

By Nelson Velez at 7:36 am, Dec 29, 2021



Review of 2020 Annual Groundwater Monitoring Report:
Content satisfactory

1. OCD approves the plugged and abandonment of well TMW-1, MW-1, MW-9, MW-11, and MW-15
2. OCD approves the elimination of TDS, dissolved manganese, and sulfate from further laboratory analysis
3. Complete quarterly sampling of all viable wells for at least eight consecutive quarters for BTEX
4. Hilcorp to continue to monitor/recover PSH from well MW-16
5. Submit the Annual Monitoring Report to the OCD no later than March 31, 2022

March 22, 2021

Ms. Clara Cardoza
Hilcorp Energy Company
PO Box 61229
Houston, TX 77208

**Subject: 2020 Annual Groundwater Monitoring Report
Hampton #4M
San Juan County, New Mexico
NMOCD Incident Number: NAUTOFAB000251
NMOCD Administrative Order: 3R-069**

Dear Ms. Cardoza:

WSP USA Inc. (WSP) presents this annual report on behalf of Hilcorp Energy Company (Hilcorp) to the New Mexico Oil Conservation Division (NMOCD) to document groundwater monitoring activities conducted at the Hampton #4M natural gas production well (Site) during 2020. The Site is located approximately 0.25 miles south of Hampton Arroyo on Bureau of Land Management (BLM) land within Unit N, Section 13, Township 30 North and Range 11 West, San Juan County, New Mexico (Figures 1 and 2).

SITE BACKGROUND

The Hampton #4M gas well was spudded by the Southland Royal Company in 1983. Since then, the well has changed ownership from Southland to Burlington Resources (Burlington) in 1996, ConocoPhillips in 2006, and Hilcorp in 2017. In addition, the Public Service Company of New Mexico (PNM) operated a dehydration unit and unlined earthen pit at the Site between 1990 and 1996 (located on the north end of the well pad). Petroleum hydrocarbon impacted soil and groundwater were encountered during pit-closure activities performed in 1996. In response, PNM conducted a subsurface investigation and installed several wells in the northern portion of the well pad to assess soil and groundwater conditions. Further investigations performed in 1997 and 1998 revealed a separate source of petroleum contamination at the southern end of the well pad (upgradient of the PNM pit) located near equipment owned by Burlington. The 1997 investigation also discovered a surface seep to the northwest of the well pad (downgradient of the well pad) that contained phase separated hydrocarbons (PSH).

Based on the investigations conducted at the Site, NMOCD issued Administrative Order Number R-11134-A to Burlington and PNM. Burlington was assigned responsibility of soil and groundwater impacts south/upgradient of the PNM dehydrator pit and PNM responsibility of impacts north/downgradient of the dehydrator pit. Several attempts to remediate the Site have been performed between 1997 and 2017 and include excavation, application of potassium permanganate within the excavations, manual PSH recovery (bailing/adsorbent socks), mobile dual-phase extraction, and PSH recovery using a skimmer pump. Recently, ConocoPhillips installed a solar-powered skimmer in 2016 to recover PSH from well MW-16. However, the system was removed in 2019 due to poor PSH recovery. Since the system removal, adsorbent socks have been placed into this well and replaced quarterly to address the residual PSH. Additional details regarding the history of the Site can be found in the *2019 Remediation and Annual Groundwater Monitoring Report* prepared by GHD Services Inc. (dated March 25, 2020).

Since 1997, several former wells at the Site have been damaged and/or removed during excavation. Currently, eight wells remain at the Site and include MW-1, MW-5, MW-9, MW-11, MW-12, MW-15, MW-16, and TMW-1. However, well TMW-1 was previously damaged and has been dry since 2012. In addition, the seep located northwest of the well pad has been dry since 2011 and is no longer sampled. Well locations and Site features are shown on Figure 2.

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SITE GROUNDWATER CLEANUP STANDARDS

NMOCD requires that groundwater-quality standards presented by the New Mexico Water Quality Control Commission (NMWQCC) in 20.6.2.3103 of the New Mexico Administrative Code (NMAC) be met. The following standards are presented for the constituents of concern at the Site in milligrams per liter (mg/L).

ANALYTE	LIMIT
Benzene	0.005 mg/L
Toluene	1.0 mg/L
Ethylbenzene	0.7 mg/L
Xylenes	0.62 mg/L
Sulfate	600 mg/L
Manganese	0.2 mg/L
Total Dissolved Solids	1,000 mg/L

In addition, NMWQCC standards state that light non-aqueous phase liquids (LNAPLs) or PSH (as referenced in this report) shall not be present floating on the groundwater.

GROUNDWATER SAMPLING ACTIVITIES AND RESULTS

Groundwater monitoring at the Site includes quarterly PSH recovery from well MW-16 and annual sampling for laboratory analysis. Groundwater-level measurements and samples were collected on August 4 and 6, 2020 from wells MW-1, MW-5, MW-9, MW-11, MW-12, MW-15, and MW-16. Samples were not collected for laboratory analysis from MW-16 due to the presence of PSH. In addition, well TMW-1 was dry during the sampling event and was not sampled. The following sections summarize the sampling procedures and results gathered during these events.

GROUNDWATER-LEVEL MEASUREMENTS

Static groundwater-level monitoring included recording depth-to-groundwater and depth-to-PSH measurements of each monitoring well using a Keck oil/water interface probe. The interface probe was decontaminated with Alconox™ soap and rinsed with de-ionized water prior to each measurement to prevent cross-contamination. Elevation data for wells MW-15 and MW-16 have not been obtained, therefore these wells have not been used to develop the potentiometric surface maps. Groundwater elevations measured in monitoring wells during the 2020 sampling event are presented in Table 1 and were used to develop groundwater potentiometric surface maps (Figure 3). The inferred groundwater flow direction is to the north-northwest with an approximate hydraulic gradient of 0.09 feet/foot.

GROUNDWATER SAMPLING

Groundwater was purged and sampled using a disposable bailer. Purging was accomplished by removing stagnant groundwater from the monitoring well prior to collecting a sample. Field measurements of groundwater quality parameters, including temperature, pH, turbidity, electrical conductivity, dissolved oxygen, and oxidation-reduction potential, were collected during the purging process and are presented in Table 2. In general, groundwater is generally low in dissolved oxygen but has positive oxidation-reduction potential values, indicating overall oxic groundwater conditions at the Site.

Following well purging, groundwater samples were placed directly into laboratory-provided jars and labeled with the date and time of collection, well designation, project name, sample collector's name, and parameters to be analyzed. They were immediately sealed, packed on ice, and submitted to Pace Analytical for analysis of benzene, toluene, ethylbenzene, and total xylenes (BTEX) by Environmental Protection Agency (EPA) Method 8260B, dissolved manganese by EPA Method 6010B, sulfate by EPA Method 9056A, and total dissolved solids (TDS) by EPA Method 2540. Proper chain-of-custody (COC) procedures were followed documenting the date and time sampled, sample number, type of sample, sample collector's name, preservative used, analyses required, and sample collector's signature. Analytical laboratory reports from the sampling events are included as Enclosure A.



GROUNDWATER ANALYTICAL RESULTS

During the annual groundwater-sampling event, benzene was detected in well MW-5 at a concentration of 0.00537 mg/L, slightly exceeding the NMWQCC standard of 0.005 mg/L. Benzene was not detected above the NMWQCC in any of the other wells sampled. Toluene, ethylbenzene, and xylenes were also not detected above the NMWQCC standards in any of the sampled wells. TDS, dissolved manganese, and sulfate were detected in all of the analyzed samples above their respective NMWQCC standards.

A summary of analytical results are presented in Table 3 and on Figure 4.

PHASE SEPARATED HYDROCARBON RECOVERY

A solar-powered skimmer was previously used to recover PSH from well MW-16 at the Site. The system was subsequently removed in 2019 due to poor PSH recovery. Since the system removal, adsorbent socks have been placed into this well and replaced quarterly to address the residual PSH. In 2020, PSH removed from MW-16 ranged from 16 ounces to 176 ounces per quarter. Table 4 presents the volume of PSH recovered by adsorbent socks during each monitoring event in 2019 and 2020.

CONCLUSIONS

Overall, the presence of PSH and BTEX concentrations have decreased over time at the Site. BTEX concentrations have not been detected above laboratory reporting limits in wells MW-1, MW-9, MW-11, and MW-15 in over ten years. Additionally, toluene, ethylbenzene, and xylene concentrations have not been detected above NMWQCC standards in wells MW-5 and MW-12 in over five years. Benzene concentrations in wells MW-5 and MW-12 have been greatly reduced and have fluctuated above and below the NMWQCC standard for the last several years. PSH remains in well MW-16; however, the volume of recoverable PSH has also decreased over time. Data collected at the Site suggests that the petroleum-hydrocarbon plume is stable and reducing.

Conversely, TDS, manganese, and sulfate concentrations detected in all wells have largely remained unchanged since they were first analyzed in 2014. Although concentrations of manganese, sulfate, and TDS could be elevated as a byproduct of petroleum degradation, these constituents are often naturally occurring at elevated concentrations in areas with shallow, perched groundwater. This is evidenced by concentrations of TDS, dissolved manganese, and sulfate in well MW-1, located upgradient of the original release, and MW-11 located over 1,200 feet downgradient of the Hampton #4M well pad. Groundwater from both wells MW-1 and MW-11 had low-level concentrations of BTEX when the Site was first investigated in 1997. BTEX concentrations were detected just above the laboratory reporting limits until 2007 and have not been detected since that time. Since 2014, TDS, manganese, and sulfate concentrations in wells MW-1 and MW-11 have remained consistent and similar to each other and are likely attributed to background concentrations.

RECOMMENDATIONS

Based on current and historical data gathered at the Site, WSP/Hilcorp recommend the following actions:

- Plug and abandon well TMW-1. This well has been damaged and dry for several years.
- TDS, dissolved manganese, and sulfate be removed as constituents of concern at the Site. These constituents can be attributed to background concentrations in the area and not due to the presence of petroleum-hydrocarbon contaminants.
- Plug and abandon wells MW-1, MW-9, MW-11, and MW-15. BTEX concentrations have been below NMWQCC standards for over 10 years, including over eight consecutive quarters between the years 1999 and 2008.
- Hilcorp to commence quarterly sampling of all viable wells at the Site for at least eight consecutive quarters to assess BTEX concentrations.
- Hilcorp to continue to monitor/recover PSH from well MW-16.



WSP appreciates the opportunity to provide these environmental services to Hilcorp. Please contact either of the undersigned with any questions at (970) 385-1096.

Kind regards,

A handwritten signature in black ink, appearing to read 'Stuart Hyde'.

Stuart Hyde, L.G.
Environmental Geologist

A handwritten signature in black ink, appearing to read 'Ashley L. Ager'.

Ashley Ager, M.S., P.G.
Regional Manager, Geologist

Enclosed:

