Stantec Consulting Services Inc.
11153 Aurora Avenue
Des Moines, Iowa 50322
Phone: (515) 253-0830
Fax: (515) 253-9592

VIA ELECTRONIC SUBMITTAL

June 15, 2018

Mr. Randy Bayliss, P.E.
Hydrologist, Districts III and IV
New Mexico Oil Conservation Division
1220 S St Francis St
Santa Fe, New Mexico 87505

RE: Groundwater Sampling Activities and Request for Site Closure
Hammond #41A Site
NMOCD Case No. 3RP-186-0

Dear Mr. Bayliss:

Pursuant to the New Mexico Oil Conservation Division (NMOCD) letter dated November 7, 2017 (Letter), Stantec Consulting Services Inc. (Stantec), on behalf of El Paso CGP Company, LLC (EPCGP), is presenting the results of additional groundwater sampling activities completed at the above-referenced site (Site). The groundwater sampling activities are being performed to address comments in the Letter to a September 1, 2017, request for Site closure. Unless otherwise noted, the groundwater sampling activities were completed pursuant to the 2018 Monitoring Well Installation and Sampling Work Plan, dated February 26, 2018, approved by the NMOCD on March 20, 2018. The NMOCD was notified of the implementation of the Work Plan on March 26, 2018 (Attachment A). Based on the results of the groundwater sampling activities, EPCGP is requesting regulatory closure of the Site.

Site Activities

Monitoring well MW-8 was advanced and installed on March 29, 2018, to assess groundwater conditions northwest of monitoring well MW-4. Monitoring well MW-8 was constructed of 2-inch-diameter, Schedule 40 polyvinyl chloride (PVC), with 0.010-inch, continuous, factory-slotted PVC screen. The well screen was installed from 10 feet below ground surface (bgs) to 30 feet bgs and bisects the field-observed water table encountered at a depth of 14 feet bgs. Coated bentonite pellets were placed above the sand pack to approximately two feet from the ground surface and hydrated. The well was completed with a locking stick-up completion, a concrete surface completion, and four protective bollards. The soil boring log and well construction diagram is provided in Appendix B. Pertinent site features and the monitoring well location are depicted on Figures 1 through 3.

During advancement of the MW-8 soil boring, retained soil samples were field-screened with a photoionization detector, with no measureable readings noted above the field-apparent water table. Therefore, the sample interval immediately above the field-interpreted water table, at a depth of 11 to 11.7 feet bgs, was retained and placed in a 4-ounce jar for laboratory analysis. The

Reference: Groundwater Sampling Activities and Request for Site Closure

soil sample was submitted for analysis for the presence of benzene, toluene, ethylbenzene, and total xylenes (BTEX) according to United States Environmental Protection Agency (EPA) Method SW846 8021B, total petroleum hydrocarbons (TPH), gasoline range organics, diesel range organics, and mineral range organics using EPA Method 8015B; and chloride according to EPA Method 300. The retained sample were stored in an ice-filled cooler and shipped under standard chain-of-custody protocols to TestAmerica Laboratories, Inc. in Pensacola, Florida (TestAmerica). The soil sample analytical report is provided in Appendix C.

Monitoring well development was performed using a well swab and stainless steel bailer until all sediment was removed and visibly clear groundwater was observed. Purged groundwater was containerized and transported to Basin Disposal, Inc. in Bloomfield, NM for disposal. Soil drums were staged on site for later disposal at Envirotech, Inc. (Envirotech), located south of Bloomfield, NM. Disposal documentation is provided in Appendix D. The top of casing and surface elevation of the new monitoring well was also surveyed into the site monitoring well array. A HydraSleeve™ (HydraSleeve) no-purge passive groundwater sampling device was also placed in MW-8 prior to departing the Site.

On April 1, 2018, water levels were gauged in the eight Site monitoring wells. Following gauging, the HydraSleeve was retrieved from MW-8, and groundwater samples collected. The groundwater samples were placed into laboratory-supplied sample containers, packed on ice, and shipped under standard chain-of-custody protocol to TestAmerica in Pensacola, Florida where they were analyzed for benzene, toluene, ethylbenzene, and total xylenes (BTEX). A field duplicate, labeled DUP-1, was also collected from monitoring well MW-8, and submitted with the primary MW-8 sample for analysis of BTEX constituents. A copy of the groundwater analytical report is provided in Appendix E. The unused sample water was included with the other wastewater generated during drilling and well development activities, and taken to Basin Disposal, Inc. for disposal. Wastewater disposal documentation is included in Appendix D.

Results

The results for the soil sample are summarized with historical soil analytical data on Table 1, and depicted in Figure 1. As presented on Table 1 and Figure 1, the concentrations of BTEX, TPH, and chloride constituents were below detectable limits.

As summarized with historical groundwater elevation data on Table 2, measureable product was not detected in the site monitoring wells. Depth to groundwater in monitoring well MW-8 was 15.17 feet from top of casing. As depicted on Figure 2, groundwater flow across the site is to the northwest.

The results of the groundwater samples are summarized with historical groundwater analytical data on Table 3, and depicted on Figure 3. As presented on Table 3 and Figure 3, the concentrations of BTEX constituents in the primary and duplicate sample collected from monitoring well MW-8 were below detectable limits.

Reference: Groundwater Sampling Activities and Request for Site Closure

Request for Site Closure

Based on the results of the requested assessment activities, EPCGP again respectfully requests the NMOCD grant site closure for this case.

If you have any comments or questions concerning this correspondence, please contact me or Joseph Wiley with EPCGP at (713) 420-3475.

Sincerely,

Stantec Consulting Services, Inc.

Stephen Varsa, P.G.
Project Manager
Phone: (515) 251-1020
steve.varsa@stantec.com

/sg:srv:leh

cc: Joseph Wiley, EPCGP
Cory Fields and Vanessa Smith, NMOCD District III
Jillian Aragon, BLM

Tables:

Table 1 – Soil Analytical Results
Table 2 – Groundwater Elevation Results
Table 3 – Groundwater BTEX Analytical Results

Figures:

Figure 1 – Soil Analytical Results
Figure 2 – Groundwater Elevation Map April 1, 2018
Figure 3 – Groundwater Analytical Results July 28, 2017 and April 1, 2018

Attachments:

Attachment A – NMOCD Notification
Attachment B – Soil Boring Log and Monitoring Well Construction Diagram
Attachment C – Soil Laboratory Analytical Report
Attachment D – Soil and Wastewater Disposal Documentation
Attachment E – Groundwater Laboratory Analytical Report

TABLES

TABLE 1 - SOIL ANALYTICAL RESULTS

Hammond #41A											
Location (depth in feet bgs)	**Date (mm/dd/yy)**	**Benzene (mg/kg)**	**Toluene (mg/kg)**	**Ethylbenzene (mg/kg)**	**Total Xylenes (mg/kg)**	**BTEX Total (mg/kg)**	**GRO C6-10 (mg/kg)**	**DRO C10-28 (mg/kg)**	**MRO C28-35 (mg/kg)**	**TPH (mg/kg)**	**Chloride (mg/kg)**
NMOCD Criteria:		10	NE	NE	NE	50	NE	NE	NE	100	600
MW-1R (13.5-14.5)	05/18/16	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL
MW-2R (13-14)	05/18/16	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	39
MW-3R(12-13)	05/20/16	BRL	BRL	BRL	BRL	BRL	0.39	54	BRL	54.39	35
MW-5 (13.5-14.5)	05/18/16	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL
MW-6 (14-15)	05/18/16	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	26
MW-7 (14-15)	05/19/16	0.029	0.25	0.16	0.44	0.879	25	BRL	BRL	25	28
MW-8 (11-11.7)	03/29/18	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL

Notes:

mg/kg	Milligrams per kilogram
BRL	Below Reporting Limits
NE	New Mexico Oil Conservation Division (NMOCD) Standard Not Established
BTEX	Benzene, toluene, ethylbenzene, xylenes
GRO	Gasoline range organics
DRO	Diesel range organics
MRO	Motor oil range organics
Total BTEX	Sum of the detectable concentrations of individual BTEX constituents
TPH	Total Petroleum Hydrocarbon concentration is calculated by adding GRO, DRO, and MRO and rounded to the nearest mg/kg.
NMOCD Criteria	New Mexico Oil Conservation Division closure criteria for groundwater ≤50 feet below bottom of pit to groundwater less than 10,000 mg/L TDS Results bolded and highlighted yellow exceed their respective NMOCD Standards

TABLE 2 - GROUNDWATER ELEVATION RESULTS

Hammond #41A						
Location	Date	TOC	Depth to Water (ft.)	Depth to LNAPL (ft.)	LNAPL Thickness (ft.)	GW Elevation (ft.)
MW-1	05/21/97	5978.20	18.79	NR		5959.41
MW-1	06/09/97	5978.20	18.89	NR		5959.31
MW-1	09/17/97	5978.20	18.79	NR		5959.41
MW-1	12/09/97	5978.20	18.47	NR		5959.73
MW-1	03/20/98	5978.20	18.05	NR		5960.15
MW-1	06/04/98	5978.20	18.54	NR		5959.66
MW-1	09/10/98	5978.20	18.19	NR		5960.01
MW-1	12/17/98	5978.20	17.42	NR		5960.78
MW-1	03/23/99	5978.20	17.56	NR		5960.64
MW-1	06/11/99	5978.20	17.80	NR		5960.40
MW-1	09/20/99	5978.20	17.36	NR		5960.84
MW-1	12/09/99	5978.20	17.42	NR		5960.78
MW-1	03/31/00	5978.20	17.15	NR		5961.05
MW-1	06/09/00	5978.20	17.64	NR		5960.56
MW-1	09/21/00	5978.20	18.10	NR		5960.10
MW-1	12/05/00	5978.20	17.91	NR		5960.29
MW-1	06/04/01	5978.20	18.09	NR		5960.11
MW-1	08/07/01	5978.20	18.62	NR		5959.58
MW-1	11/27/01	5978.20	18.06	NR		5960.14
MW-1	02/25/02	5978.20	17.86	NR		5960.34
MW-1	05/21/02	5978.20	18.16	NR		5960.04
MW-1	08/21/02	5978.20	18.70	NR		5959.50
MW-1	09/05/02	5978.20	18.82	NR		5959.38
MW-1	11/15/03	5978.20	18.26	ND		5959.94
MW-1	02/29/04	5978.20	17.75	ND		5960.45
MW-1	05/11/04	5978.20	17.88	ND		5960.32
MW-1	08/19/04	5978.20	19.06	ND		5959.14
MW-1	11/16/04	5978.20	18.83	ND		5959.37
MW-1	02/21/05	5978.20	18.29	ND		5959.91
MW-1	05/18/05	5978.20	18.21	ND		5959.99
MW-1	08/23/05	5978.20	19.03	ND		5959.17
MW-1	11/08/05	5978.20	18.76	ND		5959.44
MW-1	02/23/06	5978.20	18.48	ND		5959.72
MW-1	05/23/06	5978.20	18.77	ND		5959.43
MW-1	11/08/06	5978.20	17.86	ND		5960.34
MW-1	05/24/07	5978.20	17.50	ND		5960.70
MW-1	08/21/07	5978.20	18.19	ND		5960.01
MW-1	11/13/07	5978.20	18.13	ND		5960.07
MW-1	02/12/08	5978.20	17.66	ND		5960.54
MW-1	08/26/08	5978.20	18.46	ND		5959.74
MW-1	02/17/09	5978.20	17.92	ND		5960.28
MW-1	08/25/09	5978.20	18.06	ND		5960.14

