2017 Annual Groundwater Monitoring Report

Nell Hall No. 1
San Juan County, New Mexico
API# 30-045-09619
NMOCD# 3R-090

Hilcorp Energy Company

GHD | 6121 Indian School Rd NE Suite 200 Albuquerque NM 87110 USA

11146004| Report No 1 |January 23 2018

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1. Introduction

This Annual Groundwater Monitoring Report presents groundwater data collected during the 2017 reporting period by GHD Services, Inc. (GHD) on behalf of Hilcorp Energy Company (Hilcorp) at the Nell Hall No. 1 natural gas well site (hereafter referred to as the "Site"). The Site is located on private land in Section 7, Township 30N, Range 11W of San Juan County, New Mexico, approximately 2 miles west of the city of Aztec, New Mexico. Geographical coordinates for the Site are 36.821659N, 108.037319W. The Site consists of a natural gas well and associated equipment. The Site Vicinity Map and Site Plan are presented as Figure 1 and 2, respectively.

1.1 Background

A Site history is presented in Table 1 and is summarized in the following paragraphs.

Environmental investigation at the Site began when closure of an unlined dehydrator discharge pit was attempted in the early 1990's. Soil impacts were discovered during earthmoving activities and groundwater monitoring wells MW-1, MW-2, and MW-3 were subsequently installed to determine if hydrocarbons had impacted groundwater beneath the Site. Ongoing drought conditions resulted in a water table decline to an elevation below the screened intervals of monitoring wells MW-1, MW-2 and MW-3. Monitoring wells MW-4, MW-5, and MW-6 were subsequently installed in 2004 by Souder Miller and Associates (SMA) at sufficient depths to intersect the water table and to allow for seasonal or drought-induced water table fluctuations. Boring log data from MW-4, MW-5 and MW-6 were used to create a geologic cross section for the Site (Figure 3).

Tetra Tech, Inc. (Tetra Tech) began quarterly sampling of monitoring wells MW-4, MW-5 and MW-6 in 2004, adjusting to a semi-annual sampling schedule in 2005, followed by annual sampling beginning in 2006. Semi-annual sampling was resumed in 2007 due to seasonal groundwater fluctuations.

On June 15, 2011, Site consulting responsibilities were transferred from Tetra Tech to GHD of Albuquerque, New Mexico. Site ownership was transferred from ConocoPhillips Company to Hilcorp Energy Company in April 2017.

During September 2015, GHD installed monitoring wells MW-7 and MW-8 to further assess subsurface soils and groundwater quality conditions down-gradient of MW-6.

2. Groundwater Monitoring Methodology and Analytical Results

2.1 Groundwater Monitoring Methodology

Groundwater Elevation Measurements

Depth to groundwater was gauged using a water level meter at monitoring wells MW-1 through MW-8 prior to sampling. A summary of this data is presented in Table 2. Groundwater

potentiometric surface maps detailing groundwater elevations and groundwater flow direction using data collected during the 2017 monitoring events are presented as Figure 4, 5 and 6.

Table 2 data show that groundwater elevations are often significantly lower during the late winter and early spring months. Historically, the groundwater flow direction and gradient vary from season to season. These fluctuations are believed to be the result of changes in irrigation rates (or pumping of irrigation wells) and/or base flow conditions in the Animas River located approximately 0.6 mile to the south/southeast of the Site (Figure 1). Additionally, there is an irrigation ditch to the east of the site which may also influence groundwater gradient. Annual variation in groundwater elevation fluctuates as much as 18 feet over the course of a year. Historical groundwater flow direction at the site also varies in direction from south to southeast.

Groundwater Sampling

During the 2017 groundwater monitoring events, Site monitoring wells were purged of at least three casing volumes using 1.5 inch diameter, polyethylene bailers. Groundwater parameter data, including temperature, pH, conductivity, dissolved oxygen, and oxidation reduction potential were collected using a YSI 556 multi parameter sonde while purging each well, and recorded on field forms. A summary of field parameters for the groundwater monitoring events is presented as Table 3.

Groundwater samples were collected from monitor wells MW-4, MW-5, MW-6, MW-7, and MW-8 on June 14, September 25 and December 5, 2017. Purge water generated during sampling events was disposed of in the on-Site produced water tank (Figure 2). Groundwater samples were placed in laboratory prepared bottles, packed on ice, and shipped under chain of custody documentation to Pace.

The samples were analyzed for the presence of BTEX by EPA Method 8260 and for dissolved iron by EPA Method 6010.

2.2 Analytical Results

The New Mexico Water Quality Control Commission (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 the 2017 groundwater sampling events are discussed below:

June 2017

- Benzene
  - The NMWQCC standard for benzene in groundwater is 0.01 milligrams per liter (mg/L). The groundwater sample collected from MW-6 exceeded this standard with a concentration of 0.309 mg/L.
- Dissolved Iron
  - The NMWQCC standard for dissolved iron is 1.0 mg/L. The groundwater samples collected from MW-4 and MW-6 contained dissolved iron at concentrations of 1.03 mg/L and 10.6 mg/L, respectively.

September 2017

- Benzene
  - The groundwater samples collected from MW-5 and MW-6 exceeded the NMWQCC standard with concentrations of 0.147 mg/L and 0.157 mg/L, respectively.
- Dissolved Iron
  - The groundwater sample collected from MW-6 exceeded the NMWQCC standard with a concentration of 5.73 mg/L.

December 2017

- Benzene
  - The groundwater sample collected from MW-6 exceeded the NMWQCC standard with a concentration of 0.236 mg/L.
- Dissolved Iron
  - The groundwater sample collected from MW-6 exceeded the NMWQCC standard with a concentration of 7.58 mg/L.

A summary of the 2017 laboratory analytical results is presented on Figure 7 – 2017 Contaminant Concentration Map. A summary of historical laboratory analytical results is presented as Table 4. Groundwater laboratory analytical reports are included as Appendix A.

3. Conclusions and Recommendations

Benzene continues to be present in groundwater of MW-6 at concentrations above the NMWQCC standard. A benzene concentration above standards (and ethylbenzene and xylenes at concentrations below standards) was detected in groundwater of MW-5 in the June 2017 sample. This is the first such occurrence of BTEX constituents at MW-5. Groundwater samples collected from MW-7 and MW-8, 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.

GHD recommends continued sampling of Site monitoring wells on a semi-annual basis, paying particular attention to concentrations at MW-5 to discern any potential trend in increasing concentrations at that location or if the September 2017 event was an anomaly. An in-situ chemical oxidation event, using existing air sparging wells arrayed upgradient of MW-6 (e.g., SP-4, SP-5, SP-7-see Figure 2) as injection points, is considered a viable option to aggressively address hydrocarbons and dissolved-phase iron in Site groundwater.

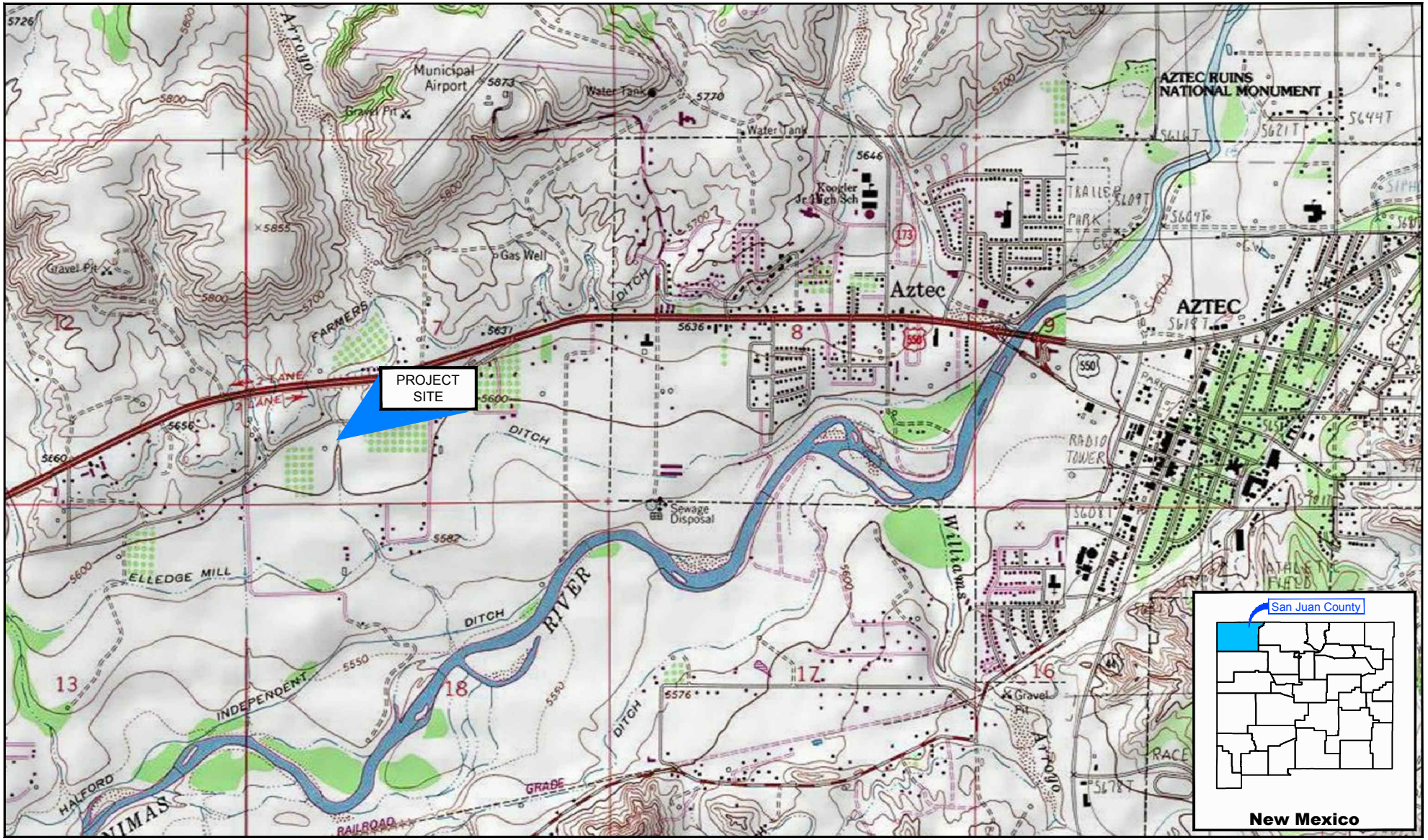
Respectfully Submitted,

GHD

Jeff Walker
Senior Project Manager

Bernard Bockisch
Albuquerque Office Manager

Figures



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

Lat/Long: 36.821656° North, 108.037314° 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

11146004-00

Jan 9, 2018

SITE LOCATION MAP

FIGURE 1

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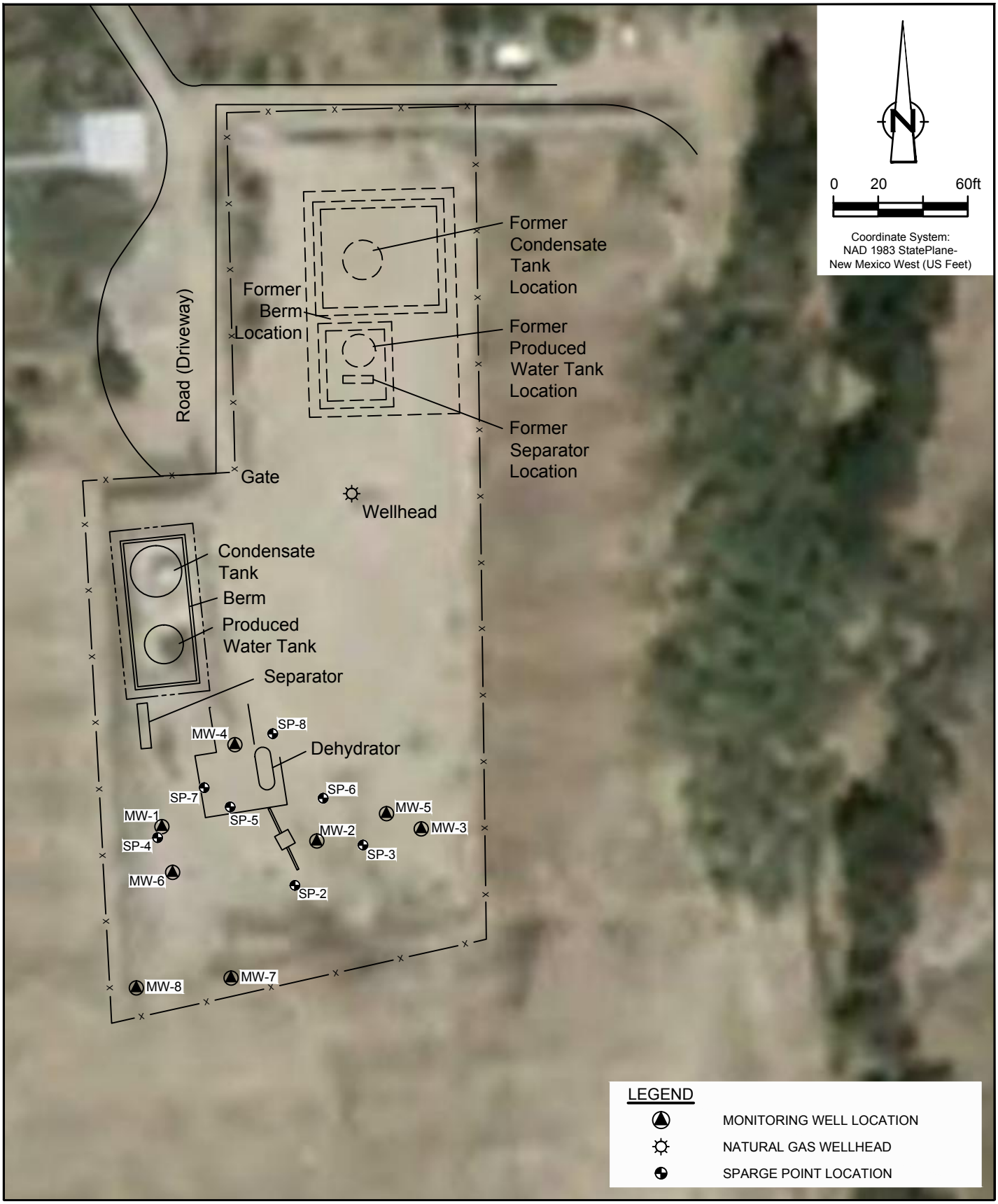