Figure 1: Site Location Map

Figure 2: Site Map

Figure 3: Annual Groundwater Elevation Map

Figure 4: Groundwater Analytical Results

Table 1: Well Construction Information and Groundwater Elevations

Table 2: Field Parameter Results

Table 3: Petroleum Hydrocarbon Groundwater Analytical Results

Table 4: Phase Separated Hydrocarbon Recovered Volume

Enclosure A: Analytical Laboratory Reports

FIGURES

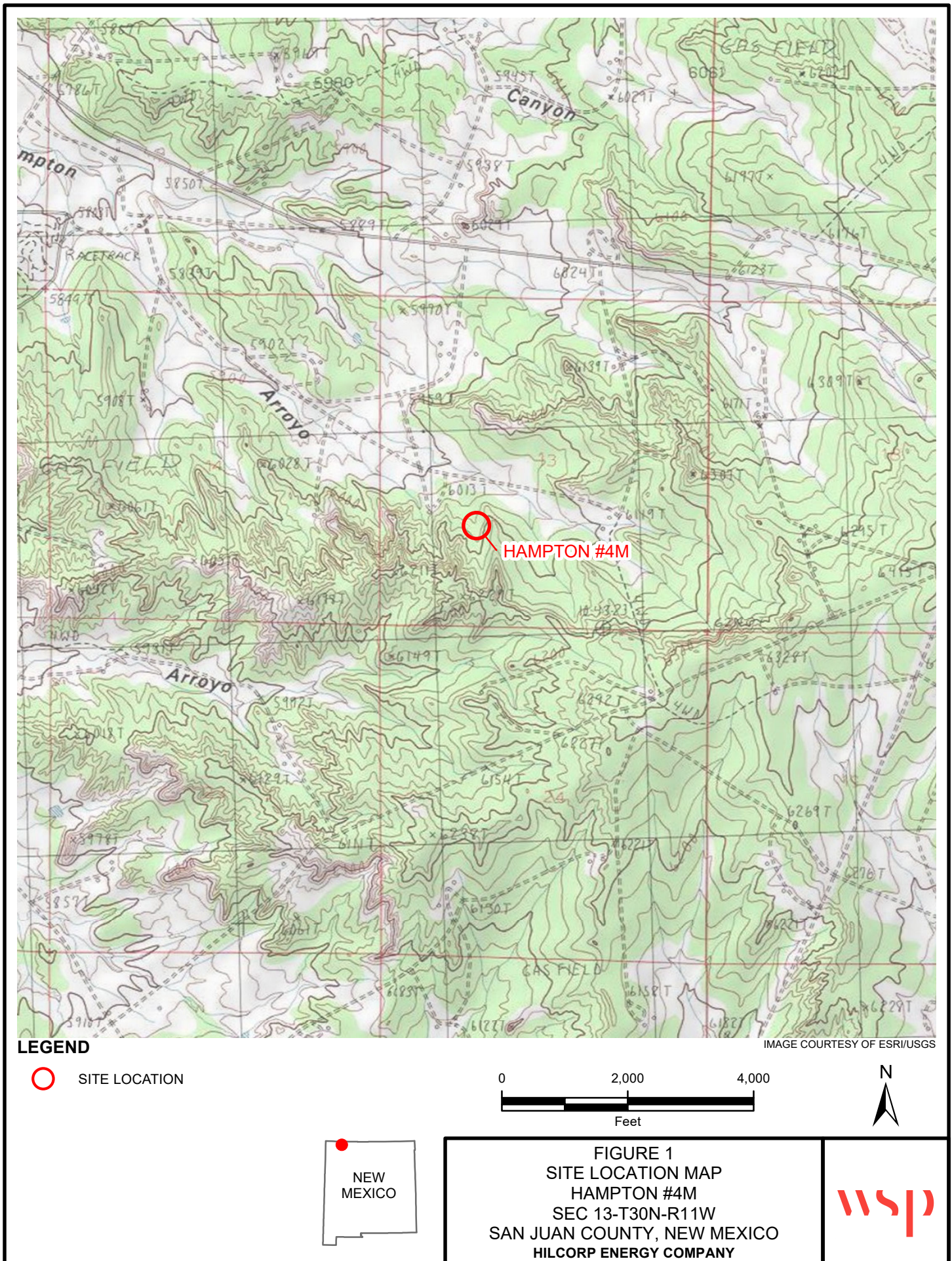




IMAGE COURTESY OF ESRI

LEGEND

- ⊗ MONITORING WELL
- ⌘ PLUGGED AND ABANDONED MONITORING WELL
- FORMER SEEP
- EL PASO GAS PIPELINE

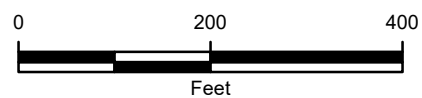
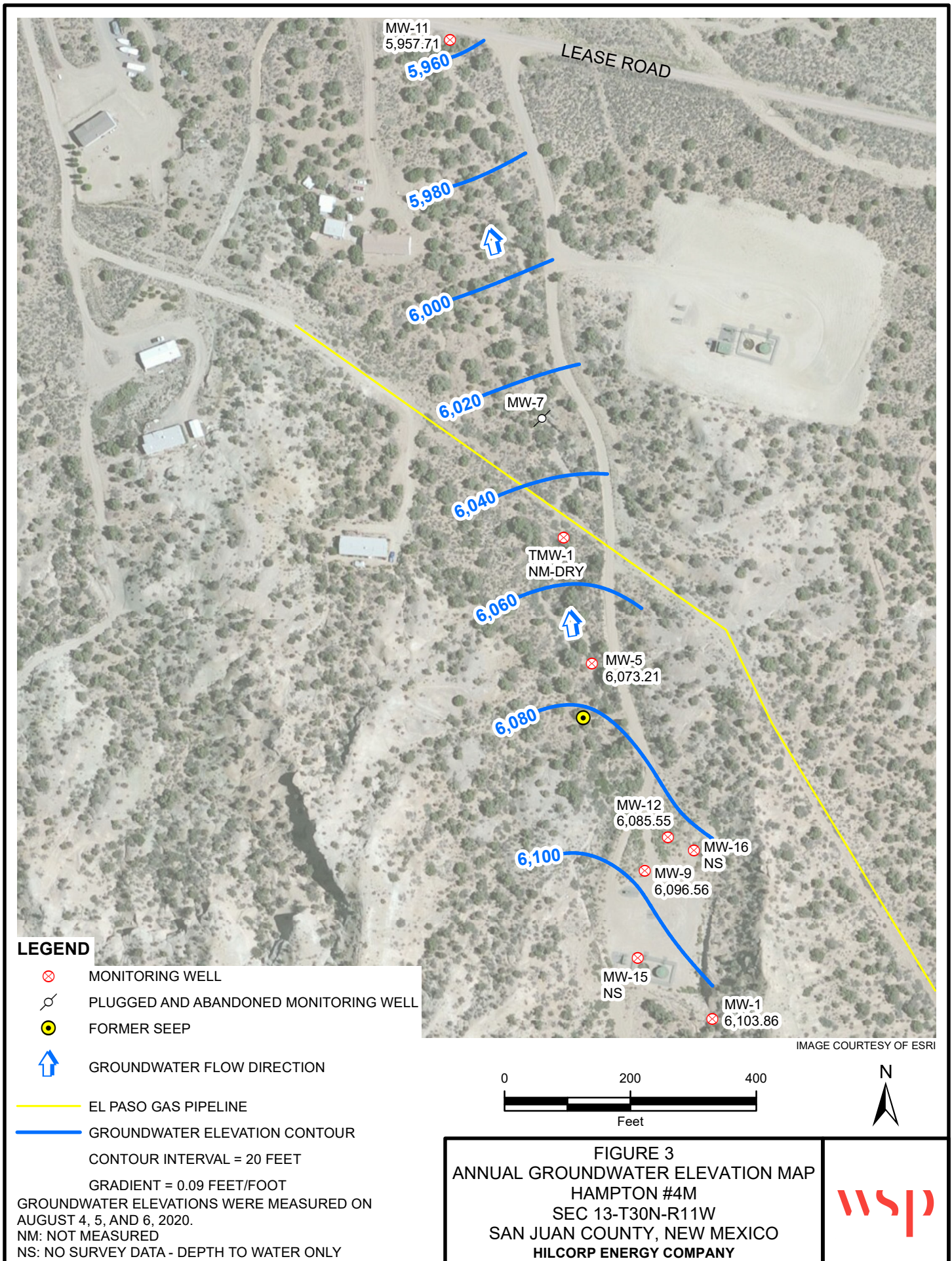
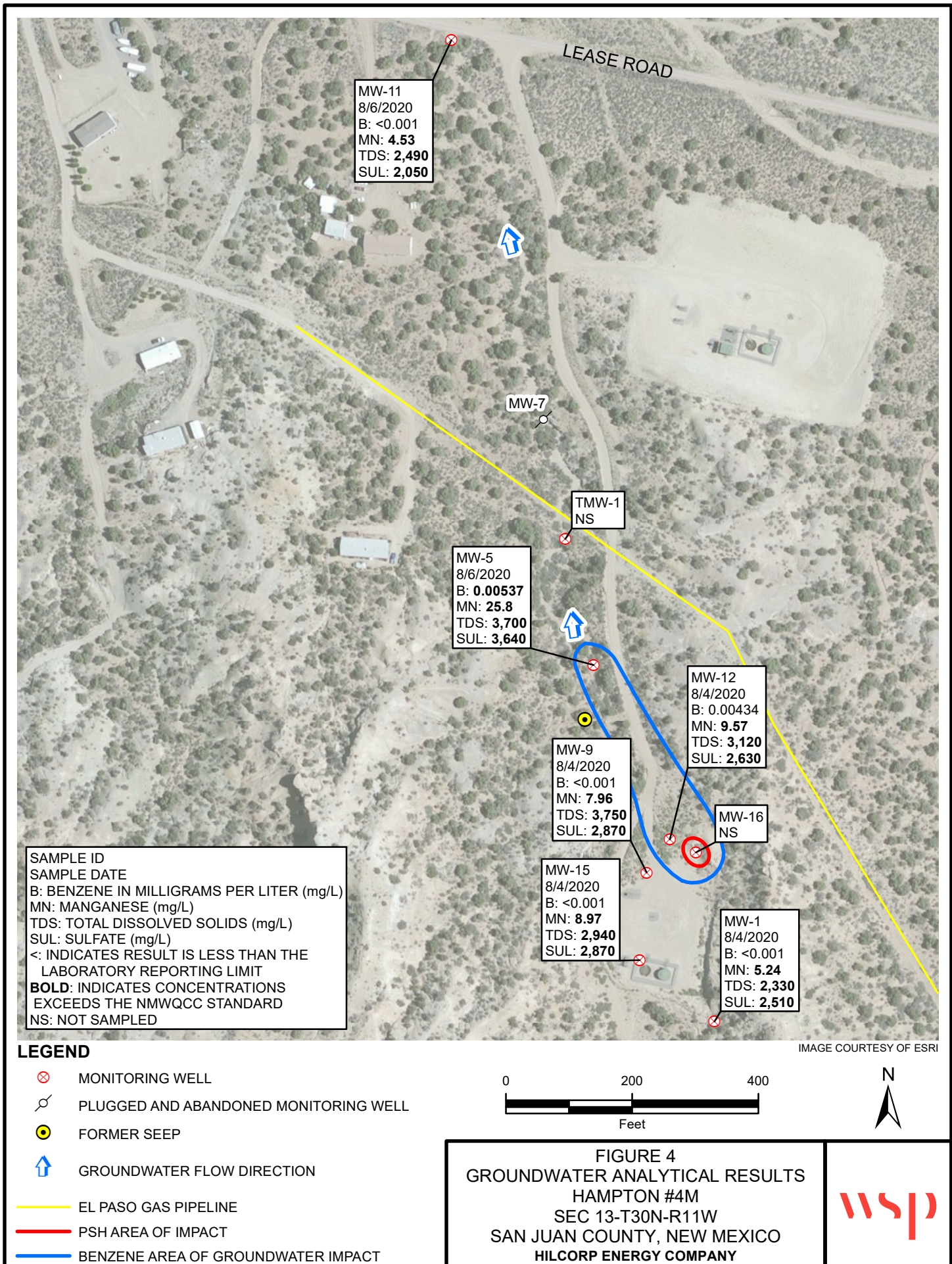


FIGURE 2
SITE MAP
HAMPTON #4M
SEC 13-T30N-R11W
SAN JUAN COUNTY, NEW MEXICO
HILCORP ENERGY COMPANY







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TABLES

TABLE 1

WELL CONSTRUCTION INFORMATION AND GROUNDWATER ELEVATIONS

HAMPTON #4M

SAN JUAN COUNTY, NEW MEXICO

Well ID	Top of Casing Elevation (ft AMSL)	Sample Date	Depth to PSH (ft BTOC)	Depth to Groundwater (ft BTOC)	PSH Thickness (ft)	Groundwater Elevation (ft AMSL)
MW-1	6,149.42	11/8/2007	--	42.81	--	6,106.61
		1/17/2008	--	42.96	--	6,106.46
		3/19/2008	--	42.93	--	6,106.49
		7/22/2008	--	42.74	--	6,106.68
		10/23/2008	--	32.80	--	6,116.62
		1/21/2009	--	42.90	--	6,106.52
		9/24/2009	--	43.09	--	6,106.33
		9/28/2010	--	43.19	--	6,106.23
		10/11/2011	--	43.55	--	6,105.87
		9/25/2012	--	43.88	--	6,105.54
		9/18/2013	--	44.32	--	6,105.10
		3/24/2014	--	44.10	--	6,105.32
		9/24/2014	--	44.69	--	6,104.73
		9/23/2015	--	44.95	--	6,104.47
		9/15/2016	--	45.11	--	6,104.31
		10/26/2017	--	45.16	--	6,104.26
		9/6/2018	--	45.52	--	6,103.90
		8/8/2019	--	45.28	--	6,104.14
		8/4/2020	--	45.56	--	6,103.86
MW-5	6,090.83	11/8/2007	--	16.52	--	6,074.31
		1/17/2008	--	15.65	--	6,075.18
		3/19/2008	--	13.64	--	6,077.19
		7/22/2008	--	15.72	--	6,075.11
		10/23/2008	--	16.53	--	6,074.30
		1/21/2009	--	16.04	--	6,074.79
		9/24/2009	--	16.89	--	6,073.94
		9/28/2010	--	16.55	--	6,074.28
		10/11/2011	--	17.39	--	6,073.44
		9/25/2012	--	17.46	--	6,073.37
		9/18/2013	--	16.78	--	6,074.05
		9/24/2014	--	17.50	--	6,073.33
		9/23/2015	--	17.17	--	6,073.66
		9/15/2016	--	17.24	--	6,073.59
		10/26/2017	--	17.69	--	6,073.14
		9/6/2018	--	18.12	--	6,072.71
		8/7/2019	--	16.87	--	6,073.96
		8/6/2020	--	17.62	--	6,073.21

TABLE 1

WELL CONSTRUCTION INFORMATION AND GROUNDWATER ELEVATIONS

HAMPTON #4M

SAN JUAN COUNTY, NEW MEXICO

MW-7	6,066.91	11/8/2007	--	20.22	--	6,046.69
		1/17/2008	--	20.50	--	6,046.41
		3/19/2008	--	20.02	--	6,046.89
		7/22/2008	--	19.29	--	6,047.62
		10/23/2008	--	19.95	--	6,046.96
		1/21/2009	--	20.44	--	6,046.47
		9/24/2009	--	20.55	--	6,046.36
		9/28/2010	--	21.24	--	6,045.67
		10/11/2011	--	DRY	--	--
		9/25/2012	--	DRY	--	--
		9/18/2013	--	DRY	--	--
		5/9/2014	Well Plugged and Abandoned			
MW-9	6,122.52	11/8/2007	--	22.91	--	6,099.61
		1/17/2008	--	22.76	--	6,099.76
		3/19/2008	--	22.38	--	6,100.14
		7/22/2008	--	23.10	--	6,099.42
		10/23/2008	--	23.02	--	6,099.50
		1/21/2009	--	22.85	--	6,099.67
		9/24/2009	--	23.64	--	6,098.88
		9/28/2010	--	23.70	--	6,098.82
		10/11/2011	--	24.03	--	6,098.49
		9/25/2012	--	24.61	--	6,097.91
		9/18/2013	--	24.61	--	6,097.91
		9/24/2014	--	25.18	--	6,097.34
		9/23/2015	--	25.32	--	6,097.20
		9/15/2016	--	25.82	--	6,096.70
		10/26/2017	--	25.35	--	6,097.17
		9/6/2018	--	26.00	--	6,096.52
		8/8/2019	--	25.56	--	6,096.96
		8/4/2020	--	25.96	--	6,096.56
MW-11	6,015.75	11/8/2007	--	56.00	--	5,959.75
		1/17/2008	--	55.86	--	5,959.89
		3/19/2008	--	55.88	--	5,959.87
		7/22/2008	--	55.71	--	5,960.04
		10/23/2008	--	55.91	--	5,959.84
		1/21/2009	--	55.75	--	5,960.00
		9/24/2009	--	56.02	--	5,959.73
		9/28/2010	--	56.06	--	5,959.69
		10/11/2011	--	56.21	--	5,959.54
		9/25/2012	--	56.41	--	5,959.34
		9/18/2013	--	56.73	--	5,959.02
		9/24/2014	--	56.91	--	5,958.84
		9/23/2015	--	57.20	--	5,958.55
		9/15/2016	--	58.37	--	5,957.38
		10/26/2017	--	57.42	--	5,958.33
		9/6/2018	--	57.84	--	5,957.91
		8/7/2019	--	57.86	--	5,957.89
		8/6/2020	--	58.04	--	5,957.71

