sample ID: 400-139217-5

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Benzene	2000		20	ug/L	20		8021B	Total/NA
Ethylbenzene	75		20	ug/L	20		8021B	Total/NA
Toluene	230		100	ug/L	20		8021B	Total/NA
Xylenes, Total	710		100	ug/L	20		8021B	Total/NA

Client Sample ID: TRIPBLANK

Lab Sample ID: 400-139217-6

No Detections.

This Detection Summary does not include radiochemical test results.

TestAmerica Pensacola

Sample Summary

Client: Stantec Consulting Services Inc
Project/Site: ElPaso CGP Company, LLC - Lat L-40

TestAmerica Job ID: 400-139217-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-139217-1	MW-1	Water	06/11/17 09:20	06/13/17 08:53
400-139217-2	MW-2	Water	06/11/17 09:10	06/13/17 08:53
400-139217-3	MW-3	Water	06/11/17 08:50	06/13/17 08:53
400-139217-4	MW-4	Water	06/11/17 09:00	06/13/17 08:53
400-139217-5	MW-5	Water	06/11/17 09:30	06/13/17 08:53
400-139217-6	TRIPBLANK	Water	06/11/17 08:40	06/13/17 08:53

Client Sample Results

Client: Stantec Consulting Services Inc
Project/Site: EIPaso CGP Company, LLC - Lat L-40

TestAmerica Job ID: 400-139217-1

Client Sample ID: MW-1

Lab Sample ID: 400-139217-1

Date Collected: 06/11/17 09:20

Matrix: Water

Date Received: 06/13/17 08:53

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	120		10	ug/L			06/17/17 02:36	10
Ethylbenzene	350		10	ug/L			06/17/17 02:36	10
Toluene	<50		50	ug/L			06/17/17 02:36	10
Xylenes, Total	2000		50	ug/L			06/17/17 02:36	10
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (pid)	95		78 - 124				06/17/17 02:36	10

Client Sample Results

Client: Stantec Consulting Services Inc
Project/Site: EIPaso CGP Company, LLC - Lat L-40

TestAmerica Job ID: 400-139217-1

Client Sample ID: MW-2

Lab Sample ID: 400-139217-2

Date Collected: 06/11/17 09:10

Matrix: Water

Date Received: 06/13/17 08:53

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	2300		20	ug/L			06/19/17 22:27	20
Ethylbenzene	11		2.0	ug/L			06/17/17 03:11	2
Toluene	21		10	ug/L			06/17/17 03:11	2
Xylenes, Total	180		10	ug/L			06/17/17 03:11	2
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (pid)	97		78 - 124				06/17/17 03:11	2

Client Sample Results

Client: Stantec Consulting Services Inc
Project/Site: EIPaso CGP Company, LLC - Lat L-40

TestAmerica Job ID: 400-139217-1

Client Sample ID: MW-3

Lab Sample ID: 400-139217-3

Date Collected: 06/11/17 08:50

Matrix: Water

Date Received: 06/13/17 08:53

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	130		1.0	ug/L			06/16/17 21:54	1
Ethylbenzene	<1.0		1.0	ug/L			06/16/17 21:54	1
Toluene	<5.0		5.0	ug/L			06/16/17 21:54	1
Xylenes, Total	<5.0		5.0	ug/L			06/16/17 21:54	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (pid)	103		78 - 124				06/16/17 21:54	1

Client Sample Results

Client: Stantec Consulting Services Inc
Project/Site: EIPaso CGP Company, LLC - Lat L-40

TestAmerica Job ID: 400-139217-1

Client Sample ID: MW-4

Lab Sample ID: 400-139217-4

Date Collected: 06/11/17 09:00

Matrix: Water

Date Received: 06/13/17 08:53

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	47		1.0	ug/L			06/16/17 22:30	1
Ethylbenzene	<1.0		1.0	ug/L			06/16/17 22:30	1
Toluene	6.8		5.0	ug/L			06/16/17 22:30	1
Xylenes, Total	<5.0		5.0	ug/L			06/16/17 22:30	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (pid)	101		78 - 124				06/16/17 22:30	1

Client Sample Results

Client: Stantec Consulting Services Inc
Project/Site: EIPaso CGP Company, LLC - Lat L-40

TestAmerica Job ID: 400-139217-1

Client Sample ID: MW-5

Lab Sample ID: 400-139217-5

Date Collected: 06/11/17 09:30

Matrix: Water

Date Received: 06/13/17 08:53

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	2000		20	ug/L			06/17/17 02:01	20
Ethylbenzene	75		20	ug/L			06/17/17 02:01	20
Toluene	230		100	ug/L			06/17/17 02:01	20
Xylenes, Total	710		100	ug/L			06/17/17 02:01	20
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (pid)	100		78 - 124				06/17/17 02:01	20

Client Sample Results

Client: Stantec Consulting Services Inc
Project/Site: EIPaso CGP Company, LLC - Lat L-40