Source: ConocoPhillips high resolution aerial imagery 2008

Lat/Long: 36.821656° North, 108.037314° West

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SITE PLAN

FIGURE 2

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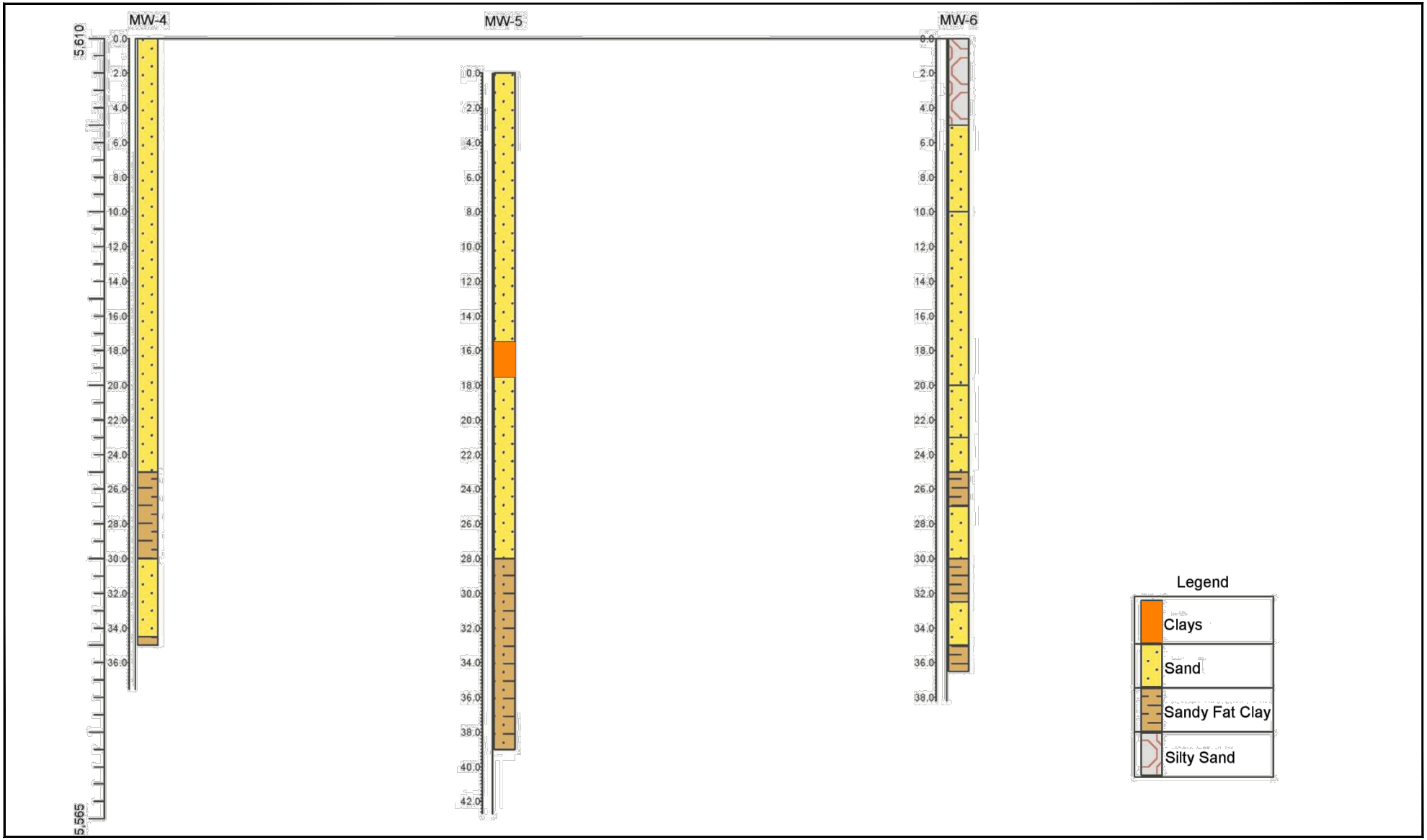

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GEOLOGIC CROSS SECTION

FIGURE 3

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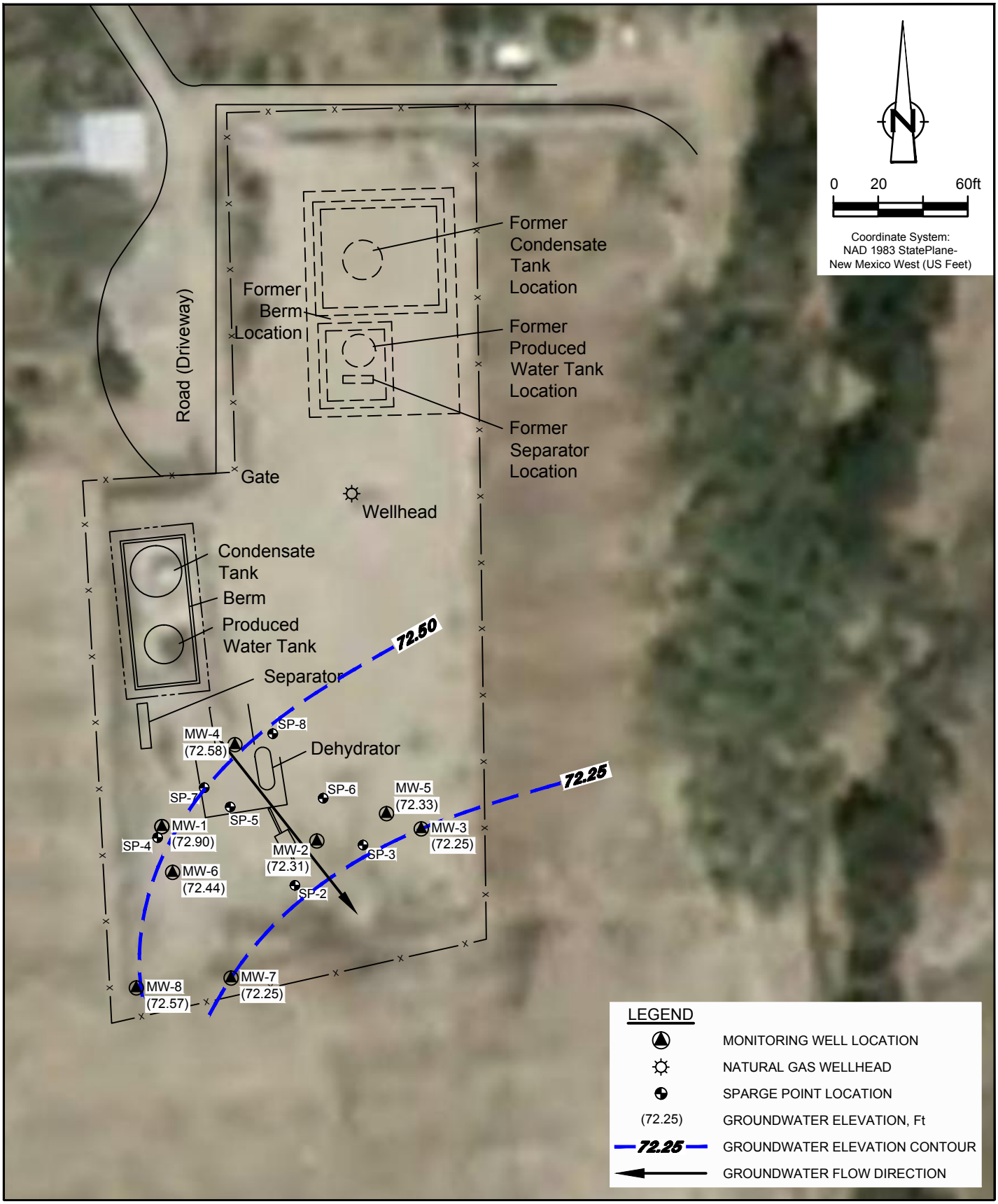

Source: ConocoPhillips high resolution aerial imagery 2008

Lat/Long: 36.821656° North, 108.037314° West

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JUNE 2017
GROUNDWATER POTENTIOMETRIC SURFACE MAP

FIGURE 4

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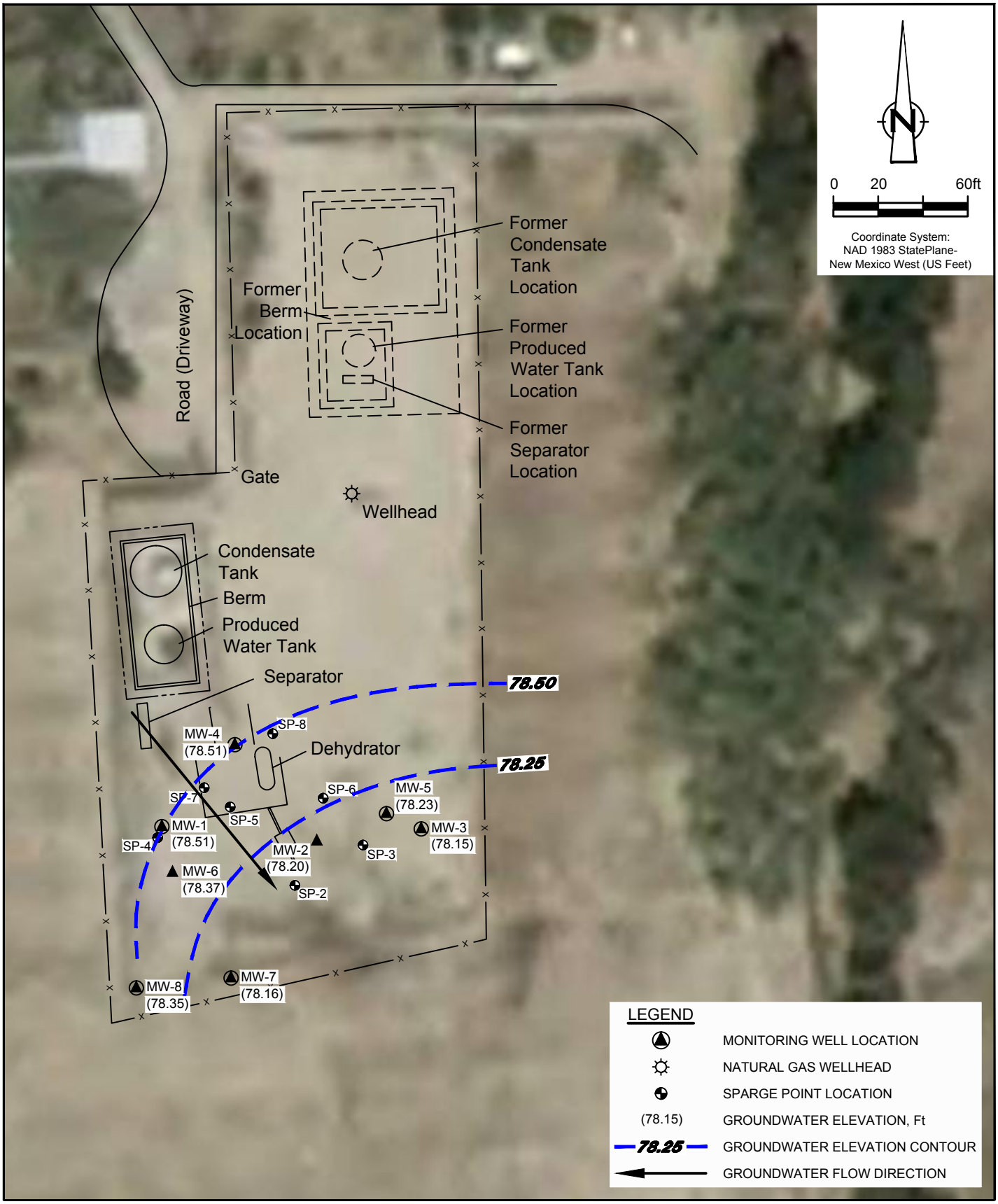

Source: ConocoPhillips high resolution aerial imagery 2008

Lat/Long: 36.821656° North, 108.037314° West

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SEPTEMBER 2017
GROUNDWATER POTENTIOMETRIC SURFACE MAP

FIGURE 5

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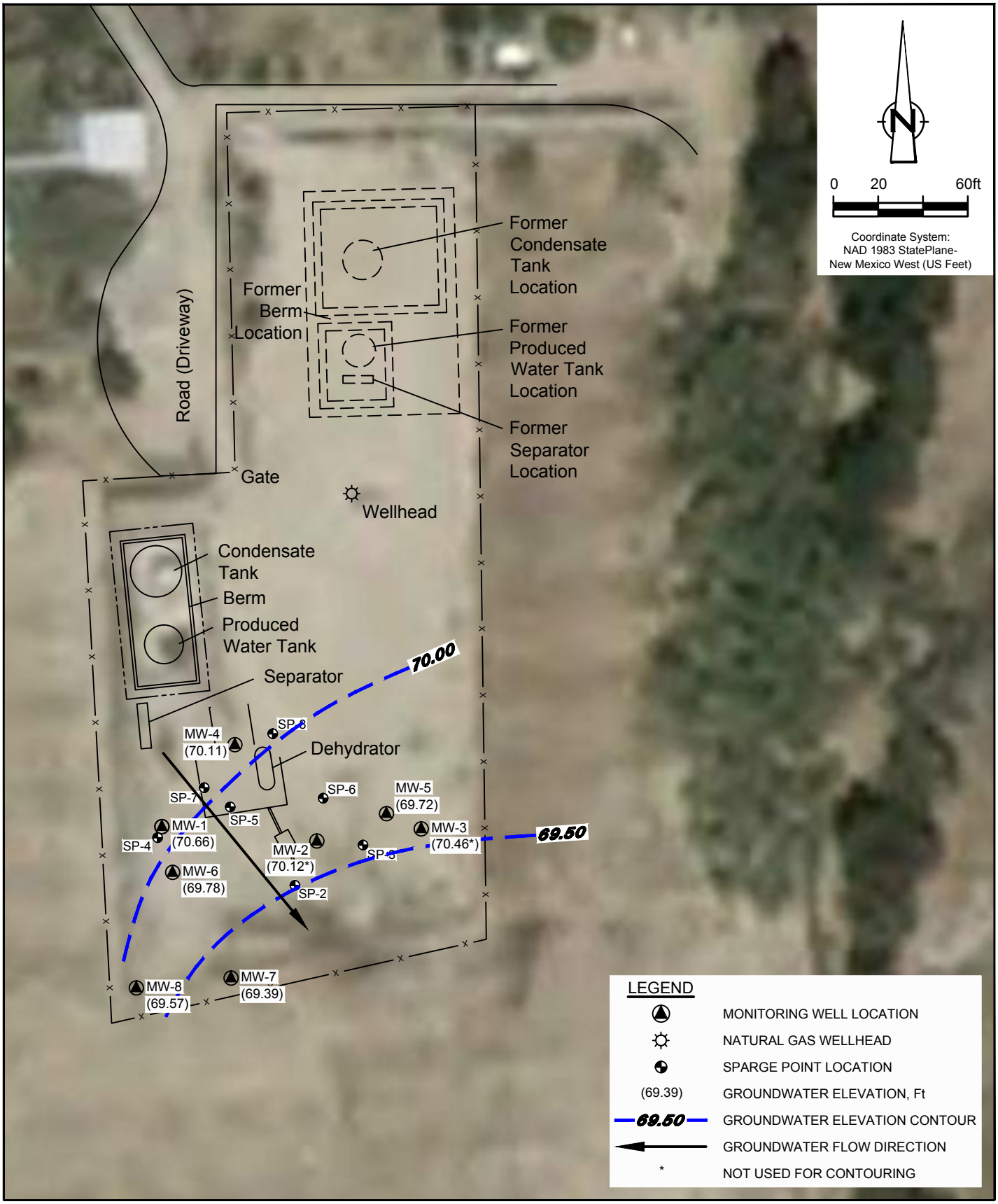