TABLE 2 - GROUNDWATER ELEVATION RESULTS

Hammond #41A						
Location	**Date**	**TOC**	**Depth to Water (ft.)**	**Depth to LNAPL (ft.)**	**LNAPL Thickness (ft.)**	**GW Elevation (ft.)**
MW-1	02/16/10	5978.20	18.37	ND		5959.83
MW-1	02/01/11	5978.20	18.36	ND		5959.84
MW-1	09/23/11	5978.20	DRY	ND		DRY
MW-1	02/22/12	5978.20	18.35	ND		5959.85
MW-1	06/05/13	5978.20	DRY	ND		DRY
MW-1	09/11/13	5978.20	DRY	ND		DRY
MW-1	12/11/13	5978.20	DRY	ND		DRY
MW-1	04/04/14	5978.20	DRY	ND		DRY
MW-1	10/24/14	5978.20	DRY	ND		DRY
MW-1	05/31/15	5978.20	DRY	ND		DRY
MW-1	11/21/15	5978.20	DRY	ND		DRY
MW-1	04/17/16	5978.20	DRY	ND		DRY
MW-1 was abandoned and replaced with MW-1R on May 20, 2016						
MW-1R	10/15/16	5978.06	17.12	ND		5960.94
MW-1R	03/28/17	5978.06	16.93	ND		5961.13
MW-1R	06/07/17	5978.06	17.28	ND		5960.78
MW-1R	07/28/17	5978.06	17.89	ND		5960.17
MW-1R	04/01/18	5978.06	17.11	ND		5960.95

TABLE 2 - GROUNDWATER ELEVATION RESULTS

Hammond #41A						
Location	Date	TOC	Depth to Water (ft.)	Depth to LNAPL (ft.)	LNAPL Thickness (ft.)	GW Elevation (ft.)
MW-2	10/15/99	5977.47	14.12	NR		5963.35
MW-2	08/28/00	5977.47	17.32	NR		5960.15
MW-2	06/04/01	5977.47	17.54	NR		5959.93
MW-2	08/07/01	5977.47	18.08	NR		5959.39
MW-2	11/27/01	5977.47	17.47	NR		5960.00
MW-2	02/25/02	5977.47	17.30	NR		5960.17
MW-2	05/21/02	5977.47	17.62	NR		5959.85
MW-2	08/21/02	5977.47	18.19	NR		5959.28
MW-2	10/08/02	5977.47	17.80	NR		5959.67
MW-2	11/15/03	5977.47	17.69	ND		5959.78
MW-2	02/29/04	5977.47	17.16	ND		5960.31
MW-2	05/11/04	5977.47	17.30	ND		5960.17
MW-2	08/19/04	5977.47	18.51	ND		5958.96
MW-2	11/16/04	5977.47	18.30	ND		5959.17
MW-2	02/21/05	5977.47	17.72	ND		5959.75
MW-2	05/18/05	5977.47	17.65	ND		5959.82
MW-2	08/23/05	5977.47	18.48	ND		5958.99
MW-2	11/08/05	5977.47	18.20	ND		5959.27
MW-2	02/23/06	5977.47	19.95	ND		5957.52
MW-2	05/23/06	5977.47	18.28	ND		5959.19
MW-2	11/08/06	5977.47	17.18	ND		5960.29
MW-2	05/24/07	5977.47	16.90	ND		5960.57
MW-2	08/21/07	5977.47	17.56	ND		5959.91
MW-2	11/13/07	5977.47	17.60	ND		5959.87
MW-2	02/12/08	5977.47	17.13	ND		5960.34
MW-2	08/26/08	5977.47	17.51	ND		5959.96
MW-2	02/17/09	5977.47	17.33	ND		5960.14
MW-2	08/25/09	5977.47	17.40	ND		5960.07
MW-2	02/16/10	5977.47	17.75	ND		5959.72
MW-2	09/27/10	5977.47	DRY	ND		DRY
MW-2	02/01/11	5977.47	17.66	ND		5959.81
MW-2	09/23/11	5977.47	DRY	ND		DRY
MW-2	02/22/12	5977.47	DRY	ND		DRY
MW-2	06/05/13	5977.47	DRY	ND		DRY
MW-2	09/11/13	5977.47	DRY	ND		DRY
MW-2	12/11/13	5977.47	DRY	ND		DRY
MW-2	04/04/14	5977.47	DRY	ND		DRY
MW-2	10/24/14	5977.47	DRY	ND		DRY
MW-2	05/31/15	5977.47	DRY	ND		DRY
MW-2	11/21/15	5977.47	DRY	ND		DRY
MW-2	04/17/16	5977.47	17.45	ND		5960.02
MW-2 was abandoned and replaced with MW-2R on May 20, 2016						

TABLE 2 - GROUNDWATER ELEVATION RESULTS

Hammond #41A						
Location	Date	TOC	Depth to Water (ft.)	Depth to LNAPL (ft.)	LNAPL Thickness (ft.)	GW Elevation (ft.)
MW-2R	10/15/16	5976.83	16.68	ND		5960.15
MW-2R	03/28/17	5976.83	15.85	ND		5960.98
MW-2R	06/07/17	5976.83	16.23	ND		5960.60
MW-2R	07/28/17	5976.83	16.88	ND		5959.95
MW-2R	04/01/18	5976.83	16.05	ND		5960.78
MW-3	10/15/99	5979.22	16.43	NR		5962.79
MW-3	08/28/00	5979.22	18.96	NR		5960.26
MW-3	06/04/01	5979.22	19.05	NR		5960.17
MW-3	08/07/01	5979.22	19.58	NR		5959.64
MW-3	11/27/01	5979.22	19.02	NR		5960.20
MW-3	02/25/02	5979.22	18.81	NR		5960.41
MW-3	05/21/02	5979.22	19.10	NR		5960.12
MW-3	08/21/02	5979.22	19.67	NR		5959.55
MW-3	10/08/02	5979.22	19.38	NR		5959.84
MW-3	11/15/03	5979.22	19.23	ND		5959.99
MW-3	02/29/04	5979.22	18.72	ND		5960.50
MW-3	05/11/04	5979.22	18.84	ND		5960.38
MW-3	08/19/04	5979.22	19.84	ND		5959.38
MW-3	11/16/04	5979.22	19.77	ND		5959.45
MW-3	02/21/05	5979.22	19.24	ND		5959.98
MW-3	05/18/05	5979.22	19.15	ND		5960.07
MW-3	08/23/05	5979.22	19.99	ND		5959.23
MW-3	11/08/05	5979.22	19.71	ND		5959.51
MW-3	02/23/06	5979.22	19.40	ND		5959.82
MW-3	05/23/06	5979.22	19.70	ND		5959.52
MW-3	11/08/06	5979.22	18.85	ND		5960.37
MW-3	05/24/07	5979.22	18.48	ND		5960.74
MW-3	08/21/07	5979.22	18.77	ND		5960.45
MW-3	11/13/07	5979.22	19.24	ND		5959.98
MW-3	02/12/08	5979.22	18.36	ND		5960.86
MW-3	08/26/08	5979.22	18.57	ND		5960.65
MW-3	02/17/09	5979.22	18.63	ND		5960.59
MW-3	08/25/09	5979.22	18.55	ND		5960.67
MW-3	02/16/10	5979.22	18.75	ND		5960.47
MW-3	09/27/10	5979.22	DRY	ND		DRY
MW-3	02/01/11	5979.22	DRY	ND		DRY
MW-3	09/23/11	5979.22	DRY	ND		DRY
MW-3	02/22/12	5979.22	DRY	ND		DRY
MW-3	06/05/13	5979.22	DRY	ND		DRY
MW-3	09/11/13	5979.22	DRY	ND		DRY
MW-3	12/11/13	5979.22	DRY	ND		DRY

TABLE 2 - GROUNDWATER ELEVATION RESULTS

Hammond #41A						
Location	**Date**	**TOC**	**Depth to Water (ft.)**	**Depth to LNAPL (ft.)**	**LNAPL Thickness (ft.)**	**GW Elevation (ft.)**
MW-3	04/04/14	5979.22	DRY	ND		DRY
MW-3	10/24/14	5979.22	DRY	ND		DRY
MW-3	05/31/15	5979.22	DRY	ND		DRY
MW-3	11/21/15	5979.22	DRY	ND		DRY
MW-3	04/17/16	5979.22	15.65	ND		5963.57
MW-3 was abandoned and replaced with MW-3R on May 20, 2016						
MW-3R	10/15/16	5978.48	18.23	ND		5960.25
MW-3R	03/28/17	5978.48	17.42	ND		5961.06
MW-3R	06/07/17	5978.48	17.79	ND		5960.69
MW-3R	07/28/17	5978.48	18.43	ND		5960.05
MW-3R	04/01/18	5978.48	17.60	ND		5960.88