TABLE 1

WELL CONSTRUCTION INFORMATION AND GROUNDWATER ELEVATIONS

HAMPTON #4M

SAN JUAN COUNTY, NEW MEXICO

MW-12	6,109.02	11/8/2007	--	20.46	--	6,088.56
		1/17/2008	--	20.24	--	6,088.78
		3/19/2008	--	19.85	--	6,089.17
		7/22/2008	--	20.54	--	6,088.48
		10/23/2008	--	20.61	--	6,088.41
		1/21/2009	--	20.37	--	6,088.65
		9/24/2009	--	21.23	--	6,087.79
		9/28/2010	--	21.27	--	6,087.75
		10/11/2011	--	21.58	--	6,087.44
		9/25/2012	--	22.14	--	6,086.88
		9/18/2013	--	22.17	--	6,086.85
		3/24/2014	--	21.64	--	6,087.38
		9/24/2014	--	22.70	--	6,086.32
		9/23/2015	--	22.84	--	6,086.18
		9/15/2016	--	22.21	--	6,086.81
		10/26/2017	--	22.82	--	6,086.20
		9/6/2018	--	23.53	--	6,085.49
		8/8/2019	--	23.08	--	6,085.94
		8/4/2020	--	23.47	--	6,085.55
MW-15	No survey - DTW only	11/8/2007	--	18.03	--	NA
		1/17/2008	--	18.20	--	NA
		3/19/2008	--	17.60	--	NA
		7/22/2008	--	17.79	--	NA
		10/23/2008	--	18.01	--	NA
		1/21/2009	--	18.20	--	NA
		9/24/2009	--	18.33	--	NA
		9/28/2010	--	18.25	--	NA
		10/11/2011	--	18.65	--	NA
		9/25/2012	--	18.97	--	NA
		9/18/2013	--	19.23	--	NA
		9/24/2014	--	19.43	--	NA
		9/23/2015	--	19.58	--	NA
		9/15/2016	--	19.69	--	NA
		10/26/2017	--	19.60	--	NA
		9/6/2018	--	20.05	--	NA
		8/8/2019	--	19.68	--	NA
		8/4/2020	--	20.05	--	NA
MW-16	No survey - DTW only	11/8/2007	--	25.03	--	NA
		1/17/2008	--	24.88	--	NA
		3/19/2008	--	24.37	--	NA
		7/22/2008	--	25.00	--	NA
		10/23/2008	--	25.57	--	NA
		1/21/2009	--	24.97	--	NA
		9/24/2009	--	25.75	--	NA
		9/28/2010	--	25.41	--	NA
		10/11/2011	--	28.26	--	NA
		9/25/2012	26.57	27.38	0.81	NA
		9/18/2013	27.34	28.15	0.81	NA

TABLE 1

WELL CONSTRUCTION INFORMATION AND GROUNDWATER ELEVATIONS
HAMPTON #4M
SAN JUAN COUNTY, NEW MEXICO

MW-16	No survey - DTW only	3/24/2014	25.96	28.20	2.24	NA
		9/24/2014	28.00	28.84	0.84	NA
		9/23/2015	26.83	29.27	2.44	NA
		9/15/2016*	33.25	33.34	0.09	NA
		10/27/2016*	33.25	33.42	0.17	NA
		6/14/2017	--	30.58	--	NA
		10/26/2017	31.39	--	--	NA
		9/6/2018	33.49	33.51	0.02	NA
		8/8/2019	--	31.86 (2)	--	NA
		8/5/2020	31.70	33.36	1.66	NA
TMW-1	No survey - DTW only	11/8/2007	--	19.06	--	NA
		1/17/2008	--	19.37	--	NA
		3/19/2008	--	18.55	--	NA
		7/22/2008	--	18.10	--	NA
		10/23/2008	--	19.19	--	NA
		1/21/2009	--	19.25	--	NA
		9/24/2009	--	19.61	--	NA
		9/28/2010	--	19.11	--	NA
		10/11/2011	--	19.39	--	NA
		9/25/2012	--	DRY	--	NA
		9/18/2013	--	DRY	--	NA
		9/24/2014	--	DRY	--	NA
		9/23/2015	--	DRY	--	NA
		10/26/2017	--	DRY	--	NA
		9/6/2018	--	DRY	--	NA
		8/8/2019	--	DRY	--	NA
		8/6/2020	--	DRY	--	NA

Notes:

(1) - when PSH is present, groundwater elevation is adjusted using a PSH density correction factor of 0.8

(2) - Uncertainty whether fluid level equilibrated after removal of adsorbant sock prior to measurement

* - extension added to top of PVC casing resulting in greater depths to groundwater

AMSL - above mean sea level

bgs - below ground surface

BTOC - below top of casing

DTW - depth to groundwater

ft - feet

NM - not measured

PSH - phase separated hydrocarbons

TABLE 2

**FIELD PARAMETER RESULTS
HAMPTON #4M
SAN JUAN COUNTY, NEW MEXICO**

Well ID	Sample Date	Temperature (°C)	pH	TDS (g/L)	Conductivity (uS/cm)	DO (mg/L)	ORP (mV)	Volume (gallons)
MW-1	9/23/2015	12.65	5.20	2.10	3,226	2.75	-26.0	1.25
	10/26/2017	13.26	4.37	--	2,522	2.29	204.8	1.25
	9/6/2018	17.53	4.82	--	2,775	6.22	260.7	0.75
	8/8/2019	20.20	4.66	1.53	3,020	--	73.5	1.00
	8/4/2020	19.70	4.77	1.41	2,870	2.64	91.5	--
MW-5	9/23/2015	15.63	5.85	2.85	4,377	3.10	-114.9	0.50
	9/15/2016	--	--	--	--	--	--	--
	9/6/2018	Sample volume insufficient to analyze field parameters						
	8/7/2019	21.30	4.42	2.41	4,900	--	142.6	1.50
	8/6/2020	18.70	5.20	2.01	4,020	2.09	61.2	--
MW-9	9/23/2015	15.69	4.98	2.50	3,838	2.85	-15.0	2.50
	9/23/2015	14.61	5.13	2.48	3,817	2.25	-32.4	3.00
	9/23/2015	14.50	5.19	2.48	3,819	2.15	-35.2	3.50
	9/15/2016	13.67	4.97	2.51	3,856	1.64	111.6	3.75
	10/26/2017	14.93	5.73	--	3,020	2.85	120.5	3.50
	9/6/2018	16.56	6.16	--	3,191	1.96	94.4	3.00
	8/8/2019	25.00	5.12	1.73	3,450	--	53.5	3.00
	8/4/2020	20.20	4.90	1.65	3,240	1.12	65.1	--
MW-11	9/23/2015	14.31	7.02	1.71	2,636	11.84	-46.1	4.75
	9/23/2015	13.92	6.54	1.89	2,906	2.16	-54.7	5.25
	9/23/2015	13.82	6.37	1.88	2,895	1.71	-88.6	5.75
	9/15/2016	13.20	6.43	1.91	2,938	1.47	-73.2	5.00
	10/26/2017	14.07	6.44	--	2,271	2.55	19.7	5.50
	9/6/2018	18.46	6.70	--	2,372	0.93	9.3	5.50
	8/7/2019	18.10	7.10	1.33	8,660	--	19.6	5.25
	8/6/2020	18.80	5.54	1.25	2,490	1.83	27.9	--
MW-12	9/23/2015	14.34	5.67	2.35	3,620	9.92	-14.0	2.75
	9/23/2015	14.34	5.95	2.36	3,631	3.13	-33.20	3.25
	9/23/2015	14.31	6.00	2.36	3,630	1.65	-44.0	3.75
	9/15/2016	13.65	5.74	2.41	3,710	0.73	-148.7	4.00
	10/26/2017	14.78	6.47	--	2,932	1.56	50.0	3.75
	9/6/2018	16.56	6.45	--	3,148	5.85	16.5	1.25
	8/8/2019	22.40	6.11	1.69	3,370	--	13.0	3.50
	8/4/2020	22.10	5.42	1.59	3,190	1.13	17.2	--
MW-15	9/23/2015	15.18	3.92	2.28	3,503	4.10	-3.5	1.50
	9/23/2015	15.17	3.88	2.28	3,505	3.80	0.2	2.00
	9/23/2015	15.05	3.84	2.28	3,502	3.59	5.9	2.50
	9/15/2016	14.10	3.88	2.33	3,591	3.17	307.9	2.50
	10/26/2017	15.76	4.15	--	2,954	3.62	339.0	2.50
	9/6/2018	17.80	4.49	--	3,006	3.10	305.7	2.50
	8/8/2019	22.40	3.95	1.62	3,240	--	145.5	2.50
	8/4/2020	21.80	3.51	1.52	3,030	2.51	147.5	--

Notes:

g/L - grams per liter

uS/cm - microsiemens per centimeter

mg/L - milligrams per liter

°C - degrees Celcius

DO - dissolved oxygen

mV - millivolts

ORP - oxidation-reduction potential

TDS - total dissolved solids

-- - data not collected

TABLE 3

PETROLEUM HYDROCARBON GROUNDWATER ANALYTICAL RESULTS
HAMPTON #4M
SAN JUAN COUNTY, NEW MEXICO

Well ID	Sample ID	Sample Date	Sample Type	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Xylenes (total) (mg/L)	Total Dissolved Solids (mg/L)	Manganese (dissolved) (mg/L)	Sulfate (mg/L)
NMWQCC Standards				0.005	1.0	0.70	0.62	1,000	0.20	600
MW-1	MW-1	10/30/1997	(orig)	0.0024	0.0023	< 0.0002	0.0011	--	--	--
	MW-1	1/12/1998	(orig)	0.0043	0.0033	0.0002	0.001	--	--	--
	MW-1	4/14/1998	(orig)	0.001	0.0013	< 0.0005	< 0.0005	--	--	--
	MW-1	7/1/1998	(orig)	0.0013	0.001	< 0.0005	0.0037	--	--	--
	MW-1	10/5/1998	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	--	--	--
	MW-1	1/27/1999	(orig)	0.0008	0.0009	< 0.0005	< 0.0015	--	--	--
	MW-1	7/12/1999	(orig)	0.0011	0.0005	< 0.0005	< 0.0005	--	--	--
	MW-1	9/24/2003	(orig)	0.0009 J	0.001	ND	0.0004 J	--	--	--
	MW-1	12/15/2003	(orig)	0.0011	0.0009 J	ND	ND	--	--	--
	MW-1	3/15/2004	(orig)	ND	ND	ND	ND	--	--	--
	MW-1	6/21/2004	(orig)	ND	ND	ND	ND	--	--	--
	MW-1	9/29/2004	(orig)	ND	ND	ND	ND	--	--	--
	MW-1	12/31/2004	(orig)	ND	0.0009 J	ND	0.0033 J	--	--	--
	MW-1	3/22/2005	(orig)	ND	0.0003 J	ND	ND	--	--	--
	MW-1	10/24/2005	(orig)	ND	ND	ND	ND	--	--	--
	MW-1	12/12/2005	(orig)	ND	0.0007 J	ND	0.0006 J	--	--	--
	MW-1	3/20/2006	(orig)	0.0011	0.0009 J	ND	0.0006 J	--	--	--
	MW-1	6/21/2006	(orig)	0.0003 J	0.0014	0.0004 J	0.0018 J	--	--	--
	MW-1	10/18/2006	(orig)	ND	0.0002	0.0002	0.0013	--	--	--
	MW-1	12/12/2006	(orig)	ND	0.0002	0.0002	0.0014	--	--	--
	MW-1	3/26/2007	(orig)	< 0.0003	0.0003 J	0.0002 J	0.0004 J	--	--	--
	MW-1	6/26/2007	(orig)	< 0.0003	< 0.0002	< 0.0002	< 0.0006	--	--	--
	MW-1	11/8/2007	(orig)	< 0.0005	< 0.0007	< 0.0008	< 0.0008	--	--	--
	MW-1	1/15/2008	(orig)	< 0.0005	< 0.0007	< 0.0008	< 0.0008	--	--	--
	MW-1	3/19/2008	(orig)	< 0.005	< 0.005	< 0.005	< 0.005	--	--	--
	MW-1	7/22/2008	(orig)	< 0.005	< 0.005	< 0.005	< 0.005	--	--	--
	MW-1	10/23/2008	(orig)	< 0.005	< 0.005	< 0.005	< 0.005	--	--	--
	MW-1	1/21/2009	(orig)	< 0.005	< 0.005	< 0.005	< 0.005	--	--	--
	MW-1	9/24/2009	(orig)	< 0.001	< 0.001	< 0.001	< 0.001	--	--	--
	MW-1	9/28/2010	(orig)	< 0.001	< 0.001	< 0.001	< 0.001	--	--	--
	GW-074927-100411-CM-002	10/4/2011	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	--	--	--
	GW-074927-092612-CM-MW-1	9/26/2012	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	--	--	--
	GW-074927-091813-CM-MW-1	9/18/2013	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	--	--	--
	GW-074927-032414-CM-MW-1	3/24/2014	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	3,060	5.86	2,450
	GW-074927-092414-CM-MW-1	9/24/2014	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	3,070	5.3	2,570
	GW-074927-092315-CB-MW-1	9/23/2015	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	2,590	4.9	2,080
	GW-11145958-102617-CM-MW-1	10/26/2017	(orig)	--	--	--	--	--	4.91	--
	GW-11145958-090618-CN-MW-1	9/6/2017	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	--	4.52	--
	MW-1	10/12/2018	(orig)	--	--	--	--	3,040	4.98	2,410
	MW-1	8/8/2019	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	2,710	4.83	2,350
	MW-1	8/4/2020	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	2,330	5.24	2,510
MW-5	MW-5	10/29/1997	(orig)	5.934	10.024	0.709	8.188	--	--	--
	MW-5	1/12/1998	(orig)	7.521	11.213	0.779	8.436	--	--	--
	MW-5	4/14/1998	(orig)	7.0	11	0.72	7.8	--	--	--
	MW-5	7/1/1998	(orig)	6.5	10	0.78	7.5	--	--	--
	MW-5	10/5/1998	(orig)	6.8	8.4	0.74	6.9	--	--	--
	MW-5	11/9/1998	(orig)	6.2	8.2	0.67	6.5	--	--	--
	MW-5	1/27/1999	(orig)	6.4	8.9	0.66	6.7	--	--	--
	MW-5	5/5/1999	(orig)	6.8	9.8	0.9	7.8	--	--	--
	MW-5	5/26/1999	(orig)	6.6	10	0.65	8.1	--	--	--
	MW-5	7/12/1999	(orig)	6.3	10	0.75	8.8	--	--	--
	MW-5	8/17/1999	(orig)	5.4	9.8	0.67	7.5	--	--	--
	MW-5	8/17/1999	(Duplicate)	5.9	8.9	0.5	6.2	--	--	--
	MW-5	10/21/1999	(orig)	5.2	9.6	0.65	6.9	--	--	--
	MW-5	1/27/2000	(orig)	4.7	10	0.68	7.4	--	--	--
	MW-5	6/13/2000	(orig)	8.4	19	1.7	22	--	--	--
	MW-5	3/29/2001	(orig)	3.89	9.6	0.64	7.73	--	--	--
	MW-5	6/26/2001	(orig)	3.8	11	0.7	9	--	--	--
	MW-5	9/18/2001	(orig)	4.1	11	0.76	10	--	--	--
	MW-5	12/18/2001	(orig)	3.2	9.7	0.6	7.8	--	--	--
	MW-5	3/22/2002	(orig)	3.5	10	0.83	8.5	--	--	--
	MW-5	6/28/2002	(orig)	3.7	12	0.76	10	--	--	--
	MW-5	9/23/2002	(orig)	3.0	9.8	0.64	8.3	--	--	--
	MW-5	12/31/2002	(orig)	2.9	8.9	0.58	7.3	--	--	--
	MW-5	3/27/2003	(orig)	1.22	4.87	0.487	6.01	--	--	--
	MW-5	6/27/2003	(orig)	2.04	8.55	0.64	8.05	--	--	--
	MW-5	9/24/2003	(orig)	2.11	9.09	0.7	9.2	--	--	--
	MW-5	12/15/2003	(orig)	2.15	9.24	0.72	8.81	--	--	--
	MW-5	6/21/2004	(orig)	1.61	8.74	0.64	8.22	--	--	--
	MW-5	9/29/2004	(orig)	1.71	7.25	0.67	8.09	--	--	--
	MW-5	12/31/2004	(orig)	1.82	9.15	0.73	9.03	--	--	--
	MW-5	3/15/2005	(orig)	1.37	8.1	0.66	8.71	--	--	--

TABLE 3

PETROLEUM HYDROCARBON GROUNDWATER ANALYTICAL RESULTS
HAMPTON #4M
SAN JUAN COUNTY, NEW MEXICO

MW-5	MW-5	3/22/2005	(orig)	0.42	1.42	0.11	1.16	--	--	--
	MW-5	10/24/2005	(orig)	1.07	6.66	0.61	7.62	--	--	--
	MW-5	12/12/2005	(orig)	0.90	5.93	0.52	6.28	--	--	--
	MW-5	3/20/2006	(orig)	0.82	6.27	0.51	6.04	--	--	--
	MW-5	6/21/2006	(orig)	0.93	6.11	0.58	6.69	--	--	--
	MW-5	10/18/2006	(orig)	0.69	5.14	0.5	5.87	--	--	--
	MW-5	12/18/2006	(orig)	0.64	5.09	0.5	5.61	--	--	--
	MW-5	3/26/2007	(orig)	0.66	6.47	0.53	5.45	--	--	--
	MW-5	6/26/2007	(orig)	0.74	8.07	0.64	7.32	--	--	--
	MW-5	11/8/2007	(orig)	0.41	4.8	0.39	5	--	--	--
	MW-5	1/17/2008	(orig)	0.44	6.4	0.51	6.1	--	--	--
	MW-5	3/19/2008	(orig)	0.37	2.9	0.24	2.57	--	--	--
	MW-5	7/22/2008	(orig)	0.34	6.1	0.55	6.4	--	--	--
	MW-5	10/23/2008	(orig)	0.27	6.2	0.44	6.3	--	--	--
	MW-5	1/21/2009	(orig)	0.25	3.8	0.51	5.2	--	--	--
	MW-5	9/24/2009	(orig)	0.19	4.3	0.47	5.1	--	--	--
	MW-5	9/28/2010	(orig)	0.13	2.4	0.6	5.2	--	--	--
	GW-074927-100411-CM-006	10/12/2011	(orig)	0.0652	1.22	0.443	3.21	--	--	--
	GW-074927-100411-CM-007	10/12/2011	(Duplicate)	0.0796	1.22	0.488	3.46	--	--	--
	GW-074927-092612-CM-MW-5	9/26/2012	(orig)	0.0898	0.626	0.551	3.59	--	--	--
	GW-074927-091813-CM-MW-5	9/18/2013	(orig)	0.0359	0.154	0.227	1.32	--	--	--
	GW-074927-092414-CM-MW-5	9/24/2014	(orig)	0.0041	0.0052	0.0338	0.106	4.030	3.5	2,690
	GW-074927-092315-CB-MW-5	9/23/2015	(orig)	0.015	0.0072	0.154	0.138	4,340	7.8	2,480
	GW-074927-091516-CM-MW-5	9/15/2016	(orig)	0.011	0.0153	0.166	0.0414	--	--	--
	GW-11145958-102617-CM-MW-5	10/26/2017	(orig)	0.0074	0.0118	0.0563	0.0236	--	16.2	--
	GW-11145958-090618-CN-MW-5	9/6/2018	(orig)	0.0059	0.0019	0.0346	0.0193	--	8.73	--
	MW-5	10/12/2018	(orig)	--	--	--	--	3,840	8.44	3,050
	MW-5	8/7/2019	(orig)	0.0025	0.0058	0.006	0.009	5,370	45.6*	4,030
	MW-5	8/6/2020	(orig)	0.00537	0.0211	0.0104	0.0635	3,700	25.8	3,640
MW-7	MW-7	1/12/1998	(orig)	0.78	0.246	0.258	3.942	--	--	--
	MW-7	4/14/1998	(orig)	0.82	0.34	0.19	2.45	--	--	--
	MW-7	7/1/1998	(orig)	0.95	0.44	0.2	3.02	--	--	--
	MW-7	10/5/1998	(orig)	1.6	0.93	0.18	1.53	--	--	--
	MW-7	11/9/1998	(orig)	1.8	1	0.16	1.24	--	--	--
	MW-7	1/27/1999	(orig)	2.1	1	0.16	1.05	--	--	--
	MW-7	5/5/1999	(orig)	0.21	0.0029	0.03	0.147	--	--	--
	MW-7	5/26/1999	(orig)	0.19	0.0074	0.032	0.15	--	--	--
	MW-7	7/12/1999	(orig)	0.13	0.0072	0.022	0.1013	--	--	--
	MW-7	10/21/1999	(orig)	0.26	0.011	0.015	0.089	--	--	--
	MW-7	1/27/2000	(orig)	0.67	0.58	0.054	0.68	--	--	--
	MW-7	6/17/2000	(orig)	0.42	1.1	0.075	1.4	--	--	--
	MW-7	3/29/2001	(orig)	0.83	0.15	0.32	1.79	--	--	--
	MW-7	6/26/2001	(orig)	0.54	0.33	0.25	1.41	--	--	--
	MW-7	9/18/2001	(orig)	0.87	0.56	0.32	2.02	--	--	--
	MW-7	12/18/2001	(orig)	0.40	0.03	0.16	0.885	--	--	--
	MW-7	3/22/2002	(orig)	0.18	ND	0.078	0.26	--	--	--
	MW-7	6/28/2002	(orig)	0.089	0.001	0.041	0.079	--	--	--
	MW-7	9/23/2002	(orig)	0.08	0.003	0.031	0.01889	--	--	--
	MW-7	12/31/2002	(orig)	0.16	0.0022	0.074	0.0315	--	--	--
	MW-7	3/27/2003	(orig)	0.195	0.0004	0.0442	0.109	--	--	--
	MW-7	6/27/2003	(orig)	0.30	0.0014 J	0.117	0.4616	--	--	--
	MW-7	9/24/2003	(orig)	0.09	0.012	0.002	0.694	--	--	--
	MW-7	3/15/2004	(orig)	0.056	0.001 J	0.006	0.003	--	--	--
	MW-7	6/21/2004	(orig)	0.18	ND	0.055	0.058 J	--	--	--
	MW-7	9/29/2004	(orig)	0.163	0.0009 J	0.0545	0.0698	--	--	--
	MW-7	12/15/2004	(orig)	0.15	0.004 J	0.115	0.549	--	--	--
	MW-7	12/31/2004	(orig)	0.094	0.003 J	0.01	0.024 J	--	--	--
	MW-7	3/22/2005	(orig)	0.0208	ND	0.0024	0.0048	--	--	--
	MW-7	10/24/2005	(orig)	0.0652	0.0007 J	0.002	0.0027 J	--	--	--
	MW-7	12/12/2005	(orig)	0.0662	0.001 J	0.0087	0.0085 J	--	--	--
	MW-7	3/20/2006	(orig)	0.072	ND	0.0126	0.0169	--	--	--
	MW-7	6/21/2006	(orig)	0.0899	0.0106	0.0048	0.0145	--	--	--
	MW-7	10/18/2006	(orig)	0.0319	0.0004 J	0.0018	0.0041	--	--	--
	MW-7	12/12/2006	(orig)	0.0294	0.0015	0.0031	0.0057	--	--	--
	MW-7	3/26/2007	(orig)	0.0115	0.001	0.0006 J	0.0008 J	--	--	--
	MW-7	6/26/2007	(orig)	0.056	0.0004 J	0.0177	0.0013	--	--	--
	MW-7	11/8/2007	(orig)	0.044	< 0.0007	0.002	< 0.0008	--	--	--
	MW-7	1/17/2008	(orig)	0.017	< 0.0007	0.003	< 0.0008	--	--	--
	MW-7	3/19/2008	(orig)	0.005	< 0.005	< 0.005	< 0.005	--	--	--
	MW-7	7/22/2008	(orig)	0.032	< 0.005	0.012	0.007	--	--	--
	MW-7	10/23/2008	(orig)	0.017	< 0.005	< 0.005	< 0.005	--	--	--
	MW-7	1/21/2009	(orig)	< 0.005	< 0.005	< 0.005	< 0.005	--	--	--
	MW-7	9/24/2009	(orig)	0.0037	< 0.001	< 0.001	< 0.001	--	--	--
	MW-7	9/28/2010	(orig)	0.0013	< 0.001	0.0023	< 0.001	--	--	--