Source: ConocoPhillips high resolution aerial imagery 2008

Lat/Long: 36.821656° North, 108.037314° West

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DECEMBER 2017
GROUNDWATER POTENTIOMETRIC SURFACE MAP

FIGURE 6

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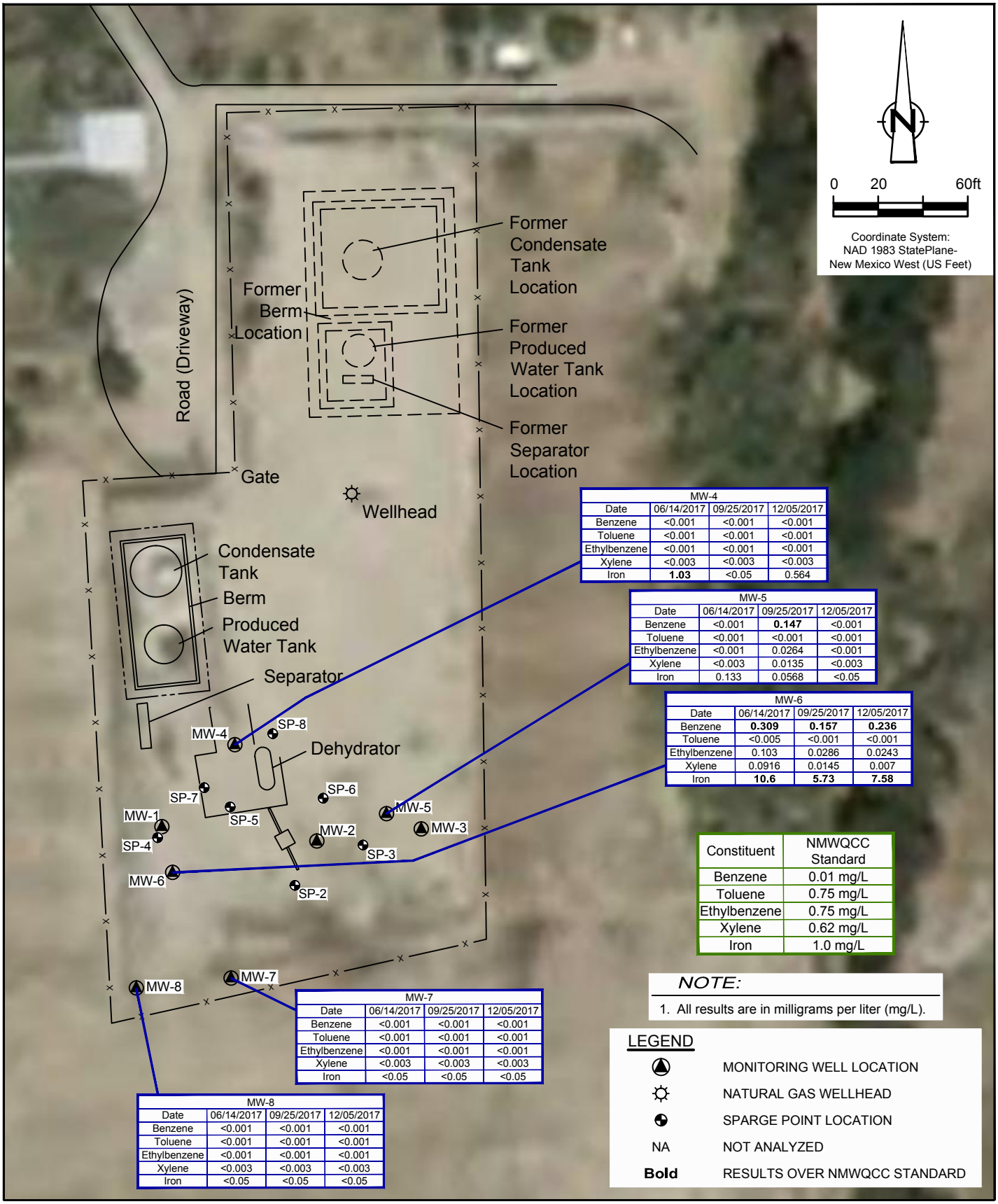

MW-4			
Date	06/14/2017	09/25/2017	12/05/2017
Benzene	<0.001	<0.001	<0.001
Toluene	<0.001	<0.001	<0.001
Ethylbenzene	<0.001	<0.001	<0.001
Xylene	<0.003	<0.003	<0.003
Iron	**1.03**	<0.05	0.564

MW-5			
Date	06/14/2017	09/25/2017	12/05/2017
Benzene	<0.001	**0.147**	<0.001
Toluene	<0.001	<0.001	<0.001
Ethylbenzene	<0.001	0.0264	<0.001
Xylene	<0.003	0.0135	<0.003
Iron	0.133	0.0568	<0.05

MW-6			
Date	06/14/2017	09/25/2017	12/05/2017
Benzene	**0.309**	**0.157**	**0.236**
Toluene	<0.005	<0.001	<0.001
Ethylbenzene	0.103	0.0286	0.0243
Xylene	0.0916	0.0145	0.007
Iron	**10.6**	**5.73**	**7.58**

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

MW-7			
Date	06/14/2017	09/25/2017	12/05/2017
Benzene	<0.001	<0.001	<0.001
Toluene	<0.001	<0.001	<0.001
Ethylbenzene	<0.001	<0.001	<0.001
Xylene	<0.003	<0.003	<0.003
Iron	<0.05	<0.05	<0.05

MW-8			
Date	06/14/2017	09/25/2017	12/05/2017
Benzene	<0.001	<0.001	<0.001
Toluene	<0.001	<0.001	<0.001
Ethylbenzene	<0.001	<0.001	<0.001
Xylene	<0.003	<0.003	<0.003
Iron	<0.05	<0.05	<0.05

NOTE:

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

LEGEND

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

Source: ConocoPhillips high resolution aerial imagery 2008

Lat/Long: 36.821656° North, 108.037314° West

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Jan 9, 2018

2017 CONTAMINANT CONCENTRATION MAP

FIGURE 7

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Tables

Table 1

Site History Timeline
Hilcorp Energy Company
Nell Hall No. 1
San Juan County, New Mexico

Date/Time Period	*Event/Action*	*Description/Comments*
February 20, 1961	Well Spudded	Southwest Production Company spudded the Nell Hall No. 1 natural gas production well.
September 1, 1963	Operator Change	Beta Development Company acquired the Nell Hall No. 1 site from Southwest Production Company.
September 15, 1988	Operator Change	Mesa Operating Limited Partnership acquired the Nell Hall No. 1 site from Beta Development Company.
July 1, 1991	Operator Change	Conoco Inc. acquired the Nell Hall No. 1 from Mesa Operating Limited Partnership.
May 3, 1994	Pit Remediation	Conoco stopped flow to the dehydrator, sampled the soil in the unlined dehydrator pit and encountered hydrocarbon-impacted soil.
August 31 through September 1, 1994	Pit Remediation	Conoco removed the dehydrator and Flint Engineering & Construction Co. excavated soil in the vicinity of the former dehydrator pit to a depth of 16 feet. A soil sample at the bottom of the excavation revealed TPH of 380 ppm.
September 21 through October 7, 1994	Pit Remediation	Flint Engineering & Construction Co. landfarmed the excavated soil on site.
June 1 and 2, 1995	Soil Borings and Groundwater Sampling	Phillip Environmental Services Corp. completed initial subsurface assesment (3 temporary monitoring wells and 3 additional borings).
June 15, 1995	Soil Borings and Groundwater Sampling	Phillip Environmental Services Corp. completed an additional soil boring.
March 27, 1997	Monitoring Well Sampling	On Site Technologies, LTD found insufficient water in the 3 monitoring wells for sampling.
June 19, 2002	Groundwater sampling	Souder Miller and Associates (SMA) conducted groundwater sampling at the Site. Samples were collected from MW-1, and sparge points SP-6, SP-7 and SP-8. The only constituent over the NMWQCC standard was benzene in SP-7 at a concentration of 0.018 milligrams per liter (mg/L).
September 17, 2002	Groundwater sampling	SMA conducted groundwater sampling at the Site. Samples were collected from MW-1, and sparge points SP-6, SP-7 and SP-8. The only constituent over the NMWQCC standard was benzene in SP-7 at a concentration of 0.021 mg/L.
January 1, 2003	Operator Name Change	Conoco Inc. and Phillips Petroleum Company merged to form ConocoPhillips Company.
February 17 and 18, 2004	Monitoring Well Installation	Monitoring Wells MW-4, MW-5, and MW-6 were installed at deeper depths (35 to 39 feet BGS) to adequately intersect the water table, since previously installed groundwater Monitoringing wells continually went dry. The lowest water levels at the site are found to occur in early spring and late winter. 30 to 35 feet of screen was installed in each well to allow for seasonal groundwater fluctuations of up to 25 feet.
March 8 through December 27, 2004	Monitoring Well Sampling	Quarterly groundwater sampling of Monitoring Wells MW-4, MW-5, and MW-6; benzene spike in March (MW-6) coincides with MW-6 well installation and discovery of BTEX and TPH impacts to soil at 25-35 feet bgs in MW-6 soil samples collected during drilling.
May 11 through November 22, 2005	Monitoring Well Sampling	Semi-annual sampling of Monitoring Wells MW-4, MW-5, and MW-6.
November 15, 2006	Monitoring Well Sampling	Annual sampling of Monitoring Wells MW-4, MW-5, and MW-6.
February 21, 2007 through October 22, 2008	Monitoring Well Sampling	Resumption of semi-annual sampling of Monitoring Wells MW-4, MW-5, and MW-6 during summer and fall months when water is most likely to be present in wells.
February 6, 2009	BTEX vs. depth to water plotted for MW-6	BTEX concentrations show inverse relationship to water column thickness in MW-6; plotted from 2/21/07 to 10/22/08.
March 30, 2009	Monitoring Well Sampling	Groundwater samples collected from MW-5 and MW-6; no sample was collected from MW-4 (dry). Benzene result of 0.042 milligrams per liter (mg/L) for MW-6.
March 30, 2009	Monitoring Well Sampling	Monitoring Wells MW-5 and MW-6 were sampled. MW-4 was found to be dry during the sampling event. Benzene was reported at a concentration above the groundwater quality standard in MW-6 with a concentration of 0.042 mg/L.
September 30, 2009	Monitoring Well Sampling	Groundwater samples were collected from MW-4, MW-5 and MW-6. MW-6 indicated a benzene concentration of 0.096 mg/L and a dissolved iron concentration of 1.06 mg/L.

Table 1

Site History Timeline
Hilcorp Energy Company
Nell Hall No. 1
San Juan County, New Mexico

Date/Time Period	*Event/Action*	*Description/Comments*
March 31 and April 1, 2010	Monitoring Well Sampling	Groundwater samples collected from MW-5 and MW-6; MW-4 was dry. MW-6 indicated a benzene concentration of 0.480 mg/L and a sample for dissolved iron was not obtained due to low water levels in MW-6.
June 9, 2010	Monitoring Well Sampling	Groundwater samples collected from MW-4, MW-5 and MW-6 as a continuation of semi-annual sampling event. MW-6 indicated a benzene concentration of 0.710 mg/L and a dissolved iron concentration of 11.4 mg/L.
September 27, 2010	MonitoringWell Sampling	Groundwater samples collected from MW-4, MW-5 and MW-6. MW-6 indicated a benzene concentration of 0.30 mg/L and a dissolved iron concentration of 0.676 mg/L.
March 16, 2011	Monitoring Well Sampling	Groundwater samples collected from MW-5 and MW-6. MW-4 was observed to be dry during this monitoring event. Laboratory analysis of the groundwater sample from MW-6 indicated a benzene concentration of 0.18 mg/L and a dissolved iron concentration of 8.66 mg/L; however, during the March 2011 sampling event MW-6 contained a very low volume of water and the sample collected may not be representative of actual aquifer conditions.
June 15, 2011	Transfer of Consulting Responsibilities to CRA	On June 15, 2011, Site consulting responsibilities were transferred from Tetra Tech of Albuquerque, NM to CRA of Albuquerque, NM.
June 21, 2011	Monitoring Well Sampling	Groundwater samples collected from MW-4, MW-5 and MW-6. Groundwater sampled from MW-6 indicated a benzene concentration of 0.461 mg/L, a xylenes concentration of 0.677 mg/L, and a dissolved iron concentration of 9.45 mg/L.
September 27, 2011	Monitoring Well Sampling	Groundwater samples collected from MW-4, MW-5 and MW-6. Groundwater sampled from MW-6 indicated a benzene concentration of 0.237 mg/L, and a dissolved iron concentration of 19.6 mg/L.
December 13, 2011	Monitoring Well Sampling	Groundwater samples collected from MW-4, MW-5 and MW-6. Groundwater sampled from MW-6 indicated a benzene concentration of 0.298 mg/L, and a dissolved iron concentration of 11.6 mg/L.
March 7, 2012	Monitoring Well Sampling	Groundwater samples collected from MW-4, MW-5 and MW-6. Groundwater sampled from MW-6 indicated a benzene concentration of 0.0477 mg/L, and a dissolved iron concentration of 22.50 mg/L.
June 4, 2012	Monitoring Well Sampling	Groundwater samples collected from MW-4, MW-5 and MW-6. Groundwater sampled from MW-6 indicated a benzene concentration of 0.649 mg/L, and a dissolved iron concentration of 19.2 mg/L. The sample from MW-4 indicated a dissolved iron concentration of 1.17 mg/L.
September 20, 2012	Monitoring Well Sampling	Groundwater samples collected from MW-4, MW-5 and MW-6. Groundwater sampled from MW-6 indicated a benzene concentration of 0.266 mg/L, and a dissolved iron concentration of 9.53 mg/L.
December 28, 2012	Monitoring Well Sampling	Groundwater samples collected from MW-4, MW-5 and MW-6. Groundwater sampled from MW-6 indicated a benzene concentration of 0.319 mg/L, and a dissolved iron concentration of 8.06 mg/L.
March 28, 2013	Groundwater Monitoring	All site wells gauged were dry; no samples collected.
June 12, 2013	Monitoring Well Sampling	Groundwater samples collected from MW-4, MW-5 and MW-6. Groundwater sampled from MW-6 indicated a benzene concentration of 0.442 mg/L, and a dissolved iron concentration of 16.6 mg/L. Groundwater sampled from MW-4 indicated a dissolved iron concentration of 1.46 mg/L.
September 11, 2013	Monitoring Well Sampling	Groundwater samples collected from MW-4, MW-5 and MW-6. Groundwater sampled from MW-6 indicated a benzene concentration of 0.442 mg/L, and a dissolved iron concentration of 16.6 mg/L. Groundwater sampled from MW-4 indicated a dissolved iron concentration of 1.46 mg/L.
December 13, 2013	Monitoring Well Sampling	Groundwater samples collected from MW-4, MW-5 and MW-6. Groundwater sampled from MW-6 indicated a benzene concentration of 0.442 mg/L, and a dissolved iron concentration of 16.6 mg/L. Groundwater sampled from MW-4 indicated a dissolved iron concentration of 1.46 mg/L.