TABLE 2 - GROUNDWATER ELEVATION RESULTS

Hammond #41A						
Location	Date	TOC	Depth to Water (ft.)	Depth to LNAPL (ft.)	LNAPL Thickness (ft.)	GW Elevation (ft.)
MW-4	08/13/03	5976.22	17.22	ND		5959.00
MW-4	11/15/03	5976.22	16.40	ND		5959.82
MW-4	02/17/04	5976.22	16.01	ND		5960.21
MW-4	02/29/04	5976.22	15.89	ND		5960.33
MW-4	05/11/04	5976.22	16.03	ND		5960.19
MW-4	08/19/04	5976.22	17.24	ND		5958.98
MW-4	11/16/04	5976.22	17.00	ND		5959.22
MW-4	02/21/05	5976.22	16.43	ND		5959.79
MW-4	05/18/05	5976.22	16.35	ND		5959.87
MW-4	08/23/05	5976.22	17.18	ND		5959.04
MW-4	11/08/05	5976.22	16.91	ND		5959.31
MW-4	02/23/06	5976.22	16.23	ND		5959.99
MW-4	05/23/06	5976.22	16.92	ND		5959.30
MW-4	11/08/06	5976.22	15.97	ND		5960.25
MW-4	02/24/07	5976.22	15.66	ND		5960.56
MW-4	05/24/07	5976.22	15.66	ND		5960.56
MW-4	08/21/07	5976.22	16.33	ND		5959.89
MW-4	11/13/07	5976.22	16.30	ND		5959.92
MW-4	02/12/08	5976.22	16.81	ND		5959.41
MW-4	08/26/08	5976.22	16.62	ND		5959.60
MW-4	02/17/09	5976.22	17.06	ND		5959.16
MW-4	08/25/09	5976.22	17.17	ND		5959.05
MW-4	02/16/10	5976.22	16.55	ND		5959.67
MW-4	09/27/10	5976.22	17.15	ND		5959.07
MW-4	02/01/11	5976.22	16.51	ND		5959.71
MW-4	09/23/11	5976.22	17.30	ND		5958.92
MW-4	02/22/12	5976.22	16.53	ND		5959.69
MW-4	06/05/13	5976.22	16.51	ND		5959.71
MW-4	09/11/13	5976.22	16.52	ND		5959.70
MW-4	12/11/13	5976.22	15.87	ND		5960.35
MW-4	04/04/14	5976.22	15.71	ND		5960.51
MW-4	10/24/14	5976.22	17.24	ND		5958.98
MW-4	05/31/15	5976.22	15.89	ND		5960.33
MW-4	11/21/15	5976.22	15.76	ND		5960.46
MW-4	04/17/16	5976.22	16.75	ND		5959.47
MW-4	10/15/16	5976.22	16.29	ND		5959.93
MW-4	03/28/17	5976.22	15.46	ND		5960.76
MW-4	06/07/17	5976.22	15.84	ND		5960.38
MW-4	07/28/17	5976.22	16.51	ND		5959.71
MW-4	04/01/18	5976.22	15.64	ND		5960.58

TABLE 2 - GROUNDWATER ELEVATION RESULTS

Hammond #41A						
Location	**Date**	**TOC**	**Depth to Water (ft.)**	**Depth to LNAPL (ft.)**	**LNAPL Thickness (ft.)**	**GW Elevation (ft.)**
MW-5	10/15/16	5977.74	17.55	ND		5960.19
MW-5	03/28/17	5977.74	16.88	ND		5960.86
MW-5	06/07/17	5977.74	17.22	ND		5960.52
MW-5	07/28/17	5977.74	17.86	ND		5959.88
MW-5	04/01/18	5977.74	17.03	ND		5960.71
MW-6	10/15/16	5978.44	18.05	ND		5960.39
MW-6	03/28/17	5978.44	17.24	ND		5961.20
MW-6	06/07/17	5978.44	17.59	ND		5960.85
MW-6	07/28/17	5978.44	18.22	ND		5960.22
MW-6	04/01/18	5978.44	17.43	ND		5961.01
MW-7	10/15/16	5978.63	18.17	ND		5960.46
MW-7	03/28/17	5978.63	17.35	ND		5961.28
MW-7	06/07/17	5978.63	17.71	ND		5960.92
MW-7	07/28/17	5978.63	18.38	ND		5960.25
MW-7	04/01/18	5978.63	17.56	ND		5961.07
MW-8	04/01/18	5975.46	15.17	ND		5960.29

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

TABLE 3 - GROUNDWATER ANYALYTICAL RESULTS

Hammond #41A					
Location	**Date**	**Benzene (µg/L)**	**Toluene (µg/L)**	**Ethylbenzene (µg/L)**	**Total Xylenes (µg/L)**
NMWQCC Standards:		10	750	750	620
MW-1	05/21/97	150	60.1	56.7	484
MW-1	06/09/97	190	12.3	36.9	181
MW-1	09/17/97	1230	<5	263	830
MW-1	12/09/97	685	<1	141	261
MW-1	03/20/98	662	3.06	78.7	292
MW-1	06/04/98	286	2.43	38.4	140
MW-1	09/10/98	391	<1	34	144
MW-1	12/17/98	330	1.6	30	150
MW-1	03/23/99	197	<1	15.8	74.1
MW-1	06/11/99	260	3.3	42	270
MW-1	09/20/99	460	16	78	440
MW-1	12/09/99	110	3.9	13	53
MW-1	03/31/00	98	3.4	19	59
MW-1	06/09/00	290	9.7	49	290
MW-1	09/21/00	110	1.7	16	44
MW-1	12/05/00	10	<0.5	3.6	4.3
MW-1	06/04/01	39	0.6	5.5	16
MW-1	08/07/01	33	<0.5	2.8	4.9
MW-1	11/27/01	3.2	<0.5	0.6	<0.5
MW-1	02/25/02	3.9	<0.5	0.5	<1
MW-1	05/21/02	4.4	<0.5	<0.5	<1
MW-1	08/21/02	NS	NS	NS	NS
MW-1	09/05/02	2.7	0.5	2.2	1.4
MW-1	05/24/07	26.6	106	77.4	446
MW-1 was abandoned and replaced with MW-1R on May 20, 2016					
MW-1R	10/15/16	<1.0	<5.0	<1.0	<5.0
MW-1R	03/28/17	<1.0	<5.0	<1.0	<5.0
MW-1R	06/07/17	<1.0	<5.0	<1.0	<5.0
MW-1R	07/28/17	<1.0	<5.0	<1.0	<5.0

TABLE 3 - GROUNDWATER ANYALYTICAL RESULTS

Hammond #41A					
Location	**Date**	**Benzene (µg/L)**	**Toluene (µg/L)**	**Ethylbenzene (µg/L)**	**Total Xylenes (µg/L)**
NMWQCC Standards:		10	750	750	620
MW-2	10/15/99	<0.5	<0.5	<0.5	<0.5
MW-2	08/28/00	69	1.3	9.4	28
MW-2	06/04/01	<0.5	<0.5	<0.5	<0.5
MW-2	08/07/01	<0.5	<0.5	<0.5	<0.5
MW-2	11/27/01	<0.5	<0.5	<0.5	<0.5
MW-2	02/25/02	<0.5	<0.5	<0.5	<1
MW-2	05/21/02	<0.5	<0.5	<0.5	<1
MW-2	10/08/02	<0.5	<0.5	<0.5	0.5
MW-2 was abandoned and replaced with MW-2R on May 20, 2016					
MW-2R	10/15/16	<1.0	<5.0	<1.0	<5.0
MW-2R	03/28/17	<1.0	<5.0	<1.0	<5.0
MW-2R	06/07/17	<1.0	<5.0	<1.0	<5.0
MW-2R	07/28/17	<1.0	<5.0	<1.0	<5.0
MW-3	10/15/99	<0.5	<0.5	<0.5	<0.5
MW-3	08/28/00	<0.5	<0.5	<0.5	<0.5
MW-3	08/07/01	<0.5	<0.5	<0.5	<0.5
MW-3	10/08/02	<0.5	<0.5	<0.5	0.6
MW-3 was abandoned and replaced with MW-3R on May 20, 2016					
MW-3R	10/15/16	<1.0	<5.0	<1.0	<5.0
MW-3R	03/28/17	<1.0	<5.0	<1.0	<5.0
MW-3R	06/07/17	<1.0	<5.0	<1.0	<5.0
MW-3R	07/28/17	<1.0	<5.0	<1.0	<5.0

TABLE 3 - GROUNDWATER ANYALYTICAL RESULTS

Hammond #41A					
Location	Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)
NMWQCC Standards:		10	750	750	620
MW-4	08/13/03	7.3	128	44.8	625
MW-4	11/15/03	19.2	113	84.6	1200
MW-4	02/17/04	22.3	109	83.2	774
MW-4	05/11/04	27.2	255	56.6	685
MW-4	08/19/04	3.1	<0.5	2.6	5.6
MW-4	11/16/04	55.2	53.3	70.7	306
MW-4	02/21/05	11.2	20.2	28.9	196
MW-4	05/18/05	140	398	252	1710
MW-4	08/23/05	<1	<1	<1	5.6
MW-4	11/08/05	13.9	20.1	20.1	149
MW-4	02/23/06	64.2	195	118	641
MW-4	05/23/06	49.2	188	85.1	304
MW-4	11/08/06	1.7	1.8	2.2	4.7
MW-4	05/24/07	25.8	103	74.3	399
MW-4	08/21/07	15.9	81	59.6	322
MW-4	11/13/07	21.7	83	93.4	343
MW-4	02/12/08	24.2	74.5	99.1	362
MW-4	08/26/08	15.9	60.6	73.5	255
MW-4	02/17/09	14.3	50.6	85.3	246
MW-4	08/25/09	2.7	23.4	28.3	127
MW-4	02/16/10	13.8	1.2	52.9	79.9
MW-4	09/27/10	2.6	<2	3.2	4.2 J
MW-4	02/01/11	11.8	0.88 J	82.7	249
MW-4	09/23/11	<1	<1	<1	<3
MW-4	02/22/12	8.5	0.34 J	69.4	88.7
MW-4	06/05/13	0.73	<0.30	16	4
MW-4	09/11/13	<0.14	<0.20	<0.30	<0.23
MW-4	12/11/13	<0.20	<0.38	2	11
MW-4	04/04/14	<0.20	<0.38	16	23
MW-4	10/24/14	<0.38	<0.70	0.53 J	<1.6
MW-4	05/31/15	0.64 J	<5.0	2.6	3.0 J
MW-4	11/21/15	2.8	<1.0	4	<3.0
MW-4	04/17/16	<1.0	<5.0	15	7
MW-4	10/15/16	2	<5.0	18	<5.0
MW-4	03/28/17	<1.0	<5.0	18	12
MW-4	06/07/17	<1.0	<5.0	8.7	<5.0
MW-4	07/28/17	<1.0	<5.0	1.3	<5.0