TABLE 3

PETROLEUM HYDROCARBON GROUNDWATER ANALYTICAL RESULTS
HAMPTON #4M
SAN JUAN COUNTY, NEW MEXICO

MW-7	MW-7	10/11/2011	No sample collected; well dry.							
	MW-7	9/26/2012	No sample collected; well dry.							
	MW-7	9/18/2013	No sample collected; well dry.							
	MW-7	5/9/2014	Well plugged and abandoned.							
MW-9	MW-9	7/1/1998	(orig)	0.012	< 0.001	< 0.001	< 0.003	--	--	--
	MW-9	10/5/1998	(orig)	0.0008	< 0.0005	< 0.0005	0.0022	--	--	--
	MW-9	11/9/1998	(orig)	0.073	< 0.0005	0.0022	0.0016	--	--	--
	MW-9	1/27/1999	(orig)	0.12	< 0.0005	0.0025	0.0018	--	--	--
	MW-9	5/5/1999	(orig)	0.12	< 0.0005	0.0016	0.0008	--	--	--
	MW-9	5/26/1999	(orig)	0.14	< 0.0005	0.0015	< 0.0005	--	--	--
	MW-9	5/26/1999	(Duplicate)	0.29	< 0.0005	0.0006	< 0.0015	--	--	--
	MW-9	7/12/1999	(orig)	0.32	< 0.0005	0.0006	< 0.0015	--	--	--
	MW-9	8/17/1999	(orig)	0.13	ND	ND	ND	--	--	--
	MW-9	10/21/1999	(orig)	< 0.0005	0.0019	< 0.0005	0.0025	--	--	--
	MW-9	1/27/2000	(orig)	< 0.0002	< 0.0002	< 0.0002	< 0.0002	--	--	--
	MW-9	6/13/2000	(orig)	< 0.0005	< 0.0005	< 0.0005	< 0.001	--	--	--
	MW-9	3/29/2001	(orig)	< 0.0005	< 0.0005	< 0.0005	< 0.001	--	--	--
	MW-9	6/26/2001	(orig)	< 0.0005	< 0.0005	< 0.0005	< 0.001	--	--	--
	MW-9	9/18/2001	(orig)	ND	ND	ND	ND	--	--	--
	MW-9	12/18/2001	(orig)	ND	ND	ND	ND	--	--	--
	MW-9	3/22/2002	(orig)	ND	ND	ND	ND	--	--	--
	MW-9	6/28/2002	(orig)	ND	ND	ND	ND	--	--	--
	MW-9	9/23/2002	(orig)	0.0004 J	ND	ND	ND	--	--	--
	MW-9	3/27/2003	(orig)	ND	ND	ND	ND	--	--	--
	MW-9	6/27/2003	(orig)	0.0005 J	ND	ND	ND	--	--	--
	MW-9	9/24/2003	(orig)	ND	ND	ND	ND	--	--	--
	MW-9	12/15/2003	(orig)	ND	ND	ND	ND	--	--	--
	MW-9	3/15/2004	(orig)	ND	ND	ND	ND	--	--	--
	MW-9	6/21/2004	(orig)	ND	0.0004 J	ND	0.0007 J	--	--	--
	MW-9	9/29/2004	(orig)	ND	ND	ND	ND	--	--	--
	MW-9	3/22/2005	(orig)	ND	ND	ND	ND	--	--	--
	MW-9	6/23/2005	(orig)	ND	0.0003 J	ND	ND	--	--	--
	MW-9	3/20/2006	(orig)	ND	ND	ND	ND	--	--	--
	MW-9	6/21/2006	(orig)	ND	ND	ND	ND	--	--	--
	MW-9	10/18/2006	(orig)	ND	ND	ND	0.0003 J	--	--	--
	MW-9	12/12/2006	(orig)	0.0003 J	0.0007 J	0.0003 J	0.0012 J	--	--	--
	MW-9	3/26/2007	(orig)	< 0.0003	< 0.0002	< 0.0002	< 0.0006	--	--	--
	MW-9	6/26/2007	(orig)	< 0.0003	< 0.0002	< 0.0002	< 0.0006	--	--	--
	MW-9	11/8/2007	(orig)	< 0.0005	< 0.0007	< 0.0008	< 0.0008	--	--	--
	MW-9	1/17/2008	(orig)	< 0.0005	< 0.0007	< 0.0008	< 0.0008	--	--	--
	MW-9	3/19/2008	(orig)	< 0.005	< 0.005	< 0.005	< 0.005	--	--	--
	MW-9	7/22/2008	(orig)	< 0.005	< 0.005	< 0.005	< 0.005	--	--	--
	MW-9	10/23/2008	(orig)	< 0.005	< 0.005	< 0.005	< 0.005	--	--	--
	MW-9	1/21/2009	(orig)	< 0.005	< 0.005	< 0.005	< 0.005	--	--	--
	MW-9	9/24/2009	(orig)	< 0.001	< 0.001	< 0.001	< 0.001	--	--	--
	MW-9	9/28/2010	(orig)	< 0.001	< 0.001	< 0.001	< 0.001	--	--	--
	GW-074927-100411-CM-004	10/4/2011	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	--	--	--
	GW-074927-092612-CM-MW-9	9/26/2012	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	--	--	--
	GW-074927-091813-CM-MW-9	9/18/2013	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	--	--	--
	GW-074927-092414-CM-MW-9	9/24/2014	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	3,800	6.6	2,430
	GW-074927-092315-CB-MW-9	9/23/2015	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	3,880	4.5	2,510
	GW-074927-091516-CM-MW-9	9/15/2016	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	4,140	5.9	2,550
	GW-11145958-102617-CM-MW-9	10/26/2017	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	--	7.98	--
	GW-11145958-090618-CN-MW-9	9/6/2018	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	--	5.69	--
	MW-9	10/12/2018	(orig)	--	--	--	--	3,320	0.692	2,720
	MW-9	8/8/2019	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	3,050	6.47	2,620
	MW-9	8/4/2020	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	3,750	7.96	2,870
MW-11	MW-11	1/27/1999	(orig)	< 0.0005	0.0025	0.0007	0.0131	--	--	--
	MW-11	5/5/1999	(orig)	< 0.0005	< 0.0005	< 0.0005	< 0.0015	--	--	--
	MW-11	5/26/1999	(orig)	0.0008	0.0017	< 0.0005	0.0011	--	--	--
	MW-11	10/21/1999	(orig)	< 0.0005	< 0.0005	< 0.0005	< 0.0015	--	--	--
	MW-11	1/27/2000	(orig)	< 0.0005	< 0.0005	< 0.0005	< 0.0005	--	--	--
	MW-11	6/13/2000	(orig)	< 0.0005	< 0.0005	< 0.0005	0.0009	--	--	--
	MW-11	3/29/2001	(orig)	< 0.0002	< 0.0002	< 0.0002	< 0.0002	--	--	--
	MW-11	6/26/2001	(orig)	< 0.0005	< 0.0005	< 0.0005	< 0.001	--	--	--
	MW-11	9/18/2001	(orig)	< 0.0005	< 0.0005	< 0.0005	< 0.001	--	--	--
	MW-11	12/18/2001	(orig)	< 0.0005	< 0.0005	< 0.0005	< 0.001	--	--	--
	MW-11	12/19/2001	(orig)	ND	ND	ND	ND	--	--	--
	MW-11	12/20/2001	(orig)	ND	ND	ND	ND	--	--	--
	MW-11	12/21/2001	(orig)	ND	ND	ND	ND	--	--	--
	MW-11	12/22/2001	(orig)	ND	ND	ND	ND	--	--	--
	MW-11	5/24/2003	(orig)	ND	ND	ND	ND	--	--	--
	MW-11	6/27/2003	(orig)	0.0004 J	0.0003 J	ND	0.0004 J	--	--	--
	MW-11	9/24/2003	(orig)	ND	ND	ND	ND	--	--	--
	MW-11	12/15/2003	(orig)	0.0005 J	ND	ND	ND	--	--	--
	MW-11	3/15/2004	(orig)	ND	ND	ND	ND	--	--	--
	MW-11	6/21/2004	(orig)	ND	ND	ND	0.0005 J	--	--	--
	MW-11	9/29/2004	(orig)	ND	ND	ND	ND	--	--	--
	MW-11	12/31/2004	(orig)	ND	ND	ND	ND	--	--	--
	MW-11	3/22/2005	(orig)	ND	ND	ND	ND	--	--	--

TABLE 3

PETROLEUM HYDROCARBON GROUNDWATER ANALYTICAL RESULTS
HAMPTON #4M
SAN JUAN COUNTY, NEW MEXICO

MW-11	MW-11	10/24/2005	(orig)	ND	ND	ND	ND	--	--	--
	MW-11	12/12/2005	(orig)	ND	0.0003 J	ND	ND	--	--	--
	MW-11	3/20/2006	(orig)	ND	ND	ND	ND	--	--	--
	MW-11	6/21/2006	(orig)	ND	0.0003 J	ND	0.0008 J	--	--	--
	MW-11	10/18/2006	(orig)	ND	0.0003 J	0.0004 J	0.0012 J	--	--	--
	MW-11	12/12/2006	(orig)	ND	ND	ND	0.0003 J	--	--	--
	MW-11	3/26/2007	(orig)	< 0.0003	< 0.0002	< 0.0002	< 0.0006	--	--	--
	MW-11	6/26/2007	(orig)	< 0.0003	< 0.0002	< 0.0002	< 0.0006	--	--	--
	MW-11	11/8/2007	(orig)	< 0.0005	< 0.0007	< 0.0008	< 0.0008	--	--	--
	MW-11	1/17/2008	(orig)	< 0.0005	< 0.0007	< 0.0008	< 0.0008	--	--	--
	MW-11	3/19/2008	(orig)	< 0.005	< 0.005	< 0.005	< 0.005	--	--	--
	MW-11	7/22/2008	(orig)	< 0.005	< 0.005	< 0.005	< 0.005	--	--	--
	MW-11	10/23/2008	(orig)	< 0.005	< 0.005	< 0.005	< 0.005	--	--	--
	MW-11	1/21/2009	(orig)	< 0.005	< 0.005	< 0.005	< 0.005	--	--	--
	MW-11	9/24/2009	(orig)	< 0.001	< 0.001	< 0.001	< 0.001	--	--	--
	MW-11	9/28/2010	(orig)	< 0.001	< 0.001	< 0.001	< 0.001	--	--	--
	GW-074927-100411-CM-005	10/11/2011	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	--	--	--
	GW-074927-092612-CM-MW-11	9/26/2012	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	--	--	--
	GW-074927-091813-CM-MW-11	9/18/2013	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	--	--	--
	GW-074927-092414-CM-MW-11	9/24/2014	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	2,760	4.2	1,810
	GW-074927-092315-CB-MW-11	9/23/2015	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	2,550	4.3	1,740
	GW-074927-091516-CM-MW-11	9/15/2016	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	--	--	--
	GW-11145958-102617-CM-MW-11	10/26/2017	(orig)	--	--	--	--	4.4	--	--
	GW-11145958-090618-CN-MW-11	9/6/2018	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	--	4.67	--
	MW-11	10/12/2018	(orig)	--	--	--	--	2,790	4.7	1,940
	MW-11	8/7/2019	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	2,350	4.54	1,840
	MW-11	8/6/2020	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	2,490	4.53	2,050
MW-12	MW-12	5/5/1999	(orig)	0.79	0.84	0.26	2.88	--	--	--
	MW-12	5/5/1999	(Duplicate)	1.2	13	0.51	0.68	--	--	--
	MW-12	5/26/1999	(orig)	1.9	0.82	0.2	1.72	--	--	--
	MW-12	5/26/1999	(Duplicate)	1.8	0.64	0.16	1.6	--	--	--
	MW-12	7/12/1999	(orig)	4.5	0.76	0.4	3.1	--	--	--
	MW-12	7/12/1999	(Duplicate)	4.6	0.73	0.39	3.08	--	--	--
	MW-12	8/17/1999	(orig)	4.8	5	0.32	3.39	--	--	--
	MW-12	8/17/1999	(Duplicate)	5.9	6.1	0.39	4.1	--	--	--
	MW-12	10/21/1999	(orig)	5.6	0.65	0.54	2.89	--	--	--
	MW-12	1/27/2000	(orig)	4.1	0.55	0.43	2.379	--	--	--
	MW-12	6/13/2000	(orig)	5	1.3	0.49	2.7	--	--	--
	MW-12	3/29/2001	(orig)	5.17	1.79	0.366	2.62	--	--	--
	MW-12	6/26/2001	(orig)	4.8	1.9	0.39	2.56	--	--	--
	MW-12	9/18/2001	(orig)	5.1	2.4	0.43	2.82	--	--	--
	MW-12	12/18/2001	(orig)	4	1.5	0.32	1.88	--	--	--
	MW-12	3/22/2002	(orig)	3.3	0.93	0.29	1.27	--	--	--
	MW-12	6/28/2002	(orig)	4.2	1.8	0.41	1.94	--	--	--
	MW-12	9/23/2002	(orig)	3.8	1.5	0.31	1.51	--	--	--
	MW-12	12/31/2002	(orig)	3.6	0.84	0.28	1.01	--	--	--
	MW-12	5/24/2003	(orig)	3.99	2.23	0.299	1.47	--	--	--
	MW-12	6/27/2003	(orig)	5.29	2.75	0.36	1.6	--	--	--
	MW-12	9/24/2003	(orig)	4.6	1.69	0.29	1.15	--	--	--
	MW-12	12/15/2003	(orig)	4.2	1.36	0.24	1.15	--	--	--
	MW-12	3/15/2004	(orig)	2.09	1.12	0.3	1.25	--	--	--
	MW-12	6/21/2004	(orig)	3.87	1.82	0.28	1.5	--	--	--
	MW-12	6/29/2004	(orig)	5.14	2.22	0.24	1.28	--	--	--
	MW-12	12/31/2004	(orig)	4.16	1.22	0.25	1.15	--	--	--
	MW-12	3/22/2005	(orig)	2.38	1.1	0.13	0.71	--	--	--
	MW-12	10/24/2005	(orig)	1.35	0.15	0.08	0.33	--	--	--
	MW-12	12/16/2005	(orig)	2.38	0.422	0.111	0.341	--	--	--
	MW-12	3/20/2006	(orig)	2.1	0.21	0.071	0.225	--	--	--
	MW-12	6/21/2006	(orig)	2.27	0.385	0.085	0.355	--	--	--
	MW-12	10/18/2006	(orig)	1.74	0.477	0.112	0.399	--	--	--
	MW-12	12/12/2006	(orig)	2.4	1.11	0.142	0.668	--	--	--
	MW-12	3/26/2007	(orig)	4.13	1.68	0.34	1.18	--	--	--
	MW-12	6/26/2007	(orig)	1.52	0.432	0.118	0.34	--	--	--
	MW-12	11/8/2007	(orig)	0.78	0.31	0.043	0.17	--	--	--
	MW-12	1/17/2008	(orig)	2	1.4	0.18	0.79	--	--	--
	MW-12	3/19/2008	(orig)	1.6	0.56	0.16	0.53	--	--	--
	MW-12	7/22/2008	(orig)	0.73	0.022	0.014	0.021	--	--	--
	MW-12	10/23/2008	(orig)	0.5	0.03	0.022	0.04	--	--	--
	MW-12	1/21/2009	(orig)	1.1	0.43	0.11	0.41	--	--	--
	MW-12	9/24/2009	(orig)	0.61	0.0083	0.01	0.0195	--	--	--
	MW-12	9/28/2010	(orig)	0.55	< 0.001	0.015	0.016	--	--	--
	GW-074927-100411-CM-003	10/4/2011	(orig)	0.494	< 0.01	0.0235	< 0.03	--	--	--
	GW-074927-092612-CM-MW-12	9/26/2012	(orig)	0.617	< 0.001	0.015	0.0207	--	--	--
	GW-074927-091813-CM-MW-12	9/18/2013	(orig)	0.202	< 0.005	< 0.005	< 0.015	--	--	--
	GW-074927-091813-CM-DUP	9/18/2013	(Duplicate)	0.21	< 0.005	< 0.005	< 0.015	--	--	--
	GW-074927-032414-CM-MW-12	3/24/2014	(orig)	0.0559	0.0067	< 0.005	< 0.015	3,390	14.2	2,740
	GW-074927-032414-CM-DUP	3/24/2014	(Duplicate)	0.0508	0.0056	< 0.005	< 0.015	--	--	--
	GW-074927-092414-CM-MW-12	9/24/2014	(orig)	0.83	0.0013	0.011	0.0171	3,460	9.7	2,330
	GW-074927-092414-CM-DUP	9/24/2014	(Duplicate)	0.882	0.0015	0.0121	0.0179	--	--	--
	GW-074927-092315-CB-MW-12	9/23/2015	(orig)	0.246	< 0.001	< 0.001	< 0.003	3,330	10.2	2,310
	GW-074927-092315-CB-MW-12	9/23/2015	(Duplicate)	0.258	< 0.001	< 0.001	< 0.003	--	--	--
	GW-074927-091516-CM-MW-12	9/15/2016	(orig)	0.0568	< 0.0005	< 0.0005	< 0.015	3,580	10.6	2,240
	GW-11145958-102617-CM-MW-12	10/26/2017	(orig)	0.0379	< 0.002	< 0.002	< 0.006	--	9.51	--
	GW-11145958-102617-CM-DUP	10/26/2017	(Duplicate)	0.0447	< 0.001	< 0.001	< 0.003	--	--	--