Table 1

Site History Timeline
Hilcorp Energy Company
Nell Hall No. 1
San Juan County, New Mexico

Date/Time Period	*Event/Action*	*Description/Comments*
March 20 - 21, 2014	Monitoring Well Sampling	Groundwater samples collected from MW-5. Analytical results for BTEX and dissolved iron were below laboratory detection limits. MW-4 and MW-6 were dry during this sampling event.
June 18, 2014	Monitoring Well Sampling	Groundwater samples collected from MW-4, MW-5 and MW-6. Groundwater sampled from MW-6 indicated a benzene concentration of 0.384 mg/L, and a dissolved iron concentration of 15.5 mg/L. Groundwater sampled from MW-4 indicated a dissolved iron concentration of 1.83 mg/L.
September 15, 2014	Monitoring Well Sampling	Groundwater samples collected from MW-4, MW-5 and MW-6. Groundwater sampled from MW-6 indicated a benzene concentration of 0.502 mg/L, and a dissolved iron concentration of 7.75 mg/L.
December 15, 2014	Monitoring Well Sampling	Groundwater samples collected from MW-4, MW-5 and MW-6. Groundwater sampled from MW-6 indicated a benzene concentration of 0.333 mg/L, and a dissolved iron concentration of 5.45 mg/L.
March 17, 2015	Monitoring Well Sampling	Groundwater samples collected from MW-5. Analytical results for BTEX and dissolved iron were below laboratory detection limits. MW-4 and MW-6 were dry during this sampling event.
June 15, 2015	Monitoring Well Sampling	Groundwater samples collected from MW-4, MW-5 and MW-6. Groundwater sampled from MW-6 indicated a benzene concentration of 0.354 mg/L, and a dissolved iron concentration of 13.1 mg/L. Groundwater sampled from MW-4 indicated a dissolved iron concentration of 1.78 mg/L.
September 1, 2015	Monitoring Well Installation	GHD (formerly CRA) installed MW-7 and MW-8 along south fence of site, downgradient from impacted MW-6 to acertain horizontal extent of soil and groundwater hydrocarbon impacts.
September 16, 2015	Monitoring Well Sampling	Groundwater samples collected from MW-4, MW-5, MW-6, MW-7, and MW-8. Groundwater sampled from MW-6 indicated a benzene concentration of 0.294 mg/L and a dissolved iron concentration of 11.0 mg/L.
December 7, 2015	Monitoring Well Sampling	Groundwater samples collected from MW-4, MW-5, MW-6, MW-7, and MW-8. Groundwater sampled from MW-6 indicated a benzene concentration of 0.413 mg/L and a dissolved iron concentration of 7.35 mg/L.
March 30, 2016	Monitoring Well Sampling	Groudnwater samples collected from MW-5, MW-7, and MW-8. analytical results for BTEX and dissolved iron were below regulatory limits.
June 22, 2016	Monitoring Well Sampling	Groudnwater samples collected from MW-4, MW-5, MW-6, MW-7, and MW-8. Groundwater sampled from MW 6 indicated a benzene concentration of 0.419 mg/L. Groundwater samples collected from MW 4 and MW 6 indicated dissolved iren concentrations of 2.07 and 16.2 ug/L, respectively.
September 8, 2016	Monitoring Well Sampling	Groudnwater samples collected from MW-4, MW-5, MW-6, MW-7, and MW-8. Groundwater sampled from MW-6 indicated a benzene concentration of 0.209 mg/L and a dissolved iron concentration of 6.07 mg/L.
November 29, 2016	Monitoring Well Sampling	Groudnwater samples collected from MW-4, MW-5, MW-6, MW-7, and MW-8. Groundwater sampled from MW-6 indicated a benzene concentration of 0.257 mg/L and a dissolved iron concentration of 6.32 mg/L.
April 13, 2017	Sale of San Juan Asset to Hilcorp Energy	Site sold as part of ConocoPhillips Company announced sale of San Juan Asset to Hilcorp Energy Company.
June 14, 2017	Monitoring Well Sampling	Groudnwater samples collected from MW-4, MW-5, MW-6, MW-7, and MW-8 for BTEX constituents and dissolved iron .
September 25, 2017	Monitoring Well Sampling	Groudnwater samples collected from MW-4, MW-5, MW-6, MW-7, and MW-8 for BTEX constituents and dissolved iron .
December 5, 2017	Monitoring Well Sampling	Groudnwater samples collected from MW-4, MW-5, MW-6, MW-7, and MW-8 for BTEX constituents and dissolved iron .

Table 2

Monitoring Well Specifications and Groundwater Elevations
Hilcorp Energy Company
Nell Hall No. 1
San Juan County, New Mexico

Well ID	*Total Depth (ft below TOC)*	*Surface Elevation (amsl)*	*Screen Interval (ft bgs)*	*Date Measured*	*Depth to Groundwater (ft below TOC)*	*Relative Water Level*
MW-1	28.55	5615.72	Unknown	5/10/2005	DRY	NA
				10/20/2005	19.25	5596.47
				11/22/2005	24.15	5591.57
				5/17/2006	NM	NM
				11/15/2006	21.40	5594.32
				2/19/2007	DRY	NA
				5/14/2007	24.85	5590.87
				8/22/2007	24.61	5591.11
				11/6/2007	20.87	5594.85
				3/17/2008	DRY	NA
				10/22/2008	19.38	5596.34
				3/30/2009	28.25	5587.47
				9/30/2009	16.56	5599.16
				3/31/2010	DRY	NA
				6/9/2010	24.16	5591.56
		97.95		9/27/2010	20.00	77.95
				3/16/2011	DRY	NA
				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	NA
				6/4/2012	26.40	71.55
				9/20/2012	17.57	80.38
				12/28/2012	DRY	NA
				3/28/2013	DRY	NA
				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	NA
				6/18/2014	25.18	72.77
				9/15/2014	18.68	79.27
				12/15/2014	DRY	NA
				3/16/2015	DRY	NA
				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	NA
				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

Table 2

Monitoring Well Specifications and Groundwater Elevations
Hilcorp Energy Company
Nell Hall No. 1
San Juan County, New Mexico

Well ID	*Total Depth (ft below TOC)*	*Surface Elevation (amsl)*	*Screen Interval (ft bgs)*	*Date Measured*	*Depth to Groundwater (ft below TOC)*	*Relative Water Level*
MW-2	27.32	5614.94	Unknown	5/10/2005	DRY	NA
				10/20/2005	18.81	5596.13
				11/22/2005	23.74	5591.20
				5/17/2006	22.06	5592.88
				11/15/2006	21.01	5593.93
				2/19/2007	DRY	NA
				5/14/2007	DRY	NA
				8/22/2007	18.03	5596.91
				11/6/2007	20.43	5594.51
				3/17/2008	DRY	NA
				10/22/2008	18.83	5596.11
				3/30/2009	27.15	5587.79
				9/30/2009	16.01	5598.93
				3/31/2010	DRY	NA
				6/9/2010	23.36	5591.58
		97.16		9/27/2010	19.42	77.74
				3/16/2011	DRY	NA
				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	NA
				6/4/2012	25.17	71.99
				9/20/2012	17.30	79.86
				12/28/2012	DRY	NA
				3/28/2013	DRY	NA
				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	NA
				6/18/2014	24.78	72.38
				9/15/2014	18.18	78.98
				12/15/2014	DRY	NA
				3/16/2015	DRY	NA
				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

Table 2

Monitoring Well Specifications and Groundwater Elevations
Hilcorp Energy Company
Nell Hall No. 1
San Juan County, New Mexico

Well ID	*Total Depth (ft below TOC)*	*Surface Elevation (amsl)*	*Screen Interval (ft bgs)*	*Date Measured*	*Depth to Groundwater (ft below TOC)*	*Relative Water Level*
MW-3	27.45	5615.53	Unknown	5/10/2005	DRY	NA
				10/20/2005	19.36	5596.17
				11/22/2005	24.24	5591.29
				5/17/2006	22.82	5592.71
				11/15/2006	21.53	5594.00
				2/19/2007	DRY	NA
				5/14/2007	DRY	NA
				8/22/2007	18.36	5597.17
				11/6/2007	20.95	5594.58
				3/17/2008	DRY	NA
				10/22/2008	19.34	5596.19
				3/30/2009	DRY	NA
				9/30/2009	NM	NM
				3/31/2010	DRY	NA
				6/9/2010	23.87	5591.66
		97.77		9/27/2010	19.93	77.84
				3/16/2011	DRY	NA
				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	NA
				6/4/2012	25.53	72.24
				9/20/2012	17.97	79.80
				12/28/2012	DRY	NA
				3/28/2013	DRY	NA
				6/12/2013	24.36	73.41
				9/11/2013	17.84	79.93
				12/13/2013	DRY	NA
				3/20/2014	DRY	DRY
				6/18/2014	25.36	72.41
				9/15/2014	18.79	78.98
				12/15/2014	DRY	NA
				3/16/2015	DRY	NA
				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	NA
				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

Table 2

Monitoring Well Specifications and Groundwater Elevations
Hilcorp Energy Company
Nell Hall No. 1
San Juan County, New Mexico

Well ID	*Total Depth (ft below TOC)*	*Surface Elevation (amsl)*	*Screen Interval (ft bgs)*	*Date Measured*	*Depth to Groundwater (ft below TOC)*	*Relative Water Level*
MW-4	37.57	5614.87	7.57 - 37.57	3/8/2004	36.04	5578.83
				7/19/2004	8.44	5606.43
				10/27/2004	19.69	5595.18
				12/27/2004	27.58	5587.29
				5/10/2005	DRY	NA
				10/20/2005	18.87	5596.00
				11/22/2005	23.93	5590.94
				5/17/2006	NM	NM
				11/15/2006	21.02	5593.85
				2/19/2007	34.40	5580.47
				5/14/2007	27.56	5587.31
				8/22/2007	18.18	5596.69
				11/6/2007	20.48	5594.39
				3/17/2008	36.08	5578.79
				10/22/2008	18.96	5595.91
				3/30/2009	37.36	5577.51
				9/30/2009	16.15	5598.72
				3/31/2010	DRY	NA
				6/9/2010	23.61	5591.26
		97.75		9/27/2010	19.61	78.14
				3/16/2011	DRY	NA
				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	NA
				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	NA
				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	NA
				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

Table 2

Monitoring Well Specifications and Groundwater Elevations
Hilcorp Energy Company
Nell Hall No. 1
San Juan County, New Mexico

Well ID	*Total Depth (ft below TOC)*	*Surface Elevation (amsl)*	*Screen Interval (ft bgs)*	*Date Measured*	*Depth to Groundwater (ft below TOC)*	*Relative Water Level*
MW-5	42.7	5615.86	7.7 - 42.7	3/8/2004	37.19	5578.67
				7/19/2004	9.38	5606.48
				10/27/2004	21.07	5594.79
				12/27/2004	28.99	5586.87
				5/10/2005	39.79	5576.07
				10/20/2005	20.34	5595.52
				11/22/2005	25.23	5590.63
				5/17/2006	23.80	5592.06
				11/15/2006	22.51	5593.35
				2/19/2007	35.31	5580.55
				5/14/2007	27.59	5588.27
				8/22/2007	19.45	5596.41
				11/6/2007	21.94	5593.92
				3/17/2008	37.33	5578.53
				10/22/2008	19.30	5596.56
				3/30/2009	38.68	5577.18
				9/30/2009	17.54	5598.32
				3/31/2010	39.05	5576.81
				6/9/2010	24.91	5590.95
		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	NA
				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

Table 2

Monitoring Well Specifications and Groundwater Elevations
Hilcorp Energy Company
Nell Hall No. 1
San Juan County, New Mexico

Well ID	*Total Depth (ft below TOC)*	*Surface Elevation (amsl)*	*Screen Interval (ft bgs)*	*Date Measured*	*Depth to Groundwater (ft below TOC)*	*Relative Water Level*
MW-6	38.21	5615.44	8.21 - 38.21	3/8/2004	36.27	5579.17
				7/19/2004	9.43	5606.01
				10/27/2004	19.33	5596.11
				12/27/2004	28.62	5586.82
				5/10/2005	DRY	NA
				10/20/2005	19.94	5595.50
				11/22/2005	25.02	5590.42
				5/17/2006	NM	NM
				11/15/2006	21.12	5594.32
				2/19/2007	34.82	5580.62
				5/14/2007	26.12	5589.32
				8/22/2007	19.41	5596.03
				11/6/2007	21.51	5593.93
				3/17/2008	36.34	5579.10
				10/22/2008	19.99	5595.45
				3/30/2009	37.04	5578.40
				9/30/2009	17.26	5598.18
				3/31/2010	37.24	5578.20
				6/9/2010	24.43	5591.01
		98.41		9/27/2010	20.79	77.62
				3/16/2011	DRY	NA
				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	NA
				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

Table 2

Monitoring Well Specifications and Groundwater Elevations
Hilcorp Energy Company
Nell Hall No. 1
San Juan County, New Mexico

Well ID	*Total Depth (ft below TOC)*	*Surface Elevation (amsl)*	*Screen Interval (ft bgs)*	*Date Measured*	*Depth to Groundwater (ft below TOC)*	*Relative Water Level*
MW-7	43.02	97.60	10-40	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
MW-8	42.47	98.87	9-39	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

Notes:

amsl = Above mean sea level
bgs = Below ground surface
ft = Feet
NM = Not measured
NA = Not available
TOC = Top of casing
* = Top of casing elevation based on an arbitrary reference elevation of 100 feet

Table 3

Field Parameters Summary
Hilcorp Energy Company
Nell Hall No. 1
San Juan County, New Mexico

Well ID	Sample Date	Temperature (°C)	pH	TDS (mg/L)	Conductivity (µS/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	-113.90	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	1046	2.60	-54.0	5.50
	3/30/2016	Not sampled.						
	6/22/2016	16.00	6.65	--	1090	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	1043	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	1013	1.32	-153.5	5.25
MW-5	3/17/2015	No parameters 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	1721	5.52	-50.5	7.75
	3/30/2016	No parameters collected due to low well volume.						
	6/22/2016	15.70	7.02	--	1120	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	--	1198	8.96	74.8	8.00
	6/14/2017	14.22	7.05	0.914	1406	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	1367	4.66	-82.9	6.50

Table 3

Field Parameters Summary
Hilcorp Energy Company
Nell Hall No. 1
San Juan County, New Mexico