TABLE 3 - GROUNDWATER ANYALYTICAL RESULTS

Hammond #41A					
Location	**Date**	**Benzene (µg/L)**	**Toluene (µg/L)**	**Ethylbenzene (µg/L)**	**Total Xylenes (µg/L)**
NMWQCC Standards:		10	750	750	620
MW-5	10/15/16	<1.0	<5.0	1.9	5.0
MW-5	03/28/17	<1.0	<5.0	1.2	<5.0
MW-5	06/07/17	<1.0	<5.0	3.7	12.0
MW-5	07/28/17	<1.0	<5.0	4.2	11.0
MW-6	10/15/16	<1.0	<5.0	<1.0	<5.0
MW-6	03/28/17	<1.0	<5.0	<1.0	<5.0
MW-6	06/07/17	<1.0	<5.0	<1.0	<5.0
MW-6	07/28/17	<1.0	<5.0	<1.0	<5.0
MW-7	10/15/16	<1.0	<5.0	<1.0	<5.0
MW-7	03/28/17	<1.0	<5.0	<1.0	<5.0
MW-7	06/07/17	<1.0	<5.0	<1.0	<5.0
MW-7	07/28/17	<1.0	<5.0	<1.0	<5.0
MW-8	04/01/18	<1.0	<1.0	<1.0	<10
DUP-1(MW-8)*	04/01/18	<1.0	<1.0	<1.0	<10

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

FIGURES

L:\San Juan River Basin\SJRB GENERAL\GIS-NEW_MXDs\HAMMOND #41A\2018 MAPS\Hammond#41A_SARM_2018.mxd

MW-8
11-11.7 ft. bgs
B: BRL
BTEX: BRL
TPH: BRL
Cl: BRL

MW-5
13.5-14.5 ft. bgs
B: BRL
BTEX: BRL
TPH: BRL
Cl: BRL

MW-2R
13-14 ft. bgs
B: BRL
BTEX: BRL
TPH: BRL
Cl: 39

MW-1R
13.5-14.5 ft. bgs
B: BRL
BTEX: BRL
TPH: BRL
Cl: BRL

MW-3R
12-13 ft. bgs
B: BRL
BTEX: BRL
TPH: 54.39
Cl: 35

MW-7
14-15 ft. bgs
B: 0.029
BTEX: 0.879
TPH: 25
Cl: 28

MW-6
14-15 ft. bgs
B: BRL
BTEX: BRL
TPH: BRL
Cl: 26

MW-8
MW-4 NS
MW-4
MW-5
MW-2 NS
MW-2
MW-2R
MW-1 NS
MW-1
MW-1R
MW-7
MW-3R
MW-6
MW-3
MW-3 NS
SMA BENCHMARK
ELEV. 5975.98'
NAD 83 NAVD 88
STATE PLANE COORDINATE SYSTEM
NEW MEXICO WEST
FORMER EPC PIT - EXCAVATED TO 19 FEET
HAMMOND #41A WELLHEAD
METER HOUSE
EPFS
SEPARATOR
DRIP TANK
DOGLEG
GAS RISER
METER RUN (OUTSIDE)
HAMMOND #092 WELLHEAD
METER HOUSE (NOT IN USE)
5976
5977
5978
5979
5980

LEGEND:

- 5980 — APPROXIMATE GROUND SURFACE CONTOUR AND ELEVATION, FEET
- ACCESS ROAD
- G A S — NATURAL GAS LINE
- MONITORING WELL
- ABANDONED MONITORING WELL
- WELLHEAD
- SMA BENCHMARK

NOTES:

MW-1R, MW-2R, MW-5 AND MW-6 SAMPLES COLLECTED 5/18/2016; MW-7 5/19/2016; MW-3R 5/20/2016; MW-8 3/29/2018.

UTILITY LOCATIONS ARE APPROXIMATE.

ft. bgs = FEET BELOW GROUND SURFACE
NS = NOT SAMPLED

EXPLANATION OF ANALYTES AND APPLICABLE STANDARDS:

RESULTS IN **BOLDFACE** TYPE INDICATE CONCENTRATION IN EXCESS OF APPLICABLE NEW MEXICO OIL CONSERVATION DIVISION SOIL CRITERIA FOR THAT ANALYTE.
mg/kg = MILLIGRAM/KILOGRAM
BRL = BELOW REPORTING LIMITS

ANALYTE	NMOCD STANDARDS
B = Benzene	10 mg/kg
BTEX = Benzene, toluene, ethylbenzene, xylenes	50 mg/kg
TPH = Total Petroleum Hydrocarbons	100 mg/kg
Cl = Chloride	600 mg/kg

N

SCALE IN FEET
0 40 80

REVISION	DATE	DESIGN BY	DRAWN BY	REVIEWED BY
	6/5/2018	SLG	SLG	SRV

TITLE:

SOIL ANALYTICAL RESULTS

PROJECT:
HAMMOND #41A
SAN JUAN RIVER BASIN
SAN JUAN COUNTY, NEW MEXICO

Stantec

Figure No.: 1

L:\San Juan River Basin\SJRB GENERAL\GIS-NEW_MXDs\HAMMOND #41A\2018 MAPS\Hammond#41A_GECM_1Q_2018.mxd

MW-8
5960.29
MW-8
SMA BENCHMARK
ELEV. 5975.98'
NAD 83 NAVD 88
STATE PLANE COORDINATE SYSTEM
NEW MEXICO WEST
5960.4
MW-4
5960.58
MW-2R
MW-2
MW-4
MW-2R
5960.78
5960.6
MW-5
MW-5
5960.71
MW-1R
5960.95
MW-7
5961.07
MW-1
MW-1R
MW-7
FORMER EPC PIT -
EXCAVATED TO 19 FEET
5960.8
5976
MW-3
MW-3R
MW-6
MW-6
5961.01
MW-3R
5960.88
5961
HAMMOND #41A WELLHEAD
METER HOUSE
EPFS
SEPARATOR
DRIP TANK
DOGLEG
5977
5976
5978
5979
5980
EPFS
GAS RISER
METER RUN
(OUTSIDE)
HAMMOND #092 WELLHEAD
METER HOUSE
(NOT IN USE)

LEGEND:

- 5980 — APPROXIMATE GROUND SURFACE CONTOUR AND ELEVATION, FEET
- ACCESS ROAD
- G A S — NATURAL GAS LINE
- MONITORING WELL
- ABANDONED MONITORING WELL
- WELLHEAD
- SMA BENCHMARK

NOTES:

5461.13 GROUNDWATER ELEVATION (FEET ABOVE MEAN SEA LEVEL)

5461.25 WATER LEVEL ELEVATION CONTOUR (DASHED WHERE INFERRED, FEET ABOVE MEAN SEA LEVEL)

DIRECTION OF APPARENT GROUNDWATER FLOW

N

SCALE IN FEET

0 40 80

REVISION	DATE	DESIGN BY	DRAWN BY	REVIEWED BY
	6/5/2018	SLG	SLG	SRV

TITLE:

GROUNDWATER ELEVATION MAP
APRIL 1, 2018

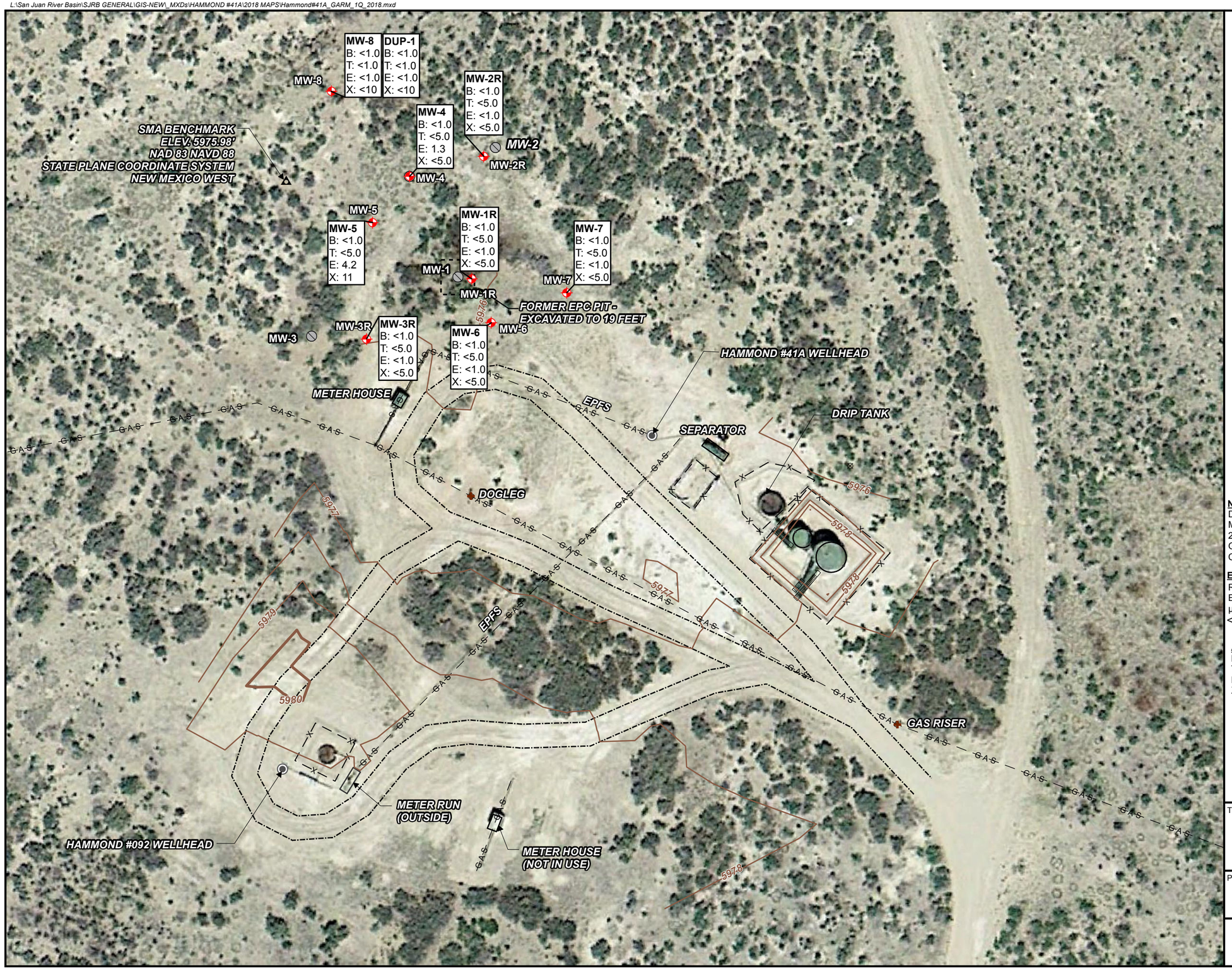
PROJECT:

HAMMOND #41A
SAN JUAN RIVER BASIN
SAN JUAN COUNTY, NEW MEXICO

Stantec

Figure No.: **2**

L:\San Juan River Basin\SJRB GENERAL\GIS-NEW_MXDs\HAMMOND #41A\2018 MAPS\Hammond#41A_GARM_1Q_2018.mxd



LEGEND:

- 5980 — APPROXIMATE GROUND SURFACE CONTOUR AND ELEVATION, FEET
- ACCESS ROAD
- G A S — NATURAL GAS LINE
- MONITORING WELL
- ABANDONED MONITORING WELL
- WELLHEAD
- SMA BENCHMARK

NOTES:
DUP = FIELD DUPLICATE SAMPLE
MW-8 AND DUP-1 SAMPLES WERE COLLECTED ON APRIL 1, 2018.
GROUNDWATER SAMPLES MW-1 THROUGH MW-7 WERE COLLECTED ON JULY 28, 2017.

EXPLANATION OF ANALYTES AND APPLICABLE STANDARDS:
RESULTS IN **BOLDFACE** TYPE INDICATE CONCENTRATION IN EXCESS OF THE STANDARD FOR THAT ANALYTE.
µg/L = MICROGRAMS PER LITER
<1 = 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
	6/14/2018	SLG	SLG	SRV

TITLE:
GROUNDWATER ANALYTICAL RESULTS JULY 28, 2017 AND APRIL 1, 2018

PROJECT:
HAMMOND #41A
SAN JUAN RIVER BASIN
SAN JUAN COUNTY, NEW MEXICO

Stantec

Figure No.: 3

ATTACHMENT A

From:	Varsa, Steve
To:	Bayliss, Randolph, EMNRD
Cc:	Smith, Cory, EMNRD; Fields, Vanessa, EMNRD; Wiley, Joe
Subject:	FW: 3RP-186 - Hammond #41A - Work Plan for Additional Monitoring Well Installation and Sampling Activities
Date:	Monday, March 26, 2018 2:37:15 PM

Hi Randy –

This correspondence is to inform you that intend to start Site activities at the above-referenced site on Thursday, March 29, 2018, with installation of the proposed well. Groundwater sampling of the new well is expected to occur on Friday or over the weekend.

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

From: Varsa, Steve
Sent: Monday, February 26, 2018 8:35 PM
To: Bayliss, Randolph, EMNRD <Randolph.Bayliss@state.nm.us>
Cc: Smith, Cory, EMNRD <Cory.Smith@state.nm.us>; Fields, Vanessa, EMNRD <Vanessa.Fields@state.nm.us>; Wiley, Joe <Joe_Wiley@kindermorgan.com>
Subject: 3RP-186 - Hammond #41A - Work Plan for Additional Monitoring Well Installation and Sampling Activities

Hi Randy –

Please find attached the above-referenced work plan for your review and files. Activities at the Site are planned to be initiated the week of March 19, 2018.

Please feel free to contact Joseph Wiley or me if you have any questions or need additional information.

Thank you,
Steve

Stephen Varsa, P.G.
Senior Hydrogeologist
Stantec Environmental Services
11153 Aurora Avenue
Des Moines, Iowa 50322
Direct: (515) 251-1020
Cell: (515) 710-7523

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

ATTACHMENT B

Drilling Log

Monitoring Well **MW-8**

Project *Hammond #41A* Owner *El Paso CGP Company, LLC*

Location *San Juan County, New Mexico* Project Number *193710249*

Surface Elev. *5972.90 ft* North *NA* East *NA*

Top of Casing *5975.46 ft* Water Level Initial ▽*5959.91* 03/28/18 14:40 Static ▼*5960.29* 04/01/18 13:00

Hole Depth *31.0ft* Screen: Diameter *2 in* Length *20.0 ft* Type/Size *PVC/0.01 in*

Hole Diameter *8.25 in* Casing: Diameter *2 in* Length *NA* Type *PVC*

Drill Co. *Cascade Drilling* Drilling Method *Hollow Stem Auger* Sand Pack *10/20 CO Silica*

Driller *Matt Cain* Driller Reg. # *WD-1210* Log By *Brad Barton*

Start Date *3/29/2018* Completion Date *3/29/2018* Checked By *S. Varsa*

COMMENTS
0-5 Feet Hand Augered

Bentonite Chips | Coated Bentonite Pellets | Grout | Portland Cement | Sand Pack | Natural Collapse

Depth (ft)	PID (ppm)	% Recovery	Blow Count Recovery	Graphic Log	USCS	Description (Color, Moisture, Texture, Structure, Odor) Geologic Descriptions are Based on the USCS.	Well Completion
0						Dirt and minor vegetation.	
						Silty SAND, brown, loose, dry, fine sand, no hydrocarbon odor.	
2	0.0	100%			SM		
4	0.0						
	0.0						
6	0.0				SP	Poorly Graded SAND, light brown, loose, dry, fine sand, subrounded, no hydrocarbon odor.	
	0.0	75%					
8						No Recovery	
	0.0				SP	Poorly Graded SAND continued.	
10	0.0						
	0.0					Slight moist	
12 ▽		54% MW-8 11-11.7'				No Recovery	
14	0.0				SP	Poorly Graded SAND continued, dark grayish brown, loose, wet, fine to medium sand, no hydrocarbon odor.	
	0.0					Black stained soil, wet, very slight hydrocarbon odor.	
16	0.0				SP	Poorly Graded SAND continued, dark grayish brown, loose, wet, fine to medium sand, no hydrocarbon odor.	
		54%				No Recovery	
18							
	0.0	70%			SW	Well Graded SAND, Light grayish brown, loose, wet, fine to coarse sand, subangular, trace gravels, no hydrocarbon odor.	
20						*Continued Next Page*	

Drilling Log

Monitoring Well **MW-8**

Project *Hammond #41A* Owner *El Paso CGP Company, LLC*

Location *San Juan County, New Mexico* Project Number *193710249*

Depth (ft)	PID (ppm)	% Recovery	Blow Count Recovery	Graphic Log	USCS	Description (Color, Moisture, Texture, Structure, Odor) Geologic Descriptions are Based on the USCS.	Well Completion
						Continued	
20	0.0				SW		
	0.0					Driller reports harder drilling at 21.5 feet below ground surface (bgs).	
22	0.0	70%			CH	FAT CLAY seem, dark grayish brown, high plasticity, tight, wet, no hydrocarbon odor.	
						No Recovery	
24	0.0				CH	FAT CLAY, gray to dark grayish brown, medium stiff to stiff, high plasticity, tight, moist, no hydrocarbon odor.	
	0.0						
26	0.0	80%					
	0.0				SP	Poorly Graded SAND, dark grayish brown, loose, wet, fine to medium sand, subangular, minor silt and clay, no hydrocarbon odor.	
28						No Recovery	
	0.0				SP	Poorly Graded SAND, light grayish brown, loose, wet, fine to medium sand, trace gravel, subrounded, no hydrocarbon odor.	
30	0.0	100%					
32						Bottom of hole 31 feet bgs.	
34							
36							
38							
40							
42							
44							
46							

ATTACHMENT C

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

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

TestAmerica Job ID: 400-151608-1
Client Project/Site: ElPaso CGP Company, LLC - Hammond #41A

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

Attn: Ms. Sarah Gardner

Carol M Webb

Authorized for release by:
4/11/2018 1:32:43 PM

Carol Webb, Project Manager II
(850)471-6250
carol.webb@testamericainc.com

Table of Contents

Client: Stantec Consulting Services Inc
Project/Site: ElPaso CGP Company, LLC - Hammond #41A

TestAmerica Job ID: 400-151608-1

Qualifiers

GC Semi VOA

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.

HPLC/IC

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	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 - Hammond #41A

TestAmerica Job ID: 400-151608-1

Job ID: 400-151608-1

Laboratory: TestAmerica Pensacola

Narrative

Job Narrative
400-151608-1

Comments
No additional comments.

Receipt
The sample was received on 3/31/2018 8:46 AM; the sample arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.0º C.

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

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

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

Organic Prep
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.

Lab Admin
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: ElPaso CGP Company, LLC - Hammond #41A

TestAmerica Job ID: 400-151608-1

Client Sample ID: MW-8 (11-11.7) **Lab Sample ID: 400-151608-1**

No Detections.

This Detection Summary does not include radiochemical test results.