TABLE 3

PETROLEUM HYDROCARBON GROUNDWATER ANALYTICAL RESULTS
HAMPTON #4M
SAN JUAN COUNTY, NEW MEXICO

MW-12	GW-11145958-090618-CN-MW-12	9/6/2018	(orig)	0.0022	<0.001	<0.001	<0.003	--	10.5	--
	MW-12	10/12/2018	(orig)	--	--	--	--	3,010	9.45	2,580
	MW-12	8/8/2019	(orig)	0.0708	<0.0200	<0.0200	<0.0600	2,750	11.2	2,380
	MW-12	8/4/2020	(orig)	0.00434	<0.0010	<0.0010	<0.003	3,120	9.57	2,630
MW-15	MW-15	10/21/1999	(orig)	< 0.0005	0.0012	< 0.0005	0.0015	--	--	--
	MW-15	1/27/2000	(orig)	< 0.0005	< 0.0005	< 0.0005	< 0.0005	--	--	--
	MW-15	6/13/2000	(orig)	< 0.0005	< 0.0005	< 0.0005	< 0.0005	--	--	--
	MW-15	3/29/2001	(orig)	< 0.0002	< 0.0002	< 0.0002	< 0.0002	--	--	--
	MW-15	6/26/2001	(orig)	< 0.0005	< 0.0005	< 0.0005	< 0.0005	--	--	--
	MW-15	9/18/2001	(orig)	< 0.0005	< 0.0005	< 0.0005	< 0.0005	--	--	--
	MW-15	12/18/2001	(orig)	< 0.0005	< 0.0005	< 0.0005	< 0.0005	--	--	--
	MW-15	3/22/2002	(orig)	ND	ND	ND	ND	--	--	--
	MW-15	6/28/2002	(orig)	ND	ND	ND	ND	--	--	--
	MW-15	9/23/2002	(orig)	ND	ND	ND	ND	--	--	--
	MW-15	12/31/2002	(orig)	ND	ND	ND	ND	--	--	--
	MW-15	3/27/2003	(orig)	ND	0.0003 J	ND	0.0009 J	--	--	--
	MW-15	6/27/2003	(orig)	0.0004 J	ND	ND	ND	--	--	--
	MW-15	9/24/2003	(orig)	ND	ND	ND	ND	--	--	--
	MW-15	3/15/2004	(orig)	ND	0.0003 J	ND	ND	--	--	--
	MW-15	6/21/2004	(orig)	ND	ND	ND	ND	--	--	--
	MW-15	9/29/2004	(orig)	ND	ND	ND	ND	--	--	--
	MW-15	12/15/2004	(orig)	0.0007 J	ND	ND	ND	--	--	--
	MW-15	12/31/2004	(orig)	ND	0.0009 J	0.0003 J	0.0014 J	--	--	--
	MW-15	3/22/2005	(orig)	ND	ND	ND	ND	--	--	--
	MW-15	10/24/2005	(orig)	ND	ND	ND	ND	--	--	--
	MW-15	12/12/2005	(orig)	ND	0.0003 J	ND	0.0004 J	--	--	--
	MW-15	3/20/2006	(orig)	ND	ND	ND	ND	--	--	--
	MW-15	6/21/2006	(orig)	0.0007 J	ND	0.0003 J	ND	--	--	--
	MW-15	10/18/2006	(orig)	ND	0.0003 J	ND	0.0002 J	--	--	--
	MW-15	12/12/2006	(orig)	ND	ND	ND	ND	--	--	--
	MW-15	3/26/2007	(orig)	< 0.0003	< 0.0002	< 0.0002	< 0.0006	--	--	--
	MW-15	6/26/2007	(orig)	< 0.0003	0.0005 J	< 0.0002	< 0.0006	--	--	--
	MW-15	11/8/2007	(orig)	< 0.0005	< 0.0007	< 0.0008	< 0.0008	--	--	--
	MW-15	1/17/2008	(orig)	< 0.0005	< 0.0007	< 0.0008	< 0.0008	--	--	--
	MW-15	3/19/2008	(orig)	< 0.005	< 0.005	< 0.005	< 0.005	--	--	--
	MW-15	7/22/2008	(orig)	< 0.005	< 0.005	< 0.005	< 0.005	--	--	--
	MW-15	10/23/2008	(orig)	< 0.005	< 0.005	< 0.005	< 0.005	--	--	--
	MW-15	1/21/2009	(orig)	< 0.005	< 0.005	< 0.005	< 0.005	--	--	--
	MW-15	9/24/2009	(orig)	< 0.001	< 0.001	< 0.001	< 0.001	--	--	--
	MW-15	9/28/2010	(orig)	< 0.001	< 0.001	< 0.001	< 0.001	--	--	--
	GW-074927-100411-CM-001	10/4/2011	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	--	--	--
	GW-074927-092612-CM-MW-15	9/26/2012	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	--	--	--
	GW-074927-091813-CM-MW-15	9/18/2013	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	--	--	--
	GW-074927-092414-CM-MW-15	9/24/2014	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	3,390	8.8	2,500
	GW-074927-092315-CB-MW-15	9/23/2015	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	3,020	8.5	2,550
	GW074927-091516-CM-MW-15	9/15/0216	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	--	--	--
	GW-11145958-102617-CM-MW-15	10/26/2017	(orig)	--	--	--	--	--	8.6	--
	GW-11145958-090618-CN-MW-15	9/6/2018	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	--	9.36	--
	MW-15	10/12/2018	(orig)	--	--	--	--	3,570	9.05	2,790
	MW-15	8/8/2019	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	3,280	7.52	2,560
	MW-15	8/4/2020	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	2,940	8.97	2,870
MW-16	MW-16	10/21/1999	(orig)	0.22	0.3	0.0054	0.142	--	--	--
	MW-16	10/21/1999	(Duplicate)	0.214	0.268	0.004	0.151	--	--	--
	MW-16	1/27/2000	(orig)	1.6	0.17	0.056	0.225	--	--	--
	MW-16	6/13/2000	(orig)	8.7	0.43	0.68	2.2	--	--	--
	MW-16	6/26/2001	(orig)	9.3	1.1	0.81	3.41	--	--	--
	MW-16	9/18/2001	(orig)	11	6.4	0.59	6.4	--	--	--
	MW-16	12/18/2001	(orig)	9.9	6.9	0.57	7.4	--	--	--
	MW-16	6/28/2002	(orig)	11	7	0.77	5.7	--	--	--
	MW-16	9/23/2002	(orig)	8.9	9.9	0.61	8.5	--	--	--
	MW-16	12/31/2002	(orig)	8.8	7.9	0.77	7.4	--	--	--
	MW-16	3/22/2003	(orig)	10	6.6	1.1	7.4	--	--	--
	MW-16	3/27/2003	(orig)	10.4	11.2	0.84	8.67	--	--	--
	MW-16	9/24/2003	(orig)	10.3	15.4	0.87	10.59	--	--	--
	MW-16	3/15/2004	(orig)	9.2	16	1.31	12	--	--	--
	MW-16	6/21/2004	(orig)	8.04	18.1	2.45	18.58	--	--	--
	MW-16	9/29/2004	(orig)	8.33	14	0.76	8.23	--	--	--
	MW-16	12/15/2004	(orig)	9.64	12.6	0.72	1.55	--	--	--
	MW-16	12/31/2004	(orig)	8.34	17.1	1.55	18.83	--	--	--
	MW-16	3/28/2005	(orig)	4.14	5.81	0.76	10.48	--	--	--
	MW-16	10/24/2005	(orig)	6.28	9.8	0.67	6.91	--	--	--
	MW-16	12/12/2005	(orig)	6.94	11.5	0.75	8.06	--	--	--
	MW-16	3/20/2006	(orig)	6.82	11.5	0.83	8.55	--	--	--
	MW-16	6/21/2006	(orig)	6.64	11.2	0.69	7.57	--	--	--
	MW-16	10/18/2006	(orig)	5.7	10.2	0.62	6.52	--	--	--
	MW-16	12/12/2006	(orig)	4.6	10	0.55	6.83	--	--	--
	MW-16	3/26/2007	(orig)	2.97	2.82	0.26	5.22	--	--	--
	MW-16	6/26/2007	(orig)	5.23	9.11	0.77	7.76	--	--	--
	MW-16	11/8/2007	(orig)	5.5	12	0.57	6.2	--	--	--
	MW-16	1/17/2008	(orig)	4.6	9.1	0.55	5.6	--	--	--
	MW-16	3/19/2008	(orig)	5.5	9.6	0.51	6.9	--	--	--
	MW-16	7/22/2008	(orig)	3.6	6.1	0.43	4.5	--	--	--
	MW-16	10/23/2008	(orig)	4.7	9.1	0.48	6.6	--	--	--

