Hilcorp

Review of 2020 Annual Groundwater Report: Content satisfactory

1. Continue the removal of NAPL and dissolved phase constituents from site wells
2. Continue quarterly groundwater monitoring and sampling
3. Submit the Annual Monitoring Report to the OCD no later than March 31, 2022

March 11, 2021

Mr. Cory Smith
New Mexico Oil Conservation Division
1000 Rio Brazos Road
Aztec, NM 87410

RE: 2020 Annual Groundwater Report
Hilcorp Energy Company
Nell Hall 1 – 3RP-090
San Juan County, New Mexico
Incident # NAUTOFAB0000417

Dear Mr. Smith:

Hilcorp Energy Company (Hilcorp) presents the following annual report discussing ground water monitoring activities conducted at the Nell Hall 1 natural gas well site (Site) during 2020. Ground water was impacted by an unlined dehydrator discharge pit. Hilcorp acquired the Site from ConocoPhillips in April 2017 which has eight monitoring wells. The site consists of a natural gas well and associated equipment. The Site is located on private land approximately 2 miles West of Aztec, San Juan County, NM in Section 7, Township 30N, Range 11W (Figure 1). Geographical coordinates for the Site are 36.821659N, 108.037319W. A detailed Site Plan is provided as Figure 2. A full history of this site can be found in the annual reports previously submitted.

Groundwater Monitoring Methodology
Depth to groundwater was gauged using a water level meter in Site monitoring wells prior to sampling. Levels in all Site wells were gauged by Hilcorp on February 19, April 29, August 24 and October 28, 2020. A summary of this data is presented in Table 2.

Table 1 data continues to show Site groundwater elevations are significantly lower during the late winter and early spring months. Historically, the groundwater flow direction and gradient exhibit seasonal fluctuations, believe to be the result of changes in irrigation rates (or pumping of irrigation wells) and/or base flow conditions in the Animas River, approximately 0.6 miles to the south/southeast of the Site. Additionally, there is an irrigation ditch to the east of the Site, the level of which may also influence the gradient. Groundwater elevations fluctuate as much as 18 feet over the course of a year. Historical groundwater flow direction at the Site has also varied in direction from south to southeast.

Groundwater parameter data, including temperature, pH, conductivity, dissolved oxygen, and oxidation reduction potential, were collected by Hilcorp during the 2020 groundwater monitoring events while wells were purged. A summary of the field parameters is presented as Table 2. Groundwater samples were collected from MW-4 through MW-8. Groundwater samples were analyzed by Pace Analytical of Mount Juliet, Tennessee for the presence of BTEX by EPA Method 8260 and for dissolved iron by EPA Method 6010.

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Results

NMWQCC regulates groundwater quality in New Mexico under Title 20, Chapter 6, Part 2 Section 3103 of the New Mexico Administrative Code (20.6.2.3103 NMAC). Groundwater concentrations above NMWQCC standards during 2020 groundwater sampling events are discussed below:

February 2020

- The concentrations of Benzene from MW-6 was 0.121 mg/L
- The concentrations of Dissolved Iron were 1.65 mg/L

April 2020

- There was insufficient volume in MW-4 & MW-6 to collect a sample in April 2020. MW-6 is perennially over the standard for benzene

August 2020

- The concentrations of Benzene from MW-6 were 0.295 mg/L
- The concentrations of Dissolved Iron were 2.8 mg/L

October 2020

- The concentrations of Benzene from MW-6 were 0.112 mg/L
- The concentrations of Dissolved Iron from MW-6 were 1.55 mg/L

A summary of the 2020 laboratory analytical results is presented on Figure 4 - 2020 Contaminant Concentration map. A summary of historical laboratory analytical results is presented as Table 3 and Groundwater laboratory analytical reports are included as Attachment 1.

Conclusions/Recommendations

Benzene continued to be present in groundwater of MW-6 at concentrations above the NMWQCC standard. Groundwater samples collected from MW-7 and MW-8, seasonally down gradient from MW-6, continue to exhibit concentrations of benzene and dissolved iron below NMWQCC standards, indicating a localized and stable contaminant plume in the area of MW-6.

Despite wide fluctuations in Site groundwater elevation and flow direction, historical groundwater quality and hydro-geologic data would indicate that the BTEX plume that remains in groundwater near MW-6 is stable and immobile in the subsurface. The trend in benzene concentrations further support intrinsic biodegradation of petroleum hydrocarbons is occurring at the Site and that monitored natural attenuation is a viable remedial alternative.

Based on a stable and declining dissolved-phase groundwater contaminant plume, Hilcorp proposes continued quarterly sampling for 2021, as purging the monitoring well enhances oxygen content and natural attenuation. Once constituents in MW-4 – MW-8 are in compliance with NMWQCC standards for eight consecutive quarters Hilcorp will request final closure.

If you have any questions or comments regarding this report, do not hesitate to contact me at (505) 324-5128 or by email Jdeal@hilcorp.com.

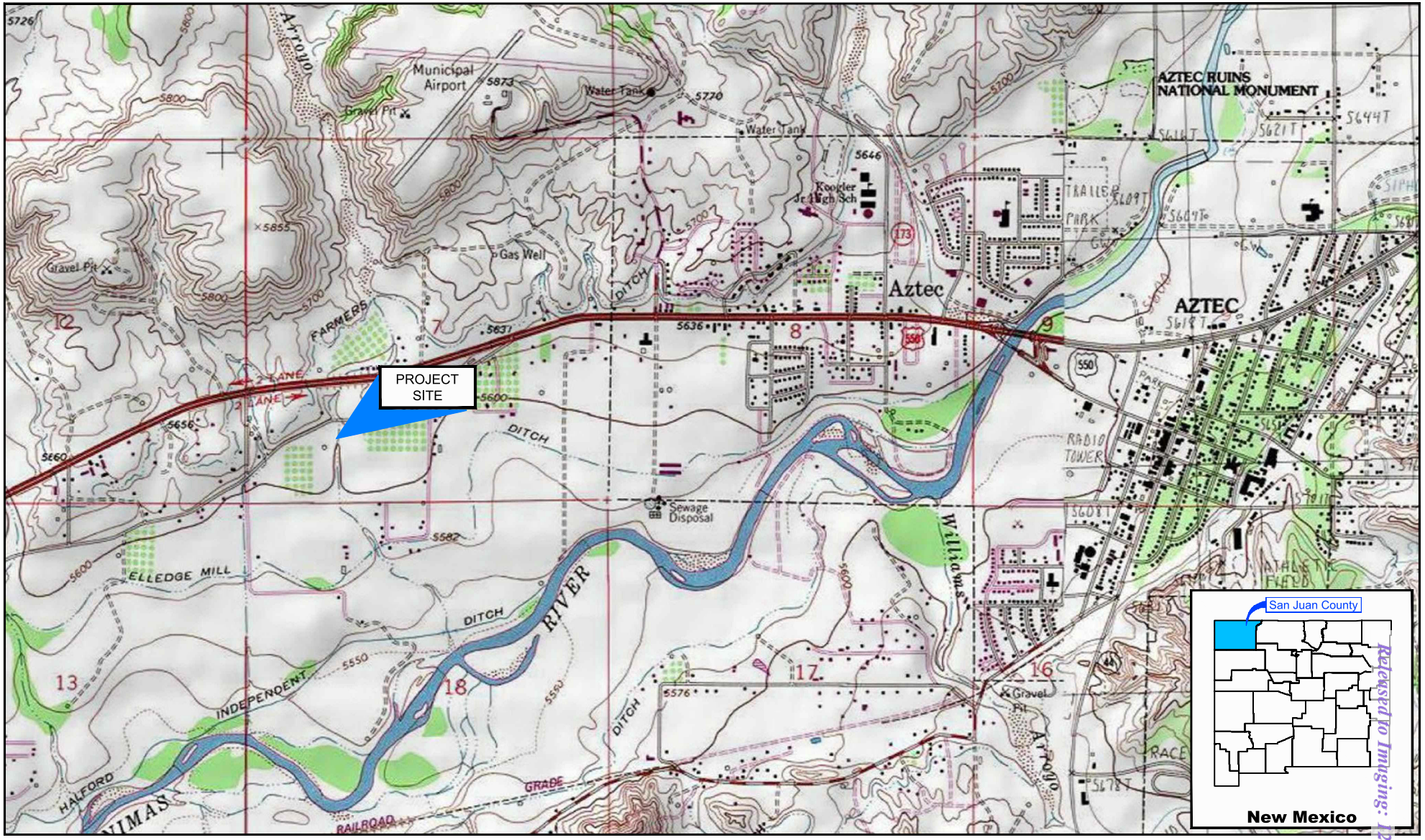
Kind Regards,

Jennifer Deal

Jennifer Deal
Environmental Specialist
Hilcorp Energy Company – L48 West

Attachments:

- Figures 1-4
- Table 1 – Groundwater Elevations
- Table 2 – Field Parameter Results
- Table 3 – Summary of Groundwater Analytical Results
- Attachment 1 – Analytical Reports



Source: USGS 7.5 Minute Quad "Flora Vista and Aztec, New Mexico"

Lat/Long: 36.821656° North, 108.037[illegible] West

0 1000 2000ft

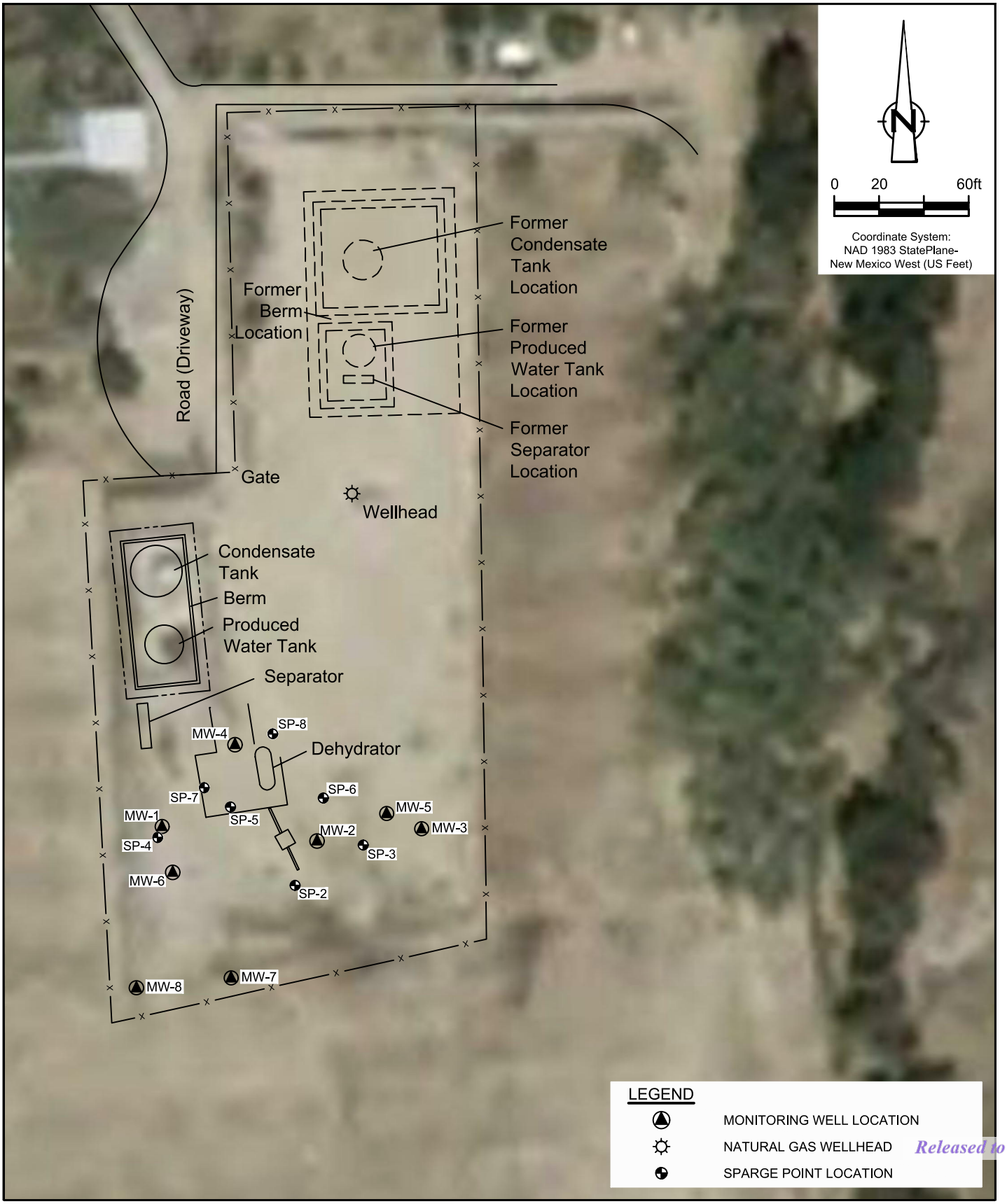
Coordinate System:
NAD 1983 StatePlane-
New Mexico West (US Feet)

HILCORP ENERGY COMPANY
SECTION 07, T30N-R11W, SAN JUAN COUNTY, NEW MEXICO
NELL HALL No. 1 NATURAL GAS WELL SITE

11207530-[illegible]
Feb 11, 202[illegible]

SITE LOCATION MAP

FIGUR[illegible] 1



Source: ConocoPhillips high resolution aerial imagery 2008

Lat/Long: 36.821656° North, 108.037314° West

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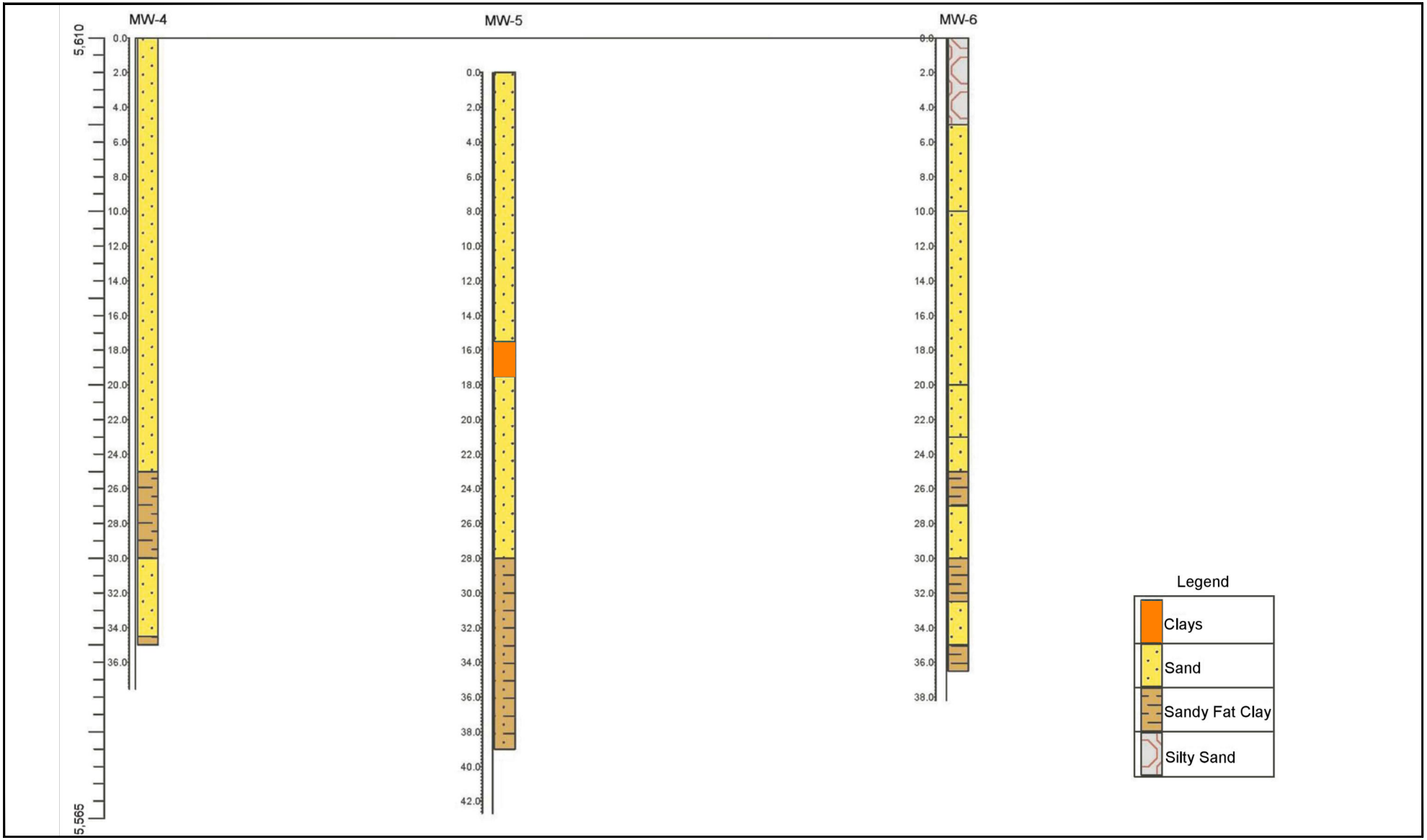
SECTION 07, T30N-R11W, SAN JUAN COUNTY, NEW MEXICO
NELL HALL No. 1 NATURAL GAS WELL SITE