Well ID	Sample Date	Temperature (°C)	pH	TDS (mg/L)	Conductivity (µS/cm)	DO (mg/L)	ORP (mV)	Volume (gallons)
MW-6	3/17/2015	Not sampled.						
	6/15/2015	15.34	6.50	0.730	1124	4.15	-95.9	5.25
	9/16/2015	15.69	6.13	0.846	1302	2.92	-121.5	7.75
	11/30/2015	15.36	6.57	0.793	1221	4.82	-72.4	5.50
	3/30/2016	Not sampled.						
	6/22/2016	15.30	6.50	--	1220	1.42	-91.4	5.75
	9/8/2016	15.51	7.43	0.849	1307	1.86	-138.7	9.25
	11/29/2016	15.29	6.86	--	1132	2.57	-86.1	6.00
	6/14/2014	14.10	6.73	0.775	1192	2.02	-115.1	6.00
	9/25/2017	14.86	6.30	--	1342	--	--	11.00
	12/5/2017	13.91	6.68	0.794	1222	0.80	-155.0	4.75
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	1641	4.99	21.0	7.75
	3/30/2016	16.77	6.91	0.800	1250	6.03	40.0	1.25
	6/22/2016	15.30	6.93	--	1090	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	--	1006	6.35	85.7	8.00
	6/14/2017	13.95	6.82	0.809	1245	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

Table 3

Field Parameters Summary
Hilcorp Energy Company
Nell Hall No. 1
San Juan County, New Mexico

Well ID	Sample Date	Temperature (°C)	pH	TDS (mg/L)	Conductivity (µS/cm)	DO (mg/L)	ORP (mV)	Volume (gallons)
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

Notes:

TDS = total dissolved solids
DO = dissolved oxygen
ORP = oxidation-reduction potential
°C = degrees Centigrade
mg/L = milligrams per liter
µS/cm = micro Siemens per centimeter
mV = millivolts

Table 4

Groundwater Analytical Results Summary
Hilcorp Energy Company
Nell Hall No. 1
San Juan County, New Mexico

Well ID	Sample ID	Date	Sample Type	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Xylenes (total) (mg/L)	Sulfate (mg/L)	Iron (dissolved) (mg/L)	Nitrate (as N) (mg/L)
NMWQCC Groundwater Quality Standards				*0.01*	*0.75*	*0.75*	*0.62*	*600*	*1*	*10*
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	105	--	< 0.40
	MW-4	11/15/2006	(orig)	< 0.0005	< 0.0007	< 0.0008	< 0.0008	110	--	< 0.25
	MW-4	2/21/2007	(orig)	< 0.0005	< 0.0007	< 0.0008	< 0.0008	59.6	--	< 0.25
	MW-4	8/22/2007	(orig)	< 0.0005	< 0.0007	< 0.0008	< 0.0008	96.5	--	< 0.25
	MW-4	11/6/2007	(orig)	< 0.0005	< 0.0007	< 0.0008	< 0.0008	111	--	3.3
	MW-4	3/17/2008	(orig)	< 0.005	< 0.005	< 0.005	< 0.005	64.5	--	< 0.5
	MW-4	10/22/2008	(orig)	< 0.005	< 0.005	< 0.005	< 0.005	93.8	--	1.9
	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	--
		3/30/16	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	

Table 4

Groundwater Analytical Results Summary
Hilcorp Energy Company
Nell Hall No. 1
San Juan County, New Mexico

Well ID	Sample ID	Date	Sample Type	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Xylenes (total) (mg/L)	Sulfate (mg/L)	Iron (dissolved) (mg/L)	Nitrate (as N) (mg/L)
	NMWQCC Groundwater Quality Standards			***0.01***	***0.75***	***0.75***	***0.62***	***600***	***1***	***10***
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	139	--	2.3
	MW-5	11/22/2005	(orig)	< 0.0005	< 0.0007	< 0.0008	< 0.0008	38	--	< 0.40
	MW-5	11/15/2006	(orig)	< 0.0005	< 0.0007	< 0.0008	< 0.0008	77.9	--	2.3
	MW-5	2/21/2007	(orig)	< 0.0005	< 0.0007	< 0.0008	< 0.0008	83.3	--	1.3
	MW-5	8/22/2007	(orig)	< 0.0005	< 0.0007	< 0.0008	< 0.0008	125	--	5.6
	MW-5	11/6/2007	(orig)	< 0.0005	< 0.0007	< 0.0008	< 0.0008	59	--	4
	MW-5	3/17/2008	(orig)	< 0.005	< 0.005	< 0.005	< 0.005	69.7	--	0.986
	MW-5	10/22/2008	(orig)	< 0.005	< 0.005	< 0.005	< 0.005	105	--	0.532
	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	

Table 4

Groundwater Analytical Results Summary
Hilcorp Energy Company
Nell Hall No. 1
San Juan County, New Mexico

Well ID	Sample ID	Date	Sample Type	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Xylenes (total) (mg/L)	Sulfate (mg/L)	Iron (dissolved) (mg/L)	Nitrate (as N) (mg/L)
	NMWQCC Groundwater Quality Standards			*0.01*	*0.75*	*0.75*	*0.62*	*600*	*1*	*10*
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	3.4	--	< 0.40
	MW-6	11/15/2006	(orig)	< 0.0005	< 0.0007	< 0.0008	< 0.0008	41.3	--	< 0.25
	MW-6	2/21/2007	(orig)	**0.54**	< 0.001	0.076	**0.81**	1.8	--	< 0.25
	MW-6	8/22/2007	(orig)	< 0.0005	< 0.0007	< 0.0008	< 0.0008	12.6	--	< 0.25
	MW-6	11/6/2007	(orig)	**0.015**	< 0.0007	0.047	0.39	5.6	--	< 0.25
	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	5.15	--	< 1.0
	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**	--

Table 4

Groundwater Analytical Results Summary
Hilcorp Energy Company
Nell Hall No. 1
San Juan County, New Mexico

Well ID	Sample ID	Date	Sample Type	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Xylenes (total) (mg/L)	Sulfate (mg/L)	Iron (dissolved) (mg/L)	Nitrate (as N) (mg/L)
NMWQCC Groundwater Quality Standards				*0.01*	*0.75*	*0.75*	*0.62*	*600*	*1*	*10*
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	
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	

Notes:

mg/L = milligrams per liter (parts per million)
-- = Not Analyzed
NMWQCC = New Mexico Water Quality Control Commission

Appendix A
Groundwater Laboratory Analytical Reports

Pace Analytical Services, LLC
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

June 30, 2017

Christine Mathews
GHD Services, Inc.
6212 Indian School Rd. NE St2
Albuquerque, NM 87110

RE: Project: 074941 NELL HALL NO1 COP
Pace Project No.: 60246793

Dear Christine Mathews:
Enclosed are the analytical results for sample(s) received by the laboratory on June 17, 2017. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Alice Spiller

Alice Spiller
alice.spiller@pacelabs.com
(913)563-1409
Project Manager

Enclosures

cc: Angela Bown, GHD Services, Inc,
Jeffrey Walker, GHD Services, Inc

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CERTIFICATIONS

Project: 074941 NELL HALL NO1 COP
Pace Project No.: 60246793

Kansas Certification IDs

9608 Loiret Boulevard, Lenexa, KS 66219
WY STR Certification #: 2456.01
Arkansas Certification #: 15-016-0
Illinois Certification #: 003097
Iowa Certification #: 118
Kansas/NELAP Certification #: E-10116
Louisiana Certification #: 03055
Nevada Certification #: KS000212008A
Oklahoma Certification #: 9205/9935
Texas Certification #: T104704407
Utah Certification #: KS00021
Kansas Field Laboratory Accreditation: # E-92587
Missouri Certification: 10070

REPORT OF LABORATORY ANALYSIS

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SAMPLE SUMMARY

Project: 074941 NELL HALL NO1 COP
Pace Project No.: 60246793

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60246793001	**GW-074941-061417-CN-MW-4**	Water	06/14/17 12:45	06/17/17 12:50
60246793002	**GW-074941-061417-CN-MW-5**	Water	06/14/17 12:55	06/17/17 12:50
60246793003	**GW-074941-061417-CN-MW-6**	Water	06/14/17 13:20	06/17/17 12:50
60246793004	**GW-074941-061417-CN-MW-7**	Water	06/14/17 13:30	06/17/17 12:50
60246793005	**TRIP BLANK**	Water	06/14/17 12:45	06/17/17 12:50
60246793006	**GW-074941-061417-CN-MW-8**	Water	06/14/17 13:50	06/17/17 08:30

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: 074941 NELL HALL NO1 COP
Pace Project No.: 60246793

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
60246793001	**GW-074941-061417-CN-MW-4**	EPA 6010	SMW	1	PASI-K
		EPA 8260	JTK	8	PASI-K
60246793002	**GW-074941-061417-CN-MW-5**	EPA 6010	SMW	1	PASI-K
		EPA 8260	JTK	8	PASI-K
60246793003	**GW-074941-061417-CN-MW-6**	EPA 6010	SMW	1	PASI-K
		EPA 8260	EAG	8	PASI-K
60246793004	**GW-074941-061417-CN-MW-7**	EPA 6010	SMW	1	PASI-K
		EPA 8260	EAG	8	PASI-K
60246793006	**GW-074941-061417-CN-MW-8**	EPA 6010	TDS	1	PASI-K
		EPA 8260	EAG	8	PASI-K

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PROJECT NARRATIVE

Project: 074941 NELL HALL NO1 COP
Pace Project No.: 60246793

Method: **EPA 6010**
Description: 6010 MET ICP, Dissolved
Client: GHD Services_COP NM
Date: June 30, 2017

General Information:
5 samples were analyzed for EPA 6010. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3010 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: 074941 NELL HALL NO1 COP
Pace Project No.: 60246793

Method: **EPA 8260**
Description: 8260 MSV UST, Water
Client: GHD Services_COP NM
Date: June 30, 2017

General Information:
5 samples were analyzed for EPA 8260. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 482824

A matrix spike/matrix spike duplicate was not performed due to insufficient sample volume.

QC Batch: 482825

A matrix spike/matrix spike duplicate was not performed due to insufficient sample volume.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS

Project: 074941 NELL HALL NO1 COP
Pace Project No.: 60246793

Sample: GW-074941-061417-CN-MW-4 **Lab ID: 60246793001** Collected: 06/14/17 12:45 Received: 06/17/17 12:50 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Iron, Dissolved	**1030**	ug/L	50.0	1	06/23/17 16:10	06/26/17 11:56	7439-89-6	
8260 MSV UST, Water	Analytical Method: EPA 8260							
Benzene	ND	ug/L	1.0	1		06/28/17 06:33	71-43-2	
Ethylbenzene	ND	ug/L	1.0	1		06/28/17 06:33	100-41-4	
Toluene	ND	ug/L	1.0	1		06/28/17 06:33	108-88-3	
Xylene (Total)	ND	ug/L	3.0	1		06/28/17 06:33	1330-20-7	
Surrogates								
Toluene-d8 (S)	98	%	80-108	1		06/28/17 06:33	2037-26-5	
4-Bromofluorobenzene (S)	100	%	80-113	1		06/28/17 06:33	460-00-4	
1,2-Dichloroethane-d4 (S)	103	%	80-114	1		06/28/17 06:33	17060-07-0	
Preservation pH	**1.0**		1.0	1		06/28/17 06:33		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 074941 NELL HALL NO1 COP
Pace Project No.: 60246793

Sample: GW-074941-061417-CN-MW-5 **Lab ID: 60246793002** Collected: 06/14/17 12:55 Received: 06/17/17 12:50 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Iron, Dissolved	**133**	ug/L	50.0	1	06/23/17 16:10	06/26/17 11:58	7439-89-6	
8260 MSV UST, Water	Analytical Method: EPA 8260							
Benzene	ND	ug/L	1.0	1		06/28/17 06:48	71-43-2	
Ethylbenzene	ND	ug/L	1.0	1		06/28/17 06:48	100-41-4	
Toluene	ND	ug/L	1.0	1		06/28/17 06:48	108-88-3	
Xylene (Total)	ND	ug/L	3.0	1		06/28/17 06:48	1330-20-7	
Surrogates								
Toluene-d8 (S)	101	%	80-108	1		06/28/17 06:48	2037-26-5	
4-Bromofluorobenzene (S)	105	%	80-113	1		06/28/17 06:48	460-00-4	
1,2-Dichloroethane-d4 (S)	100	%	80-114	1		06/28/17 06:48	17060-07-0	
Preservation pH	**1.0**		1.0	1		06/28/17 06:48		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 074941 NELL HALL NO1 COP
Pace Project No.: 60246793

Sample: GW-074941-061417-CN-MW-6 **Lab ID: 60246793003** Collected: 06/14/17 13:20 Received: 06/17/17 12:50 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Iron, Dissolved	**10600**	ug/L	50.0	1	06/23/17 16:10	06/26/17 12:05	7439-89-6	
8260 MSV UST, Water	Analytical Method: EPA 8260							
Benzene	**309**	ug/L	5.0	5		06/27/17 15:58	71-43-2	
Ethylbenzene	**103**	ug/L	5.0	5		06/27/17 15:58	100-41-4	
Toluene	ND	ug/L	5.0	5		06/27/17 15:58	108-88-3	
Xylene (Total)	**91.6**	ug/L	15.0	5		06/27/17 15:58	1330-20-7	
Surrogates								
Toluene-d8 (S)	102	%	80-108	5		06/27/17 15:58	2037-26-5	
4-Bromofluorobenzene (S)	106	%	80-113	5		06/27/17 15:58	460-00-4	
1,2-Dichloroethane-d4 (S)	99	%	80-114	5		06/27/17 15:58	17060-07-0	
Preservation pH	**1.0**		1.0	5		06/27/17 15:58		

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ANALYTICAL RESULTS

Project: 074941 NELL HALL NO1 COP
Pace Project No.: 60246793

Sample: GW-074941-061417-CN-MW-7 **Lab ID: 60246793004** Collected: 06/14/17 13:30 Received: 06/17/17 12:50 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Iron, Dissolved	ND	ug/L	50.0	1	06/23/17 16:10	06/26/17 12:07	7439-89-6	
8260 MSV UST, Water	Analytical Method: EPA 8260							
Benzene	ND	ug/L	1.0	1		06/28/17 00:42	71-43-2	
Ethylbenzene	ND	ug/L	1.0	1		06/28/17 00:42	100-41-4	
Toluene	ND	ug/L	1.0	1		06/28/17 00:42	108-88-3	
Xylene (Total)	ND	ug/L	3.0	1		06/28/17 00:42	1330-20-7	
Surrogates								
Toluene-d8 (S)	104	%	80-108	1		06/28/17 00:42	2037-26-5	
4-Bromofluorobenzene (S)	105	%	80-113	1		06/28/17 00:42	460-00-4	
1,2-Dichloroethane-d4 (S)	102	%	80-114	1		06/28/17 00:42	17060-07-0	
Preservation pH	**1.0**		1.0	1		06/28/17 00:42		