Sample Summary

Client: Stantec Consulting Services Inc
Project/Site: ElPaso CGP Company, LLC - Hammond #41A

TestAmerica Job ID: 400-151608-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-151608-1	MW-8 (11-11.7)	Solid	03/29/18 12:40	03/31/18 08:46

Client: Stantec Consulting Services Inc
Project/Site: ElPaso CGP Company, LLC - Hammond #41A

TestAmerica Job ID: 400-151608-1

Client Sample ID: MW-8 (11-11.7)
Date Collected: 03/29/18 12:40
Date Received: 03/31/18 08:46

Lab Sample ID: 400-151608-1
Matrix: Solid
Percent Solids: 97.7

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
C6-C10	<0.10		0.10		mg/Kg	☼	04/02/18 10:30	04/02/18 15:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (fid)	*96*		*65 - 125*	*04/02/18 10:30*	*04/02/18 15:27*	*1*

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0010		0.0010		mg/Kg	☼	04/02/18 10:30	04/02/18 15:27	1
Ethylbenzene	<0.0010		0.0010		mg/Kg	☼	04/02/18 10:30	04/02/18 15:27	1
Toluene	<0.0050		0.0050		mg/Kg	☼	04/02/18 10:30	04/02/18 15:27	1
Xylenes, Total	<0.0050		0.0050		mg/Kg	☼	04/02/18 10:30	04/02/18 15:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (pid)	*97*		*40 - 150*	*04/02/18 10:30*	*04/02/18 15:27*	*1*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
C10-C28	<5.1		5.1		mg/Kg	☼	04/04/18 08:55	04/05/18 02:52	1
C28-C35	<5.1		5.1		mg/Kg	☼	04/04/18 08:55	04/05/18 02:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*72*		*27 - 151*	*04/04/18 08:55*	*04/05/18 02:52*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<21		21		mg/Kg	☼		04/05/18 04:57	1

GC VOA

Analysis Batch: 392322

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-151608-1	MW-8 (11-11.7)	Total/NA	Solid	8021B	392401
MB 400-392401/3-A	Method Blank	Total/NA	Solid	8021B	392401
LCS 400-392401/1-A	Lab Control Sample	Total/NA	Solid	8021B	392401
400-151603-A-3-C MS	Matrix Spike	Total/NA	Solid	8021B	392401
400-151603-A-3-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	392401

Analysis Batch: 392323

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-151608-1	MW-8 (11-11.7)	Total/NA	Solid	8015B	392401
MB 400-392401/3-A	Method Blank	Total/NA	Solid	8015B	392401
LCS 400-392401/2-A	Lab Control Sample	Total/NA	Solid	8015B	392401
400-151603-A-3-C MS	Matrix Spike	Total/NA	Solid	8015B	392401
400-151603-A-3-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B	392401

Prep Batch: 392401

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-151608-1	MW-8 (11-11.7)	Total/NA	Solid	5035	
MB 400-392401/3-A	Method Blank	Total/NA	Solid	5035	
LCS 400-392401/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCS 400-392401/2-A	Lab Control Sample	Total/NA	Solid	5035	
400-151603-A-3-C MS	Matrix Spike	Total/NA	Solid	5035	
400-151603-A-3-D MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

GC Semi VOA

Prep Batch: 392596

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-151608-1	MW-8 (11-11.7)	Total/NA	Solid	3546	
MB 400-392596/1-A	Method Blank	Total/NA	Solid	3546	
LCS 400-392596/2-A	Lab Control Sample	Total/NA	Solid	3546	
400-151676-E-5-A MS	Matrix Spike	Total/NA	Solid	3546	
400-151676-E-5-B MSD	Matrix Spike Duplicate	Total/NA	Solid	3546	

Analysis Batch: 392735

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-151608-1	MW-8 (11-11.7)	Total/NA	Solid	8015B	392596
MB 400-392596/1-A	Method Blank	Total/NA	Solid	8015B	392596
LCS 400-392596/2-A	Lab Control Sample	Total/NA	Solid	8015B	392596
400-151676-E-5-A MS	Matrix Spike	Total/NA	Solid	8015B	392596
400-151676-E-5-B MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B	392596

HPLC/IC

Leach Batch: 392599

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-151608-1	MW-8 (11-11.7)	Soluble	Solid	DI Leach	
MB 400-392599/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 400-392599/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 400-392599/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
400-151618-A-4-C MS	Matrix Spike	Soluble	Solid	DI Leach	

HPLC/IC (Continued)

Leach Batch: 392599 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-151618-A-4-D MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 392765

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-151608-1	MW-8 (11-11.7)	Soluble	Solid	300.0	392599

Analysis Batch: 392766

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 400-392599/1-A	Method Blank	Soluble	Solid	300.0	392599
LCS 400-392599/2-A	Lab Control Sample	Soluble	Solid	300.0	392599
LCSD 400-392599/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	392599
400-151618-A-4-C MS	Matrix Spike	Soluble	Solid	300.0	392599
400-151618-A-4-D MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	392599

General Chemistry

Analysis Batch: 392466

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-151608-1	MW-8 (11-11.7)	Total/NA	Solid	Moisture	
400-151637-D-1 MS	Matrix Spike	Total/NA	Solid	Moisture	
400-151637-D-1 MSD	Matrix Spike Duplicate	Total/NA	Solid	Moisture	
400-151600-E-3 DU	Duplicate	Total/NA	Solid	Moisture	

Method: 8015B - Gasoline Range Organics - (GC)

Lab Sample ID: MB 400-392401/3-A
Matrix: Solid
Analysis Batch: 392323

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 392401

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
C6-C10	<0.10		0.10		mg/Kg		04/02/18 10:30	04/02/18 11:38	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (fid)	*95*		*65 - 125*	*04/02/18 10:30*	*04/02/18 11:38*	*1*

Lab Sample ID: LCS 400-392401/2-A
Matrix: Solid
Analysis Batch: 392323

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 392401

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
C6-C10			1.00	1.03		mg/Kg		103	62 - 141		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
a,a,a-Trifluorotoluene (fid)	*96*		*65 - 125*

Lab Sample ID: 400-151603-A-3-C MS
Matrix: Solid
Analysis Batch: 392323

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 392401

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
C6-C10	<0.14		1.38	1.44		mg/Kg	☼	105	10 - 150		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
a,a,a-Trifluorotoluene (fid)	*99*		*65 - 125*

Lab Sample ID: 400-151603-A-3-D MSD
Matrix: Solid
Analysis Batch: 392323

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 392401

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
C6-C10	<0.14		1.36	1.37		mg/Kg	☼	101	10 - 150	5	32

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
a,a,a-Trifluorotoluene (fid)	*97*		*65 - 125*

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 400-392401/3-A
Matrix: Solid
Analysis Batch: 392322

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 392401

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0010		0.0010		mg/Kg		04/02/18 10:30	04/02/18 11:38	1
Ethylbenzene	<0.0010		0.0010		mg/Kg		04/02/18 10:30	04/02/18 11:38	1
Toluene	<0.0050		0.0050		mg/Kg		04/02/18 10:30	04/02/18 11:38	1
Xylenes, Total	<0.0050		0.0050		mg/Kg		04/02/18 10:30	04/02/18 11:38	1

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

Lab Sample ID: MB 400-392401/3-A
Matrix: Solid
Analysis Batch: 392322

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 392401

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (pid)	97		40 - 150	04/02/18 10:30	04/02/18 11:38	1

Lab Sample ID: LCS 400-392401/1-A
Matrix: Solid
Analysis Batch: 392322

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 392401

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.0500	0.0456		mg/Kg		91	74 - 127
Ethylbenzene	0.0500	0.0485		mg/Kg		97	79 - 131
Toluene	0.0500	0.0460		mg/Kg		92	76 - 127
Xylenes, Total	0.150	0.142		mg/Kg		95	80 - 129

Surrogate	LCS %Recovery	LCS Qualifier	Limits
a,a,a-Trifluorotoluene (pid)	96		40 - 150

Lab Sample ID: 400-151603-A-3-C MS
Matrix: Solid
Analysis Batch: 392322

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 392401

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	<0.0014		0.0688	0.0659		mg/Kg	☼	96	10 - 150
Ethylbenzene	<0.0014		0.0688	0.0693		mg/Kg	☼	101	10 - 150
Toluene	<0.0069		0.0688	0.0663		mg/Kg	☼	96	10 - 150
Xylenes, Total	<0.0069		0.206	0.203		mg/Kg	☼	99	50 - 150

Surrogate	MS %Recovery	MS Qualifier	Limits
a,a,a-Trifluorotoluene (pid)	96		40 - 150

Lab Sample ID: 400-151603-A-3-D MSD
Matrix: Solid
Analysis Batch: 392322

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 392401

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.0014		0.0678	0.0650		mg/Kg	☼	96	10 - 150	1	34
Ethylbenzene	<0.0014		0.0678	0.0687		mg/Kg	☼	101	10 - 150	1	66
Toluene	<0.0069		0.0678	0.0656		mg/Kg	☼	97	10 - 150	1	44
Xylenes, Total	<0.0069		0.204	0.202		mg/Kg	☼	99	50 - 150	1	46

Surrogate	MSD %Recovery	MSD Qualifier	Limits
a,a,a-Trifluorotoluene (pid)	97		40 - 150

Method: 8015B - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 400-392596/1-A
Matrix: Solid
Analysis Batch: 392735

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 392596

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
C10-C28	<5.0		5.0		mg/Kg		04/04/18 08:55	04/04/18 23:33	1
C28-C35	<5.0		5.0		mg/Kg		04/04/18 08:55	04/04/18 23:33	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*69*		*27 - 151*	*04/04/18 08:55*	*04/04/18 23:33*	*1*

Lab Sample ID: LCS 400-392596/2-A
Matrix: Solid
Analysis Batch: 392735

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 392596

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
C10-C28			349	235		mg/Kg		67	63 - 153		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
o-Terphenyl	*63*		*27 - 151*

Lab Sample ID: 400-151676-E-5-A MS
Matrix: Solid
Analysis Batch: 392735

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 392596

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
C10-C28	450	F1	422	674	F1	mg/Kg	☼	53	62 - 204		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
o-Terphenyl	*56*		*27 - 151*

Lab Sample ID: 400-151676-E-5-B MSD
Matrix: Solid
Analysis Batch: 392735

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 392596

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
C10-C28	450	F1	419	640	F1	mg/Kg	☼	46	62 - 204	5	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
o-Terphenyl	*54*		*27 - 151*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 400-392599/1-A
Matrix: Solid
Analysis Batch: 392766

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<20		20		mg/Kg			04/05/18 02:17	1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 400-392599/2-A
Matrix: Solid
Analysis Batch: 392766

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride			97.3	90.6		mg/Kg		93	80 - 120		

Lab Sample ID: LCSD 400-392599/3-A
Matrix: Solid
Analysis Batch: 392766

Client Sample ID: Lab Control Sample Dup
Prep Type: Soluble

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride			96.5	90.3		mg/Kg		94	80 - 120	0	15