11207530-00

Feb 11, 2020

SITE PLAN

FIGURE 2



HILCORP ENERGY COMPANY
SECTION 07, T30N-R11W, SAN JUAN COUNTY, NEW MEXICO
NELL HALL No. 1 NATURAL GAS WELL SITE

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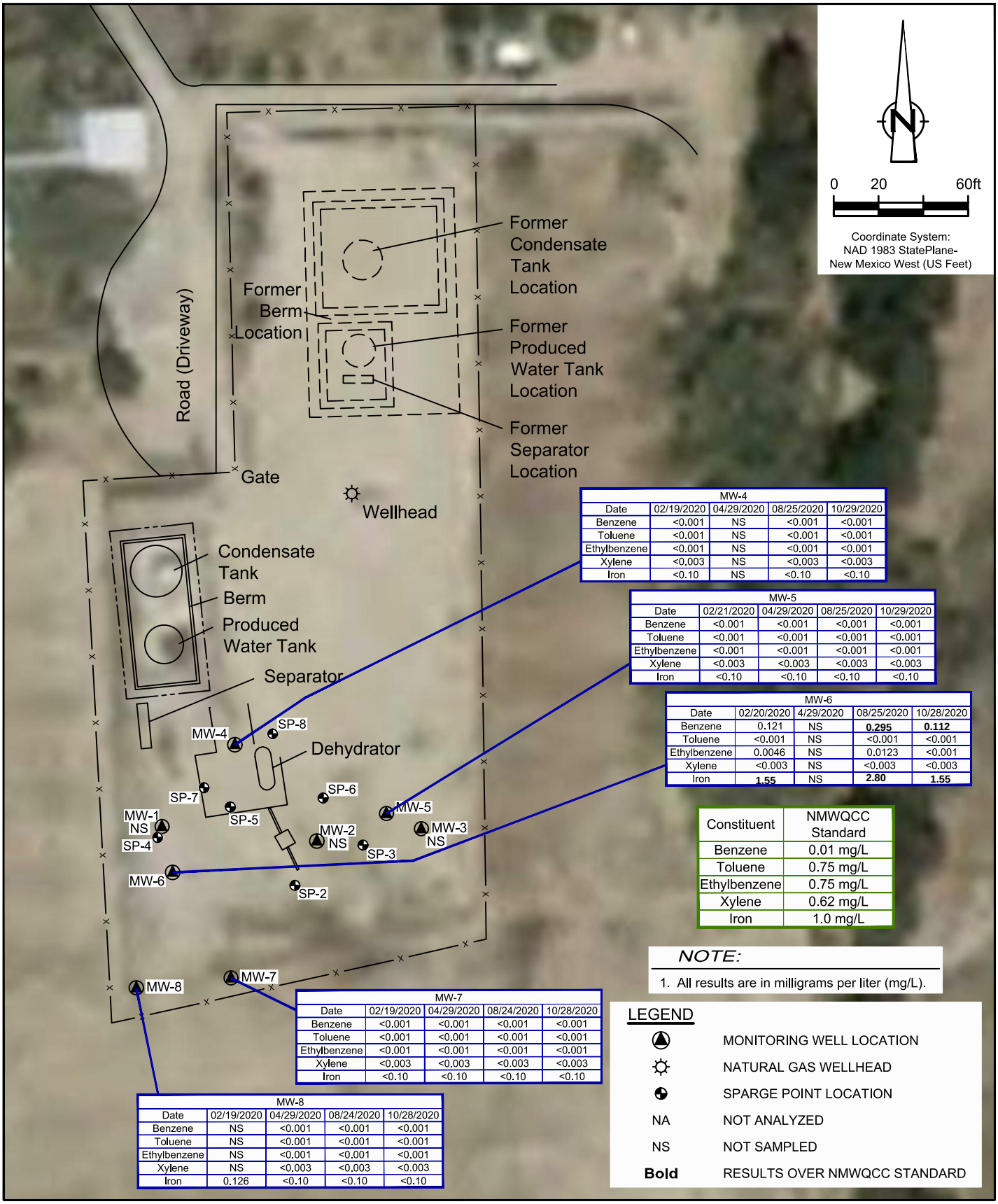
Feb 11, 2020

GEOLOGIC CROSS SECTION

FIGURE 3

CAD File: I:\CAD\Files\Eight Digit Job Numbers\112-----\11207530-Nell Hall #1\11207530-00\11207530-00(001)\11207530-00(001)GN-DL001.dwg



MW-4				
Date	02/19/2020	04/29/2020	08/25/2020	10/29/2020
Benzene	<0.001	NS	<0.001	<0.001
Toluene	<0.001	NS	<0.001	<0.001
Ethylbenzene	<0.001	NS	<0.001	<0.001
Xylene	<0.003	NS	<0.003	<0.003
Iron	<0.10	NS	<0.10	<0.10

MW-5				
Date	02/21/2020	04/29/2020	08/25/2020	10/29/2020
Benzene	<0.001	<0.001	<0.001	<0.001
Toluene	<0.001	<0.001	<0.001	<0.001
Ethylbenzene	<0.001	<0.001	<0.001	<0.001
Xylene	<0.003	<0.003	<0.003	<0.003
Iron	<0.10	<0.10	<0.10	<0.10

MW-6				
Date	02/20/2020	4/29/2020	08/25/2020	10/28/2020
Benzene	0.121	NS	**0.295**	**0.112**
Toluene	<0.001	NS	<0.001	<0.001
Ethylbenzene	0.0046	NS	0.0123	<0.001
Xylene	<0.003	NS	<0.003	<0.003
Iron	**1.55**	NS	**2.80**	**1.55**

Constituent	NMWQCC Standard
Benzene	0.01 mg/L
Toluene	0.75 mg/L
Ethylbenzene	0.75 mg/L
Xylene	0.62 mg/L
Iron	1.0 mg/L

NOTE:

1. All results are in milligrams per liter (mg/L).

MW-7				
Date	02/19/2020	04/29/2020	08/24/2020	10/28/2020
Benzene	<0.001	<0.001	<0.001	<0.001
Toluene	<0.001	<0.001	<0.001	<0.001
Ethylbenzene	<0.001	<0.001	<0.001	<0.001
Xylene	<0.003	<0.003	<0.003	<0.003
Iron	<0.10	<0.10	<0.10	<0.10

MW-8				
Date	02/19/2020	04/29/2020	08/24/2020	10/28/2020
Benzene	NS	<0.001	<0.001	<0.001
Toluene	NS	<0.001	<0.001	<0.001
Ethylbenzene	NS	<0.001	<0.001	<0.001
Xylene	NS	<0.003	<0.003	<0.003
Iron	0.126	<0.10	<0.10	<0.10

LEGEND

▲	MONITORING WELL LOCATION
☼	NATURAL GAS WELLHEAD
◔	SPARGE POINT LOCATION
NA	NOT ANALYZED
NS	NOT SAMPLED
Bold	RESULTS OVER NMWQCC STANDARD

Source: ConocoPhillips high resolution aerial imagery 2008

Lat/Long: 36.821656° North, 108.037314° West

HILCORP ENERGY COMPANY
SECTION 07, T30N-R11W, SAN JUAN COUNTY, NEW MEXICO
NELL HALL No. 1 NATURAL GAS WELL SITE

11207530-00
Feb 19, 2021

2020 CONTAMINANT CONCENTRATION MAP

FIGURE 4

TABLE 1
WELL CONSTRUCTION INFORMATION AND GROUNDWATER ELEVATIONS

NELL HALL #1
SAN JUAN COUNTY, NEW MEXICO
HILCORP ENERGY COMPANY

Well ID	Total Depth (ft)	Screened Interval (ft bgs)	Top of Casing Elevation (ft) (1)	Sample Date	Depth to Groundwater (ft BTOC)	Groundwater Elevation (1)
MW-1	28.55	Unknown	5,615.72 (ft amsl)	5/10/2005	DRY	--
				10/20/2005	19.25	5,596.47
				11/22/2005	24.15	5,591.57
				5/17/2006	NM	NM
				11/15/2006	21.40	5,594.32
				2/19/2007	DRY	--
				5/14/2007	24.85	5,590.87
				8/22/2007	24.61	5,591.11
				11/6/2007	20.87	5,594.85
				3/17/2008	DRY	--
				10/22/2008	19.38	5,596.34
				3/30/2009	28.25	5,587.47
				9/30/2009	16.56	5,599.16
				3/31/2010	DRY	--
				6/9/2010	24.16	5,591.56
			97.95	9/27/2010	20.00	77.95
				3/16/2011	DRY	--
				6/21/2011	26.80	71.15
				9/27/2011	17.85	80.10
				12/13/2011	25.39	72.56
				3/7/2012	DRY	--
				6/4/2012	26.40	71.55
				9/20/2012	17.57	80.38
				12/28/2012	DRY	--
				3/28/2013	DRY	--
				6/12/2013	24.33	73.62
				9/11/2013	17.59	80.36
				12/13/2013	27.45	70.50
				3/20/2014	DRY	--
				6/18/2014	25.18	72.77
				9/15/2014	18.68	79.27
				12/15/2014	DRY	--
				3/16/2015	DRY	--
				6/15/2015	27.85	70.10
				9/16/2015	21.71	76.24
				11/30/2015	26.14	71.81
				3/30/2016	DRY	--
				9/8/2016	18.46	79.49
				11/29/2016	25.21	72.74
				6/14/2017	25.05	72.90
				9/25/2017	19.44	78.51
				12/5/2017	27.29	70.66
				3/15/2018	28.36	69.59
				6/27/2018	24.84	73.11
				3/14/2019	28.24	69.71
				5/24/2019	28.24	69.71
				8/27/2019	DRY	--
				12/17/2019	27.80	70.15
				2/19/2020	28.25	69.70
				4/28/2020	28.26	69.69
				8/25/2020	25.17	72.78
				10/28/2020	22.34	75.61

Well ID	Total Depth (ft)	Screened Interval (ft bgs)	Top of Casing Elevation (ft) (1)	Sample Date	Depth to Groundwater (ft BTOC)	Groundwater Elevation (1)
MW-2	27.32	Unknown	5,614.94 (ft amsl)	5/10/2005	DRY	--
				10/20/2005	18.81	5,596.13
				11/22/2005	23.74	5,591.20
				5/17/2006	22.06	5,592.88
				11/15/2006	21.01	5,593.93
				2/19/2007	DRY	--
				5/14/2007	DRY	--
				8/22/2007	18.03	5,596.91
				11/6/2007	20.43	5,594.51
				3/17/2008	DRY	--
				10/22/2008	18.83	5,596.11
				3/30/2009	27.15	5,587.79
				9/30/2009	16.01	5,598.93
				3/31/2010	DRY	--
				6/9/2010	23.36	5,591.58
			97.16	9/27/2010	19.42	77.74
				3/16/2011	DRY	--
				6/21/2011	26.43	70.73
				9/27/2011	17.28	79.88
				12/13/2011	25.10	72.06
				3/7/2012	DRY	--
				6/4/2012	25.17	71.99
				9/20/2012	17.30	79.86
				12/28/2012	DRY	--
				3/28/2013	DRY	--
				6/12/2013	23.78	73.38
				9/11/2013	17.22	79.94
				12/13/2013	27.00	70.16
				3/20/2014	DRY	--
				6/18/2014	24.78	72.38
				9/15/2014	18.18	78.98
				12/15/2014	DRY	--
				3/16/2015	DRY	--
				6/15/2015	26.65	70.51
				9/16/2015	21.37	75.79
				11/30/2015	26.04	71.12
				3/30/2016	27.31	69.85
				6/22/2016	25.45	71.71
				9/8/2016	18.09	79.07
				11/29/2016	24.94	72.22
				6/14/2017	24.85	72.31
				9/25/2017	18.96	78.20
				12/5/2017	27.04	70.12
				3/15/2018	DRY	--
				6/27/2018	24.61	72.55
				3/14/2019	27.16	70.00
				5/24/2019	27.21	69.95
				8/27/2019	24.74	72.42
				12/17/2019	27.05	70.11
				2/19/2020	27.14	70.02
				4/28/2020	27.20	69.96
				8/24/2020	24.61	72.55
				10/28/2020	21.89	75.27

Well ID	Total Depth (ft)	Screened Interval (ft bgs)	Top of Casing Elevation (ft) (1)	Sample Date	Depth to Groundwater (ft BTOC)	Groundwater Elevation (1)
MW-3	27.45	Unknown	5,615.53 (ft amsl)	5/10/2005	DRY	--
				10/20/2005	19.36	5,596.17
				11/22/2005	24.24	5,591.29
				5/17/2006	22.82	5,592.71
				11/15/2006	21.53	5,594.00
				2/19/2007	DRY	--
				5/14/2007	DRY	--
				8/22/2007	18.36	5,597.17
				11/6/2007	20.95	5,594.58
				3/17/2008	DRY	--
				10/22/2008	19.34	5,596.19
				3/30/2009	DRY	--
				9/30/2009	NM	--
				3/31/2010	DRY	--
				6/9/2010	23.87	5,591.66
			97.77	9/27/2010	19.93	77.84
				3/16/2011	DRY	--
				6/21/2011	27.06	70.71
				9/27/2011	17.82	79.95
				12/13/2011	25.66	72.11
				3/7/2012	DRY	--
				6/4/2012	25.53	72.24
				9/20/2012	17.97	79.80
				12/28/2012	DRY	--
				3/28/2013	DRY	--
				6/12/2013	24.36	73.41
				9/11/2013	17.84	79.93
				12/13/2013	DRY	--
				3/20/2014	DRY	--
				6/18/2014	25.36	72.41
				9/15/2014	18.79	78.98
				12/15/2014	DRY	--
				3/16/2015	DRY	--
				6/15/2015	27.20	70.57
				9/16/2015	22.05	75.72
				11/30/2015	26.68	71.09
				3/30/2016	DRY	--
				9/8/2016	18.75	79.02
				11/29/2016	25.53	72.24
				6/14/2017	25.52	72.25
				9/25/2017	19.62	78.15
				12/5/2017	27.31	70.46
				3/15/2018	DRY	--
				6/27/2018	25.27	72.50
				3/14/2019	27.40	70.37
				5/24/2019	DRY	--
				8/27/2019	25.42	72.35
				12/17/2019	27.30	70.47
				2/19/2020	27.37	70.40
				4/28/2020	DRY	--
				8/24/2020	25.20	72.57
				10/28/2020	22.49	75.28