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ANALYTICAL RESULTS

Project: 074941 NELL HALL NO1 COP
Pace Project No.: 60246793

Sample: GW-074941-061417-CN-MW-8 **Lab ID: 60246793006** Collected: 06/14/17 13:50 Received: 06/17/17 08:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Iron, Dissolved	ND	ug/L	50.0	1	06/27/17 10:05	06/29/17 11:27	7439-89-6	
8260 MSV UST, Water	Analytical Method: EPA 8260							
Benzene	ND	ug/L	1.0	1		06/28/17 00:56	71-43-2	
Ethylbenzene	ND	ug/L	1.0	1		06/28/17 00:56	100-41-4	
Toluene	ND	ug/L	1.0	1		06/28/17 00:56	108-88-3	
Xylene (Total)	ND	ug/L	3.0	1		06/28/17 00:56	1330-20-7	
Surrogates								
Toluene-d8 (S)	106	%	80-108	1		06/28/17 00:56	2037-26-5	
4-Bromofluorobenzene (S)	107	%	80-113	1		06/28/17 00:56	460-00-4	
1,2-Dichloroethane-d4 (S)	99	%	80-114	1		06/28/17 00:56	17060-07-0	
Preservation pH	**1.0**		1.0	1		06/28/17 00:56		

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 074941 NELL HALL NO1 COP
Pace Project No.: 60246793

QC Batch: 482383 Analysis Method: EPA 6010
QC Batch Method: EPA 3010 Analysis Description: 6010 MET Dissolved
Associated Lab Samples: 60246793001, 60246793002, 60246793003, 60246793004

METHOD BLANK: 1975951 Matrix: Water
Associated Lab Samples: 60246793001, 60246793002, 60246793003, 60246793004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Iron, Dissolved	ug/L	ND	50.0	06/26/17 11:09	

LABORATORY CONTROL SAMPLE: 1975952

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Iron, Dissolved	ug/L	10000	9820	98	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1975953 1975954

Parameter	Units	60246772001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Iron, Dissolved	ug/L	662	10000	10000	10100	10200	94	95	75-125	1	20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 074941 NELL HALL NO1 COP
Pace Project No.: 60246793

QC Batch: 482717
QC Batch Method: EPA 3010
Analysis Method: EPA 6010
Analysis Description: 6010 MET Dissolved
Associated Lab Samples: 60246793006

METHOD BLANK: 1977606 Matrix: Water
Associated Lab Samples: 60246793006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Iron, Dissolved	ug/L	ND	50.0	06/29/17 10:30	

LABORATORY CONTROL SAMPLE: 1977607

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Iron, Dissolved	ug/L	10000	9970	100	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1977608 1977609

Parameter	Units	60246795004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Iron, Dissolved	ug/L	ND	10000	10000	9890	9860	98	98	75-125	0	20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

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QUALITY CONTROL DATA

Project: 074941 NELL HALL NO1 COP
Pace Project No.: 60246793

QC Batch: 482824 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV UST-WATER
Associated Lab Samples: 60246793003

METHOD BLANK: 1977957 Matrix: Water
Associated Lab Samples: 60246793003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Benzene	ug/L	ND	1.0	06/27/17 13:21	
Ethylbenzene	ug/L	ND	1.0	06/27/17 13:21	
Toluene	ug/L	ND	1.0	06/27/17 13:21	
Xylene (Total)	ug/L	ND	3.0	06/27/17 13:21	
1,2-Dichloroethane-d4 (S)	%	102	80-114	06/27/17 13:21	
4-Bromofluorobenzene (S)	%	106	80-113	06/27/17 13:21	
Toluene-d8 (S)	%	101	80-108	06/27/17 13:21	

LABORATORY CONTROL SAMPLE: 1977958

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L	20	20.1	100	82-115	
Ethylbenzene	ug/L	20	20.0	100	83-112	
Toluene	ug/L	20	19.9	100	78-113	
Xylene (Total)	ug/L	60	59.4	99	83-114	
1,2-Dichloroethane-d4 (S)	%			101	80-114	
4-Bromofluorobenzene (S)	%			98	80-113	
Toluene-d8 (S)	%			101	80-108	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

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QUALITY CONTROL DATA

Project: 074941 NELL HALL NO1 COP
Pace Project No.: 60246793

QC Batch: 482825 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV UST-WATER
Associated Lab Samples: 60246793004, 60246793006

METHOD BLANK: 1977959 Matrix: Water
Associated Lab Samples: 60246793004, 60246793006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Benzene	ug/L	ND	1.0	06/28/17 00:28	
Ethylbenzene	ug/L	ND	1.0	06/28/17 00:28	
Toluene	ug/L	ND	1.0	06/28/17 00:28	
Xylene (Total)	ug/L	ND	3.0	06/28/17 00:28	
1,2-Dichloroethane-d4 (S)	%	100	80-114	06/28/17 00:28	
4-Bromofluorobenzene (S)	%	105	80-113	06/28/17 00:28	
Toluene-d8 (S)	%	104	80-108	06/28/17 00:28	

LABORATORY CONTROL SAMPLE: 1977960

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L	20	18.6	93	82-115	
Ethylbenzene	ug/L	20	19.5	98	83-112	
Toluene	ug/L	20	18.9	95	78-113	
Xylene (Total)	ug/L	60	57.7	96	83-114	
1,2-Dichloroethane-d4 (S)	%			100	80-114	
4-Bromofluorobenzene (S)	%			100	80-113	
Toluene-d8 (S)	%			104	80-108	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

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QUALITY CONTROL DATA

Project: 074941 NELL HALL NO1 COP
Pace Project No.: 60246793

QC Batch: 482913
QC Batch Method: EPA 8260
Analysis Method: EPA 8260
Analysis Description: 8260 MSV UST-WATER
Associated Lab Samples: 60246793001, 60246793002

METHOD BLANK: 1978251 Matrix: Water
Associated Lab Samples: 60246793001, 60246793002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Benzene	ug/L	ND	1.0	06/28/17 02:45	
Ethylbenzene	ug/L	ND	1.0	06/28/17 02:45	
Toluene	ug/L	ND	1.0	06/28/17 02:45	
Xylene (Total)	ug/L	ND	3.0	06/28/17 02:45	
1,2-Dichloroethane-d4 (S)	%	106	80-114	06/28/17 02:45	
4-Bromofluorobenzene (S)	%	104	80-113	06/28/17 02:45	
Toluene-d8 (S)	%	100	80-108	06/28/17 02:45	

LABORATORY CONTROL SAMPLE: 1978252

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L	20	18.1	90	82-115	
Ethylbenzene	ug/L	20	18.8	94	83-112	
Toluene	ug/L	20	18.6	93	78-113	
Xylene (Total)	ug/L	60	57.9	96	83-114	
1,2-Dichloroethane-d4 (S)	%			102	80-114	
4-Bromofluorobenzene (S)	%			104	80-113	
Toluene-d8 (S)	%			99	80-108	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1978253 1978254

Parameter	Units	60246831007 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Benzene	ug/L	71.1	20	20	90.4	92.3	97	106	55-145	2	18	
Ethylbenzene	ug/L	8.9	20	20	25.5	27.3	83	92	45-152	7	11	
Toluene	ug/L	2.9	20	20	20.6	21.0	88	91	52-144	2	12	
Xylene (Total)	ug/L	11.4	60	60	61.7	65.3	84	90	54-146	6	12	
1,2-Dichloroethane-d4 (S)	%						94	93	80-114			
4-Bromofluorobenzene (S)	%						103	106	80-113			
Toluene-d8 (S)	%						96	99	80-108			
Preservation pH		1.0			1.0	1.0				0		

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

QUALIFIERS

Project: 074941 NELL HALL NO1 COP
Pace Project No.: 60246793

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

LABORATORIES

PASI-K Pace Analytical Services - Kansas City

BATCH QUALIFIERS

Batch: 482824

[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

Batch: 482825

[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 074941 NELL HALL NO1 COP
Pace Project No.: 60246793

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60246793001	**GW-074941-061417-CN-MW-4**	EPA 3010	482383	EPA 6010	482480
60246793002	**GW-074941-061417-CN-MW-5**	EPA 3010	482383	EPA 6010	482480
60246793003	**GW-074941-061417-CN-MW-6**	EPA 3010	482383	EPA 6010	482480
60246793004	**GW-074941-061417-CN-MW-7**	EPA 3010	482383	EPA 6010	482480
60246793006	**GW-074941-061417-CN-MW-8**	EPA 3010	482717	EPA 6010	482862
60246793001	**GW-074941-061417-CN-MW-4**	EPA 8260	482913		
60246793002	**GW-074941-061417-CN-MW-5**	EPA 8260	482913		
60246793003	**GW-074941-061417-CN-MW-6**	EPA 8260	482824		
60246793004	**GW-074941-061417-CN-MW-7**	EPA 8260	482825		
60246793006	**GW-074941-061417-CN-MW-8**	EPA 8260	482825		

Pace Analytical
www.pacelabs.com

Sample Condition Upon Receipt
ESI Tech Spec Client

WO# : 60246793

60246793

Client Name: GHD P66

Courier: FedEx ☒ UPS ☐ VIA ☐ Clay ☐ PEX ☐ ECI ☐ Pace ☐ Xroads ☐ Client ☐ Other ☐

Tracking #: 7869 0826 1730 Pace Shipping Label Used? Yes ☐ No ☐

Custody Seal on Cooler/Box Present: Yes ☒ No ☐ Seals intact: Yes ☒ No ☐

Packing Material: Bubble Wrap ☐ Bubble Bags ☒ Foam ☐ None ☐ Other ☐

Thermometer Used: CF +2.9 T-266 / CF +0.2 T-239 **Type of Ice:** (Wet) Blue None

Cooler Temperature (°C): **As-read** 4.4 **Corr. Factor** CF +2.9 CF +0.2 **Corrected** 4.6

Date and initials of person examining contents: JB 6/12/17

Temperature should be above freezing to 6°C

Chain of Custody present:	☒Yes ☐No ☐N/A	Extra sample not on COC,
Chain of Custody relinquished:	☒Yes ☐No ☐N/A	MW-8 6/14/17 at 1350 BP3F^{2-} (3)DG9H 006
Samples arrived within holding time:	☒Yes ☐No ☐N/A	
Short Hold Time analyses (<72hr):	☐Yes ☒No ☐N/A	
Rush Turn Around Time requested:	☐Yes ☒No ☐N/A	
Sufficient volume:	☒Yes ☐No ☐N/A	
Correct containers used:	☒Yes ☐No ☐N/A	
Pace containers used:	☒Yes ☐No ☐N/A	
Containers intact:	☒Yes ☐No ☐N/A	
Unpreserved 5035A / TX1005/1006 soils frozen in 48hrs?	☐Yes ☐No ☒N/A	
Filtered volume received for dissolved tests?	☒Yes ☐No ☐N/A	
Sample labels match COC: Date / time / ID / analyses	☒Yes ☐No ☐N/A	
Samples contain multiple phases? Matrix: WT	☐Yes ☒No ☐N/A	
Containers requiring pH preservation in compliance? (HNO_3, H_2SO_4, HCl<2; NaOH>9 Sulfide, NaOH>10 Cyanide) (Exceptions: VOA, Micro, O&G, KS TPH, OK-DRO)	☒Yes ☐No ☐N/A	
Cyanide water sample checks: ☒ N/A Lead acetate strip turns dark? (Record only) Potassium iodide test strip turns blue/purple? (Preserve)	☐Yes ☐No ☐Yes ☐No	
Trip Blank present:	☒Yes ☐No ☐N/A	
Headspace in VOA vials (>6mm):	☐Yes ☒No ☐N/A	
Samples from USDA Regulated Area: State:	☐Yes ☐No ☒N/A	
Additional labels attached to 5035A / TX1005 vials in the field?	☐Yes ☐No ☒N/A	

Client Notification/ Resolution: Copy COC to Client? Y / N Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: Alice Date: 6/14/17

Temp Log: Record start and finish times when unpacking cooler, if >20 min, recheck sample temps.

Start: 1045	Start:
End: 1054	End:
Temp:	Temp:

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page : 1 Of 1

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	GHD Services_COP NM	Report To:	Christine Mathews	Attention:	
Address:	6212 Indian School Rd. NE St2	Copy To:	Jeff Walker, Angela Bown	Company Name:	
	Albuquerque, NM 87110			Address:	
Email:	christine.mathews@ghd.com	Purchase Order #:	34005864	Pace Quote:	
Phone:	505-884-0672 Fax:	Project Name:	074941 Nell Hall No1 COP	Pace Project Manager:	alice.spiller@pacelabs.com,
Requested Due Date:		Project #:		Pace Profile #:	8644 , 34

Regulatory Agency

State / Location: NM

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique)	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test Y/N	8260 BTEX	Dissolved Fe-field filtered	Residual Chlorine (Y/N)	
1	GW-074941-061417-CN-MW-4	WT	G	6-14-17	1245				4			X	X						X	X		BP3F (3)D694 cu
2	GW-074941-061417-CN-MW-5				1255																	cu2
3	GW-074941-061417-CN-MW-6				1320																	cu3
4	GW-074941-061417-CN-MW-7				1330																	cu4
5																						(3)D694 FB cu5
6																						
7																						
8																						
9																						
10																						
11																						
12																						

Residual Chlorine (Y/N): 6024679

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
		6/16/17	16:00		6/16/17	0830	4C	Y	Y	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Charles Dyleski

SIGNATURE of SAMPLER: [signature] DATE Signed: 6-16-17

TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

Pace Analytical Services, LLC
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

October 11, 2017

Jeff Walker
GHD Services
6121 indian School Rd
Ste 200
Albuquerque, NM 87110

RE: Project: 11146004 NELL HALL
Pace Project No.: 60254379

Dear Jeff Walker:
Enclosed are the analytical results for sample(s) received by the laboratory on September 29, 2017. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Alice Spiller

Alice Spiller
alice.spiller@pacelabs.com
(913)563-1409
Project Manager

Enclosures

cc: Angela Bown, GHD Services
Christine Mathews, GHD Services

Pace Analytical Services, LLC
9608 Loiret Blvd.
Lenexa, KS 66219
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CERTIFICATIONS

Project: 11146004 NELL HALL
Pace Project No.: 60254379

Kansas Certification IDs

9608 Loiret Boulevard, Lenexa, KS 66219
WY STR Certification #: 2456.01
Arkansas Certification #: 15-016-0
Illinois Certification #: 003097
Iowa Certification #: 118
Kansas/NELAP Certification #: E-10116
Louisiana Certification #: 03055
Nevada Certification #: KS000212008A
Oklahoma Certification #: 9205/9935
Texas Certification #: T104704407
Utah Certification #: KS00021
Kansas Field Laboratory Accreditation: # E-92587
Missouri Certification: 10070