Lab Sample ID: 400-151618-A-4-C MS
Matrix: Solid
Analysis Batch: 392766

Client Sample ID: Matrix Spike
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride	510		102	593	4	mg/Kg		78	80 - 120		

Lab Sample ID: 400-151618-A-4-D MSD
Matrix: Solid
Analysis Batch: 392766

Client Sample ID: Matrix Spike Duplicate
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	510		102	586	4	mg/Kg		71	80 - 120	1	15

Lab Chronicle

Client: Stantec Consulting Services Inc
Project/Site: ElPaso CGP Company, LLC - Hammond #41A

TestAmerica Job ID: 400-151608-1

Client Sample ID: MW-8 (11-11.7)

Date Collected: 03/29/18 12:40
Date Received: 03/31/18 08:46

Lab Sample ID: 400-151608-1

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			392466	04/03/18 09:52	CAC	TAL PEN
	Instrument ID: NOEQUIP									

Client Sample ID: MW-8 (11-11.7)

Date Collected: 03/29/18 12:40
Date Received: 03/31/18 08:46

Lab Sample ID: 400-151608-1

Matrix: Solid
Percent Solids: 97.7

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.14 g	5.0 g	392401	04/02/18 10:30	GRK	TAL PEN
Total/NA	Analysis	8015B		1	5 mL	5 mL	392323	04/02/18 15:27	GRK	TAL PEN
	Instrument ID: CH_RITA									
Total/NA	Prep	5035			5.14 g	5.0 g	392401	04/02/18 10:30	GRK	TAL PEN
Total/NA	Analysis	8021B		1	5 mL	5 mL	392322	04/02/18 15:27	GRK	TAL PEN
	Instrument ID: CH_RITA									
Total/NA	Prep	3546			15.02 g	1.0 mL	392596	04/04/18 08:55	KLR	TAL PEN
Total/NA	Analysis	8015B		1			392735	04/05/18 02:52	TAJ	TAL PEN
	Instrument ID: Eva									
Soluble	Leach	DI Leach			2.42 g	50 mL	392599	04/04/18 16:10	JAW	TAL PEN
Soluble	Analysis	300.0		1			392765	04/05/18 04:57	JAW	TAL PEN
	Instrument ID: IC2									

Laboratory References:

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

Accreditation/Certification Summary

Client: Stantec Consulting Services Inc
TestAmerica Job ID: 400-151608-1
Project/Site: ElPaso CGP Company, LLC - Hammond #41A

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	01-12-19
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	10-31-18
Kentucky (UST)	State Program	4	53	06-30-18
Kentucky (WW)	State Program	4	98030	12-31-18
L-A-B	ISO/IEC 17025		L2471	02-22-20
Louisiana	NELAP	6	30976	06-30-18
Louisiana (DW)	NELAP	6	LA170005	12-31-18
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	12-31-18
Oklahoma	State Program	6	9810	08-31-18
Pennsylvania	NELAP	3	68-00467	01-31-19
Rhode Island	State Program	1	LAO00307	12-30-18
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

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Method Summary

Client: Stantec Consulting Services Inc
Project/Site: ElPaso CGP Company, LLC - Hammond #41A

TestAmerica Job ID: 400-151608-1

Method	Method Description	Protocol	Laboratory
8015B	Gasoline Range Organics - (GC)	SW846	TAL PEN
8021B	Volatile Organic Compounds (GC)	SW846	TAL PEN
8015B	Diesel Range Organics (DRO) (GC)	SW846	TAL PEN
300.0	Anions, Ion Chromatography	MCAWW	TAL PEN
Moisture	Percent Moisture	EPA	TAL PEN

Protocol References:

EPA = US Environmental Protection Agency

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

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	Sampler: Brad Barton	Lab PM: Webb, Carol M	Carrier Tracking No(s):	COC No: 400-72780-28799.1
Client Contact: Steve Varsa	Phone: 316 305 2789	E-Mail: carol.webb@testamericainc.com		Page: Page 1 of 1
Company: Stantec Consulting Services Inc				Job #:

Address: 11153 Aurora Avenue	Due Date Requested: Normal	Analysis Requested	Preservation Codes:
City: Des Moines	TAT Requested (days): Normal		A - HCL M - Hexane B - NaOH N - None C - Zn Acetate O - AsNaO2 D - Nitric Acid P - Na2O4S E - NaHSO4 Q - Na2SO3 F - MeOH R - Na2S2O3 G - Amchlor S - H2SO4 H - Ascorbic Acid T - TSP Dodecahydrate I - Ice U - Acetone J - DI Water V - MCAA K - EDTA W - pH 4-5 L - EDA Z - other (specify) Other:
State, Zip: IA, 50322-7904			
Phone: 303-291-2239(Tel)	PO #: See Project Notes		
Email: steve.varsa@stantec.com	WO#: ARF # FRG-STN-03-08-18-SAH-01		
Project Name: Hammond #41 Soil 2018	Project #: 40005479 (Hammond #41A)		
Site: Hammond #41A Site	SSOW#:		

400-151608 COC

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8015B_DRO - DRO ORO	8015B_GRO, 8021B	300_ORGFM_28D - Chloride	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	N		
MW-8(11-11.7)	3/29/18	1240	G	S	N	N	1	1	2	4	Per ARF

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) Per ARF

Special Instructions/QC Requirements: Per ARF

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

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by: Brad Barton	Date/Time: 3/30/18 1030	Company Stantec	Received by: Fed Ex office	Date/Time: 3/30/18 1030	Company Fed Ex
Relinquished by: Fed Ex	Date/Time: 3/31/18 -	Company Fed Ex	Received by:	Date/Time: 3-31-18 0846	Company TA-PEN

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

Cooler Temperature(s) °C and Other Remarks: 2.0C IR-7

4/11/2018

Login Sample Receipt Checklist

Client: Stantec Consulting Services Inc

Job Number: 400-151608-1

Login Number: 151608

List Source: TestAmerica Pensacola

List Number: 1

Creator: Edwards, Robin S

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	2.0°C IR-7
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 <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

ATTACHMENT D

envirotech

Bill of Lading

MANIFEST # 59960
GENERATOR El Paso
POINT OF ORIGIN Hammond 41A
TRANSPORTER Sierra
DATE 4-2-18 JOB # 14073-0030

PHONE: (505) 632-0615 • 5796 U.S. HIGHWAY 64 • FARMINGTON, NEW MEXICO 87401

LOAD NO.	COMPLETE DESCRIPTION OF SHIPMENT					TRANSPORTING COMPANY			
	DESTINATION	MATERIAL	GRID	YDS	BBLS	TKT#	TRK#	TIME	DRIVER SIGNATURE
1	LF II -	Cont Soil	AA5		2	-	18	1218	
					2				

RESULTS			LANDFARM EMPLOYEE	NOTES
<295	CHLORIDE TEST	1	Gary Robinson EL	We Dumped & Decon.
	PAINT FILTER TEST	1	Certification of above receival & placement	

By signing as the driver/transporter, I certify the material hauled from the above location has not been added to or tampered with. I certify the material is from the above mentioned Generator/Point of Origin and that no additional material has been added or mixed into the load.

Generator Onsite Contact _____ Phone _____

Signatures required prior to distribution of the legal document. DISTRIBUTION: **White** - Company Records, **Yellow** - Billing, **Pink** - Customer, **Goldenrod** - LF Copy

envirotech

BOL# 59960

CHLORIDE TESTING / PAINT FILTER TESTING

DATE 4.2.18 TIME 1218

Attach test strip here

CUSTOMER El Paso

SITE Hammond 41A

DRIVER Happy Shorty JR.

SAMPLE Soil Straight ✓ With Dirt _____

CHLORIDE TEST 295 mg/Kg

ACCEPTED YES ✓ NO _____

PAINT FILTER TEST Time started 1218 Time completed 1230

PASS YES ✓ NO _____

SAMPLER/ANALYST Cory Robinson

5796 US Hwy 64, Farmington, NM 87401 || Ph (505) 632-0615 Fr (800) 362-1879 Fx (505) 632-1865 || info@envirotech-inc.com envirotech-inc.com

30 Years of Environmental Health and Safety Excellence

BASIN DISPOSAL

200 Montana, Bloomfield, NM 87413
505-632-8936 or 505-334-3013
OPEN 24 Hours per Day

NO. 711022
NMOCD PERMIT: NM -001-0005
Oil Field Waste Document, Form C138
INVOICE:

DATE 4-9-18
GENERATOR: El Paso
HAULING CO. Sierra
ORDERED BY: Joseph Wiley

DEL. TKT#.
BILL TO: El Paso
DRIVER: Martin
(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	54	Canada Mesa #2	8	20			520	
2		+ Hammond, Lat 0-21				'18APR 9	1:04PM	
3								
4								
5								

I, Martin Erives representitive 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

san juan reproduction 168-6

ATTACHMENT E

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

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

TestAmerica Job ID: 400-151704-1
Client Project/Site: ElPaso CGP Company, LLC - Hammond #41A

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

Attn: Ms. Sarah Gardner

Carol M Webb

Authorized for release by:
4/10/2018 12:47:23 PM

Carol Webb, Project Manager II
(850)471-6250
carol.webb@testamericainc.com

Table of Contents

Definitions/Glossary

Client: Stantec Consulting Services Inc
Project/Site: ElPaso CGP Company, LLC - Hammond #41A

TestAmerica Job ID: 400-151704-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	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 - Hammond #41A

TestAmerica Job ID: 400-151704-1

Job ID: 400-151704-1

Laboratory: TestAmerica Pensacola

Narrative

Job Narrative
400-151704-1

Comments
No additional comments.

Receipt
The samples were received on 4/3/2018 9:32 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 0.0º C.

GC/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: ElPaso CGP Company, LLC - Hammond #41A

TestAmerica Job ID: 400-151704-1

Client Sample ID: TRIP BLANK (4/1/18) — Lab Sample ID: 400-151704-1

No Detections.

Client Sample ID: MW-8 — Lab Sample ID: 400-151704-2

No Detections.

Client Sample ID: DUP-1 — Lab Sample ID: 400-151704-3

No Detections.

This Detection Summary does not include radiochemical test results.