TestAmerica Job ID: 400-139217-1

Client Sample ID: TRIPBLANK

Lab Sample ID: 400-139217-6

Date Collected: 06/11/17 08:40

Matrix: Water

Date Received: 06/13/17 08:53

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0	ug/L			06/17/17 00:51	1
Ethylbenzene	<1.0		1.0	ug/L			06/17/17 00:51	1
Toluene	<5.0		5.0	ug/L			06/17/17 00:51	1
Xylenes, Total	<5.0		5.0	ug/L			06/17/17 00:51	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (pid)	94		78 - 124				06/17/17 00:51	1

QC Association Summary

Client: Stantec Consulting Services Inc
Project/Site: EIPaso CGP Company, LLC - Lat L-40

TestAmerica Job ID: 400-139217-1

GC VOA

Analysis Batch: 357255

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-139217-1	MW-1	Total/NA	Water	8021B	
400-139217-2	MW-2	Total/NA	Water	8021B	
400-139217-3	MW-3	Total/NA	Water	8021B	
400-139217-4	MW-4	Total/NA	Water	8021B	
400-139217-5	MW-5	Total/NA	Water	8021B	
400-139217-6	TRIPBLANK	Total/NA	Water	8021B	
MB 400-357255/5	Method Blank	Total/NA	Water	8021B	
LCS 400-357255/1004	Lab Control Sample	Total/NA	Water	8021B	
400-139101-A-1 MS	Matrix Spike	Total/NA	Water	8021B	
400-139101-A-1 MSD	Matrix Spike Duplicate	Total/NA	Water	8021B	

Analysis Batch: 357549

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-139217-2	MW-2	Total/NA	Water	8021B	
MB 400-357549/4	Method Blank	Total/NA	Water	8021B	
LCS 400-357549/1003	Lab Control Sample	Total/NA	Water	8021B	
400-139224-A-3 MS	Matrix Spike	Total/NA	Water	8021B	
400-139224-A-3 MSD	Matrix Spike Duplicate	Total/NA	Water	8021B	

QC Sample Results

Client: Stantec Consulting Services Inc
Project/Site: EIPaso CGP Company, LLC - Lat L-40

TestAmerica Job ID: 400-139217-1

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 400-357255/5

Matrix: Water

Analysis Batch: 357255

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			06/16/17 17:14	1
Ethylbenzene	<1.0		1.0	ug/L			06/16/17 17:14	1
Toluene	<5.0		5.0	ug/L			06/16/17 17:14	1
Xylenes, Total	<5.0		5.0	ug/L			06/16/17 17:14	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (pid)	99		78 - 124		06/16/17 17:14	1

Lab Sample ID: LCS 400-357255/1004

Matrix: Water

Analysis Batch: 357255

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	48.5		ug/L		97	85 - 115
Ethylbenzene	50.0	50.5		ug/L		101	85 - 115
Toluene	50.0	50.1		ug/L		100	85 - 115
Xylenes, Total	150	151		ug/L		101	85 - 115

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

Lab Sample ID: 400-139101-A-1 MS

Matrix: Water

Analysis Batch: 357255

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	59.3		ug/L		119	44 - 150
Ethylbenzene	1.6		50.0	59.4		ug/L		116	70 - 142
Toluene	<5.0		50.0	63.5		ug/L		127	69 - 136
Xylenes, Total	25		150	203		ug/L		119	68 - 142

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

Lab Sample ID: 400-139101-A-1 MSD

Matrix: Water

Analysis Batch: 357255

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	59.9		ug/L		120	44 - 150	1	16
Ethylbenzene	1.6		50.0	60.9		ug/L		119	70 - 142	2	16
Toluene	<5.0		50.0	64.0		ug/L		128	69 - 136	1	16
Xylenes, Total	25		150	206		ug/L		121	68 - 142	1	15

Surrogate	MSD %Recovery	MSD Qualifier	Limits
a,a,a-Trifluorotoluene (pid)	102		78 - 124

TestAmerica Pensacola

QC Sample Results

Client: Stantec Consulting Services Inc
Project/Site: EIPaso CGP Company, LLC - Lat L-40

TestAmerica Job ID: 400-139217-1

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

Lab Sample ID: MB 400-357549/4

Matrix: Water

Analysis Batch: 357549

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			06/19/17 13:57	1
Ethylbenzene	<1.0		1.0	ug/L			06/19/17 13:57	1
Toluene	<5.0		5.0	ug/L			06/19/17 13:57	1
Xylenes, Total	<5.0		5.0	ug/L			06/19/17 13:57	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (pid)	106		78 - 124		06/19/17 13:57	1

Lab Sample ID: LCS 400-357549/1003

Matrix: Water

Analysis Batch: 357549

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	20.0	17.8		ug/L		89	85 - 115
Ethylbenzene	20.0	18.3		ug/L		92	85 - 115
Toluene	20.0	18.0		ug/L		90	85 - 115
Xylenes, Total	60.0	56.2		ug/L		94	85 - 115

Surrogate	LCS %Recovery	LCS Qualifier	Limits
a,a,a-Trifluorotoluene (pid)	104		78 - 124

Lab Sample ID: 400-139224-A-3 MS

Matrix: Water

Analysis Batch: 357549

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	2.2		50.0	62.4		ug/L		120	44 - 150
Ethylbenzene	<1.0		50.0	61.9		ug/L		124	70 - 142
Toluene	<5.0		50.0	60.4		ug/L		121	69 - 136
Xylenes, Total	<5.0		150	189		ug/L		126	68 - 142