Well ID	Total Depth (ft)	Screened Interval (ft bgs)	Top of Casing Elevation (ft) (1)	Sample Date	Depth to Groundwater (ft BTOC)	Groundwater Elevation (1)
MW-4	37.57	7.57 - 37.57	5,614.87 (ft amsl)	3/8/2004	36.04	5,578.83
				7/19/2004	8.44	5,606.43
				10/27/2004	19.69	5,595.18
				12/27/2004	27.58	5,587.29
				5/10/2005	DRY	--
				10/20/2005	18.87	5,596.00
				11/22/2005	23.93	5,590.94
				5/17/2006	NM	--
				11/15/2006	21.02	5,593.85
				2/19/2007	34.40	5,580.47
				5/14/2007	27.56	5,587.31
				8/22/2007	18.18	5,596.69
				11/6/2007	20.48	5,594.39
				3/17/2008	36.08	5,578.79
				10/22/2008	18.96	5,595.91
				3/30/2009	37.36	5,577.51
				9/30/2009	16.15	5,598.72
				3/31/2010	DRY	--
				6/9/2010	23.61	5,591.26
			97.75	9/27/2010	19.61	78.14
				3/16/2011	DRY	--
				6/21/2011	26.79	70.96
				9/27/2011	17.47	80.28
				12/13/2011	25.35	72.40
				3/7/2012	35.73	62.02
				6/4/2012	25.39	72.36
				9/20/2012	17.43	80.32
				12/28/2012	28.02	69.73
				3/28/2013	DRY	--
				6/12/2013	24.06	73.69
				9/11/2013	17.40	80.35
				12/13/2013	27.90	69.85
				3/20/2014	DRY	--
				6/18/2014	25.10	72.65
				9/15/2014	18.43	79.32
				12/15/2014	28.01	69.74
				3/16/2015	DRY	--
				6/15/2015	26.91	70.84
				9/16/2015	21.62	76.13
				11/30/2015	26.28	71.47
				3/30/2016	37.54	60.21
				6/22/2016	25.59	72.16
				9/8/2016	18.29	79.46
				11/29/2016	25.31	72.44
				6/14/2017	25.17	72.58
				9/25/2017	19.24	78.51
				12/5/2017	27.64	70.11
				3/15/2018	37.54	60.21
				6/27/2018	24.84	72.91
				10/10/2018	22.70	75.05
				12/12/2018	29.98	67.77
				3/14/2019	37.43	60.32
				5/23/2019	33.96	63.79
				8/27/2019	25.17	72.58
				12/16/2019	29.15	68.6
				2/20/2020	36.64	61.11
				4/29/2020	DRY	--
				8/25/2020	24.74	73.01
				10/28/2020	22.13	75.62

Well ID	Total Depth (ft)	Screened Interval (ft bgs)	Top of Casing Elevation (ft) (1)	Sample Date	Depth to Groundwater (ft BTOC)	Groundwater Elevation (1)
MW-5	42.70	7.7 - 42.7	5,615.86 (ft amsl)	3/8/2004	37.19	5,578.67
				7/19/2004	9.38	5,606.48
				10/27/2004	21.07	5,594.79
				12/27/2004	28.99	5,586.87
				5/10/2005	39.79	5,576.07
				10/20/2005	20.34	5,595.52
				11/22/2005	25.23	5,590.63
				5/17/2006	23.80	5,592.06
				11/15/2006	22.51	5,593.35
				2/19/2007	35.31	5,580.55
				5/14/2007	27.59	5,588.27
				8/22/2007	19.45	5,596.41
				11/6/2007	21.94	5,593.92
				3/17/2008	37.33	5,578.53
				10/22/2008	19.30	5,596.56
				3/30/2009	38.68	5,577.18
				9/30/2009	17.54	5,598.32
				3/31/2010	39.05	5,576.81
				6/9/2010	24.91	5,590.95
			98.81	9/27/2010	20.92	77.89
				3/16/2011	39.25	59.56
				6/21/2011	28.02	70.79
				9/27/2011	18.79	80.02
				12/13/2011	26.62	72.19
				3/7/2012	37.00	61.81
				6/4/2012	26.57	72.24
				9/20/2012	18.92	79.89
				12/28/2012	29.37	69.44
				3/28/2013	DRY	--
				6/12/2013	25.39	73.42
				9/11/2013	18.84	79.97
				12/13/2013	29.20	69.61
				3/20/2014	39.83	58.98
				6/18/2014	26.35	72.46
				9/15/2014	19.76	79.05
				12/15/2014	29.37	69.44
				3/16/2015	39.55	59.26
				6/15/2015	28.22	70.59
				9/16/2015	23.02	75.79
				11/30/2015	27.61	71.20
				3/30/2016	41.26	57.55
				6/22/2016	26.91	71.90
				9/8/2016	19.72	79.09
				11/29/2016	26.48	72.33
				6/14/2017	26.48	72.33
				9/25/2017	20.58	78.23
				12/5/2017	29.09	69.72
				3/15/2018	40.67	58.14
				6/27/2018	26.24	72.57
				10/10/2018	23.44	75.37
				12/12/2018	31.25	67.56
				3/14/2019	41.70	57.11
				5/24/2019	34.36	64.45
				8/28/2019	26.41	72.40
				12/17/2019	30.58	68.23
				2/21/2020	38.03	60.78
				4/29/2020	39.43	59.38
				8/25/2020	26.17	72.64
				10/29/2020	23.49	75.32

Well ID	Total Depth (ft)	Screened Interval (ft bgs)	Top of Casing Elevation (ft) (1)	Sample Date	Depth to Groundwater (ft BTOC)	Groundwater Elevation (1)
MW-6	38.21	8.21 - 38.21	5,615.44 (ft amsl)	3/8/2004	36.27	5,579.17
				7/19/2004	9.43	5,606.01
				10/27/2004	19.33	5,596.11
				12/27/2004	28.62	5,586.82
				5/10/2005	DRY	--
				10/20/2005	19.94	5,595.50
				11/22/2005	25.02	5,590.42
				5/17/2006	NM	--
				11/15/2006	21.12	5,594.32
				2/19/2007	34.82	5,580.62
				5/14/2007	26.12	5,589.32
				8/22/2007	19.41	5,596.03
				11/6/2007	21.51	5,593.93
				3/17/2008	36.34	5,579.10
				10/22/2008	19.99	5,595.45
				3/30/2009	37.04	5,578.40
				9/30/2009	17.26	5,598.18
				3/31/2010	37.24	5,578.20
				6/9/2010	24.43	5,591.01
			98.41	9/27/2010	20.79	77.62
				3/16/2011	DRY	--
				6/21/2011	27.56	70.85
				9/27/2011	18.58	79.83
				12/13/2011	26.32	72.09
				3/7/2012	36.01	62.40
				6/4/2012	26.55	71.86
				9/20/2012	18.25	80.16
				12/28/2012	29.11	69.30
				3/28/2013	DRY	--
				6/12/2013	24.78	73.63
				9/11/2013	18.26	80.15
				12/13/2013	28.84	69.57
				3/20/2014	37.47	60.94
				6/18/2014	25.93	72.48
				9/15/2014	19.35	79.06
				12/15/2014	29.02	69.39
				3/16/2015	37.37	61.04
				6/15/2015	27.92	70.49
				9/16/2015	22.40	76.01
				11/30/2015	27.22	71.19
				3/30/2016	37.81	60.60
				6/22/2016	26.75	71.66
				9/8/2016	19.27	79.14
				11/29/2016	26.20	72.21
				6/14/2017	25.97	72.44
				9/25/2017	20.04	78.37
				12/5/2017	28.63	69.78
				3/15/2018	37.76	60.65
				6/27/2018	25.67	72.74
				10/10/2018	22.97	75.44
				12/12/2018	31.12	67.29
				3/14/2019	37.84	60.57
				5/23/2019	35.26	63.15
				8/27/2019	25.83	72.58
				12/16/2019	29.41	69.00
				2/20/2020	36.41	62.00
				4/29/2020	DRY	--
				8/25/2020	25.70	72.71
				10/28/2020	22.85	75.56

Well ID	Total Depth (ft)	Screened Interval (ft bgs)	Top of Casing Elevation (ft) (1)	Sample Date	Depth to Groundwater (ft BTOC)	Groundwater Elevation (1)
MW-7	43.02	10 - 40	97.60	9/16/2015	21.70	75.90
				11/30/2015	26.78	70.82
				3/30/2016	40.46	57.14
				6/22/2016	25.98	71.62
				9/8/2016	18.55	79.05
				11/29/2016	25.73	71.87
				6/14/2017	25.35	72.25
				9/25/2017	19.44	78.16
				12/5/2017	28.21	69.39
				3/15/2018	39.85	57.75
				6/27/2018	25.06	72.54
				10/10/2018	22.26	75.34
				12/12/2018	30.25	67.35
				3/14/2019	40.81	56.79
				5/23/2019	33.75	63.85
				8/28/2019	25.00	72.60
				12/16/2019	29.41	68.19
				2/19/2020	37.10	60.50
				4/29/2020	37.87	59.73
				8/24/2020	25.17	72.43
				10/28/2020	22.25	75.35
MW-8	42.47	9 - 39	98.87	9/16/2015	22.74	76.13
				11/30/2015	27.97	70.90
				3/30/2016	41.65	57.22
				6/22/2016	27.11	71.76
				9/8/2016	19.52	79.35
				11/29/2016	26.82	72.05
				6/14/2017	26.30	72.57
				9/25/2017	20.52	78.35
				12/5/2017	29.30	69.57
				3/15/2018	41.03	57.84
				6/27/2018	26.00	72.87
				10/10/2018	23.27	75.60
				12/12/2018	31.34	67.53
				3/14/2019	42.00	56.87
				5/23/2019	35.12	63.75
				8/28/2019	26.03	72.84
				12/17/2019	30.42	68.45
				2/19/2020	38.11	60.76
				4/29/2020	38.32	60.55
				8/25/2020	26.23	72.64
				10/28/2020	23.41	75.46

Notes:

(1) - surface elevation based on an arbitrary datum of 100 feet
amsl - above mean sea level
bgs - below ground surface
BTOC - below top of casing
ft = feet
NM = Not measured

TABLE 2
FIELD PARAMETER RESULTS

NELL HALL #1
SAN JUAN COUNTY, NEW MEXICO
HILCORP ENERGY COMPANY

Well ID	Sample Date	Temperature (°C)	pH	TDS (mg/L)	Conductivity (uS/cm)	DO (mg/L)	ORP (mV)	Volume (gallons)
MW-4	3/17/2015	Not sampled.						
	6/15/2015	16.01	6.78	0.635	977	2.74	-113.9	5.25
	9/16/2015	16.48	7.00	0.619	953	4.24	-83.1	7.75
	11/30/2015	15.59	7.01	0.680	1,046	2.60	-54.0	5.50
	3/30/2016	Not sampled.						
	6/22/2016	16.00	6.65	--	1,090	1.10	-109.0	6.00
	9/8/2016	16.55	7.35	0.627	965	5.03	66.3	9.50
	11/29/2016	14.79	7.34	--	935	3.87	46.0	6.00
	6/14/2017	14.81	7.02	0.688	1,043	2.14	-135.6	6.00
	9/25/2017	16.08	6.90	--	800	--	--	9.00
	12/5/2017	14.31	6.84	0.658	1,013	1.32	-153.5	5.25
	3/15/2018	No parameters collected due to low well volume.						
	6/27/2018	16.51	6.77	--	1,060	99.00	-102.5	6.50
	3/14/2019	No parameters collected due to low well volume						
	5/23/2019	14.40	7.10	0.510	980	27.00	-4.6	--
	8/27/2019	19.60	7.16	0.620	1,230	29.60	-3.2	--
	12/16/2019	8.40	6.40	0.590	1,200	2.68	13.5	--
	2/20/2020	15.80	6.36	0.650	1,300	8.19	-2.6	--
	4/29/2020	No parameters collected due to low well volume						
	8/25/2020	22.40	6.18	0.640	1,290	1.04	16.2	--
	10/29/2020	17.20	6.59	0.570	1,140	4.63	-13.1	--
MW-5	3/17/2015	No parameters or sample collected due to low well volume.						
	6/15/2015	15.28	7.08	0.576	886	6.83	10.2	7.00
	9/16/2015	15.99	6.72	0.598	920	7.33	34.9	9.75
	11/30/2015	16.24	6.84	1.118	1,721	5.52	-50.5	7.75
	3/30/2016	No parameters collected due to low well volume.						
	6/22/2016	15.70	7.02	--	1,120	5.87	2.0	7.75
	9/8/2016	15.78	7.82	0.550	846	7.91	54.3	11.25
	11/29/2016	15.47	7.17	--	1,198	8.96	74.8	8.00
	6/14/2017	14.22	7.05	0.914	1,406	6.88	-80.1	8.00
	9/25/2017	15.60	6.83	--	947	--	--	9.00
	12/5/2017	15.16	7.05	0.888	1,367	4.66	-82.9	6.50
	3/15/2018	15.53	7.13	--	1,301	1.23	78.4	--
	6/27/2018	15.84	7.11	--	1,098	6.80	65.6	8.25
	3/14/2019	14.40	7.20	0.670	1,340	--	-15.6	--
	5/24/2019	14.40	7.17	0.560	1,130	55.70	-22.6	--
	8/28/2019	19.10	7.02	0.680	1,360	56.20	-20.2	--
	12/17/2019	10.20	6.57	0.640	1,250	7.16	-31.7	--
	2/21/2020	12.40	6.50	0.570	1,210	14.37	-30.5	--
	4/29/2020	20.70	6.71	0.530	1,060	4.04	-19.9	--
	8/25/2020	23.40	6.86	0.600	1,180	2.71	-15.6	--
	10/28/2020	17.50	6.54	0.670	1,330	4.46	-8.6	--
MW-6	3/17/2015	Not sampled.						
	6/15/2015	15.34	6.50	0.730	1,124	4.15	-95.9	5.25
	9/16/2015	15.69	6.13	0.846	1,302	2.92	-121.5	7.75
	11/30/2015	15.36	6.57	0.793	1,221	4.82	-72.4	5.50
	3/30/2016	Not sampled.						
	6/22/2016	15.30	6.50	--	1,220	1.42	-91.4	5.75
	9/8/2016	15.51	7.43	0.849	1,307	1.86	-138.7	9.25
	11/29/2016	15.29	6.86	--	1,132	2.57	-86.1	6.00
	6/14/2014	14.10	6.73	0.775	1,192	2.02	-115.1	6.00
	9/25/2017	14.86	6.30	--	1,342	--	--	11.00
	12/5/2017	13.91	6.68	0.794	1,222	0.80	-155.0	4.75
	3/15/2018	15.21	6.78	--	1,553	-0.11	-139.2	--
	6/27/2018	16.31	6.91	--	1,195	0.52	-125	6.50
	3/14/2019	No parameter or samples collected due to low well volume						
	5/23/2019	No parameters or samples collected due to low well level						
	8/27/2019	20.60	6.73	0.580	1,160	15.1	13.7	--
	12/16/2019	9.50	6.13	0.590	1,150	5.15	12.2	--
	2/20/2020	15.40	6.04	0.670	1,340	10.52	11.1	--
	4/29/2020	No parameters collected due to low well volume						
	8/25/2020	25.70	6.25	0.660	1,330	1.32	25.8	--
	10/28/2020	15.50	6.22	0.790	1,590	5.49	15.3	--