TABLE 3

PETROLEUM HYDROCARBON GROUNDWATER ANALYTICAL RESULTS
HAMPTON #4M
SAN JUAN COUNTY, NEW MEXICO

MW-16	MW-16	1/21/2009	(orig)	4.2	7.5	0.48 J	6.9	--	--	--
	MW-16	9/24/2009	(orig)	3.2	4.6	0.34	3.5	--	--	--
	MW-16	9/29/2010	(orig)	3	4.6	3.4	23.6	--	--	--
	MW-16	12/15/2010	(orig)	5.2	13	1.1	14.5	--	--	--
	MW-16	10/11/2011	No sample collected due to presence of LNAPL.							
	MW-16	9/26/2012	No sample collected due to presence of LNAPL.							
	MW-16	9/18/2013	No sample collected due to presence of LNAPL.							
	MW-16	9/24/2014	No sample collected due to presence of LNAPL.							
	MW-16	9/23/2015	No sample collected due to presence of LNAPL.							
	MW-16	9/15/2016	No sample collected due to presence of LNAPL.							
	MW-16	10/26/2017	No sample collected due to presence of LNAPL.							
	MW-16	9/6/2018	No sample collected due to presence of LNAPL.							
	MW-16	8/8/2019	No sample collected due to presence of LNAPL.							
	MW-16	8/4/2020	No sample collected due to presence of LNAPL.							
Seep	Seep	7/1/1998	(orig)	0.0016	0.0007	0.0006	0.00036	--	--	--
	Seep	4/14/1999	(orig)	0.04	0.0022	0.0021	0.019	--	--	--
	Seep	10/21/1999	(orig)	0.065	0.23	0.011	0.434	--	--	--
	Seep	3/29/2001	(orig)	0.0116	< 0.0002	0.0007 J	0.0254	--	--	--
	Seep	6/26/2001	(orig)	< 0.0005	< 0.0005	< 0.0005	< 0.001	--	--	--
	Seep	9/18/2001	(orig)	< 0.0005	< 0.0005	< 0.0005	< 0.001	--	--	--
	Seep	12/18/2001	(orig)	< 0.0005	< 0.0005	< 0.0005	< 0.001	--	--	--
	Seep	3/22/2002	(orig)	0.0059	ND	0.0008	0.0034	--	--	--
	Seep	6/28/2002	(orig)	ND	ND	ND	ND	--	--	--
	Seep	9/23/2002	(orig)	ND	ND	ND	ND	--	--	--
	Seep	12/31/2002	(orig)	0.0007	ND	ND	ND	--	--	--
	Seep	3/27/2003	(orig)	0.0063	0.0002 J	0.0018	0.0101	--	--	--
	Seep	9/24/2003	(orig)	ND	0.0003 J	ND	ND	--	--	--
	Seep	12/15/2003	(orig)	0.0004 J	0.0003 J	ND	ND	--	--	--
	Seep	3/15/2004	(orig)	ND	ND	ND	ND	--	--	--
	Seep	6/21/2004	(orig)	ND	ND	ND	ND	--	--	--
	Seep	9/29/2004	(orig)	ND	ND	ND	ND	--	--	--
	Seep	12/31/2004	(orig)	ND	0.0002 J	ND	0.0004 J	--	--	--
	Seep	3/28/2005	(orig)	ND	ND	ND	ND	--	--	--
	Seep	10/24/2005	(orig)	ND	J	ND	ND	--	--	--
	Seep	12/12/2005	(orig)	ND	0.0005 J	0.0003 J	0.0009 J	--	--	--
	Seep	3/20/2006	(orig)	ND	ND	ND	ND	--	--	--
	Seep	6/21/2006	(orig)	0.004	0.0129	0.0008 J	0.015	--	--	--
	Seep	10/18/2006	(orig)	ND	0.0005 J	0.0003 J	0.0014 J	--	--	--
	Seep	12/12/2006	(orig)	ND	ND	ND	ND	--	--	--
	Seep	3/26/2007	(orig)	< 0.0003	0.0003 J	< 0.0002	< 0.0006	--	--	--
	Seep	6/26/2007	(orig)	< 0.0003	< 0.0002	< 0.0002	< 0.0006	--	--	--
	Seep	11/8/2007	(orig)	< 0.0005	< 0.0007	< 0.0008	< 0.0008	--	--	--
	Seep	3/19/2008	(orig)	< 0.005	< 0.005	< 0.005	< 0.005	--	--	--
	Seep	10/23/2008	(orig)	< 0.005	< 0.005	< 0.005	< 0.005	--	--	--
	Seep	1/21/2009	(orig)	< 0.005	< 0.005	< 0.005	< 0.005	--	--	--
	Seep	9/24/2009	(orig)	< 0.001	< 0.001	< 0.001	< 0.001	--	--	--
	Seep	9/28/2010	(orig)	< 0.001	< 0.001	< 0.001	< 0.001	--	--	--
	Seep	10/11/2011	No sample collected; seep dry.							
	Seep	9/26/2012	No sample collected; seep dry.							
	Seep	9/18/2013	No sample collected; seep dry.							
	Seep	9/24/2014	No sample collected; seep dry.							
	Seep	9/23/2015	No sample collected; seep dry.							
TMW-1	TMW-1	1/27/2000	(orig)	0.93	1.4	0.35	6.7	--	--	--
	TMW-1	6/13/2000	(orig)	2.4	3.4	0.55	9.1	--	--	--
	TMW-1	6/26/2001	(orig)	1.1	3.5	0.33	5.5	--	--	--
	TMW-1	5/23/2003	(orig)	0.83	0.123	0.107	1.0047	--	--	--
	TMW-1	6/27/2003	(orig)	0.474	0.0366	0.0596	0.4907	--	--	--
	TMW-1	9/24/2003	(orig)	0.292	0.139	0.017	0.221	--	--	--
	TMW-1	12/15/2003	(orig)	0.0559	0.0013	0.0039	0.0425	--	--	--
	TMW-1	6/21/2004	(orig)	0.0406	ND	0.0141	0.0147	--	--	--
	TMW-1	9/29/2004	(orig)	0.41	0.0087	0.0596	0.4585	--	--	--
	TMW-1	12/31/2004	(orig)	0.003 J	0.005 J	0.001 J	0.011 J	--	--	--
	TMW-1	3/22/2005	(orig)	0.0678	0.0133	0.0081	0.1017	--	--	--
	TMW-1	10/24/2005	(orig)	0.483	0.705	0.045	0.328	--	--	--
	TMW-1	12/12/2005	(orig)	0.122	0.317	0.019	0.16	--	--	--
	TMW-1	3/20/2006	(orig)	0.071	0.082	0.016	0.151	--	--	--
	TMW-1	6/21/2006	(orig)	0.159	0.0657	0.0569	0.36	--	--	--
	TMW-1	10/18/2006	(orig)	0.0064	0.0016	0.0021	0.0138	--	--	--
	TMW-1	6/26/2007	(orig)	0.269	0.0026	0.0049	0.0157	--	--	--
	TMW-1	11/8/2007	(orig)	0.3	0.012	0.006	0.038	--	--	--
	TMW-1	1/17/2008	(orig)	0.0008	< 0.0007	< 0.0008	0.001	--	--	--
	TMW-1	3/19/2008	(orig)	< 0.005	< 0.005	< 0.005	< 0.005	--	--	--
	TMW-1	7/22/2008	(orig)	0.13	0.029	0.011	0.022	--	--	--
	TMW-1	1/21/2009	(orig)	0.013	< 0.005	< 0.005	< 0.005	--	--	--
	TMW-1	9/28/2010	(orig)	0.013	< 0.001	< 0.001	0.0032	--	--	--
	TMW-1	10/11/2011	No sample collected; insufficient water present in well.							
	TMW-1	9/26/2012	No sample collected; well dry.							
	TMW-1	9/18/2013	No sample collected; well dry.							
	TMW-1	9/24/2014	No sample collected; well dry.							
	TMW-1	9/23/2015	No sample collected; well dry.							
	TMW-1	9/15/2016	No sample collected; well dry.							

TABLE 3

PETROLEUM HYDROCARBON GROUNDWATER ANALYTICAL RESULTS
HAMPTON #4M
SAN JUAN COUNTY, NEW MEXICO

TMW-1	TMW-1	10/26/2017	No sample collected; well dry.
	TMW-1	9/6/2018	No sample collected; well dry.
	TMW-1	8/8/2019	No sample collected; well dry.
	TMW-1	8/4/2020	No sample collected; well dry.

Notes:

mg/L - milligrams per liter

J - laboratory flag for estimated concentration

ND - not detected, practical quantitation limit unknown

NE - not established

NMWQCC - New Mexico Water Quality Control Commission

NT - not tested

<0.037 - indicates result less than the stated laboratory reporting limit (PQL)

BOLD - indicates concentration exceeds the NNEPA standard

-- - not analyzed

* - Anomously high result-may indicate sample was unfiltered and measured total manganese

TABLE 4

**PHASE SEPARATED HYDROCARBON RECOVERED VOLUME
HAMPTON #4M
SAN JUAN COUNTY, NEW MEXICO**

Well ID	Sample Date	PSH Removed (ounces)
MW-16	1/22/2019	6
MW-16	2/15/2019	10
MW-16	4/5/2019	28
MW-16	8/8/2019	32
MW-16	11/7/2019	24
MW-16	3/27/2020	16
MW-16	5/29/2020	26
MW-16	8/5/2020	176
MW-16	10/9/2020	12

Notes:

PSH removed using an adsorbent sock and/or disposable bailer

ENCLOSURE A – ANALYTICAL LABORATORY REPORT



ANALYTICAL REPORT

August 14, 2020

HilCorp-Farmington, NM

Sample Delivery Group: L1248186
Samples Received: 08/07/2020
Project Number: Hampton 4M
Description: HAMPTON 4M
Site: HAMPTON 4M
Report To: Kurt Hoekstra
382 Road 3100
Aztec, NM 87401

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

Entire Report Reviewed By:

Olivia Studebaker
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.

Cp: Cover Page	1
Tc: Table of Contents	2
Ss: Sample Summary	3
Cn: Case Narrative	4
Sr: Sample Results	5
MW-1 L1248186-01	5
MW-5 L1248186-02	6
MW-9 L1248186-03	7
MW-11 L1248186-04	8
MW-12 L1248186-05	9
MW-15 L1248186-06	10
Qc: Quality Control Summary	11
Gravimetric Analysis by Method 2540 C-2011	11
Wet Chemistry by Method 9056A	12
Metals (ICP) by Method 6010B	13
Volatile Organic Compounds (GC/MS) by Method 8260B	14
Gl: Glossary of Terms	16
Al: Accreditations & Locations	17
Sc: Sample Chain of Custody	18



MW-1 L1248186-01 GW

				Collected by Kurt	Collected date/time 08/04/20 10:30	Received date/time 08/07/20 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1523114	1	08/09/20 18:24	08/09/20 21:58	TH	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1522954	100	08/09/20 18:53	08/09/20 18:53	ELN	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1522971	1	08/12/20 08:39	08/12/20 20:28	EL	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1524028	1	08/11/20 15:31	08/11/20 15:31	JCP	Mt. Juliet, TN

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

MW-5 L1248186-02 GW

				Collected by Kurt	Collected date/time 08/06/20 09:45	Received date/time 08/07/20 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1523114	1	08/09/20 18:24	08/09/20 21:58	TH	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1522954	100	08/09/20 19:10	08/09/20 19:10	ELN	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1522971	5	08/12/20 08:39	08/12/20 23:52	EL	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1524028	1	08/11/20 15:55	08/11/20 15:55	JCP	Mt. Juliet, TN

MW-9 L1248186-03 GW

				Collected by Kurt	Collected date/time 08/04/20 14:30	Received date/time 08/07/20 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1523114	1	08/09/20 18:24	08/09/20 21:58	TH	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1522954	100	08/09/20 19:27	08/09/20 19:27	ELN	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1522971	1	08/12/20 08:39	08/12/20 20:35	EL	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1524028	1	08/11/20 16:18	08/11/20 16:18	JCP	Mt. Juliet, TN

MW-11 L1248186-04 GW

				Collected by Kurt	Collected date/time 08/06/20 09:15	Received date/time 08/07/20 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1523114	1	08/09/20 18:24	08/09/20 21:58	TH	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1522954	100	08/09/20 19:43	08/09/20 19:43	ELN	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1522971	1	08/12/20 08:39	08/12/20 20:38	EL	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1524028	1	08/11/20 16:42	08/11/20 16:42	JCP	Mt. Juliet, TN

MW-12 L1248186-05 GW

				Collected by Kurt	Collected date/time 08/04/20 13:15	Received date/time 08/07/20 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1523114	1	08/09/20 18:24	08/09/20 21:58	TH	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1522954	100	08/09/20 20:00	08/09/20 20:00	ELN	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1522971	1	08/12/20 08:39	08/12/20 19:19	EL	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1525686	1	08/13/20 20:46	08/13/20 20:46	ADM	Mt. Juliet, TN

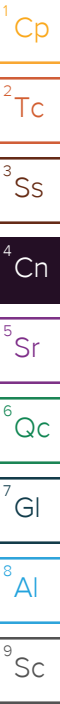
MW-15 L1248186-06 GW

				Collected by Kurt	Collected date/time 08/04/20 12:00	Received date/time 08/07/20 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1523114	1	08/09/20 18:24	08/09/20 21:58	TH	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1522954	100	08/09/20 20:17	08/09/20 20:17	ELN	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1522971	1	08/12/20 08:39	08/12/20 19:23	EL	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1524028	1	08/11/20 17:05	08/11/20 17:05	JCP	Mt. Juliet, TN

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.



Olivia Studebaker
Project Manager



Collected date/time: 08/04/20 10:30

L1248186

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Dissolved Solids	2330		50.0	1	08/09/2020 21:58	WG1523114

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Sulfate	2510		500	100	08/09/2020 18:53	WG1522954

Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Manganese,Dissolved	5.24		0.0100	1	08/12/2020 20:28	WG1522971

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Benzene	ND		0.00100	1	08/11/2020 15:31	WG1524028
Toluene	ND		0.00100	1	08/11/2020 15:31	WG1524028
Ethylbenzene	ND		0.00100	1	08/11/2020 15:31	WG1524028
Total Xylenes	ND		0.00300	1	08/11/2020 15:31	WG1524028
(S) Toluene-d8	110		80.0-120		08/11/2020 15:31	WG1524028
(S) 4-Bromofluorobenzene	98.9		77.0-126		08/11/2020 15:31	WG1524028
(S) 1,2-Dichloroethane-d4	109		70.0-130		08/11/2020 15:31	WG1524028

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Collected date/time: 08/06/20 09:45

L1248186

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Dissolved Solids	3700		50.0	1	08/09/2020 21:58	WG1523114

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Sulfate	3640		500	100	08/09/2020 19:10	WG1522954

Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Manganese,Dissolved	25.8		0.0500	5	08/12/2020 23:52	WG1522971

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Benzene	0.00537		0.00100	1	08/11/2020 15:55	WG1524028
Toluene	0.0211		0.00100	1	08/11/2020 15:55	WG1524028
Ethylbenzene	0.0104		0.00100	1	08/11/2020 15:55	WG1524028
Total Xylenes	0.0635		0.00300	1	08/11/2020 15:55	WG1524028
(S) Toluene-d8	100		80.0-120		08/11/2020 15:55	WG1524028
(S) 4-Bromofluorobenzene	105		77.0-126		08/11/2020 15:55	WG1524028
(S) 1,2-Dichloroethane-d4	106		70.0-130		08/11/2020 15:55	WG1524028

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Collected date/time: 08/04/20 14:30

L1248186

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Dissolved Solids	3750		50.0	1	08/09/2020 21:58	WG1523114

1 Cp

2 Tc

3 Ss

4 Cn

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Sulfate	2870		500	100	08/09/2020 19:27	WG1522954

5 Sr

6 Qc

Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Manganese,Dissolved	7.96		0.0100	1	08/12/2020 20:35	WG1522971

7 Gl

8 Al

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Benzene	ND		0.00100	1	08/11/2020 16:18	WG1524028
Toluene	ND		0.00100	1	08/11/2020 16:18	WG1524028
Ethylbenzene	ND		0.00100	1	08/11/2020 16:18	WG1524028
Total Xylenes	ND		0.00300	1	08/11/2020 16:18	WG1524028
(S) Toluene-d8	109		80.0-120		08/11/2020 16:18	WG1524028
(S) 4-Bromofluorobenzene	97.8		77.0-126		08/11/2020 16:18	WG1524028
(S) 1,2-Dichloroethane-d4	105		70.0-130		08/11/2020 16:18	WG1524028