Surrogate	MS %Recovery	MS Qualifier	Limits
a,a,a-Trifluorotoluene (pid)	108		78 - 124

Lab Sample ID: 400-139224-A-3 MSD

Matrix: Water

Analysis Batch: 357549

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	2.2		50.0	59.9		ug/L		116	44 - 150	4	16
Ethylbenzene	<1.0		50.0	59.6		ug/L		119	70 - 142	4	16
Toluene	<5.0		50.0	58.1		ug/L		116	69 - 136	4	16
Xylenes, Total	<5.0		150	182		ug/L		122	68 - 142	4	15

Surrogate	MSD %Recovery	MSD Qualifier	Limits
a,a,a-Trifluorotoluene (pid)	108		78 - 124

TestAmerica Pensacola

Lab Chronicle

Client: Stantec Consulting Services Inc
Project/Site: EIPaso CGP Company, LLC - Lat L-40

TestAmerica Job ID: 400-139217-1

Client Sample ID: MW-1

Date Collected: 06/11/17 09:20

Date Received: 06/13/17 08:53

Lab Sample ID: 400-139217-1

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		10	5 mL	5 mL	357255	06/17/17 02:36	CMW	TAL PEN
Instrument ID: CH_JOAN										

Client Sample ID: MW-2

Date Collected: 06/11/17 09:10

Date Received: 06/13/17 08:53

Lab Sample ID: 400-139217-2

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		2	5 mL	5 mL	357255	06/17/17 03:11	CMW	TAL PEN
Instrument ID: CH_JOAN										
Total/NA	Analysis	8021B		20	5 mL	5 mL	357549	06/19/17 22:27	CMW	TAL PEN
Instrument ID: CH_PAULA										

Client Sample ID: MW-3

Date Collected: 06/11/17 08:50

Date Received: 06/13/17 08:53

Lab Sample ID: 400-139217-3

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	357255	06/16/17 21:54	CMW	TAL PEN
Instrument ID: CH_JOAN										

Client Sample ID: MW-4

Date Collected: 06/11/17 09:00

Date Received: 06/13/17 08:53

Lab Sample ID: 400-139217-4

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	357255	06/16/17 22:30	CMW	TAL PEN
Instrument ID: CH_JOAN										

Client Sample ID: MW-5

Date Collected: 06/11/17 09:30

Date Received: 06/13/17 08:53

Lab Sample ID: 400-139217-5

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		20	5 mL	5 mL	357255	06/17/17 02:01	CMW	TAL PEN
Instrument ID: CH_JOAN										

Lab Chronicle

Client: Stantec Consulting Services Inc
Project/Site: EIPaso CGP Company, LLC - Lat L-40

TestAmerica Job ID: 400-139217-1

Client Sample ID: TRIPBLANK

Date Collected: 06/11/17 08:40

Date Received: 06/13/17 08:53

Lab Sample ID: 400-139217-6

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	357255	06/17/17 00:51	CMW	TAL PEN
Instrument ID: CH_JOAN										

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

Accreditation/Certification Summary

Client: Stantec Consulting Services Inc
Project/Site: EIPaso CGP Company, LLC - Lat L-40

TestAmerica Job ID: 400-139217-1

Laboratory: TestAmerica Pensacola

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

Authority	Program	EPA Region	Identification Number	Expiration Date
Alabama	State Program	4	40150	06-30-18
Arizona	State Program	9	AZ0710	01-11-18
Arkansas DEQ	State Program	6	88-0689	09-01-17
California	ELAP	9	2510	03-31-18
Florida	NELAP	4	E81010	06-30-18
Georgia	State Program	4	N/A	06-30-17
Illinois	NELAP	5	200041	10-09-17
Iowa	State Program	7	367	08-01-18
Kansas	NELAP	7	E-10253	10-31-17
Kentucky (UST)	State Program	4	53	06-30-17
Kentucky (WW)	State Program	4	98030	12-31-17
L-A-B	ISO/IEC 17025		L2471	02-22-20
Louisiana	NELAP	6	30976	06-30-18
Louisiana (DW)	NELAP	6	LA170005	12-31-17
Maryland	State Program	3	233	09-30-17
Massachusetts	State Program	1	M-FL094	06-30-17
Michigan	State Program	5	9912	06-30-17
New Jersey	NELAP	2	FL006	06-30-17
North Carolina (WW/SW)	State Program	4	314	12-31-17
Oklahoma	State Program	6	9810	08-31-17
Pennsylvania	NELAP	3	68-00467	01-31-18
Rhode Island	State Program	1	LAO00307	12-30-17
South Carolina	State Program	4	96026	06-30-17
Tennessee	State Program	4	TN02907	06-30-17
Texas	NELAP	6	T104704286-16-10	09-30-17
USDA	Federal		P330-16-00172	05-24-19
Virginia	NELAP	3	460166	06-14-18
Washington	State Program	10	C915	05-15-18
West Virginia DEP	State Program	3	136	06-30-17

Method Summary

Client: Stantec Consulting Services Inc
Project/Site: ElPaso CGP Company, LLC - Lat L-40