Well ID	Sample Date	Temperature (°C)	pH	TDS (mg/L)	Conductivity (uS/cm)	DO (mg/L)	ORP (mV)	Volume (gallons)
MW-7	9/16/2015	15.07	6.52	0.581	893	7.15	72.8	10.25
	11/30/2015	15.01	6.69	1.067	1,641	4.99	21.0	7.75
	3/30/2016	16.77	6.91	0.800	1,250	6.03	40.0	1.25
	6/22/2016	15.30	6.93	--	1,090	1.22	53.5	8.25
	9/8/2016	16.29	7.62	0.441	679	7.49	5.6	11.50
	11/29/2016	14.11	7.07	--	1,006	6.35	85.7	8.00
	6/14/2017	13.95	6.82	0.809	1,245	4.88	-78.6	8.50
	9/25/2017	13.87	6.91	--	808	--	--	--
	12/5/2017	14.11	6.93	0.615	946	3.11	-82.8	7.00
	3/15/2018	15.26	6.91	--	1,037	1.09	77.1	--
	6/27/2018	15.07	6.95	--	887	5.6	42.5	8.75
	3/14/2019	12.20	7.40	0.510	--	--	-5.3	--
	5/23/2019	15.50	7.15	0.490	1,550	35.8	-8.8	--
	8/28/2019	18.00	7.08	0.440	880	38.7	-17.8	--
	12/16/2019	8.20	6.41	0.520	1,050	2.85	-39.1	--
	2/19/2020	14.70	6.46	0.570	1,120	9.25	-10.6	--
	4/29/2020	13.00	6.42	0.530	1,070	2.96	-6.5	--
	8/24/2020	19.80	6.51	0.510	1,020	2.17	-6.1	--
	10/28/2020	10.90	6.55	0.650	1,290	5.21	-12.4	--
MW-8	9/16/2015	14.18	6.65	0.534	821	6.37	73.2	9.75
	11/30/2015	13.85	7.20	0.565	869	4.59	-13.8	7.00
	3/30/2016	No parameters collected due to low well volume.						
	6/22/2016	14.70	7.04	--	970	0.66	-22.6	7.50
	9/8/2016	13.99	7.82	0.550	847	7.95	15.0	11.25
	11/29/2016	13.71	7.24	--	883	8.81	89.1	7.50
	6/14/2017	13.36	7.43	0.549	844	7.71	-71.9	7.75
	9/25/2017	12.78	6.73	--	823	--	--	11.00
	12/5/2017	12.36	7.09	0.509	783	2.53	-83.5	6.50
	3/15/2018	14.52	7.12	--	915	0.00	-135.0	--
	6/27/2018	14.48	7.14	--	748	5.57	62.2	8.00
	3/14/2019	Now parameter or samples collected due to low well levels						
	5/23/2019	18.40	7.47	0.470	910	32.8	-30.3	--
	8/28/2019	18.40	7.07	0.480	960	48.1	-15.4	--
	12/17/2019	6.60	6.80	0.400	800	9.43	-36.6	--
	2/19/2020	15.30	6.21	0.440	880	9.57	-18.0	--
	4/29/2020	15.30	6.46	0.420	850	2.61	-10.1	--
	8/25/2020	23.00	6.62	0.480	970	2.04	-14	--
	10/28/2020	13.40	6.59	0.460	910	4.72	-19.8	--

Notes:

mg/L - milligrams 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

NELL HALL #1
SAN JUAN COUNTY, NEW MEXICO
HILCORP ENERGY COMPANY

Well ID	Sample ID	Sample Date	Sample Type	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Xylenes (total) (mg/L)	Iron (dissolved) (mg/L)	Nitrate (as N) (mg/L)	Sulfate (mg/L)
NMWQCC Standards				0.010	0.75	0.75	0.62	1.0	10	600
MW-4	MW-4	3/8/2004	(orig)	0.013	0.012	0.064	1.4	--	--	--
	MW-4	7/19/2004	(orig)	< 0.0005	< 0.0005	< 0.0005	< 0.0005	--	--	--
	MW-4	10/27/2004	(orig)	0.011	0.008	0.021	0.13	--	--	--
	MW-4	12/27/2004	(orig)	< 0.0025	< 0.0025	< 0.0025	< 0.0005	--	--	--
	MW-4	11/22/2005	(orig)	< 0.0005	< 0.0007	< 0.0008	< 0.0008	--	< 0.40	105
	MW-4	11/15/2006	(orig)	< 0.0005	< 0.0007	< 0.0008	< 0.0008	--	< 0.25	110
	MW-4	2/21/2007	(orig)	< 0.0005	< 0.0007	< 0.0008	< 0.0008	--	< 0.25	59.6
	MW-4	8/22/2007	(orig)	< 0.0005	< 0.0007	< 0.0008	< 0.0008	--	< 0.25	96.5
	MW-4	11/6/2007	(orig)	< 0.0005	< 0.0007	< 0.0008	< 0.0008	--	3.3	111
	MW-4	3/17/2008	(orig)	< 0.005	< 0.005	< 0.005	< 0.005	--	< 0.5	64.5
	MW-4	10/22/2008	(orig)	< 0.005	< 0.005	< 0.005	< 0.005	--	1.9	93.8
	MW-4	9/30/2009	(orig)	< 0.001	< 0.001	< 0.001	< 0.001	< 0.02	--	--
	MW-4	6/9/2010	(orig)	< 0.001	< 0.001	< 0.001	< 0.001	< 0.02	--	--
	MW-4	9/27/2010	(orig)	< 0.001	< 0.001	< 0.001	< 0.001	< 0.02	--	--
	GW-74941-062111-CMB-001	6/21/2011	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	1.21	--	--
	GW-074941-092711-CM-007	9/27/2011	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	< 0.05	--	--
	GW-074941-121311-CB-MW-4	12/13/2011	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	0.201	--	--
	GW-074941-3712-CB-MW-4	3/7/2012	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	< 0.25	--	--
	GW-074941-3712-CB-DUP	3/7/2012	(Duplicate)	< 0.001	< 0.001	< 0.001	< 0.003	--	--	--
	GW-074941-060412-CB-MW-4	6/4/2012	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	1.17	--	--
	GW-074941-092012-JP-MW-4	9/20/2012	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	< 0.25	--	--
	GW-074941-122812-JMK-MW4	12/28/2012	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	0.748	--	--
	GW-074941-122812-JMK-DUP	12/28/2012	(Duplicate)	< 0.001	< 0.001	< 0.001	< 0.003	--	--	--
	074941-061213-JK-MW4	6/12/2013	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	1.46	--	--
	074941-061213-JK-DUP	6/12/2013	(Duplicate)	< 0.001	< 0.001	< 0.001	< 0.003	--	--	--
	GW-074941-091113-CM-MW-4	9/11/2013	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	<0.050	--	--
	GW-074941-122323-CM-MW4	12/13/2013	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	0.758	--	--
	GW-074941-061814-CK-MW-4	6/18/2014	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	1.83	--	--
	GW-074941-091514-CB-MW-4	9/15/2014	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	0.0544	--	--
	GW-074941-121514-CM-MW-4	12/15/2014	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	0.456	--	--
	GW-074941-061515-CB-MW-4	6/15/2015	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	1.78	--	--
	GW-074941-091615-CK-MW-4	9/16/2015	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	0.225	--	--
	GW-074941-113015-CB-MW-4	11/30/2015	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	0.58	--	--
		3/30/2016	Insufficient water column for sample							
	GW-074941-062216-SP-MW-4	06/22/2016	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	2.07	--	--
	GW-074941-090816-SP-MW-4	09/08/2016	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	< 0.05	--	--
	GW-074941-112916-CN-MW-4	11/29/2016	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	< 0.05	--	--
	GW-074941-061417-CN-MW-4	06/14/2017	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	1.03	--	--
	GW-11146004-092517-CN-MW-4	9/25/2017	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	< 0.05	--	--
	GW-11146004-120517-SP-MW-4	12/05/2017	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	0.564	--	--
	GW-11146004-031518-JW-MW-4	3/15/2018	Insufficient water column for sample							
	GW-11146004-062718-CM-MW-4	6/27/2018	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	1.39	--	--
	MW-4	10/10/2018	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	<0.10	--	--
	MW-4	12/12/2018	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	<0.10	--	--
	MW-4	3/14/2019	Insufficient water column for sample							
	MW-4	5/23/2019	(orig)	--	--	--	--	<0.10	--	--
	MW-4	8/27/2019	(orig)	--	--	--	--	<0.10	--	--
	MW-4	12/16/2019	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	<0.10	--	--
	MW-4	2/19/2020	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	<0.10	--	--
	MW-4	4/29/2020	Insufficient water column for sample							
	MW-4	8/25/2020	(orig)	<0.001	<0.001	<0.001	<0.003	<0.10	--	--
	MW-4	10/29/2020	(orig)	<0.001	<0.001	<0.001	<0.003	<0.10	--	--

Well ID	Sample ID	Sample Date	Sample Type	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Xylenes (total) (mg/L)	Iron (dissolved) (mg/L)	Nitrate (as N) (mg/L)	Sulfate (mg/L)
NMWQCC Standards				0.010	0.75	0.75	0.62	1.0	10	600
MW-5	MW-5	3/8/2004	(orig)	0.0011	< 0.0005	0.001	0.017	--	--	--
	MW-5	7/19/2004	(orig)	< 0.0005	0.00055	< 0.0005	0.00072	--	--	--
	MW-5	10/27/2004	(orig)	< 0.0005	< 0.0005	< 0.0005	< 0.001	--	--	--
	MW-5	12/27/2004	(orig)	< 0.0005	< 0.0005	< 0.0005	< 0.001	--	--	--
	MW-5	5/11/2005	(orig)	< 0.0005	< 0.0007	< 0.0008	< 0.0008	--	2.3	139
	MW-5	11/22/2005	(orig)	< 0.0005	< 0.0007	< 0.0008	< 0.0008	--	< 0.40	38
	MW-5	11/15/2006	(orig)	< 0.0005	< 0.0007	< 0.0008	< 0.0008	--	2.3	77.9
	MW-5	2/21/2007	(orig)	< 0.0005	< 0.0007	< 0.0008	< 0.0008	--	1.3	83.3
	MW-5	8/22/2007	(orig)	< 0.0005	< 0.0007	< 0.0008	< 0.0008	--	5.6	125
	MW-5	11/6/2007	(orig)	< 0.0005	< 0.0007	< 0.0008	< 0.0008	--	4	59
	MW-5	3/17/2008	(orig)	< 0.005	< 0.005	< 0.005	< 0.005	--	0.986	69.7
	MW-5	10/22/2008	(orig)	< 0.005	< 0.005	< 0.005	< 0.005	--	0.532	105
	MW-5	3/30/2009	(orig)	< 0.005	< 0.005	< 0.005	< 0.005	--	--	--
	MW-5	9/30/2009	(orig)	< 0.001	< 0.001	< 0.001	< 0.001	< 0.02	--	--
	MW-5	3/31/2010	(orig)	< 0.001	< 0.001	< 0.001	< 0.001	< 0.02	--	--
	MW-5	6/9/2010	(orig)	< 0.001	< 0.001	< 0.001	< 0.001	< 0.02	--	--
	MW-5	9/27/2010	(orig)	< 0.001	< 0.001	< 0.001	< 0.001	< 0.02	--	--
	MW-5	3/16/2011	(orig)	< 0.001	< 0.001	< 0.001	< 0.001	< 0.02	--	--
	GW-74941-062111-CMB-002	6/21/2011	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	< 0.1	--	--
	GW-074941-092711-CM-005	9/27/2011	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	0.0835	--	--
	GW-074941-121311-CB-MW-5	12/13/2011	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	< 0.05	--	--
	GW-074941-3712-CB-MW-5	3/7/2012	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	< 0.05	--	--
	GW-074941-060412-CB-MW-5	6/4/2012	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	< 0.05	--	--
	GW-074941-092012-JP-MW-5	9/20/2012	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	< 0.05	--	--
	GW-074941-122812-JMK-MW5	12/28/2012	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	< 0.05	--	--
	074941-061213-JK-MW5	6/12/2013	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	< 0.05	--	--
	GW-074941-091113-CM-MW-5	9/11/2013	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	0.0723	--	--
	GW-074941-122323-CM-MW5	12/13/2013	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	0.076	--	--
	GW-074941-032114-CK-MW-5	3/21/2014	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	< 0.05	--	--
	GW-074941-032114-CK-DUP	3/21/2014	(Duplicate)	< 0.001	< 0.001	< 0.001	< 0.003	--	--	--
	GW-074941-061814-CK-MW-5	6/18/2014	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	< 0.05	--	--
	GW-074941-091514-CB-MW-5	9/15/2014	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	< 0.05	--	--
	GW-074941-121514-CM-MW-5	12/15/2014	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	< 0.05	--	--
	GW-074941-031715-CM-MW-5	3/17/2015	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	--	--	--
	GW-074941-061515-CB-MW-5	6/15/2015	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	< 0.05	--	--
	GW-074941-091615-CK-MW-5	9/16/2015	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	< 0.05	--	--
	GW-074941-113015-CB-MW-5	11/30/2015	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	0.0684	--	--
	GW-074941-033016-CM-MW-5	3/30/2016	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	--	--	--
	GW-074941-062216-SP-MW-5	6/22/2016	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	< 0.05	--	--
	GW-074941-090816-SP-MW-5	09/08/2016	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	< 0.05	--	--
	GW-074941-112916-CN-MW-5	11/29/2016	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	< 0.05	--	--
	GW-074941-061417-CNMW-5	06/14/2017	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	0.133	--	--
	GW-11146004-092517-CN-MW-5	9/25/2017	(orig)	0.147	< 0.001	0.0264	0.0135	0.0568	--	--
	GW-11146004-120517-SP-MW-5	12/05/2017	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	< 0.05		--
	GW-11146004-031518-JW-MW-5	3/15/2018	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	0.0795	--	--
	GW-11146004-062718-JW-MW-5	6/27/2018	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	< 0.05	--	--
	MW-5	10/10/2016	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	<0.10	--	--
	MW-5	12/12/2016	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	<0.10	--	--
	MW-5	3/14/2019	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	<0.10	--	--
	MW-5	5/24/2019	(orig)	--	--	--	--	<0.10	--	--
	MW-5	8/28/2019	(orig)	--	--	--	--	<0.10	--	--
	MW-5	12/17/2019	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	<0.10	--	--
	MW-5	2/21/2020	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	<0.10	--	--
	MW-5	4/29/2020	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	<0.10	--	--
	MW-5	8/25/2020	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	<0.10	--	--
	MW-5	10/29/2020	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	<0.10	--	--