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

SAMPLE SUMMARY

Project: 11146004 NELL HALL
Pace Project No.: 60254379

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60254379001	**GW-11146004-092517-CN-MW-4**	Water	09/25/17 14:15	09/29/17 08:35
60254379002	**GW-11146004-092517-CN-MW-7**	Water	09/25/17 14:52	09/29/17 08:35
60254379003	**GW-11146004-092517-CN-MW-6**	Water	09/25/17 15:10	09/29/17 08:35
60254379004	**GW-11146004-092517-CN-MW-5**	Water	09/25/17 15:45	09/29/17 08:35
60254379005	**GW-11146004-092517-CN-MW-8**	Water	09/25/17 15:50	09/29/17 08:35
60254379006	**TB**	Water	09/25/17 14:15	09/29/17 08:35

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SAMPLE ANALYTE COUNT

Project: 11146004 NELL HALL
Pace Project No.: 60254379

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
60254379001	**GW-11146004-092517-CN-MW-4**	EPA 6010	TDS	1	PASI-K
		EPA 8260	PGH	8	PASI-K
60254379002	**GW-11146004-092517-CN-MW-7**	EPA 6010	TDS	1	PASI-K
		EPA 8260	PGH	8	PASI-K
60254379003	**GW-11146004-092517-CN-MW-6**	EPA 6010	TDS	1	PASI-K
		EPA 8260	PGH	8	PASI-K
60254379004	**GW-11146004-092517-CN-MW-5**	EPA 6010	TDS	1	PASI-K
		EPA 8260	PGH	8	PASI-K
60254379005	**GW-11146004-092517-CN-MW-8**	EPA 6010	TDS	1	PASI-K
		EPA 8260	PGH	8	PASI-K

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ANALYTICAL RESULTS

Project: 11146004 NELL HALL
Pace Project No.: 60254379

Sample: GW-11146004-092517-CN-MW-4 **Lab ID: 60254379001** Collected: 09/25/17 14:15 Received: 09/29/17 08:35 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Iron, Dissolved	ND	ug/L	50.0	1	10/06/17 16:14	10/09/17 13:26	7439-89-6	
8260 MSV UST, Water	Analytical Method: EPA 8260							
Benzene	ND	ug/L	1.0	1		10/05/17 02:57	71-43-2	
Ethylbenzene	ND	ug/L	1.0	1		10/05/17 02:57	100-41-4	
Toluene	ND	ug/L	1.0	1		10/05/17 02:57	108-88-3	
Xylene (Total)	ND	ug/L	3.0	1		10/05/17 02:57	1330-20-7	
Surrogates								
Toluene-d8 (S)	101	%	80-108	1		10/05/17 02:57	2037-26-5	
4-Bromofluorobenzene (S)	100	%	80-113	1		10/05/17 02:57	460-00-4	
1,2-Dichloroethane-d4 (S)	100	%	80-114	1		10/05/17 02:57	17060-07-0	
Preservation pH	**1.0**		1.0	1		10/05/17 02:57		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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(913)599-5665

ANALYTICAL RESULTS

Project: 11146004 NELL HALL
Pace Project No.: 60254379

Sample: GW-11146004-092517-CN-MW-7 **Lab ID: 60254379002** Collected: 09/25/17 14:52 Received: 09/29/17 08:35 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Iron, Dissolved	ND	ug/L	50.0	1	10/06/17 16:14	10/09/17 13:28	7439-89-6	
8260 MSV UST, Water	Analytical Method: EPA 8260							
Benzene	ND	ug/L	1.0	1		10/05/17 03:11	71-43-2	
Ethylbenzene	ND	ug/L	1.0	1		10/05/17 03:11	100-41-4	
Toluene	ND	ug/L	1.0	1		10/05/17 03:11	108-88-3	
Xylene (Total)	ND	ug/L	3.0	1		10/05/17 03:11	1330-20-7	
Surrogates								
Toluene-d8 (S)	100	%	80-108	1		10/05/17 03:11	2037-26-5	
4-Bromofluorobenzene (S)	100	%	80-113	1		10/05/17 03:11	460-00-4	
1,2-Dichloroethane-d4 (S)	95	%	80-114	1		10/05/17 03:11	17060-07-0	
Preservation pH	**1.0**		1.0	1		10/05/17 03:11		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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ANALYTICAL RESULTS

Project: 11146004 NELL HALL
Pace Project No.: 60254379

Sample: GW-11146004-092517-CN-MW-6 **Lab ID: 60254379003** Collected: 09/25/17 15:10 Received: 09/29/17 08:35 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Iron, Dissolved	**5730**	ug/L	50.0	1	10/06/17 16:14	10/09/17 13:31	7439-89-6	
8260 MSV UST, Water	Analytical Method: EPA 8260							
Benzene	**157**	ug/L	1.0	1		10/05/17 03:53	71-43-2	
Ethylbenzene	**28.6**	ug/L	1.0	1		10/05/17 03:53	100-41-4	
Toluene	ND	ug/L	1.0	1		10/05/17 03:53	108-88-3	
Xylene (Total)	**14.5**	ug/L	3.0	1		10/05/17 03:53	1330-20-7	
Surrogates								
Toluene-d8 (S)	100	%	80-108	1		10/05/17 03:53	2037-26-5	
4-Bromofluorobenzene (S)	99	%	80-113	1		10/05/17 03:53	460-00-4	
1,2-Dichloroethane-d4 (S)	99	%	80-114	1		10/05/17 03:53	17060-07-0	
Preservation pH	**1.0**		1.0	1		10/05/17 03:53		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 11146004 NELL HALL
Pace Project No.: 60254379

Sample: GW-11146004-092517-CN-MW-5 **Lab ID: 60254379004** Collected: 09/25/17 15:45 Received: 09/29/17 08:35 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Iron, Dissolved	**56.8**	ug/L	50.0	1	10/06/17 16:14	10/09/17 13:33	7439-89-6	
8260 MSV UST, Water	Analytical Method: EPA 8260							
Benzene	**147**	ug/L	1.0	1		10/05/17 03:25	71-43-2	
Ethylbenzene	**26.4**	ug/L	1.0	1		10/05/17 03:25	100-41-4	
Toluene	ND	ug/L	1.0	1		10/05/17 03:25	108-88-3	
Xylene (Total)	**13.5**	ug/L	3.0	1		10/05/17 03:25	1330-20-7	
Surrogates								
Toluene-d8 (S)	97	%	80-108	1		10/05/17 03:25	2037-26-5	
4-Bromofluorobenzene (S)	103	%	80-113	1		10/05/17 03:25	460-00-4	
1,2-Dichloroethane-d4 (S)	101	%	80-114	1		10/05/17 03:25	17060-07-0	
Preservation pH	**1.0**		1.0	1		10/05/17 03:25		

REPORT OF LABORATORY ANALYSIS

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(913)599-5665

ANALYTICAL RESULTS

Project: 11146004 NELL HALL
Pace Project No.: 60254379

Sample: GW-11146004-092517-CN-MW-8 **Lab ID: 60254379005** Collected: 09/25/17 15:50 Received: 09/29/17 08:35 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Iron, Dissolved	ND	ug/L	50.0	1	10/06/17 16:14	10/09/17 13:40	7439-89-6	
8260 MSV UST, Water	Analytical Method: EPA 8260							
Benzene	ND	ug/L	1.0	1		10/05/17 03:39	71-43-2	
Ethylbenzene	ND	ug/L	1.0	1		10/05/17 03:39	100-41-4	
Toluene	ND	ug/L	1.0	1		10/05/17 03:39	108-88-3	
Xylene (Total)	ND	ug/L	3.0	1		10/05/17 03:39	1330-20-7	
Surrogates								
Toluene-d8 (S)	99	%	80-108	1		10/05/17 03:39	2037-26-5	
4-Bromofluorobenzene (S)	100	%	80-113	1		10/05/17 03:39	460-00-4	
1,2-Dichloroethane-d4 (S)	98	%	80-114	1		10/05/17 03:39	17060-07-0	
Preservation pH	**1.0**		1.0	1		10/05/17 03:39		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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(913)599-5665

QUALITY CONTROL DATA

Project: 11146004 NELL HALL
Pace Project No.: 60254379

QC Batch: 497371 Analysis Method: EPA 6010
QC Batch Method: EPA 3010 Analysis Description: 6010 MET Dissolved
Associated Lab Samples: 60254379001, 60254379002, 60254379003, 60254379004, 60254379005

METHOD BLANK: 2034591 Matrix: Water
Associated Lab Samples: 60254379001, 60254379002, 60254379003, 60254379004, 60254379005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Iron, Dissolved	ug/L	ND	50.0	10/09/17 13:12	

LABORATORY CONTROL SAMPLE: 2034592

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Iron, Dissolved	ug/L	10000	9370	94	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2034593 2034594

Parameter	Units	60254351007 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Iron, Dissolved	ug/L	93.2	10000	10000	9380	9330	93	92	75-125	1	20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 11146004 NELL HALL
Pace Project No.: 60254379

QC Batch: 497169 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV UST-WATER
Associated Lab Samples: 60254379001, 60254379002, 60254379003, 60254379004, 60254379005

METHOD BLANK: 2033893 Matrix: Water
Associated Lab Samples: 60254379001, 60254379002, 60254379003, 60254379004, 60254379005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Benzene	ug/L	ND	1.0	10/05/17 00:21	
Ethylbenzene	ug/L	ND	1.0	10/05/17 00:21	
Toluene	ug/L	ND	1.0	10/05/17 00:21	
Xylene (Total)	ug/L	ND	3.0	10/05/17 00:21	
1,2-Dichloroethane-d4 (S)	%	97	80-114	10/05/17 00:21	
4-Bromofluorobenzene (S)	%	98	80-113	10/05/17 00:21	
Toluene-d8 (S)	%	97	80-108	10/05/17 00:21	

LABORATORY CONTROL SAMPLE: 2033894

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L	20	20.2	101	82-115	
Ethylbenzene	ug/L	20	19.8	99	83-112	
Toluene	ug/L	20	19.7	99	78-113	
Xylene (Total)	ug/L	60	60.1	100	83-114	
1,2-Dichloroethane-d4 (S)	%			101	80-114	
4-Bromofluorobenzene (S)	%			99	80-113	
Toluene-d8 (S)	%			100	80-108	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

QUALIFIERS

Project: 11146004 NELL HALL
Pace Project No.: 60254379

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

LABORATORIES

PASI-K Pace Analytical Services - Kansas City

BATCH QUALIFIERS

Batch: 497169

[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 11146004 NELL HALL
Pace Project No.: 60254379

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60254379001	**GW-11146004-092517-CN-MW-4**	EPA 3010	497371	EPA 6010	497774
60254379002	**GW-11146004-092517-CN-MW-7**	EPA 3010	497371	EPA 6010	497774
60254379003	**GW-11146004-092517-CN-MW-6**	EPA 3010	497371	EPA 6010	497774
60254379004	**GW-11146004-092517-CN-MW-5**	EPA 3010	497371	EPA 6010	497774
60254379005	**GW-11146004-092517-CN-MW-8**	EPA 3010	497371	EPA 6010	497774
60254379001	**GW-11146004-092517-CN-MW-4**	EPA 8260	497169		
60254379002	**GW-11146004-092517-CN-MW-7**	EPA 8260	497169		
60254379003	**GW-11146004-092517-CN-MW-6**	EPA 8260	497169		
60254379004	**GW-11146004-092517-CN-MW-5**	EPA 8260	497169		
60254379005	**GW-11146004-092517-CN-MW-8**	EPA 8260	497169		

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Sample Condition Upon Receipt

WO# : 60254379

60254379

Client Name: GHD Services

Courier: FedEx ☒ UPS ☐ VIA ☐ Clay ☐ PEX ☐ ECI ☐ Pace ☐ Xroads ☐ Client ☐ Other ☐

Tracking #: 7878 9032 2313 Pace Shipping Label Used? Yes ☒ No ☐

Custody Seal on Cooler/Box Present: Yes ☒ No ☐ Seals intact: Yes ☒ No ☐

Packing Material: Bubble Wrap ☐ Bubble Bags ☒ Foam ☐ None ☐ Other ☐

Thermometer Used: CF 0.0 T-266 / CF +0.3 T-239 **Type of Ice:** Wet Blue None

Cooler Temperature (°C): **As-read** 3.1 **Corr. Factor** CF 0.0 CF+0.3 **Corrected** 3.1

RH 9/29/17

Date and initials of person examining contents:

Temperature should be above freezing to 6°C

Chain of Custody present:	☒Yes ☐No ☐N/A	
Chain of Custody relinquished:	☒Yes ☐No ☐N/A	
Samples arrived within holding time:	☒Yes ☐No ☐N/A	
Short Hold Time analyses (<72hr):	☐Yes ☒No ☐N/A	
Rush Turn Around Time requested:	☐Yes ☒No ☐N/A	
Sufficient volume:	☒Yes ☐No ☐N/A	
Correct containers used:	☒Yes ☐No ☐N/A	
Pace containers used:	☒Yes ☐No ☐N/A	
Containers intact:	☒Yes ☐No ☐N/A	
Unpreserved 5035A / TX1005/1006 soils frozen in 48hrs?	☐Yes ☐No ☒N/A	
Filtered volume received for dissolved tests?	☐Yes ☐No ☒N/A	
Sample labels match COC: Date / time / ID / analyses	☒Yes ☐No ☐N/A	
Samples contain multiple phases? Matrix: WT	☐Yes ☒No ☐N/A	
Containers requiring pH preservation in compliance? (HNO3, H2SO4, HCl<2; NaOH>9 Sulfide, NaOH>10 Cyanide) (Exceptions: VOA, Micro, O&G, KS TPH, OK-DRO)	☒Yes ☐No ☐N/A	
Cyanide water sample checks: ☒N/A Lead acetate strip turns dark? (Record only) Potassium iodide test strip turns blue/purple? (Preserve)	☐Yes ☐No ☐Yes ☐No	
Trip Blank present:	☒Yes ☐No ☐N/A	2 (DG9H) = TB
Headspace in VOA vials (>6mm):	☐Yes ☐No ☒N/A	
Samples from USDA Regulated Area: State:	☐Yes ☐No ☒N/A	
Additional labels attached to 5035A / TX1005 vials in the field?	☐Yes ☐No ☒N/A	

AKS

Client Notification/ Resolution: Copy COC to Client? Y / N Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: Alice Date: 10/03/17

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page : 1 Of 1

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	GHD Services, New Mexico	Report To:	Jeff Walker	Attention:	
Address:	6121 indian School Rd	Copy To:		Company Name:	
Albuquerque, NM 87110				Address:	
Email:	jeff.walker@ghd.com	Purchase Order #:		Pace Quote:	
Phone:	505-884-0672 Fax:	Project Name:	11146004 Nell Hall	Pace Project Manager:	alice.spiller@pacelabs.com,
Requested Due Date:		Project #:		Pace Profile #:	10540, line 1