TestAmerica Job ID: 400-139217-1

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

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

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information Client Contact: Ms. Sarah Gardner Company: Stantec Consulting Services Inc Address: 1560 Broadway Suite 1800 City: Denver State, Zip: CO, 80202 Phone: 303-291-2239 (Tel) Email: sarah.gardner@mwglobal.com Project Name: Lat L 40 Site: Lat L 40		Sampler: S. Gardner & Justin Garver Lab PM: Webb, Carol M Phone: 303 291 2239 E-Mail: carol.webb@testamerica.com		COC No: 400-65867-26942.1 Carrier Tracking No(s): Page: Page 1 of 1 Job #:	
Due Date Requested: TAT Requested (days): PO #: Standard Purchase Order Requested WO #: Project #: 40005479 SSOW#:		Analysis Requested			
Sample Identification MW-1 MW-2 MW-3 MW-4 MW-5 TRIP BLANK		Sample Date 6/11/2017 6/11/2017 6/11/2017 6/11/2017 6/11/2017 6/11/2017	Sample Time 920 910 850 900 930 840	Sample Type (C=Comp, G=grab) G G G G G -	Matrix (W=water, S=solid, O=wastewater, BI=tissue, A=air) W W W W W W
Field Filtered Sample (Yes or No) 8021B - BTEX 8021		Field Filtered Sample (Yes or No) 8021B - BTEX 8021		Total Number of Containers 2 2 2 2 2	
Preservation Codes: A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Amchlor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA Other:		Preservation Codes: M - Hexane N - None O - AsNaO2 P - Na2OAS Q - Na2SO3 R - Na2S2O3 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4-5 X - EDTA Z - other (specify)		Special Instructions/Note:	
Possible Hazard Identification ☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological Deliverable Requested: I, II, III, IV, Other (specify)					
Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) ☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months					
Special Instructions/QC Requirements:					
Empty Kit Relinquished by:		Date:		Method of Shipment:	
Relinquished by: <i>Sarah Gardner</i>		Date/Time: 6/12/2017 800		Company: Stanrec	
Relinquished by:		Date/Time:		Company:	
Relinquished by:		Date/Time:		Company:	
Custody Seals Intact: Δ Yes Δ No		Custody Seal No.:		Cooler Temperature: 3.5 °C Other Remarks:	

Login Sample Receipt Checklist

Client: Stantec Consulting Services Inc

Job Number: 400-139217-1

Login Number: 139217

List Source: TestAmerica Pensacola

List Number: 1

Creator: Franklin, Justin H

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	3.5°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 (excluding tests with immediate HTs)	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	

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

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

TestAmerica Job ID: 400-145964-1

Client Project/Site: EL Paso CGP Company - Lat L 40

For:

Stantec Consulting Services Inc
1560 Broadway
Suite 1800
Denver, Colorado 80202

Attn: Ms. Sarah Gardner

Madonna Myers

Authorized for release by:

11/20/2017 12:04:49 PM

Madonna Myers, Project Manager II
(615)796-1870

madonna.myers@testamericainc.com

Designee for

Carol Webb, Project Manager II
(850)471-6250

carol.webb@testamericainc.com

LINKS

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results through

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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	13
QC Sample Results	14
Chronicle	17
Certification Summary	19
Method Summary	20
Chain of Custody	21
Receipt Checklists	22



Definitions/Glossary

Client: Stantec Consulting Services Inc
Project/Site: EL Paso CGP Company - Lat L 40

TestAmerica Job ID: 400-145964-1

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	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
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 (Radiochemistry)
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: Stantec Consulting Services Inc
Project/Site: EL Paso CGP Company - Lat L 40

TestAmerica Job ID: 400-145964-1

Job ID: 400-145964-1

Laboratory: TestAmerica Pensacola

Narrative

Job Narrative
400-145964-1

Comments

No additional comments.

Receipt

The samples were received on 11/14/2017 9:01 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 1.9° C.

Receipt Exceptions

The Chain-of-Custody (COC) was incomplete as received and/or improperly completed. Per client instructions, method 8260 was used in place of method 8021.

GC/MS VOA

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

VOA Prep

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

Detection Summary

Client: Stantec Consulting Services Inc
Project/Site: EL Paso CGP Company - Lat L 40

TestAmerica Job ID: 400-145964-1

Client Sample ID: TRIP BLANK

Lab Sample ID: 400-145964-1

No Detections.

Client Sample ID: MW-1

Lab Sample ID: 400-145964-2

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Benzene	120		10	ug/L	10		8260C	Total/NA
Ethylbenzene	370		10	ug/L	10		8260C	Total/NA
Xylenes, Total	2000		100	ug/L	10		8260C	Total/NA

Client Sample ID: MW-2

Lab Sample ID: 400-145964-3

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Toluene	230		1.0	ug/L	1		8260C	Total/NA
Ethylbenzene	13		1.0	ug/L	1		8260C	Total/NA
Xylenes, Total	280		10	ug/L	1		8260C	Total/NA
Benzene - DL	1900		10	ug/L	10		8260C	Total/NA

Client Sample ID: MW-3

Lab Sample ID: 400-145964-4

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Benzene	170		1.0	ug/L	1		8260C	Total/NA