Well ID	Sample ID	Sample Date	Sample Type	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Xylenes (total) (mg/L)	Iron (dissolved) (mg/L)	Nitrate (as N) (mg/L)	Sulfate (mg/L)
NMWQCC Standards				0.010	0.75	0.75	0.62	1.0	10	600
MW-6	MW-6	3/8/2004	(orig)	2.5	0.014	1.6	21.031	--	--	--
	MW-6	7/19/2004	(orig)	< 0.0005	< 0.0005	0.00098	0.0026	--	--	--
	MW-6	10/27/2004	(orig)	0.0004	0.0003	0.0005	0.0021	--	--	--
	MW-6	12/27/2004	(orig)	0.045	0.0068	0.014	0.0717	--	--	--
	MW-6	11/22/2005	(orig)	0.01	0.0007	0.016	0.15	--	< 0.40	3.4
	MW-6	11/15/2006	(orig)	< 0.0005	< 0.0007	< 0.0008	< 0.0008	--	< 0.25	41.3
	MW-6	2/21/2007	(orig)	0.54	< 0.001	0.076	0.81	--	< 0.25	1.8
	MW-6	8/22/2007	(orig)	< 0.0005	< 0.0007	< 0.0008	< 0.0008	--	< 0.25	12.6
	MW-6	11/6/2007	(orig)	0.015	< 0.0007	0.047	0.39	--	< 0.25	5.6
	MW-6	3/18/2008	(orig)	0.16	< 0.005	< 0.005	0.033	--	--	--
	MW-6	10/22/2008	(orig)	< 0.005	< 0.005	< 0.005	< 0.005	--	< 1.0	5.15
	MW-6	3/30/2009	(orig)	0.042	< 0.005	< 0.005	0.01	--	--	--
	MW-6	9/30/2009	(orig)	0.096	0.0047	0.062	0.12	1.06	--	--
	MW-6	4/1/2010	(orig)	0.48	< 0.001	0.078	0.2	--	--	--
	MW-6	6/9/2010	(orig)	0.71	< 0.001	0.42	0.52	11.4	--	--
	MW-6	9/27/2010	(orig)	0.3	< 0.001	0.25	0.41	0.676	--	--
	MW-6	3/16/2011	(orig)	0.18	< 0.001	0.044	0.072	8.66	--	--
	GW-74941-062111-CMB-003	6/21/2011	(orig)	0.461	0.00048	0.454	0.677	9.45	--	--
	GW-74941-062111-CMB-DUP	6/21/2011	(Duplicate)	0.383	0.00057	0.407	0.607	--	--	--
	GW-074941-092711-CM-006	9/27/2011	(orig)	0.237	< 0.005	0.197	0.225	19.6	--	--
	GW-074941-092711-CM-008	9/27/2011	(Duplicate)	0.249	< 0.005	0.216	0.248	--	--	--
	GW-074941-121311-CB-MW-6	12/13/2011	(orig)	0.298	0.0083	0.154	0.141	11.6	--	--
	GW-074941-121311-CB-DUP	12/13/2011	(Duplicate)	0.359	0.0061	0.19	0.183	--	--	--
	GW-074941-3712-CB-MW-6	3/7/2012	(orig)	0.0477	< 0.001	0.0073	0.0192	22.5	--	--
	GW-074941-060412-CB-MW-6	6/4/2012	(orig)	0.649	< 0.01	0.309	0.314	19.2	--	--
	GW-074941-060412-CB-DUP	6/4/2012	(Duplicate)	0.62	< 0.01	0.267	0.266	--	--	--
	GW-074941-092012-JP-MW-6	9/20/2012	(orig)	0.266	< 0.005	0.065	0.0355	9.53	--	--
	GW-074941-092012-JP-DUP	9/20/2012	(Duplicate)	0.282	< 0.005	0.0634	0.0348	--	--	--
	GW-074941-122812-JMK-MW6	12/28/2012	(orig)	0.319	< 0.005	0.0764	0.0452	8.06	--	--
	074941-061213-JK-MW6	6/12/2013	(orig)	0.442	< 0.005	0.159	0.209	16.6	--	--
	GW-074941-091113-CM-MW-6	9/11/2013	(orig)	0.109	< 0.001	0.0208	0.0123	2.26	--	--
	GW-074941-091113-CM-DUP	9/11/2013	(Duplicate)	0.0937	< 0.001	0.0191	0.0114	--	--	--
	GW-074941-122323-CM-MW6	12/13/2013	(orig)	0.467	< 0.001	0.101	0.0537	5.9	--	--
	GW-074941-122323-CM-DUP	12/13/2013	(Duplicate)	0.456	< 0.001	0.0777	0.0491	--	--	--
	GW-074941-061814-CK-MW-6	6/18/2014	(orig)	0.384	< 0.005	0.152	0.177	15.5	--	--
	GW-074941-061814-CK-DUP	6/18/2014	(Duplicate)	0.402	< 0.005	0.153	0.173	--	--	--
	GW-074941-091514-CB-MW-6	9/15/2014	(orig)	0.502	< 0.001	0.101	0.064	7.75	--	--
	GW-074941-091514-CB-DUP	9/15/2014	(Duplicate)	0.182	< 0.001	0.0638	0.0354	--	--	--
	GW-074941-121514-CM-MW-6	12/15/2014	(orig)	0.333	< 0.001	0.0758	0.0249	5.45	--	--
	GW-074941-121514-CM-DUP	12/15/2014	(Duplicate)	0.314	< 0.001	0.0502	0.0169	--	--	--
	GW-074941-061515-CB-MW-6	6/15/2015	(orig)	0.354	< 0.005	0.167	0.222	13.1	--	--
	GW-074941-061515-CB-DUP	6/15/2015	(Duplicate)	0.358	< 0.005	0.144	0.195	--	--	--
	GW-074941-091615-CK-MW-6	9/16/2015	(orig)	0.294	< 0.005	0.134	0.0615	11	--	--
	GW-074941-091615-CK-DUP	9/16/2015	(Duplicate)	0.284	< 0.005	0.134	0.0624	--	--	--
	GW-074941-113015-CB-MW-6	11/30/2015	(orig)	0.413	< 0.01	0.0642	< 0.03	7.35	--	--
	GW-074941-113015-CB-DUP	11/30/2015	(Duplicate)	0.367	< 0.001	0.0714	0.0167	--	--	--
		3/30/2016	Insufficient water column for sample							
	GW-074941-062216-SP-MW-6	6/22/2016	(orig)	0.419	< 0.010	0.0718	0.0435	16.2	--	--
	GW-074941-090816-SP-MW-6	09/08/2016	(orig)	0.209	< 0.005	0.0339	< 0.015	6.07	--	--
	GW-074941-090816-SP-MW-DUP	09/08/2016	(Duplicate)	0.217	< 0.001	0.0474	0.0093	--	--	--
	GW-074941-112916-CN-MW-6	11/29/2016	(orig)	0.257	< 0.005	0.0649	0.0203	6.32	--	--
	GW-074941-061417-CN-MW-6	06/14/2017	(orig)	0.309	< 0.005	0.103	0.0916	10.6	--	--
	GW-11146004-092517-CN-MW-6	9/25/2017	(orig)	0.157	< 0.001	0.0286	0.0145	5.73	--	--
	GW-11146004-120517-SP-MW-6	12/05/2017	(orig)	0.236	< 0.001	0.0243	0.007	7.58	--	--
	GW-11146004-031518-JW-MW-6	3/15/2018	(orig)	0.389	< 0.001	0.0544	0.0376	--	--	--
	GW-11146004-062718-JW-MW-6	6/27/2018	(orig)	0.389	< 0.001	0.0683	0.0427	10.00	--	--
	MW-6	10/10/2018	(orig)	0.0125	< 0.001	0.0038	< 0.003	1.68	--	--
	MW-6	12/12/2018	(orig)	0.146	< 0.001	0.00285	< 0.003	1.66	--	--
	MW-6	3/14/2019	Insufficient water column for sample							
	MW-6	5/23/2019	(orig)	0.164	< 0.001	0.0926	0.0377	3.05	--	--
	MW-6	8/27/2019	(orig)	0.187	< 0.001	0.0479	0.00321	3.54	--	--
	MW-6	12/16/2019	(orig)	0.222	< 0.001	0.0149	< 0.003	0.344	--	--
	MW-6	2/20/2020	(orig)	0.121	< 0.001	0.0046	< 0.003	1.65	--	--
	MW-6	4/29/2020	Insufficient water column for sample							
	MW-6	8/25/2020	(orig)	0.295	<0.001	0.0123	<0.003	2.8	--	--
	MW-6	10/28/2020	(orig)	0.112	<0.001	<0.0100	<0.003	1.55	--	--

Well ID	Sample ID	Sample Date	Sample Type	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Xylenes (total) (mg/L)	Iron (dissolved) (mg/L)	Nitrate (as N) (mg/L)	Sulfate (mg/L)
NMWQCC Standards				0.010	0.75	0.75	0.62	1.0	10	600
MW-7	GW-074941-091615-CK-MW-7	9/16/2015	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	< 0.05	--	--
	GW-074941-113015-CB-MW-7	11/30/2015	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	0.0637	--	--
	GW-074941-033016-CM-MW-7	3/30/2016	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	< 0.50		
	GW-074941-062216-SP-MW-7	6/22/2016	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	< 0.50	--	--
	GW-074941-090816-SP-MW-7	09/08/2016	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	< 0.05	--	--
	GW-074941-112916-CN-MW-7	11/29/2016	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	<0.05	--	--
	GW-074941-061417-CN-MW-7	06/14/2017	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	<0.05	--	--
	GW-11146004-902517-CN-MW-7	9/25/2017	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	<0.05	--	--
	GW-11146004-120517-SP-MW-7	12/05/2017	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	<0.05	--	--
	GW-11146004-031518-JW-MW-7	3/15/2018	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	0.0936	--	--
	GW-11146004-062718-CM-MW-7	6/27/2018	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	<0.05	--	--
	MW-7	10/10/2018	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	<0.10	--	--
	MW-7	12/11/2016	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	<0.10	--	--
	MW-7	3/14/2019	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	<0.10	--	--
	MW-7	5/23/2019	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	<0.10	--	--
	MW-7	8/28/2019	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	<0.10	--	--
	MW-7	12/16/2019	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	<0.10	--	--
	MW-7	2/19/2020	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	<0.10	--	--
	MW-7	4/29/2020	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	<0.10	--	--
	MW-7	8/24/2020	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	<0.10	--	--
	MW-7	10/28/2020	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	<0.10	--	--
MW-8	GW-074941-091615-CK-MW-8	9/16/2015	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	< 0.05	--	--
	GW-074941-113015-CB-MW-8	11/30/2015	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	< 0.05	--	--
	GW-074941-033016-CM-MW-8	3/30/2016	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	0.412		
	GW-074941-062216-SP-MW-8	6/22/2016	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	0.0753	--	--
	GW-074941-090816-SP-MW-8	09/08/2016	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	< 0.05	--	--
	GW-074941-112916-CN-MW-8	11/29/2016	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	< 0.05	--	--
	GW-074941-061417-CN-MW-8	06/14/2017	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	< 0.05	--	--
	GW-11146006-092517-CN-MW-8	9/25/2017	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	< 0.05	--	--
	GW-11146004-120517-SP-MW-8	12/5/2017	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	< 0.05	--	--
	GW-11146004-120517-SP-DUP	12/5/2017	(Duplicate)	< 0.001	< 0.001	< 0.001	< 0.003	< 0.05	--	--
	GW-11146004-031518-JW-MW-8	3/15/2018	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	0.237	--	--
	GW-11146004-062718-CM-MW-8	6/27/2018	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	< 0.05	--	--
	MW-8	10/10/2018	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	< 0.05	--	--
	MW-8	12/11/2018	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	<0.10	--	--
	MW-8	3/14/2019	Insufficient water column for sample							
	MW-8	5/23/2019	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	<0.10	--	--
	MW-8	8/28/2019	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	<0.10	--	--
	MW-8	12/17/2019	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	<0.10	--	--
	MW-8	2/19/2020	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	0.126	--	--
	MW-8	4/29/2020	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	<0.10	--	--
	MW-8	8/24/2020	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	<0.10	--	--
	MW-8	10/28/2020	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	<0.10	--	--

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

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

BOLD - indicates concentration exceeds the NNEPA standard

-- - not analyzed

Pace Analytical®
National Center for Testing & Innovation

ANALYTICAL REPORT

February 29, 2020

HilCorp-Farmington, NM

Sample Delivery Group:	L1192176
Samples Received:	02/22/2020
Project Number:	
Description:	Nell Hall #1
Site:	NELL HALL #1
Report To:	Kurt Hoekstra 382 Road 3100 Aztec, NM 87401

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.

MW4 L1192176-01 GW

Collected by: Kurt | Collected date/time: 02/20/20 14:20 | Received date/time: 02/22/20 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010B	WG1432445	1	02/24/20 22:27	02/25/20 09:19	EL	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1432628	1	02/23/20 03:44	02/23/20 03:44	TJJ	Mt. Juliet, TN

MW5 L1192176-02 GW

Collected by: Kurt | Collected date/time: 02/21/20 10:35 | Received date/time: 02/22/20 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010B	WG1432445	1	02/24/20 22:27	02/25/20 09:21	EL	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1432628	1	02/23/20 04:04	02/23/20 04:04	TJJ	Mt. Juliet, TN

MW6 L1192176-03 GW

Collected by: Kurt | Collected date/time: 02/20/20 14:45 | Received date/time: 02/22/20 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010B	WG1432445	1	02/24/20 22:27	02/25/20 09:24	EL	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1432628	1	02/23/20 04:25	02/23/20 04:25	TJJ	Mt. Juliet, TN

MW7 L1192176-04 GW

Collected by: Kurt | Collected date/time: 02/19/20 11:55 | Received date/time: 02/22/20 08:45

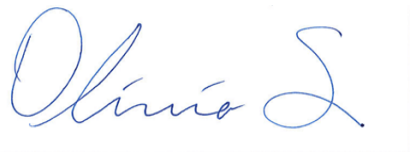
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010B	WG1432445	1	02/24/20 22:27	02/25/20 09:27	EL	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1432628	1	02/23/20 04:45	02/23/20 04:45	TJJ	Mt. Juliet, TN

MW8 L1192176-05 GW

Collected by: Kurt | Collected date/time: 02/19/20 14:10 | Received date/time: 02/22/20 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010B	WG1432445	1	02/24/20 22:27	02/25/20 09:29	EL	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1432628	1	02/23/20 05:05	02/23/20 05:05	TJJ	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

Metals (ICP) by Method 6010B

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Iron,Dissolved	ND		0.100	1	02/25/2020 09:19	WG1432445

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

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Benzene	ND		0.00100	1	02/23/2020 03:44	WG1432628
Toluene	ND		0.00100	1	02/23/2020 03:44	WG1432628
Ethylbenzene	ND		0.00100	1	02/23/2020 03:44	WG1432628
Total Xylenes	ND		0.00300	1	02/23/2020 03:44	WG1432628
(S) Toluene-d8	*109*		*80.0-120*		*02/23/2020 03:44*	WG1432628
(S) 4-Bromofluorobenzene	*102*		*77.0-126*		*02/23/2020 03:44*	WG1432628
(S) 1,2-Dichloroethane-d4	*99.6*		*70.0-130*		*02/23/2020 03:44*	WG1432628

Metals (ICP) by Method 6010B

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Iron,Dissolved	ND		0.100	1	02/25/2020 09:21	WG1432445

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

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Benzene	ND		0.00100	1	02/23/2020 04:04	WG1432628
Toluene	ND		0.00100	1	02/23/2020 04:04	WG1432628
Ethylbenzene	ND		0.00100	1	02/23/2020 04:04	WG1432628
Total Xylenes	ND		0.00300	1	02/23/2020 04:04	WG1432628
(S) Toluene-d8	*105*		*80.0-120*		*02/23/2020 04:04*	WG1432628
(S) 4-Bromofluorobenzene	*99.9*		*77.0-126*		*02/23/2020 04:04*	WG1432628
(S) 1,2-Dichloroethane-d4	*97.4*		*70.0-130*		*02/23/2020 04:04*	WG1432628

Metals (ICP) by Method 6010B

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Iron,Dissolved	1.65		0.100	1	02/25/2020 09:24	WG1432445