Sample Summary

Client: Stantec Consulting Services Inc
Project/Site: ElPaso CGP Company, LLC - Hammond #41A

TestAmerica Job ID: 400-151704-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-151704-1	TRIP BLANK (4/1/18)	Water	04/01/18 10:00	04/03/18 09:32
400-151704-2	MW-8	Water	04/01/18 13:30	04/03/18 09:32
400-151704-3	DUP-1	Water	04/01/18 03:00	04/03/18 09:32

Client Sample Results

Client: Stantec Consulting Services Inc
Project/Site: ElPaso CGP Company, LLC - Hammond #41A

TestAmerica Job ID: 400-151704-1

Client Sample ID: TRIP BLANK (4/1/18)
Date Collected: 04/01/18 10:00
Date Received: 04/03/18 09:32

Lab Sample ID: 400-151704-1
Matrix: Water

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			04/06/18 11:18	1
Toluene	<1.0		1.0		ug/L			04/06/18 11:18	1
Ethylbenzene	<1.0		1.0		ug/L			04/06/18 11:18	1
Xylenes, Total	<10		10		ug/L			04/06/18 11:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*95*		*78 - 118*		*04/06/18 11:18*	*1*
Dibromofluoromethane	*92*		*81 - 121*		*04/06/18 11:18*	*1*
1,2-Dichloroethane-d4 (Surr)	*83*		*67 - 134*		*04/06/18 11:18*	*1*

Client Sample Results

Client: Stantec Consulting Services Inc
Project/Site: ElPaso CGP Company, LLC - Hammond #41A

TestAmerica Job ID: 400-151704-1

Client Sample ID: MW-8
Date Collected: 04/01/18 13:30
Date Received: 04/03/18 09:32

Lab Sample ID: 400-151704-2
Matrix: Water

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			04/06/18 17:21	1
Toluene	<1.0		1.0		ug/L			04/06/18 17:21	1
Ethylbenzene	<1.0		1.0		ug/L			04/06/18 17:21	1
Xylenes, Total	<10		10		ug/L			04/06/18 17:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*95*		*78 - 118*		*04/06/18 17:21*	*1*
Dibromofluoromethane	*92*		*81 - 121*		*04/06/18 17:21*	*1*
1,2-Dichloroethane-d4 (Surr)	*87*		*67 - 134*		*04/06/18 17:21*	*1*

Client Sample ID: DUP-1
Date Collected: 04/01/18 03:00
Date Received: 04/03/18 09:32

Lab Sample ID: 400-151704-3
Matrix: Water

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			04/06/18 17:47	1
Toluene	<1.0		1.0		ug/L			04/06/18 17:47	1
Ethylbenzene	<1.0		1.0		ug/L			04/06/18 17:47	1
Xylenes, Total	<10		10		ug/L			04/06/18 17:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*95*		*78 - 118*		*04/06/18 17:47*	*1*
Dibromofluoromethane	*91*		*81 - 121*		*04/06/18 17:47*	*1*
1,2-Dichloroethane-d4 (Surr)	*85*		*67 - 134*		*04/06/18 17:47*	*1*

QC Association Summary

Client: Stantec Consulting Services Inc
Project/Site: ElPaso CGP Company, LLC - Hammond #41A

TestAmerica Job ID: 400-151704-1

GC/MS VOA

Analysis Batch: 392915

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-151704-1	TRIP BLANK (4/1/18)	Total/NA	Water	8260C	
400-151704-2	MW-8	Total/NA	Water	8260C	
400-151704-3	DUP-1	Total/NA	Water	8260C	
MB 400-392915/4	Method Blank	Total/NA	Water	8260C	
LCS 400-392915/1002	Lab Control Sample	Total/NA	Water	8260C	
400-151584-D-1 MS	Matrix Spike	Total/NA	Water	8260C	
400-151584-D-1 MSD	Matrix Spike Duplicate	Total/NA	Water	8260C	

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

Lab Sample ID: MB 400-392915/4
Matrix: Water
Analysis Batch: 392915

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			04/06/18 08:42	1
Toluene	<1.0		1.0		ug/L			04/06/18 08:42	1
Ethylbenzene	<1.0		1.0		ug/L			04/06/18 08:42	1
Xylenes, Total	<10		10		ug/L			04/06/18 08:42	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*93*		*78 - 118*		*04/06/18 08:42*	*1*
Dibromofluoromethane	*92*		*81 - 121*		*04/06/18 08:42*	*1*
1,2-Dichloroethane-d4 (Surr)	*83*		*67 - 134*		*04/06/18 08:42*	*1*

Lab Sample ID: LCS 400-392915/1002
Matrix: Water
Analysis Batch: 392915

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	48.8		ug/L		98	70 - 130		
Toluene			50.0	52.7		ug/L		105	70 - 130		
Ethylbenzene			50.0	52.5		ug/L		105	70 - 130		
Xylenes, Total			100	102		ug/L		102	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*92*		*78 - 118*
Dibromofluoromethane	*91*		*81 - 121*
1,2-Dichloroethane-d4 (Surr)	*83*		*67 - 134*

Lab Sample ID: 400-151584-D-1 MS
Matrix: Water
Analysis Batch: 392915

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	46.2		ug/L		92	56 - 142		
Toluene	<1.0		50.0	49.4		ug/L		99	65 - 130		
Ethylbenzene	<1.0		50.0	48.6		ug/L		97	58 - 131		
Xylenes, Total	<10		100	95.4		ug/L		95	59 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene	*92*		*78 - 118*
Dibromofluoromethane	*92*		*81 - 121*
1,2-Dichloroethane-d4 (Surr)	*81*		*67 - 134*

Lab Sample ID: 400-151584-D-1 MSD
Matrix: Water
Analysis Batch: 392915

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	45.2		ug/L		90	56 - 142	2	30
Toluene	<1.0		50.0	46.9		ug/L		94	65 - 130	5	30

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

Lab Sample ID: 400-151584-D-1 MSD
Matrix: Water
Analysis Batch: 392915

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	46.2		ug/L		92	58 - 131	5	30
Xylenes, Total	<10		100	90.7		ug/L		91	59 - 130	5	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene	*94*		*78 - 118*
Dibromofluoromethane	*91*		*81 - 121*
1,2-Dichloroethane-d4 (Surr)	*82*		*67 - 134*

Lab Chronicle

Client: Stantec Consulting Services Inc
Project/Site: ElPaso CGP Company, LLC - Hammond #41A

TestAmerica Job ID: 400-151704-1

Client Sample ID: TRIP BLANK (4/1/18)

Lab Sample ID: 400-151704-1
Matrix: Water
Date Collected: 04/01/18 10:00
Date Received: 04/03/18 09:32

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	392915	04/06/18 11:18	WPD	TAL PEN
	Instrument ID: CH_CONAN									

Client Sample ID: MW-8

Lab Sample ID: 400-151704-2
Matrix: Water
Date Collected: 04/01/18 13:30
Date Received: 04/03/18 09:32

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	392915	04/06/18 17:21	WPD	TAL PEN
	Instrument ID: CH_CONAN									

Client Sample ID: DUP-1

Lab Sample ID: 400-151704-3
Matrix: Water
Date Collected: 04/01/18 03:00
Date Received: 04/03/18 09:32

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	392915	04/06/18 17:47	WPD	TAL PEN
	Instrument ID: CH_CONAN									

Laboratory References:

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

Accreditation/Certification Summary

Client: Stantec Consulting Services Inc
TestAmerica Job ID: 400-151704-1
Project/Site: ElPaso CGP Company, LLC - Hammond #41A

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	01-12-19
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	10-31-18
Kentucky (UST)	State Program	4	53	06-30-18
Kentucky (WW)	State Program	4	98030	12-31-18
L-A-B	ISO/IEC 17025		L2471	02-22-20
Louisiana	NELAP	6	30976	06-30-18
Louisiana (DW)	NELAP	6	LA170005	12-31-18
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	12-31-18
Oklahoma	State Program	6	9810	08-31-18
Pennsylvania	NELAP	3	68-00467	01-31-19
Rhode Island	State Program	1	LAO00307	12-30-18
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

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Method Summary

Client: Stantec Consulting Services Inc
Project/Site: ElPaso CGP Company, LLC - Hammond #41A

TestAmerica Job ID: 400-151704-1

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

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: Brad Burt	Lab PM: Webb, Carol M	Carrier Tracking No(s):	COC No: 400-72786-28805.1
Client Contact: Steve Varsa	Phone: 316 305 2789	E-Mail: carol.webb@testamericainc.com		Page: Page 1 of 1
Company: Stantec Consulting Services Inc				Job #:

Address: 11153 Aurora Avenue	Due Date Requested: Normal	Analysis Requested	Preservation Codes:
City: Des Moines	TAT Requested (days): Normal		A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)
State, Zip: IA, 50322-7904			
Phone: 303-291-2239(Tel)	PO #: See Project Notes		
Email: steve.varsa@stantec.com	~~WO#~~ ARP # ERG-STN-03-08-18-SAV-01 (Hammond)		
Project Name: Hammond Water 2018	Project #: 40005479		Other:
Site: Hammond #41A site	SSOW#:		

400-151704 COC

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260C - BTEX 8260	Total Number of containers	Special Instructions/Note:
			Preservation Code:				A		
Trip Blank (4/1/18)	4/1/18	1000	-	W	N	N	3	3	Per ARF
MW-8	4/1/18	1330	G	W	N	N	3	3	
Dup-1	4/1/18	03:00	G	W	N	N	3	3	

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological	☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Per ARF	Special Instructions/QC Requirements: Per ARF

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

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by: Brad Burt	Date/Time: 4/2/18 0630	Company Stantec	Received by: Fed Ex pick-up	Date/Time: 4/2/18 -	Company Fed Ex
Relinquished by: Fed Ex	Date/Time: 4/3/18 -	Company Fed Ex	Received by:	Date/Time: 4/3/18 0932	Company TAL

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 0.0°C IR7

Ver: 08/04/2016

4/10/2018

Login Sample Receipt Checklist

Client: Stantec Consulting Services Inc

Job Number: 400-151704-1

Login Number: 151704
List Number: 1
Creator: Perez, Trina M

List Source: TestAmerica Pensacola

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	0.0°C IR-7
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 <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	