Client Sample ID: MW-4

Lab Sample ID: 400-145964-5

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Benzene	26		1.0	ug/L	1		8260C	Total/NA

Client Sample ID: MW-5

Lab Sample ID: 400-145964-6

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Benzene	1100		10	ug/L	10		8260C	Total/NA
Toluene	550		10	ug/L	10		8260C	Total/NA
Ethylbenzene	85		10	ug/L	10		8260C	Total/NA
Xylenes, Total	820		100	ug/L	10		8260C	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Pensacola

Sample Summary

Client: Stantec Consulting Services Inc
Project/Site: EL Paso CGP Company - Lat L 40

TestAmerica Job ID: 400-145964-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-145964-1	TRIP BLANK	Water	11/11/17 09:00	11/14/17 09:01
400-145964-2	MW-1	Water	11/11/17 09:24	11/14/17 09:01
400-145964-3	MW-2	Water	11/11/17 09:30	11/14/17 09:01
400-145964-4	MW-3	Water	11/11/17 09:12	11/14/17 09:01
400-145964-5	MW-4	Water	11/11/17 09:05	11/14/17 09:01
400-145964-6	MW-5	Water	11/11/17 09:37	11/14/17 09:01

Client Sample Results

Client: Stantec Consulting Services Inc
Project/Site: EL Paso CGP Company - Lat L 40

TestAmerica Job ID: 400-145964-1

Client Sample ID: TRIP BLANK

Lab Sample ID: 400-145964-1

Date Collected: 11/11/17 09:00

Matrix: Water

Date Received: 11/14/17 09:01

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0	ug/L			11/16/17 17:37	1
Toluene	<1.0		1.0	ug/L			11/16/17 17:37	1
Ethylbenzene	<1.0		1.0	ug/L			11/16/17 17:37	1
Xylenes, Total	<10		10	ug/L			11/16/17 17:37	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane	103		81 - 121		11/16/17 17:37	1
4-Bromofluorobenzene	108		78 - 118		11/16/17 17:37	1
Toluene-d8 (Surr)	109		80 - 120		11/16/17 17:37	1

TestAmerica Pensacola

Client Sample Results

Client: Stantec Consulting Services Inc
Project/Site: EL Paso CGP Company - Lat L 40

TestAmerica Job ID: 400-145964-1

Client Sample ID: MW-1

Date Collected: 11/11/17 09:24

Date Received: 11/14/17 09:01

Lab Sample ID: 400-145964-2

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	120		10	ug/L			11/16/17 19:06	10
Toluene	<10		10	ug/L			11/16/17 19:06	10
Ethylbenzene	370		10	ug/L			11/16/17 19:06	10
Xylenes, Total	2000		100	ug/L			11/16/17 19:06	10
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Dibromofluoromethane	103		81 - 121				11/16/17 19:06	10
4-Bromofluorobenzene	117		78 - 118				11/16/17 19:06	10
Toluene-d8 (Surr)	109		80 - 120				11/16/17 19:06	10

Client Sample Results

Client: Stantec Consulting Services Inc
Project/Site: EL Paso CGP Company - Lat L 40

TestAmerica Job ID: 400-145964-1

Client Sample ID: MW-2
Date Collected: 11/11/17 09:30
Date Received: 11/14/17 09:01

Lab Sample ID: 400-145964-3
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Toluene	230		1.0	ug/L			11/16/17 17:59	1
Ethylbenzene	13		1.0	ug/L			11/16/17 17:59	1
Xylenes, Total	280		10	ug/L			11/16/17 17:59	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Dibromofluoromethane	99		81 - 121				11/16/17 17:59	1
4-Bromofluorobenzene	117		78 - 118				11/16/17 17:59	1
Toluene-d8 (Surr)	105		80 - 120				11/16/17 17:59	1

Method: 8260C - Volatile Organic Compounds by GC/MS - DL

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	1900		10	ug/L			11/17/17 18:10	10
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Dibromofluoromethane	101		81 - 121				11/17/17 18:10	10
4-Bromofluorobenzene	116		78 - 118				11/17/17 18:10	10
Toluene-d8 (Surr)	101		80 - 120				11/17/17 18:10	10

TestAmerica Pensacola

Client Sample Results

Client: Stantec Consulting Services Inc
Project/Site: EL Paso CGP Company - Lat L 40

TestAmerica Job ID: 400-145964-1

Client Sample ID: MW-3

Date Collected: 11/11/17 09:12

Date Received: 11/14/17 09:01

Lab Sample ID: 400-145964-4

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	170		1.0	ug/L			11/16/17 18:22	1
Toluene	<1.0		1.0	ug/L			11/16/17 18:22	1
Ethylbenzene	<1.0		1.0	ug/L			11/16/17 18:22	1
Xylenes, Total	<10		10	ug/L			11/16/17 18:22	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane	104		81 - 121		11/16/17 18:22	1
4-Bromofluorobenzene	112		78 - 118		11/16/17 18:22	1
Toluene-d8 (Surr)	105		80 - 120		11/16/17 18:22	1

Client Sample Results

Client: Stantec Consulting Services Inc
Project/Site: EL Paso CGP Company - Lat L 40