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

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Benzene	0.121		0.00100	1	02/23/2020 04:25	WG1432628
Toluene	ND		0.00100	1	02/23/2020 04:25	WG1432628
Ethylbenzene	0.00446		0.00100	1	02/23/2020 04:25	WG1432628
Total Xylenes	ND		0.00300	1	02/23/2020 04:25	WG1432628
(S) Toluene-d8	*97.9*		*80.0-120*		*02/23/2020 04:25*	WG1432628
(S) 4-Bromofluorobenzene	*107*		*77.0-126*		*02/23/2020 04:25*	WG1432628
(S) 1,2-Dichloroethane-d4	*95.2*		*70.0-130*		*02/23/2020 04:25*	WG1432628

Metals (ICP) by Method 6010B

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Iron,Dissolved	ND		0.100	1	02/25/2020 09:27	WG1432445

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

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Benzene	ND		0.00100	1	02/23/2020 04:45	WG1432628
Toluene	ND		0.00100	1	02/23/2020 04:45	WG1432628
Ethylbenzene	ND		0.00100	1	02/23/2020 04:45	WG1432628
Total Xylenes	ND		0.00300	1	02/23/2020 04:45	WG1432628
(S) Toluene-d8	*107*		*80.0-120*		*02/23/2020 04:45*	WG1432628
(S) 4-Bromofluorobenzene	*100*		*77.0-126*		*02/23/2020 04:45*	WG1432628
(S) 1,2-Dichloroethane-d4	*98.1*		*70.0-130*		*02/23/2020 04:45*	WG1432628

Metals (ICP) by Method 6010B

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Iron,Dissolved	0.126		0.100	1	02/25/2020 09:29	WG1432445

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

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Benzene	ND		0.00100	1	02/23/2020 05:05	WG1432628
Toluene	ND		0.00100	1	02/23/2020 05:05	WG1432628
Ethylbenzene	ND		0.00100	1	02/23/2020 05:05	WG1432628
Total Xylenes	ND		0.00300	1	02/23/2020 05:05	WG1432628
(S) Toluene-d8	*102*		*80.0-120*		*02/23/2020 05:05*	WG1432628
(S) 4-Bromofluorobenzene	*102*		*77.0-126*		*02/23/2020 05:05*	WG1432628
(S) 1,2-Dichloroethane-d4	*98.0*		*70.0-130*		*02/23/2020 05:05*	WG1432628

Method Blank (MB)

(MB) R3502941-1 02/25/20 08:34

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Iron,Dissolved	U		0.0141	0.100

Laboratory Control Sample (LCS)

(LCS) R3502941-2 02/25/20 08:36

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Iron,Dissolved	10.0	10.0	100	80.0-120	

L1192155-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1192155-03 02/25/20 08:39 • (MS) R3502941-4 02/25/20 08:44 • (MSD) R3502941-5 02/25/20 08:47

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 %
Iron,Dissolved	10.0	1.28	11.0	11.2	97.6	98.9	1	75.0-125			1.11	20

Method Blank (MB)

(MB) R3503726-1 02/22/20 22:14

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Benzene	U		0.000331	0.00100
Ethylbenzene	U		0.000384	0.00100
Toluene	U		0.000412	0.00100
Xylenes, Total	U		0.00106	0.00300
(S) Toluene-d8	*104*			*80.0-120*
(S) 4-Bromofluorobenzene	*96.1*			*77.0-126*
(S) 1,2-Dichloroethane-d4	*99.1*			*70.0-130*

Laboratory Control Sample (LCS)

(LCS) R3503726-2 02/22/20 21:34

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Benzene	0.00500	0.00558	112	70.0-123	
Ethylbenzene	0.00500	0.00588	118	79.0-123	
Toluene	0.00500	0.00518	104	79.0-120	
Xylenes, Total	0.0150	0.0181	121	79.0-123	
(S) Toluene-d8			*102*	*80.0-120*	
(S) 4-Bromofluorobenzene			*95.1*	*77.0-126*	
(S) 1,2-Dichloroethane-d4			*100*	*70.0-130*	

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

The remainder of this page intentionally left blank, there are no qualifiers applied to this SDG.

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	LAO00356
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

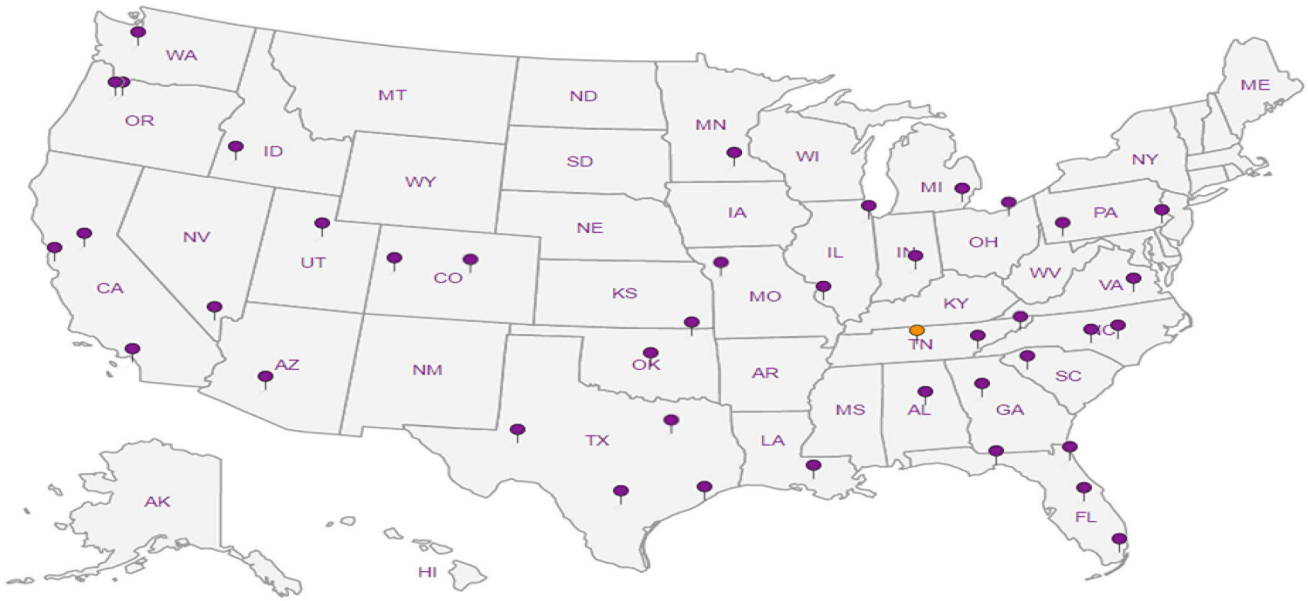
Third Party Federal Accreditations

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.



HilCorp-Farmington, NM

382 Road 3100
Aztec, NM 87401

Billing Information:

PO Box 61529
Houston, TX 77208

Pres Chk

Report to: **Kurt Hoekstra**

Email To: ccardoza@hilcorp.com;khoekstra@hilcorp.com;jde

Project Description: **Nell Hall #1**

City/State Collected:

Please Circle: PT MT CT ET

Phone: **505-486-9543**

Client Project #

Lab Project # **HILCORANM-NELLHALL1**

Fax:

Collected by (print): Kurt

Site/Facility ID # Nell Hall #1

P.O. #

Collected by (signature): Kurt Hoekstra

Immediately Packed on Ice N ___ Y X

Rush? (Lab MUST Be Notified)
___ Same Day X Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Quote #

Date Results Needed

No. of Cntrs

Analysis / Container / Preservative

Dissolved Fe 250mlHDPE-NoPres
V8260BTEX 40mlAmb-HCl
No Samples Field Filtered

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	Dissolved Fe 250mlHDPE-NoPres	V8260BTEX 40mlAmb-HCl	No Samples Field Filtered	Remarks	Sample # (lab only)
MW4		GW		2-20	2:20	4	X	X	X		-01
MW5		GW		2-21	10:35	4	X	X	X		02
MW6		GW		2-20	2:45	4	X	X	X		03
MW7		GW		2-19	11:55	4	X	X	X		04
MW8		GW		2-19	2:10	4	X	X	X		05

* Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other

Remarks:

pH ____ Temp ____

Flow ____ Other ____

Samples returned via: __ UPS __ FedEx __ Courier ____

Tracking # 1203 5789 6000

Trip Blank Received: Yes / No
HCL / MeoH
TBR

Temp: °C Bottles Received: 20

Date: Time:

If preservation required by Login: Date/Time

Hold: Condition: NCF / OK

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
Kurt Hoekstra	2-21-20	11:15	
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)
			Hanley/M

2/22/2020 845

Sample Receipt Checklist

COC Seal Present/Intact:	NP	Y N
COC Signed/Accurate:		Y N
Bottles arrive intact:		Y N
Correct bottles used:		Y N
Sufficient volume sent:		Y N
If Applicable		
VOA Zero Headspace:		Y N
Preservation Correct/Checked:		Y N
RAD Screen <0.5 mR/hr:		Y N

Chain of Custody Page ___ of ___

Pace Analytical®
National Center for Testing & Innovation

12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

SDG # 1192176

G047

Acctnum: HILCORANM

Template: T157362

Prelogin: P750472

PM: 823 - Olivia Studebaker

PB:

Shipped Via:

Pace Analytical®
National Center for Testing & Innovation

ANALYTICAL REPORT

May 05, 2020

HilCorp-Farmington, NM

Sample Delivery Group:	L1213819
Samples Received:	04/30/2020
Project Number:	
Description:	Nell Hall #1
Site:	NELL HALL #1
Report To:	Kurt Hoekstra 382 Road 3100 Aztec, NM 87401

Entire Report Reviewed By:

Olivia Studebaker
Project Manager

TABLE OF CONTENTS

MW5 L1213819-01 GW

Collected by: Kurt
Collected date/time: 04/29/20 11:25
Received date/time: 04/30/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010B	WG1469073	1	05/01/20 15:12	05/04/20 07:29	CCE	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1469961	1	05/03/20 14:58	05/03/20 14:58	JHH	Mt. Juliet, TN

MW7 L1213819-02 GW

Collected by: Kurt
Collected date/time: 04/29/20 08:30
Received date/time: 04/30/20 08:30

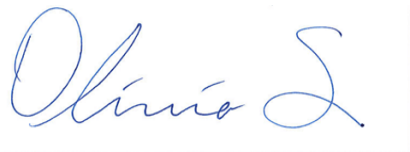
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010B	WG1469073	1	05/01/20 15:12	05/04/20 07:31	CCE	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1469961	1	05/03/20 15:20	05/03/20 15:20	JHH	Mt. Juliet, TN

MW8 L1213819-03 GW

Collected by: Kurt
Collected date/time: 04/29/20 09:30
Received date/time: 04/30/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010B	WG1469073	1	05/01/20 15:12	05/04/20 07:34	CCE	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1469961	1	05/03/20 15:42	05/03/20 15:42	JHH	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

Metals (ICP) by Method 6010B

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Iron,Dissolved	ND		0.100	1	05/04/2020 07:29	WG1469073

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

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Benzene	ND		0.00100	1	05/03/2020 14:58	WG1469961
Toluene	ND		0.00100	1	05/03/2020 14:58	WG1469961
Ethylbenzene	ND		0.00100	1	05/03/2020 14:58	WG1469961
Total Xylenes	ND		0.00300	1	05/03/2020 14:58	WG1469961
(S) Toluene-d8	*98.1*		*80.0-120*		*05/03/2020 14:58*	WG1469961
(S) 4-Bromofluorobenzene	*98.7*		*77.0-126*		*05/03/2020 14:58*	WG1469961
(S) 1,2-Dichloroethane-d4	*113*		*70.0-130*		*05/03/2020 14:58*	WG1469961

Metals (ICP) by Method 6010B

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Iron,Dissolved	ND		0.100	1	05/04/2020 07:31	WG1469073

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

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Benzene	ND		0.00100	1	05/03/2020 15:20	WG1469961
Toluene	ND		0.00100	1	05/03/2020 15:20	WG1469961
Ethylbenzene	ND		0.00100	1	05/03/2020 15:20	WG1469961
Total Xylenes	ND		0.00300	1	05/03/2020 15:20	WG1469961
(S) Toluene-d8	*101*		*80.0-120*		*05/03/2020 15:20*	WG1469961
(S) 4-Bromofluorobenzene	*102*		*77.0-126*		*05/03/2020 15:20*	WG1469961
(S) 1,2-Dichloroethane-d4	*116*		*70.0-130*		*05/03/2020 15:20*	WG1469961

Metals (ICP) by Method 6010B

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Iron,Dissolved	ND		0.100	1	05/04/2020 07:34	WG1469073

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

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Benzene	ND		0.00100	1	05/03/2020 15:42	WG1469961
Toluene	ND		0.00100	1	05/03/2020 15:42	WG1469961
Ethylbenzene	ND		0.00100	1	05/03/2020 15:42	WG1469961
Total Xylenes	ND		0.00300	1	05/03/2020 15:42	WG1469961
(S) Toluene-d8	*102*		*80.0-120*		*05/03/2020 15:42*	WG1469961
(S) 4-Bromofluorobenzene	*102*		*77.0-126*		*05/03/2020 15:42*	WG1469961
(S) 1,2-Dichloroethane-d4	*116*		*70.0-130*		*05/03/2020 15:42*	WG1469961

Method Blank (MB)

(MB) R3524348-6 05/04/20 11:24

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Iron,Dissolved	U		0.0458	0.100

Laboratory Control Sample (LCS)

(LCS) R3524348-7 05/04/20 11:26

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Iron,Dissolved	10.0	9.83	98.3	80.0-120	

Method Blank (MB)

(MB) R3524290-3 05/03/20 11:49

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	*101*			*80.0-120*
(S) 4-Bromofluorobenzene	*89.5*			*77.0-126*
(S) 1,2-Dichloroethane-d4	*114*			*70.0-130*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3524290-1 05/03/20 10:43 • (LCSD) R3524290-2 05/03/20 11:05

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Benzene	0.00500	0.00532	0.00515	106	103	70.0-123			3.25	20
Ethylbenzene	0.00500	0.00430	0.00435	86.0	87.0	79.0-123			1.16	20
Toluene	0.00500	0.00450	0.00454	90.0	90.8	79.0-120			0.885	20
Xylenes, Total	0.0150	0.0129	0.0133	86.0	88.7	79.0-123			3.05	20
(S) Toluene-d8				*95.4*	*97.8*	*80.0-120*				
(S) 4-Bromofluorobenzene				*90.9*	*93.1*	*77.0-126*				
(S) 1,2-Dichloroethane-d4				*107*	*103*	*70.0-130*				

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.
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
	The remainder of this page intentionally left blank, there are no qualifiers applied to this SDG.