9 Sc

Collected date/time: 08/06/20 09:15

L1248186

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Dissolved Solids	2490		50.0	1	08/09/2020 21:58	WG1523114

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Sulfate	2050		500	100	08/09/2020 19:43	WG1522954

Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Manganese,Dissolved	4.53		0.0100	1	08/12/2020 20:38	WG1522971

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Benzene	ND		0.00100	1	08/11/2020 16:42	WG1524028
Toluene	ND		0.00100	1	08/11/2020 16:42	WG1524028
Ethylbenzene	ND		0.00100	1	08/11/2020 16:42	WG1524028
Total Xylenes	ND		0.00300	1	08/11/2020 16:42	WG1524028
(S) Toluene-d8	110		80.0-120		08/11/2020 16:42	WG1524028
(S) 4-Bromofluorobenzene	97.9		77.0-126		08/11/2020 16:42	WG1524028
(S) 1,2-Dichloroethane-d4	110		70.0-130		08/11/2020 16:42	WG1524028

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Collected date/time: 08/04/20 13:15

L1248186

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Dissolved Solids	3120		50.0	1	08/09/2020 21:58	WG1523114

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Sulfate	2630		500	100	08/09/2020 20:00	WG1522954

Metals (ICP) by Method 6010B

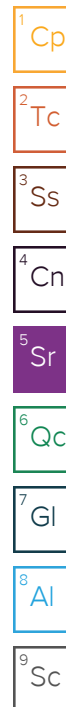
Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Manganese,Dissolved	9.57		0.0100	1	08/12/2020 19:19	WG1522971

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Benzene	0.00434		0.00100	1	08/13/2020 20:46	WG1525686
Toluene	ND		0.00100	1	08/13/2020 20:46	WG1525686
Ethylbenzene	ND		0.00100	1	08/13/2020 20:46	WG1525686
Total Xylenes	ND		0.00300	1	08/13/2020 20:46	WG1525686
(S) Toluene-d8	122	J1	80.0-120		08/13/2020 20:46	WG1525686
(S) 4-Bromofluorobenzene	150	J1	77.0-126		08/13/2020 20:46	WG1525686
(S) 1,2-Dichloroethane-d4	117		70.0-130		08/13/2020 20:46	WG1525686

Sample Narrative:

L1248186-05 WG1525686: Surrogate failure due to matrix interference.



Collected date/time: 08/04/20 12:00

L1248186

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Dissolved Solids	2940		50.0	1	08/09/2020 21:58	WG1523114

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Sulfate	2870		500	100	08/09/2020 20:17	WG1522954

Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Manganese,Dissolved	8.97		0.0100	1	08/12/2020 19:23	WG1522971

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Benzene	ND		0.00100	1	08/11/2020 17:05	WG1524028
Toluene	ND		0.00100	1	08/11/2020 17:05	WG1524028
Ethylbenzene	ND		0.00100	1	08/11/2020 17:05	WG1524028
Total Xylenes	ND		0.00300	1	08/11/2020 17:05	WG1524028
(S) Toluene-d8	110		80.0-120		08/11/2020 17:05	WG1524028
(S) 4-Bromofluorobenzene	98.1		77.0-126		08/11/2020 17:05	WG1524028
(S) 1,2-Dichloroethane-d4	106		70.0-130		08/11/2020 17:05	WG1524028

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Gravimetric Analysis by Method 2540 C-2011 [L1248186-01,02,03,04,05,06](#)

Method Blank (MB)

(MB) R3558322-1 08/09/20 21:58

Analyte	MB Result mg/l	<u>MB Qualifier</u>	MB MDL mg/l	MB RDL mg/l
Dissolved Solids	U		2.82	10.0

L1246562-06 Original Sample (OS) • Duplicate (DUP)

(OS) L1246562-06 08/09/20 21:58 • (DUP) R3558322-3 08/09/20 21:58

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	<u>DUP Qualifier</u>	DUP RPD Limits %
Dissolved Solids	96.0	78.0	1	20.7	<u>J3</u>	5

Laboratory Control Sample (LCS)

(LCS) R3558322-2 08/09/20 21:58

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	<u>LCS Qualifier</u>
Dissolved Solids	8800	7930	90.1	77.4-123	

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Wet Chemistry by Method 9056A

[L1248186-01,02,03,04,05,06](#)

Method Blank (MB)

(MB) R3558063-1 08/09/20 10:31

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
Sulfate	U		0.594	5.00

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

L1245797-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1245797-02 08/09/20 12:41 • (DUP) R3558063-3 08/09/20 12:58

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Sulfate	108	108	5	0.453		15

L1247826-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1247826-01 08/09/20 16:54 • (DUP) R3558063-6 08/09/20 17:11

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Sulfate	7.84	7.73	1	1.41		15

Laboratory Control Sample (LCS)

(LCS) R3558063-2 08/09/20 10:48

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	mg/l	mg/l	%	%	
Sulfate	40.0	41.2	103	80.0-120	

L1246152-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1246152-01 08/09/20 13:48 • (MS) R3558063-4 08/09/20 14:05 • (MSD) R3558063-5 08/09/20 14:22

	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Analyte	mg/l	mg/l	mg/l	mg/l	%	%		%			%	%
Sulfate	50.0	ND	52.3	52.3	105	105	1	80.0-120			0.0752	15

L1247830-01 Original Sample (OS) • Matrix Spike (MS)

(OS) L1247830-01 08/09/20 17:28 • (MS) R3558063-7 08/09/20 17:45

	Spike Amount	Original Result	MS Result	MS Rec.	Dilution	Rec. Limits	MS Qualifier
Analyte	mg/l	mg/l	mg/l	%		%	
Sulfate	50.0	25.8	76.5	101	1	80.0-120	

Metals (ICP) by Method 6010B [L1248186-01,02,03,04,05,06](#)

Method Blank (MB)

(MB) R3559207-1 08/12/20 19:39

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Manganese,Dissolved	U		0.00327	0.0100

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

Laboratory Control Sample (LCS)

(LCS) R3559207-2 08/12/20 19:42

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Manganese,Dissolved	1.00	0.964	96.4	80.0-120	

L1247416-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1247416-01 08/12/20 19:45 • (MS) R3559207-4 08/12/20 19:50 • (MSD) R3559207-5 08/12/20 19:52

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Manganese,Dissolved	1.00	0.692	1.62	1.64	93.1	94.5	1	75.0-125			0.883	20

Volatile Organic Compounds (GC/MS) by Method 8260B

L1248186-01,02,03,04,06

Method Blank (MB)

(MB) R3559596-2 08/11/20 14:24

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Benzene	U		0.0000941	0.00100
Ethylbenzene	U		0.000137	0.00100
Toluene	U		0.000278	0.00100
Xylenes, Total	U		0.000174	0.00300
(S) Toluene-d8	114			80.0-120
(S) 4-Bromofluorobenzene	94.9			77.0-126
(S) 1,2-Dichloroethane-d4	106			70.0-130

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Laboratory Control Sample (LCS)

(LCS) R3559596-1 08/11/20 13:37

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Benzene	0.00500	0.00402	80.4	70.0-123	
Ethylbenzene	0.00500	0.00435	87.0	79.0-123	
Toluene	0.00500	0.00431	86.2	79.0-120	
Xylenes, Total	0.0150	0.0123	82.0	79.0-123	
(S) Toluene-d8			107	80.0-120	
(S) 4-Bromofluorobenzene			93.2	77.0-126	
(S) 1,2-Dichloroethane-d4			106	70.0-130	

Method Blank (MB)

(MB) R3559758-2 08/13/20 13:56

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Benzene	U		0.0000941	0.00100
Ethylbenzene	U		0.000137	0.00100
Toluene	U		0.000278	0.00100
Xylenes, Total	U		0.000174	0.00300
(S) Toluene-d8	113			80.0-120
(S) 4-Bromofluorobenzene	108			77.0-126
(S) 1,2-Dichloroethane-d4	119			70.0-130

Laboratory Control Sample (LCS)

(LCS) R3559758-1 08/13/20 13:16

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Benzene	0.00500	0.00401	80.2	70.0-123	
Ethylbenzene	0.00500	0.00425	85.0	79.0-123	
Toluene	0.00500	0.00418	83.6	79.0-120	
Xylenes, Total	0.0150	0.0123	82.0	79.0-123	
(S) Toluene-d8			113	80.0-120	
(S) 4-Bromofluorobenzene			107	77.0-126	
(S) 1,2-Dichloroethane-d4			126	70.0-130	

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

Guide to Reading and Understanding Your Laboratory Report

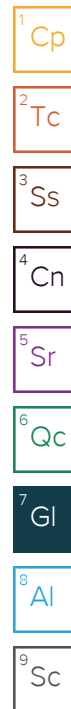
The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

MDL	Method Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL" (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier	Description
J1	Surrogate recovery limits have been exceeded; values are outside upper control limits.
J3	The associated batch QC was outside the established quality control range for precision.



Pace National is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our one location design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be YOUR LAB OF CHOICE.

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace National.

State Accreditations

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN-03-2002-34
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey-NELAP	TN002
California	2932	New Mexico ¹	n/a
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina ¹	DW21704
Georgia	NELAP	North Carolina ³	41
Georgia ¹	923	North Dakota	R-140
Idaho	TN00003	Ohio-VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LA000356
Kentucky ^{1 6}	90010	South Carolina	84004
Kentucky ²	16	South Dakota	n/a
Louisiana	AI30792	Tennessee ^{1 4}	2006
Louisiana ¹	LA180010	Texas	T104704245-18-15
Maine	TN0002	Texas ⁵	LAB0152
Maryland	324	Utah	TN00003
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	460132
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA

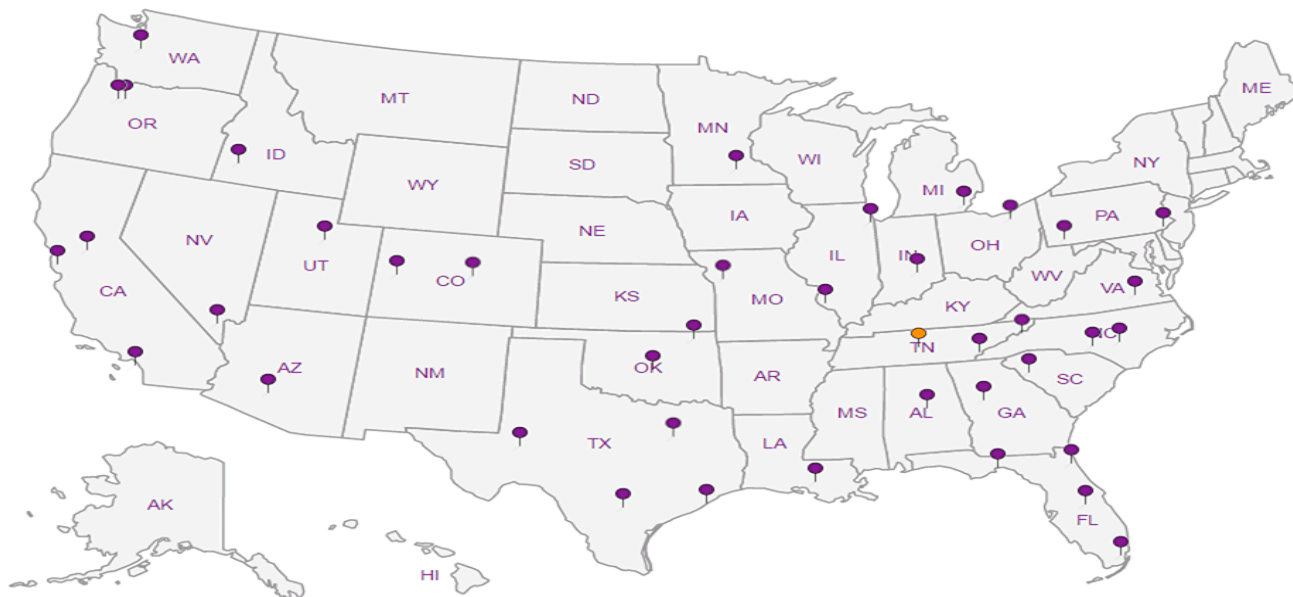
Third Party Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA-LAP, LLC EMLAP	100789
A2LA – ISO 17025 ⁵	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA-Crypto	TN00003		

¹ Drinking Water ² Underground Storage Tanks ³ Aquatic Toxicity ⁴ Chemical/Microbiological ⁵ Mold ⁶ Wastewater n/a Accreditation not applicable

Our Locations

Pace National has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. Pace National performs all testing at our central laboratory.



Released to Imaging: 12/29/2021 7:38:46 AM

District I

1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720

District II

811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720

District III

1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170

District IV

1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

CONDITIONS

Action 21721

CONDITIONS

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID:
	372171
	Action Number: 21721
	Action Type: [UF-GWA] Ground Water Abatement (GROUND WATER ABATEMENT)

CONDITIONS

Created By	Condition	Condition Date
nvelez	Review of 2020 Annual Groundwater Monitoring Report: Content satisfactory 1. OCD approves the plugged and abandonment of well TMW-1, MW-1, MW-9, MW-11, and MW-15 2. OCD approves the elimination of TDS, dissolved manganese, and sulfate from further laboratory analysis 3. Complete quarterly sampling of all viable wells for at least eight consecutive quarters for BTEX 4. Hilcorp to continue to monitor/recover PSH from well MW-16 5. Submit the Annual Monitoring Report to the OCD no later than March 31, 2022	12/29/2021