TestAmerica Job ID: 400-145964-1

Client Sample ID: MW-4

Date Collected: 11/11/17 09:05

Date Received: 11/14/17 09:01

Lab Sample ID: 400-145964-5

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	26		1.0	ug/L			11/16/17 18:44	1
Toluene	<1.0		1.0	ug/L			11/16/17 18:44	1
Ethylbenzene	<1.0		1.0	ug/L			11/16/17 18:44	1
Xylenes, Total	<10		10	ug/L			11/16/17 18:44	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Dibromofluoromethane	103		81 - 121				11/16/17 18:44	1
4-Bromofluorobenzene	115		78 - 118				11/16/17 18:44	1
Toluene-d8 (Surr)	106		80 - 120				11/16/17 18:44	1

Client Sample Results

Client: Stantec Consulting Services Inc
Project/Site: EL Paso CGP Company - Lat L 40

TestAmerica Job ID: 400-145964-1

Client Sample ID: MW-5

Date Collected: 11/11/17 09:37

Date Received: 11/14/17 09:01

Lab Sample ID: 400-145964-6

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	1100		10	ug/L			11/16/17 19:28	10
Toluene	550		10	ug/L			11/16/17 19:28	10
Ethylbenzene	85		10	ug/L			11/16/17 19:28	10
Xylenes, Total	820		100	ug/L			11/16/17 19:28	10
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Dibromofluoromethane	102		81 - 121				11/16/17 19:28	10
4-Bromofluorobenzene	116		78 - 118				11/16/17 19:28	10
Toluene-d8 (Surr)	104		80 - 120				11/16/17 19:28	10

TestAmerica Pensacola

QC Association Summary

Client: Stantec Consulting Services Inc
Project/Site: EL Paso CGP Company - Lat L 40

TestAmerica Job ID: 400-145964-1

GC/MS VOA

Analysis Batch: 376215

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-145964-1	TRIP BLANK	Total/NA	Water	8260C	
400-145964-2	MW-1	Total/NA	Water	8260C	
400-145964-3	MW-2	Total/NA	Water	8260C	
400-145964-4	MW-3	Total/NA	Water	8260C	
400-145964-5	MW-4	Total/NA	Water	8260C	
400-145964-6	MW-5	Total/NA	Water	8260C	
MB 400-376215/27	Method Blank	Total/NA	Water	8260C	
LCS 400-376215/1002	Lab Control Sample	Total/NA	Water	8260C	
400-145961-A-6 MS	Matrix Spike	Total/NA	Water	8260C	
400-145961-A-6 MSD	Matrix Spike Duplicate	Total/NA	Water	8260C	

Analysis Batch: 376328

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-145964-3 - DL	MW-2	Total/NA	Water	8260C	
MB 400-376328/4	Method Blank	Total/NA	Water	8260C	
LCS 400-376328/1002	Lab Control Sample	Total/NA	Water	8260C	
400-145968-A-5 MS	Matrix Spike	Total/NA	Water	8260C	
400-145968-A-5 MSD	Matrix Spike Duplicate	Total/NA	Water	8260C	

QC Sample Results

Client: Stantec Consulting Services Inc
Project/Site: EL Paso CGP Company - Lat L 40

TestAmerica Job ID: 400-145964-1

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 400-376215/27

Matrix: Water

Analysis Batch: 376215

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			11/16/17 13:12	1
Toluene	<1.0		1.0	ug/L			11/16/17 13:12	1
Ethylbenzene	<1.0		1.0	ug/L			11/16/17 13:12	1
Xylenes, Total	<10		10	ug/L			11/16/17 13:12	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane	102		81 - 121		11/16/17 13:12	1
4-Bromofluorobenzene	115		78 - 118		11/16/17 13:12	1
Toluene-d8 (Surr)	107		80 - 120		11/16/17 13:12	1

Lab Sample ID: LCS 400-376215/1002

Matrix: Water

Analysis Batch: 376215

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	50.3		ug/L		101	70 - 130
Toluene	50.0	54.0		ug/L		108	70 - 130
Ethylbenzene	50.0	56.2		ug/L		112	70 - 130
Xylenes, Total	100	112		ug/L		112	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Dibromofluoromethane	104		81 - 121
4-Bromofluorobenzene	117		78 - 118
Toluene-d8 (Surr)	104		80 - 120

Lab Sample ID: 400-145961-A-6 MS

Matrix: Water

Analysis Batch: 376215

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	40.4		ug/L		81	56 - 142
Toluene	<1.0		50.0	40.6		ug/L		81	65 - 130
Ethylbenzene	<1.0		50.0	41.8		ug/L		84	58 - 131
Xylenes, Total	<10		100	83.4		ug/L		83	59 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
Dibromofluoromethane	111		81 - 121
4-Bromofluorobenzene	113		78 - 118
Toluene-d8 (Surr)	103		80 - 120

Lab Sample ID: 400-145961-A-6 MSD

Matrix: Water

Analysis Batch: 376215

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	38.6		ug/L		77	56 - 142	5	30
Toluene	<1.0		50.0	39.9		ug/L		80	65 - 130	2	30