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	LAO00356
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

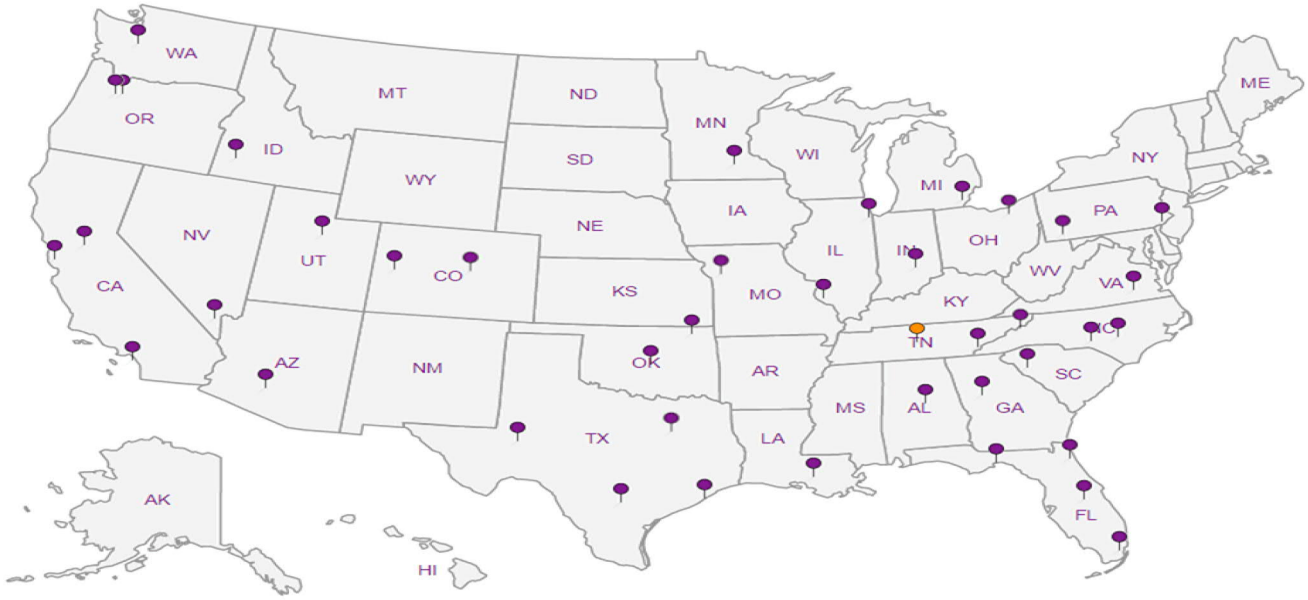
Third Party Federal Accreditations

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.



HilCorp-Farmington, NM

382 Road 3100
Aztec, NM 87401

Billing Information:

PO Box 61529
Houston, TX 77208

Report to: **Kurt Hoekstra**

Email To: ccardoza@hilcorp.com;khoekstra@hilcorp.com;j

Project Description: **Nell Hall #1**

City/State Collected:

Please Circle: PT MT CT ET

Phone: **505-486-9543**

Client Project #

Lab Project # **HILCORANM-NELLHALL1**

Collected by (print): Kurt

Site/Facility ID # NELL HALL #1

P.O. #

Collected by (signature): Kurt Hoekstra

Immediately Packed on Ice N ___ Y X

Rush? (Lab MUST Be Notified)
___ Same Day X Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Quote #

Date Results Needed

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	Dissolved Fe 250ml HDPE-NoPres	V8260BTEX 40ml Amb-HCl	NO SAMPLES FIELD FILTERED	Remarks	Sample # (lab only)
MW4		GW				4	X	X	X	NO SAMPLE	
MW5		GW		4-29	11:25	4	X	X	X		01
MW6		GW				4	X	X	X	NO SAMPE	
MW7		GW		4-29	8:30	4	X	X	X		02
MW8		GW		4-29	9:30	4	X	X	X		03

Chain of Custody Page ___ of ___

Pace Analytical®
National Center for Testing & Innovation

12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

SDG # 12 13819
A188

Acctnum: **HILCORANM**
Template: **T157362**
Prelogin: **P768588**
PM: **823 - Olivia Studebaker**
PB:
Shipped Via:

* Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other

Remarks:

pH ___ Temp ___
Flow ___ Other ___

Samples returned via: __ UPS __ FedEx __ Courier ___

Tracking #

Sample Receipt Checklist
COC Seal Present/Intact: NP Y N
COC Signed/Accurate: Y N
Bottles arrive intact: Y N
Correct bottles used: Y N
Sufficient volume sent: Y N
If Applicable
VOA Zero Headspace: Y N
Preservation Correct/Checked: Y N
RAD Screen <0.5 mR/hr: Y N

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
Kurt Hoekstra	4-29-20	1:15	
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)

Trip Blank Received: Yes (No) HCL / MeoH TBR

Temp: 4.6 °C Bottles Received: 12
5-1=.4

Date: 4-30 Time: 0830

If preservation required by Login: Date/Time

Hold: Condition: NCF / OK

ANALYTICAL REPORT

September 03, 2020

HilCorp-Farmington, NM

Sample Delivery Group:	L1255410
Samples Received:	08/27/2020
Project Number:	NELL HALL #1
Description:	Nell Hall #1
Site:	NELL HALL #1
Report To:	Kurt Hoekstra 382 Road 3100 Aztec, NM 87401

Entire Report Reviewed By:

Olivia Studebaker
Project Manager

TABLE OF CONTENTS

MW4 L1255410-01 GW

Collected by: Kurt | Collected date/time: 08/25/20 11:35 | Received date/time: 08/27/20 09:36

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICPMS) by Method 6020	WG1534725	1	08/30/20 16:15	08/31/20 13:45	LAT	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1534275	1	08/28/20 14:51	08/28/20 14:51	JCP	Mt. Juliet, TN

MW5 L1255410-02 GW

Collected by: Kurt | Collected date/time: 08/25/20 13:50 | Received date/time: 08/27/20 09:36

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICPMS) by Method 6020	WG1534725	1	08/30/20 16:15	08/31/20 13:48	LAT	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1534275	1	08/28/20 15:14	08/28/20 15:14	JCP	Mt. Juliet, TN

MW6 L1255410-03 GW

Collected by: Kurt | Collected date/time: 08/25/20 10:25 | Received date/time: 08/27/20 09:36

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICPMS) by Method 6020	WG1534725	1	08/30/20 16:15	08/31/20 13:51	LAT	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1534275	1	08/28/20 15:38	08/28/20 15:38	JCP	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1535194	10	08/31/20 09:25	08/31/20 09:25	JCP	Mt. Juliet, TN

MW7 L1255410-04 GW

Collected by: Kurt | Collected date/time: 08/24/20 10:25 | Received date/time: 08/27/20 09:36

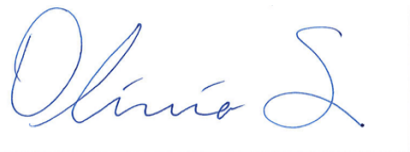
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICPMS) by Method 6020	WG1534725	1	08/30/20 16:15	08/31/20 13:54	LAT	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1534275	1	08/28/20 16:01	08/28/20 16:01	JCP	Mt. Juliet, TN

MW8 L1255410-05 GW

Collected by: Kurt | Collected date/time: 08/24/20 12:50 | Received date/time: 08/27/20 09:36

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICPMS) by Method 6020	WG1534725	1	08/30/20 16:15	08/31/20 13:58	LAT	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1534275	1	08/28/20 16:25	08/28/20 16:25	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

Metals (ICPMS) by Method 6020

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Iron,Dissolved	ND		0.100	1	08/31/2020 13:45	WG1534725

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

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Benzene	ND		0.00100	1	08/28/2020 14:51	WG1534275
Toluene	ND		0.00100	1	08/28/2020 14:51	WG1534275
Ethylbenzene	ND		0.00100	1	08/28/2020 14:51	WG1534275
Total Xylenes	ND		0.00300	1	08/28/2020 14:51	WG1534275
(S) Toluene-d8	*119*		*80.0-120*		*08/28/2020 14:51*	WG1534275
(S) 4-Bromofluorobenzene	*91.6*		*77.0-126*		*08/28/2020 14:51*	WG1534275
(S) 1,2-Dichloroethane-d4	*114*		*70.0-130*		*08/28/2020 14:51*	WG1534275

Metals (ICPMS) by Method 6020

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Iron,Dissolved	ND		0.100	1	08/31/2020 13:48	WG1534725

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

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Benzene	ND		0.00100	1	08/28/2020 15:14	WG1534275
Toluene	ND		0.00100	1	08/28/2020 15:14	WG1534275
Ethylbenzene	ND		0.00100	1	08/28/2020 15:14	WG1534275
Total Xylenes	ND		0.00300	1	08/28/2020 15:14	WG1534275
(S) Toluene-d8	*119*		*80.0-120*		*08/28/2020 15:14*	WG1534275
(S) 4-Bromofluorobenzene	*93.1*		*77.0-126*		*08/28/2020 15:14*	WG1534275
(S) 1,2-Dichloroethane-d4	*112*		*70.0-130*		*08/28/2020 15:14*	WG1534275

Metals (ICPMS) by Method 6020

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Iron,Dissolved	2.80		0.100	1	08/31/2020 13:51	WG1534725

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

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Benzene	0.295		0.0100	10	08/31/2020 09:25	WG1535194
Toluene	ND		0.00100	1	08/28/2020 15:38	WG1534275
Ethylbenzene	0.0123		0.00100	1	08/28/2020 15:38	WG1534275
Total Xylenes	ND		0.00300	1	08/28/2020 15:38	WG1534275
(S) Toluene-d8	*111*		*80.0-120*		*08/28/2020 15:38*	WG1534275
(S) Toluene-d8	*89.5*		*80.0-120*		*08/31/2020 09:25*	WG1535194
(S) 4-Bromofluorobenzene	*113*		*77.0-126*		*08/28/2020 15:38*	WG1534275
(S) 4-Bromofluorobenzene	*92.6*		*77.0-126*		*08/31/2020 09:25*	WG1535194
(S) 1,2-Dichloroethane-d4	*98.1*		*70.0-130*		*08/28/2020 15:38*	WG1534275
(S) 1,2-Dichloroethane-d4	*91.7*		*70.0-130*		*08/31/2020 09:25*	WG1535194

Metals (ICPMS) by Method 6020

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Iron,Dissolved	ND		0.100	1	08/31/2020 13:54	WG1534725

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

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Benzene	ND		0.00100	1	08/28/2020 16:01	WG1534275
Toluene	ND		0.00100	1	08/28/2020 16:01	WG1534275
Ethylbenzene	ND		0.00100	1	08/28/2020 16:01	WG1534275
Total Xylenes	ND		0.00300	1	08/28/2020 16:01	WG1534275
(S) Toluene-d8	*118*		*80.0-120*		*08/28/2020 16:01*	WG1534275
(S) 4-Bromofluorobenzene	*93.8*		*77.0-126*		*08/28/2020 16:01*	WG1534275
(S) 1,2-Dichloroethane-d4	*111*		*70.0-130*		*08/28/2020 16:01*	WG1534275

Metals (ICPMS) by Method 6020

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Iron,Dissolved	ND		0.100	1	08/31/2020 13:58	WG1534725

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

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Benzene	ND		0.00100	1	08/28/2020 16:25	WG1534275
Toluene	ND		0.00100	1	08/28/2020 16:25	WG1534275
Ethylbenzene	ND		0.00100	1	08/28/2020 16:25	WG1534275
Total Xylenes	ND		0.00300	1	08/28/2020 16:25	WG1534275
(S) Toluene-d8	*123*	J1	*80.0-120*		*08/28/2020 16:25*	WG1534275
(S) 4-Bromofluorobenzene	*96.2*		*77.0-126*		*08/28/2020 16:25*	WG1534275
(S) 1,2-Dichloroethane-d4	*111*		*70.0-130*		*08/28/2020 16:25*	WG1534275

Method Blank (MB)

(MB) R3565705-1 08/31/20 12:34

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Iron,Dissolved	U		0.0489	0.100

Laboratory Control Sample (LCS)

(LCS) R3565705-2 08/31/20 12:37

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Iron,Dissolved	5.00	4.66	93.2	80.0-120	

L1255491-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1255491-01 08/31/20 12:41 • (MS) R3565705-4 08/31/20 12:47 • (MSD) R3565705-5 08/31/20 12:50

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 %
Iron,Dissolved	5.00	ND	4.76	4.89	95.1	97.8	1	75.0-125			2.79	20

Method Blank (MB)

(MB) R3565448-2 08/28/20 11:28

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	*117*			*80.0-120*
(S) 4-Bromofluorobenzene	*90.4*			*77.0-126*
(S) 1,2-Dichloroethane-d4	*114*			*70.0-130*

Laboratory Control Sample (LCS)

(LCS) R3565448-1 08/28/20 10:41

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Benzene	0.00500	0.00464	92.8	70.0-123	
Ethylbenzene	0.00500	0.00435	87.0	79.0-123	
Toluene	0.00500	0.00489	97.8	79.0-120	
Xylenes, Total	0.0150	0.0133	88.7	79.0-123	
(S) Toluene-d8			*114*	*80.0-120*	
(S) 4-Bromofluorobenzene			*89.0*	*77.0-126*	
(S) 1,2-Dichloroethane-d4			*110*	*70.0-130*	

Method Blank (MB)

(MB) R3566103-2 08/31/20 02:05

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Benzene	U		0.0000941	0.00100
(S) Toluene-d8	*103*			*80.0-120*
(S) 4-Bromofluorobenzene	*102*			*77.0-126*
(S) 1,2-Dichloroethane-d4	*93.3*			*70.0-130*

Laboratory Control Sample (LCS)

(LCS) R3566103-1 08/31/20 00:48

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Benzene	0.00500	0.00484	96.8	70.0-123	
(S) Toluene-d8			*102*	*80.0-120*	
(S) 4-Bromofluorobenzene			*104*	*77.0-126*	
(S) 1,2-Dichloroethane-d4			*93.6*	*70.0-130*	

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.

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	LAO00356
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

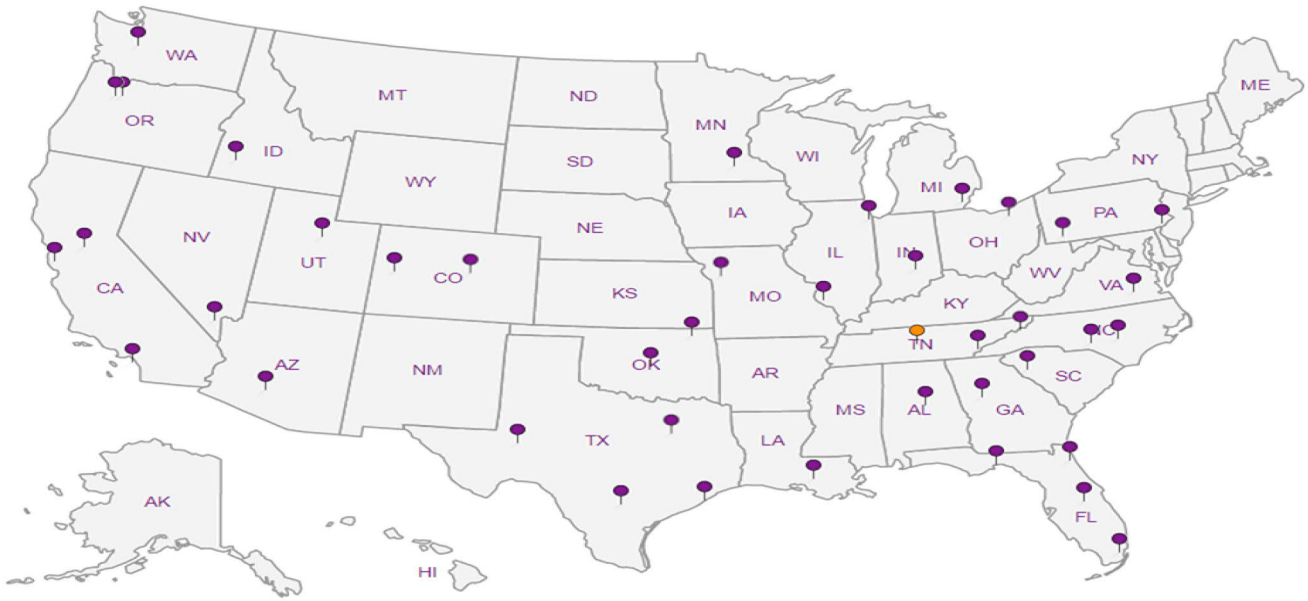
Third Party Federal Accreditations

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.



HilCorp-Farmington, NM

382 Road 3100
Aztec, NM 87401

Billing Information:
Clara Cardoza
PO Box 61529
Houston, TX 77208

Pres Chk

Report to: Kurt Hoekstra

Email To: @hilcorp.com;khoekstra@hilcorp.com

Project Description: Nell Hall #1

City/State Collected:

Please Circle: PT MT CT ET

Phone: 505-486-9543

Client Project # NELL HALL #1

Lab Project # HILCORANM-NELLHALL1

Collected by (print): KURT

Collected by (signature): Kurt Hoekstra

Immediately Packed on Ice N ___ Y X

Site/Facility ID # NELL HALL #1

P.O. #

Quote #

Rush? (Lab MUST Be Notified)
___ Same Day X Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Date Results Needed

Analysis / Container / Preservative

Chain of Custody Page ___ of ___

Pace Analytical®
National Center for Testing & Innovation

12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

SDG # L1255410

1111

Acctnum: HILCORANM
Template: T153798
Prelogin: P784554
PM: 823 - Olivia Studebaker
PB:

Shipped Via:

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	Dissolved Fe 250mlHDPE-NoPres	V8260BTEX 40mlAmb-HCl	NO SAMPLES FIELD FILTERED	Remarks	Sample # (lab only)
MW4		GW		8-25	11:35	4	X	X	X		-01
MW5		GW		8-25	1:50	4	X	X	X		02
MW6		GW		8-25	10:25	4	X	X	X		03
MW7		GW		8-24	10:25	4	X	X	X		04
MW8		GW		8-24	12:50	4	X	X	X		05

* Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other_____

Remarks:

pH _____ Temp _____

Flow _____ Other _____

Samples returned via:
__ UPS __ FedEx __ Courier _____

Tracking # 1845 4325 2564

Sample Receipt Checklist

COC Seal Present/Intact:	NP	Y	N
COC Signed/Accurate:		Y	N
Bottles arrive intact:		Y	N
Correct bottles used:		Y	N
Sufficient volume sent:		Y	N
If Applicable			
VOA Zero Headspace:		Y	N
Preservation Correct/Checked:		Y	N
RAD Screen <0.5 mR/hr:		Y	N

Relinquished by: (Signature) Kurt Hoekstra	Date: 8-26-20	Time: 1:50	Received by: (Signature)	Trip Blank Received: Yes / No (No) HCL / MeoH TBR
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: 1.PAS °C 29.5=21 20 Bottles Received:
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 8.27.20 Time: 936

If preservation required by Login: Date/Time

Hold:

Condition: NCF / (OK)

Pace Analytical®
National Center for Testing & Innovation

ANALYTICAL REPORT

November 11, 2020

HilCorp-Farmington, NM

Sample Delivery Group:	L1280464
Samples Received:	10/31/2020
Project Number:	
Description:	Nell Hall #1
Site:	NELL HALL #1
Report To:	Kurt Hoekstra 382 Road 3100 Aztec, NM 87401

Entire Report Reviewed By:

Olivia Studebaker
Project Manager

TABLE OF CONTENTS

MW4 L1280464-01 GW

Collected by: Kurt
Collected date/time: 10/29/20 10:58
Received date/time: 10/31/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010B	WG1571336	1	11/07/20 20:23	11/08/20 20:45	CCE	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1572776	1	11/07/20 18:46	11/07/20 18:46	ACG	Mt. Juliet, TN

MW5 L1280464-02 GW

Collected by: Kurt
Collected date/time: 10/29/20 13:21
Received date/time: 10/31/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010B	WG1571336	1	11/07/20 20:23	11/08/20 20:47	CCE	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1572776	1	11/07/20 19:06	11/07/20 19:06	ACG	Mt. Juliet, TN

MW6 L1280464-03 GW

Collected by: Kurt
Collected date/time: 10/28/20 14:24
Received date/time: 10/31/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010B	WG1571336	1	11/07/20 20:23	11/08/20 20:50	CCE	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1572776	10	11/07/20 22:21	11/07/20 22:21	ACG	Mt. Juliet, TN

MW7 L1280464-04 GW

Collected by: Kurt
Collected date/time: 10/28/20 10:11
Received date/time: 10/31/20 09:00

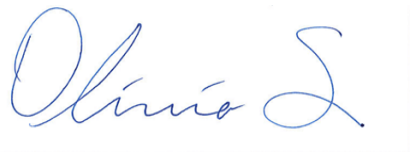
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010B	WG1571336	1	11/07/20 20:23	11/08/20 20:53	CCE	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1572776	1	11/07/20 19:25	11/07/20 19:25	ACG	Mt. Juliet, TN

MW8 L1280464-05 GW

Collected by: Kurt
Collected date/time: 10/28/20 12:22
Received date/time: 10/31/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010B	WG1571336	1	11/07/20 20:23	11/08/20 21:01	CCE	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1572776	1	11/07/20 19:45	11/07/20 19:45	ACG	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

Metals (ICP) by Method 6010B

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Iron,Dissolved	ND		0.100	1	11/08/2020 20:45	WG1571336

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

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Benzene	ND		0.00100	1	11/07/2020 18:46	WG1572776
Toluene	ND		0.00100	1	11/07/2020 18:46	WG1572776
Ethylbenzene	ND		0.00100	1	11/07/2020 18:46	WG1572776
Total Xylenes	ND		0.00300	1	11/07/2020 18:46	WG1572776
(S) Toluene-d8	*115*		*80.0-120*		*11/07/2020 18:46*	WG1572776
(S) 4-Bromofluorobenzene	*102*		*77.0-126*		*11/07/2020 18:46*	WG1572776
(S) 1,2-Dichloroethane-d4	*97.8*		*70.0-130*		*11/07/2020 18:46*	WG1572776

Metals (ICP) by Method 6010B

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Iron,Dissolved	ND		0.100	1	11/08/2020 20:47	WG1571336

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

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Benzene	ND		0.00100	1	11/07/2020 19:06	WG1572776
Toluene	ND		0.00100	1	11/07/2020 19:06	WG1572776
Ethylbenzene	ND		0.00100	1	11/07/2020 19:06	WG1572776
Total Xylenes	ND		0.00300	1	11/07/2020 19:06	WG1572776
(S) Toluene-d8	*119*		*80.0-120*		*11/07/2020 19:06*	WG1572776
(S) 4-Bromofluorobenzene	*103*		*77.0-126*		*11/07/2020 19:06*	WG1572776
(S) 1,2-Dichloroethane-d4	*97.2*		*70.0-130*		*11/07/2020 19:06*	WG1572776

Metals (ICP) by Method 6010B

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Iron,Dissolved	1.55		0.100	1	11/08/2020 20:50	WG1571336

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

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Benzene	0.112		0.0100	10	11/07/2020 22:21	WG1572776
Toluene	ND		0.0100	10	11/07/2020 22:21	WG1572776
Ethylbenzene	ND		0.0100	10	11/07/2020 22:21	WG1572776
Total Xylenes	ND		0.0300	10	11/07/2020 22:21	WG1572776
(S) Toluene-d8	*110*		*80.0-120*		*11/07/2020 22:21*	WG1572776
(S) 4-Bromofluorobenzene	*98.3*		*77.0-126*		*11/07/2020 22:21*	WG1572776
(S) 1,2-Dichloroethane-d4	*97.4*		*70.0-130*		*11/07/2020 22:21*	WG1572776

Metals (ICP) by Method 6010B

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Iron,Dissolved	ND		0.100	1	11/08/2020 20:53	WG1571336

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

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Benzene	ND		0.00100	1	11/07/2020 19:25	WG1572776
Toluene	ND		0.00100	1	11/07/2020 19:25	WG1572776
Ethylbenzene	ND		0.00100	1	11/07/2020 19:25	WG1572776
Total Xylenes	ND		0.00300	1	11/07/2020 19:25	WG1572776
(S) Toluene-d8	*119*		*80.0-120*		*11/07/2020 19:25*	WG1572776
(S) 4-Bromofluorobenzene	*102*		*77.0-126*		*11/07/2020 19:25*	WG1572776
(S) 1,2-Dichloroethane-d4	*95.5*		*70.0-130*		*11/07/2020 19:25*	WG1572776

Metals (ICP) by Method 6010B

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Iron,Dissolved	ND		0.100	1	11/08/2020 21:01	WG1571336

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

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Benzene	ND		0.00100	1	11/07/2020 19:45	WG1572776
Toluene	ND		0.00100	1	11/07/2020 19:45	WG1572776
Ethylbenzene	ND		0.00100	1	11/07/2020 19:45	WG1572776
Total Xylenes	ND		0.00300	1	11/07/2020 19:45	WG1572776
(S) Toluene-d8	*124*	J1	*80.0-120*		*11/07/2020 19:45*	WG1572776
(S) 4-Bromofluorobenzene	*109*		*77.0-126*		*11/07/2020 19:45*	WG1572776
(S) 1,2-Dichloroethane-d4	*92.4*		*70.0-130*		*11/07/2020 19:45*	WG1572776

Method Blank (MB)

(MB) R3590749-1 11/08/20 20:29

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Iron,Dissolved	U		0.0180	0.100

Laboratory Control Sample (LCS)

(LCS) R3590749-2 11/08/20 20:32

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Iron,Dissolved	10.0	9.57	95.7	80.0-120	

L1281051-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1281051-01 11/08/20 20:34 • (MS) R3590749-4 11/08/20 20:39 • (MSD) R3590749-5 11/08/20 20:42

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 %
Iron,Dissolved	10.0	ND	9.63	9.66	96.0	96.2	1	75.0-125			0.261	20

Method Blank (MB)

(MB) R3591091-2 11/07/20 14:13

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	*118*			*80.0-120*
(S) 4-Bromofluorobenzene	*110*			*77.0-126*
(S) 1,2-Dichloroethane-d4	*97.9*			*70.0-130*

Laboratory Control Sample (LCS)

(LCS) R3591091-1 11/07/20 13:14

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Benzene	0.00500	0.00484	96.8	70.0-123	
Ethylbenzene	0.00500	0.00428	85.6	79.0-123	
Toluene	0.00500	0.00442	88.4	79.0-120	
Xylenes, Total	0.0150	0.0130	86.7	79.0-123	
(S) Toluene-d8			*104*	*80.0-120*	
(S) 4-Bromofluorobenzene			*92.7*	*77.0-126*	
(S) 1,2-Dichloroethane-d4			*100*	*70.0-130*	

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.

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	LAO00356
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

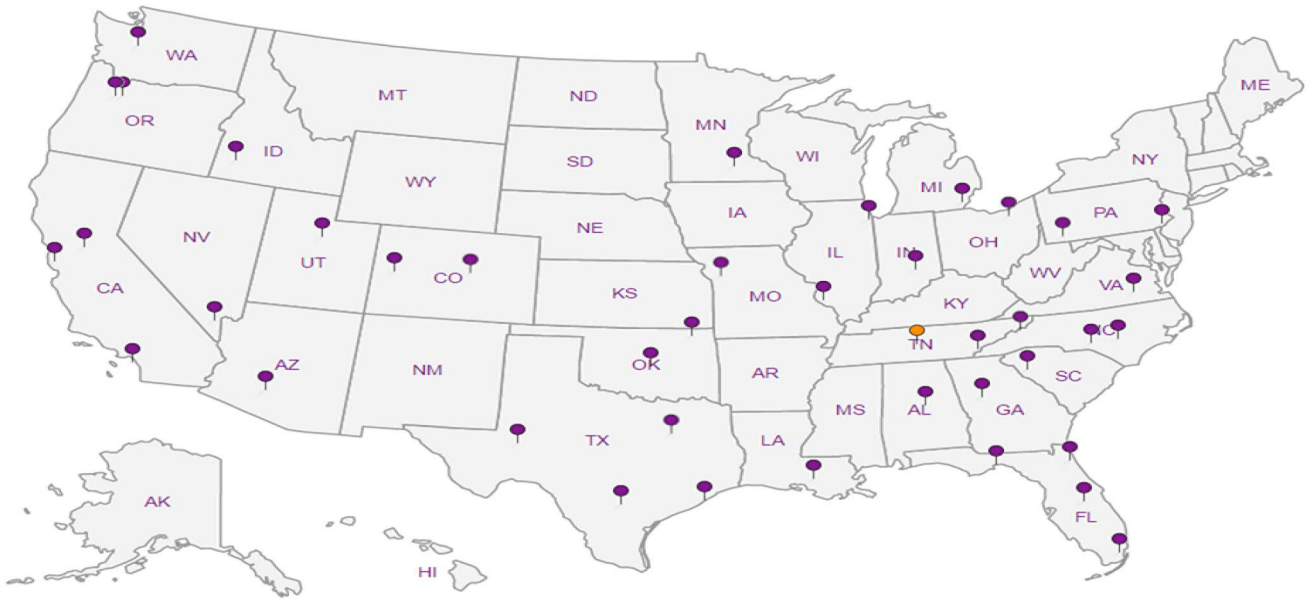
Third Party Federal Accreditations

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.



HilCorp-Farmington, NM

382 Road 3100
Aztec, NM 87401

Billing Information:
Clara Cardoza
PO Box 61529
Houston, TX 77208

Pres Chk

Report to: Kurt Hoekstra

Email To: jdeal@hilcorp.com;khoekstra@hilcorp.com

Project Description: Nell Hall #1

City/State Collected:

Please Circle: PT MT CT ET

Phone: 505-486-9543

Client Project #

Lab Project # HILCORANM-NELLHALL1

Collected by (print): KURT

Site/Facility ID # NELL HALL #1

P.O. #

Collected by (signature):

Immediately Packed on Ice N ___ Y X

Rush? (Lab MUST Be Notified)
___ Same Day ___ Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Quote #

Date Results Needed

Analysis / Container / Preservative

Chain of Custody Page ___ of ___

Pace Analytical® National Center for Testing & Innovation

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Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

SDG # L1280464

H161

Acctnum: HILCORANM
Template: T157362
Prelogin: P800115
PM: 823 - Olivia Studebaker
PB: JS 9/28/2020
Shipped Via: FedEx Ground

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	Dissolved Fe 250mlHDPE-NoPres	V8260BTEX 40mlAmb-HCl	NO SAMPLES FIELD FILTERED	Remarks	Sample # (lab only)
MW4		GW		10-29	10:58	4	X	X	X		-01
MW5		GW		10-29	1:21	4	X	X	X		02
MW6		GW		10-28	2:24	3	X	X	X		03
MW7		GW		10-28	10:11	4	X	X	X		04
MW8		GW		10-28	12:22	4	X	X	X		05

* Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other ___

Remarks:

pH ___ Temp ___

Flow ___ Other ___

Samples returned via: __ UPS __ FedEx __ Courier ___

Tracking # 9156 2503 5310

Sample Receipt Checklist

COC Seal Present/Intact:	NP	Y N
COC Signed/Accurate:		Y N
Bottles arrive intact:		Y N
Correct bottles used:		Y N
Sufficient volume sent:		Y N
If Applicable		
VOA Zero Headspace:		Y N
Preservation Correct/Checked:		Y N
RAD Screen <0.5 mR/hr:		Y N

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Trip Blank Received: Yes / (No) HCL / MeoH TBR
Kurt Hoekstra	10-30-20	8:00		D
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: °C Bottles Received:
				5.1+0.2=5.3 19
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: Time:
			Emily Quiles	10/31/2020 09:00

If preservation required by Login: Date/Time

Hold:

Condition: NCF / (OK)

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 20515

CONDITIONS

Operator:	OGRID:
HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	372171
	Action Number: 20515
	Action Type: [UF-GWA] Ground Water Abatement (GROUND WATER ABATEMENT)

CONDITIONS

Created By	Condition	Condition Date
nvelez	Review of 2020 Annual Groundwater Report: Content satisfactory 1. Continue the removal of NAPL and dissolved phase constituents from site wells 2. Continue quarterly groundwater monitoring and sampling 3. Submit the Annual Monitoring Report to the OCD no later than March 31, 2022	12/28/2021