TestAmerica Pensacola

QC Sample Results

Client: Stantec Consulting Services Inc
Project/Site: EL Paso CGP Company - Lat L 40

TestAmerica Job ID: 400-145964-1

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

Lab Sample ID: 400-145961-A-6 MSD

Matrix: Water

Analysis Batch: 376215

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
Ethylbenzene	<1.0		50.0	40.6		ug/L		81	58 - 131	3	30
Xylenes, Total	<10		100	80.9		ug/L		81	59 - 130	3	30
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
Dibromofluoromethane	103		81 - 121								
4-Bromofluorobenzene	118		78 - 118								
Toluene-d8 (Surr)	104		80 - 120								

Lab Sample ID: MB 400-376328/4

Matrix: Water

Analysis Batch: 376328

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			11/17/17 11:32	1
Toluene	<1.0		1.0	ug/L			11/17/17 11:32	1
Ethylbenzene	<1.0		1.0	ug/L			11/17/17 11:32	1
Xylenes, Total	<10		10	ug/L			11/17/17 11:32	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
Dibromofluoromethane	101		81 - 121				11/17/17 11:32	1
4-Bromofluorobenzene	114		78 - 118				11/17/17 11:32	1
Toluene-d8 (Surr)	104		80 - 120				11/17/17 11:32	1

Lab Sample ID: LCS 400-376328/1002

Matrix: Water

Analysis Batch: 376328

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	48.1		ug/L		96	70 - 130
Toluene	50.0	51.7		ug/L		103	70 - 130
Ethylbenzene	50.0	54.1		ug/L		108	70 - 130
Xylenes, Total	100	109		ug/L		109	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
Dibromofluoromethane	105		81 - 121				
4-Bromofluorobenzene	112		78 - 118				
Toluene-d8 (Surr)	104		80 - 120				

Lab Sample ID: 400-145968-A-5 MS

Matrix: Water

Analysis Batch: 376328

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	46.6		ug/L		92	56 - 142
Toluene	<1.0		50.0	46.2		ug/L		92	65 - 130
Ethylbenzene	<1.0		50.0	46.5		ug/L		93	58 - 131
Xylenes, Total	<10		100	95.0		ug/L		95	59 - 130

TestAmerica Pensacola

QC Sample Results

Client: Stantec Consulting Services Inc
Project/Site: EL Paso CGP Company - Lat L 40

TestAmerica Job ID: 400-145964-1

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

Lab Sample ID: 400-145968-A-5 MS

Matrix: Water

Analysis Batch: 376328

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Surrogate	MS %Recovery	MS Qualifier	Limits
Dibromofluoromethane	104		81 - 121
4-Bromofluorobenzene	114		78 - 118
Toluene-d8 (Surr)	105		80 - 120

Lab Sample ID: 400-145968-A-5 MSD

Matrix: Water

Analysis Batch: 376328

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	45.5		ug/L		90	56 - 142	2	30
Toluene	<1.0		50.0	46.2		ug/L		92	65 - 130	0	30
Ethylbenzene	<1.0		50.0	48.6		ug/L		97	58 - 131	4	30
Xylenes, Total	<10		100	97.2		ug/L		97	59 - 130	2	30

Surrogate	MSD %Recovery	MSD Qualifier	Limits
Dibromofluoromethane	103		81 - 121
4-Bromofluorobenzene	117		78 - 118
Toluene-d8 (Surr)	105		80 - 120

Lab Chronicle

Client: Stantec Consulting Services Inc
Project/Site: EL Paso CGP Company - Lat L 40

TestAmerica Job ID: 400-145964-1

Client Sample ID: TRIP BLANK

Date Collected: 11/11/17 09:00

Date Received: 11/14/17 09:01

Lab Sample ID: 400-145964-1

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	8260C		1	5 mL	5 mL	376215	11/16/17 17:37	S1K	TAL PEN
Instrument ID: Darwin										

Client Sample ID: MW-1

Date Collected: 11/11/17 09:24

Date Received: 11/14/17 09:01

Lab Sample ID: 400-145964-2

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	8260C		10	5 mL	5 mL	376215	11/16/17 19:06	S1K	TAL PEN
Instrument ID: Darwin										

Client Sample ID: MW-2

Date Collected: 11/11/17 09:30

Date Received: 11/14/17 09:01

Lab Sample ID: 400-145964-3

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	8260C		1	5 mL	5 mL	376215	11/16/17 17:59	S1K	TAL PEN
Instrument ID: Darwin										
Total/NA	Analysis	8260C	DL	10	5 mL	5 mL	376328	11/17/17 18:10	CAR	TAL PEN
Instrument ID: Darwin										

Client Sample ID: MW-3

Date Collected: 11/11/17 09:12

Date Received: 11/14/17 09:01

Lab Sample ID: 400-145964-4

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	8260C		1	5 mL	5 mL	376215	11/16/17 18:22	S1K	TAL PEN
Instrument ID: Darwin										

Client Sample ID: MW-4

Date Collected: 11/11/17 09:05

Date Received: 11/14/17 09:01

Lab Sample ID: 400-145964-5

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	8260C		1	5 mL	5 mL	376215	11/16/17 18:44	S1K	TAL PEN
Instrument ID: Darwin										

Lab Chronicle

Client: Stantec Consulting Services Inc
Project/Site: EL Paso CGP Company - Lat L 40

TestAmerica Job ID: 400-145964-1

Client Sample ID: MW-5

Date Collected: 11/11/17 09:37

Date Received: 11/14/17 09:01

Lab Sample ID: 400-145964-6

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	8260C		10	5 mL	5 mL	376215	11/16/17 19:28	S1K	TAL PEN
Instrument ID: Darwin										

Laboratory References:

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

Accreditation/Certification Summary

Client: Stantec Consulting Services Inc
Project/Site: EL Paso CGP Company - Lat L 40

TestAmerica Job ID: 400-145964-1

Laboratory: TestAmerica Pensacola

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

Authority	Program	EPA Region	Identification Number	Expiration Date
Alabama	State Program	4	40150	06-30-18
Arizona	State Program	9	AZ0710	01-11-18
Arkansas DEQ	State Program	6	88-0689	09-01-18
California	ELAP	9	2510	03-31-18
Florida	NELAP	4	E81010	06-30-18
Georgia	State Program	4	N/A	06-30-18
Illinois	NELAP	5	200041	10-09-18
Iowa	State Program	7	367	08-01-18
Kansas	NELAP	7	E-10253	12-31-17
Kentucky (UST)	State Program	4	53	06-30-18
Kentucky (WW)	State Program	4	98030	12-31-17
L-A-B	ISO/IEC 17025		L2471	02-22-20
Louisiana	NELAP	6	30976	06-30-18
Louisiana (DW)	NELAP	6	LA170005	12-31-17
Maryland	State Program	3	233	09-30-18
Massachusetts	State Program	1	M-FL094	06-30-18
Michigan	State Program	5	9912	06-30-18
New Jersey	NELAP	2	FL006	06-30-18
North Carolina (WW/SW)	State Program	4	314	12-31-17
Oklahoma	State Program	6	9810	08-31-18
Pennsylvania	NELAP	3	68-00467	01-31-18
Rhode Island	State Program	1	LAO00307	12-30-17
South Carolina	State Program	4	96026	06-30-18
Tennessee	State Program	4	TN02907	06-30-18
Texas	NELAP	6	T104704286-17-12	09-30-18
USDA	Federal		P330-16-00172	05-24-19
Virginia	NELAP	3	460166	06-14-18
Washington	State Program	10	C915	05-15-18
West Virginia DEP	State Program	3	136	06-30-18

Method Summary

Client: Stantec Consulting Services Inc
Project/Site: EL Paso CGP Company - Lat L 40

TestAmerica Job ID: 400-145964-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	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

TestAmerica

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

Chain of Custody Record

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Client Information Client Contact: Ms. Sarah Gardner Company: Stantec Consulting Services Inc Address: 1560 Broadway Suite 1800 City: Denver State/Zip: CO, 80202 Phone: 303-291-2239(Tel) Email: sarah.gardner@mwhglobal.com Project Name: Lat L 40 Nov 2017 Site:		Sampler: SMS Lab PM: Webb, Carol M Phone: 515-306 E-Mail: carol.webb@testamerica.com		Carrier Tracking No(s): 400-69064-27998.1 Page: Page 1 of 1 Job #: 203720281	
Due Date Requested: TAT Requested (days): 10 day STD PO #: Purchase Order Requested WQ#: ARF Project #: W-ERG-SIN-05-17-17-SLG-13 L4 40005479 SSOW#:		Analysis Requested Preservation Codes: A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Anchlor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA Other: M - Hexane N - None O - AsNaO2 P - Na2O4S Q - Na2SO3 R - Na2SO3 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4-5 Z - other (specify)			
Sample Identification Sample Date Sample Time Sample Type (C=Comp, G=grab) Matrix (W=water, S=solid, O=organic, A=air)		Special Instructions/Note: Per ARF			
Trip Blank MW-1 MW-2 MW-3 MW-4 MW-5		11/11/17 900 924 930 912 905 937		A2 A2 A2 A2 A2 A2	
Possible Hazard Identification ☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) ☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months			
Deliverable Requested: I, II, III, IV, Other (specify)		Special Instructions/QC Requirements:			
Empty Kit Relinquished by:		Method of Shipment:			
Relinquished by: [Signature] Date/Time: 11/18/17 1100 Company: Stantec		Received by: [Signature] Date/Time: 11/14/17 0901 Company: [Signature]			
Relinquished by: [Signature] Date/Time: [Signature] Company: [Signature]		Received by: [Signature] Date/Time: [Signature] Company: [Signature]			
Relinquished by: [Signature] Date/Time: [Signature] Company: [Signature]		Received by: [Signature] Date/Time: [Signature] Company: [Signature]			
Custody Seals Intact: Δ Yes Δ No		Cooler Temperature(s) °C and Other Remarks: 1.90 C JR 8			

Login Sample Receipt Checklist

Client: Stantec Consulting Services Inc

Job Number: 400-145964-1

Login Number: 145964

List Number: 1

Creator: Perez, Trina M

List Source: TestAmerica Pensacola

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	1.9°C IR-8
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 (excluding tests with immediate HTs)	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	