Regulatory Agency	
State / Location	NM

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique)	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test Y/N	8260 BTEX	Dissolved Fe- field filtered												Residual Chlorine (Y/N)	60254379	
1	GW-11146004-092517-CN-MW-4			9/25/17	1415				4										X	X											3(DG9H),BP3N	001
2	GW-11146004-092517-CN-MW-7				1452				4										X	X												002
3	GW-11146004-092517-CN-MW-6				1510				4										X	X												003
4	GW-11146004-092517-CN-MW-5				1545				4										X	X												004
5	GW-11146004-092517-CN-MW-8				1550				4										X	X												005
6																															TB = 2(DG9H)	006
7																																
8																																
9																																
10																																
11																																
12																																

MATRIX CODE: Drinking Water DW; Water WT; Waste Water WW; Product P; Soil/Solid SL; Oil OL; Wipe WP; Air AR; Other OT; Tissue TS

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
		9/28/17	1105		9-29-17	0835	3.1	4	4	4

SAMPLER NAME AND SIGNATURE					
PRINT Name of SAMPLER:	Charles Neleigh		TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
SIGNATURE of SAMPLER:		DATE Signed: 9-28-17				

Pace Analytical Services, LLC
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Lenexa, KS 66219
(913)599-5665

December 18, 2017

Jeff Walker
GHD Services
6121 indian School Rd
Ste 200
Albuquerque, NM 87110

RE: Project: 11146004 NEIL HALL
Pace Project No.: 60259884

Dear Jeff Walker:
Enclosed are the analytical results for sample(s) received by the laboratory on December 08, 2017. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Colleen Clyne
colleen.clyne@pacelabs.com
1(913)563-1406
Project Manager

Enclosures

cc: Angela Bown, GHD Services
Christine Mathews, GHD Services

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CERTIFICATIONS

Project: 11146004 NEIL HALL
Pace Project No.: 60259884

Kansas Certification IDs

9608 Loiret Boulevard, Lenexa, KS 66219
WY STR Certification #: 2456.01
Arkansas Certification #: 17-016-0
Illinois Certification #: 200030
Iowa Certification #: 118
Kansas/NELAP Certification #: E-10116
Louisiana Certification #: 03055
Nevada Certification #: KS000212018-1
Oklahoma Certification #: 9205/9935
Texas Certification #: T104704407
Utah Certification #: KS00021
Kansas Field Laboratory Accreditation: # E-92587
Missouri Certification: 10070

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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SAMPLE SUMMARY

Project: 11146004 NEIL HALL
Pace Project No.: 60259884

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60259884001	**GW-11146004-120517-SP-MW-4**	Water	12/05/17 10:44	12/08/17 09:10
60259884002	**GW-11146004-120517-SP-MW-5**	Water	12/05/17 11:05	12/08/17 09:10
60259884003	**GW-11146004-120517-SP-MW-6**	Water	12/05/17 11:15	12/08/17 09:10
60259884004	**GW-11146004-120517-SP-MW-7**	Water	12/05/17 11:40	12/08/17 09:10
60259884005	**GW-11146004-120517-SP-MW-8**	Water	12/05/17 12:00	12/08/17 09:10
60259884006	**GW-11146004-120517-SP-DUP**	Water	12/05/17 12:00	12/08/17 09:10
60259884007	**TRIP BLANK**	Water	12/05/17 10:44	12/08/17 09:10

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SAMPLE ANALYTE COUNT

Project: 11146004 NEIL HALL
Pace Project No.: 60259884

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
60259884001	**GW-11146004-120517-SP-MW-4**	EPA 6010	TDS	1	PASI-K
		EPA 8260	JTK	8	PASI-K
60259884002	**GW-11146004-120517-SP-MW-5**	EPA 6010	TDS	1	PASI-K
		EPA 8260	JTK	8	PASI-K
60259884003	**GW-11146004-120517-SP-MW-6**	EPA 6010	TDS	1	PASI-K
		EPA 8260	JTK	8	PASI-K
60259884004	**GW-11146004-120517-SP-MW-7**	EPA 6010	TDS	1	PASI-K
		EPA 8260	JTK	8	PASI-K
60259884005	**GW-11146004-120517-SP-MW-8**	EPA 6010	TDS	1	PASI-K
		EPA 8260	JTK	8	PASI-K
60259884006	**GW-11146004-120517-SP-DUP**	EPA 8260	JTK	8	PASI-K
60259884007	**TRIP BLANK**	EPA 8260	JTK	8	PASI-K

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ANALYTICAL RESULTS

Project: 11146004 NEIL HALL
Pace Project No.: 60259884

Sample: GW-11146004-120517-SP-MW-4 **Lab ID: 60259884001** Collected: 12/05/17 10:44 Received: 12/08/17 09:10 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Iron, Dissolved	**564**	ug/L	50.0	1	12/13/17 10:38	12/15/17 15:17	7439-89-6	
8260 MSV UST, Water	Analytical Method: EPA 8260							
Benzene	ND	ug/L	1.0	1		12/13/17 07:05	71-43-2	
Ethylbenzene	ND	ug/L	1.0	1		12/13/17 07:05	100-41-4	
Toluene	ND	ug/L	1.0	1		12/13/17 07:05	108-88-3	
Xylene (Total)	ND	ug/L	3.0	1		12/13/17 07:05	1330-20-7	
Surrogates								
Toluene-d8 (S)	103	%	80-108	1		12/13/17 07:05	2037-26-5	
4-Bromofluorobenzene (S)	108	%	80-113	1		12/13/17 07:05	460-00-4	
1,2-Dichloroethane-d4 (S)	95	%	80-114	1		12/13/17 07:05	17060-07-0	
Preservation pH	**1.0**		1.0	1		12/13/17 07:05		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 11146004 NEIL HALL
Pace Project No.: 60259884

Sample: GW-11146004-120517-SP-MW-5 **Lab ID: 60259884002** Collected: 12/05/17 11:05 Received: 12/08/17 09:10 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Iron, Dissolved	ND	ug/L	50.0	1	12/13/17 10:38	12/15/17 15:20	7439-89-6	
8260 MSV UST, Water	Analytical Method: EPA 8260							
Benzene	ND	ug/L	1.0	1		12/13/17 07:20	71-43-2	
Ethylbenzene	ND	ug/L	1.0	1		12/13/17 07:20	100-41-4	
Toluene	ND	ug/L	1.0	1		12/13/17 07:20	108-88-3	
Xylene (Total)	ND	ug/L	3.0	1		12/13/17 07:20	1330-20-7	
Surrogates								
Toluene-d8 (S)	100	%	80-108	1		12/13/17 07:20	2037-26-5	
4-Bromofluorobenzene (S)	106	%	80-113	1		12/13/17 07:20	460-00-4	
1,2-Dichloroethane-d4 (S)	96	%	80-114	1		12/13/17 07:20	17060-07-0	
Preservation pH	**1.0**		1.0	1		12/13/17 07:20		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 11146004 NEIL HALL
Pace Project No.: 60259884

Sample: GW-11146004-120517-SP-MW-6 **Lab ID: 60259884003** Collected: 12/05/17 11:15 Received: 12/08/17 09:10 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Iron, Dissolved	**7580**	ug/L	50.0	1	12/13/17 10:38	12/15/17 15:22	7439-89-6	
8260 MSV UST, Water	Analytical Method: EPA 8260							
Benzene	**236**	ug/L	5.0	5		12/14/17 00:11	71-43-2	
Ethylbenzene	**24.3**	ug/L	1.0	1		12/13/17 07:35	100-41-4	
Toluene	ND	ug/L	1.0	1		12/13/17 07:35	108-88-3	
Xylene (Total)	**7.0**	ug/L	3.0	1		12/13/17 07:35	1330-20-7	
Surrogates								
Toluene-d8 (S)	99	%	80-108	1		12/13/17 07:35	2037-26-5	
4-Bromofluorobenzene (S)	104	%	80-113	1		12/13/17 07:35	460-00-4	
1,2-Dichloroethane-d4 (S)	94	%	80-114	1		12/13/17 07:35	17060-07-0	
Preservation pH	**1.0**		1.0	1		12/13/17 07:35		

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ANALYTICAL RESULTS

Project: 11146004 NEIL HALL
Pace Project No.: 60259884

Sample: GW-11146004-120517-SP-MW-7 **Lab ID: 60259884004** Collected: 12/05/17 11:40 Received: 12/08/17 09:10 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Iron, Dissolved	ND	ug/L	50.0	1	12/13/17 10:38	12/15/17 15:24	7439-89-6	
8260 MSV UST, Water	Analytical Method: EPA 8260							
Benzene	ND	ug/L	1.0	1		12/13/17 07:50	71-43-2	
Ethylbenzene	ND	ug/L	1.0	1		12/13/17 07:50	100-41-4	
Toluene	ND	ug/L	1.0	1		12/13/17 07:50	108-88-3	
Xylene (Total)	ND	ug/L	3.0	1		12/13/17 07:50	1330-20-7	
Surrogates								
Toluene-d8 (S)	102	%	80-108	1		12/13/17 07:50	2037-26-5	
4-Bromofluorobenzene (S)	106	%	80-113	1		12/13/17 07:50	460-00-4	
1,2-Dichloroethane-d4 (S)	95	%	80-114	1		12/13/17 07:50	17060-07-0	
Preservation pH	**1.0**		1.0	1		12/13/17 07:50		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 11146004 NEIL HALL
Pace Project No.: 60259884

Sample: GW-11146004-120517-SP-MW-8 **Lab ID: 60259884005** Collected: 12/05/17 12:00 Received: 12/08/17 09:10 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Iron, Dissolved	ND	ug/L	50.0	1	12/13/17 10:38	12/15/17 15:27	7439-89-6	
8260 MSV UST, Water	Analytical Method: EPA 8260							
Benzene	ND	ug/L	1.0	1		12/13/17 08:05	71-43-2	
Ethylbenzene	ND	ug/L	1.0	1		12/13/17 08:05	100-41-4	
Toluene	ND	ug/L	1.0	1		12/13/17 08:05	108-88-3	
Xylene (Total)	ND	ug/L	3.0	1		12/13/17 08:05	1330-20-7	
Surrogates								
Toluene-d8 (S)	103	%	80-108	1		12/13/17 08:05	2037-26-5	
4-Bromofluorobenzene (S)	109	%	80-113	1		12/13/17 08:05	460-00-4	
1,2-Dichloroethane-d4 (S)	95	%	80-114	1		12/13/17 08:05	17060-07-0	
Preservation pH	**1.0**		1.0	1		12/13/17 08:05		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 11146004 NEIL HALL
Pace Project No.: 60259884

Sample: GW-11146004-120517-SP-DUP **Lab ID: 60259884006** Collected: 12/05/17 12:00 Received: 12/08/17 09:10 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV UST, Water	Analytical Method: EPA 8260							
Benzene	ND	ug/L	1.0	1		12/13/17 08:20	71-43-2	
Ethylbenzene	ND	ug/L	1.0	1		12/13/17 08:20	100-41-4	
Toluene	ND	ug/L	1.0	1		12/13/17 08:20	108-88-3	
Xylene (Total)	ND	ug/L	3.0	1		12/13/17 08:20	1330-20-7	
Surrogates								
Toluene-d8 (S)	102	%	80-108	1		12/13/17 08:20	2037-26-5	
4-Bromofluorobenzene (S)	107	%	80-113	1		12/13/17 08:20	460-00-4	
1,2-Dichloroethane-d4 (S)	96	%	80-114	1		12/13/17 08:20	17060-07-0	
Preservation pH	**1.0**		1.0	1		12/13/17 08:20		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 11146004 NEIL HALL
Pace Project No.: 60259884

Sample: TRIP BLANK **Lab ID: 60259884007** Collected: 12/05/17 10:44 Received: 12/08/17 09:10 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV UST, Water	Analytical Method: EPA 8260							
Benzene	ND	ug/L	1.0	1		12/13/17 08:35	71-43-2	
Ethylbenzene	ND	ug/L	1.0	1		12/13/17 08:35	100-41-4	
Toluene	ND	ug/L	1.0	1		12/13/17 08:35	108-88-3	
Xylene (Total)	ND	ug/L	3.0	1		12/13/17 08:35	1330-20-7	
Surrogates								
Toluene-d8 (S)	102	%	80-108	1		12/13/17 08:35	2037-26-5	
4-Bromofluorobenzene (S)	106	%	80-113	1		12/13/17 08:35	460-00-4	
1,2-Dichloroethane-d4 (S)	96	%	80-114	1		12/13/17 08:35	17060-07-0	
Preservation pH	**1.0**		1.0	1		12/13/17 08:35		

REPORT OF LABORATORY ANALYSIS

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(913)599-5665

QUALITY CONTROL DATA

Project: 11146004 NEIL HALL
Pace Project No.: 60259884

QC Batch: 507060 Analysis Method: EPA 6010
QC Batch Method: EPA 3010 Analysis Description: 6010 MET Dissolved
Associated Lab Samples: 60259884001, 60259884002, 60259884003, 60259884004, 60259884005

METHOD BLANK: 2077289 Matrix: Water
Associated Lab Samples: 60259884001, 60259884002, 60259884003, 60259884004, 60259884005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Iron, Dissolved	ug/L	ND	50.0	12/15/17 14:38	

LABORATORY CONTROL SAMPLE: 2077290

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Iron, Dissolved	ug/L	10000	10200	102	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2077291 2077292

Parameter	Units	60259839001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Iron, Dissolved	ug/L	248	10000	10000	10400	10500	101	102	75-125	1	20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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Lenexa, KS 66219
(913)599-5665

QUALITY CONTROL DATA

Project: 11146004 NEIL HALL
Pace Project No.: 60259884

QC Batch: 506955 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV UST-WATER
Associated Lab Samples: 60259884001, 60259884002, 60259884003, 60259884004, 60259884005, 60259884006, 60259884007

METHOD BLANK: 2076882 Matrix: Water
Associated Lab Samples: 60259884001, 60259884002, 60259884003, 60259884004, 60259884005, 60259884006, 60259884007

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Benzene	ug/L	ND	1.0	12/13/17 03:35	
Ethylbenzene	ug/L	ND	1.0	12/13/17 03:35	
Toluene	ug/L	ND	1.0	12/13/17 03:35	
Xylene (Total)	ug/L	ND	3.0	12/13/17 03:35	
1,2-Dichloroethane-d4 (S)	%	95	80-114	12/13/17 03:35	
4-Bromofluorobenzene (S)	%	108	80-113	12/13/17 03:35	
Toluene-d8 (S)	%	102	80-108	12/13/17 03:35	

LABORATORY CONTROL SAMPLE: 2076883

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L	20	20.1	100	82-115	
Ethylbenzene	ug/L	20	19.6	98	83-112	
Toluene	ug/L	20	20.2	101	78-113	
Xylene (Total)	ug/L	60	60.0	100	83-114	
1,2-Dichloroethane-d4 (S)	%			93	80-114	
4-Bromofluorobenzene (S)	%			106	80-113	
Toluene-d8 (S)	%			102	80-108	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

QUALITY CONTROL DATA

Project: 11146004 NEIL HALL
Pace Project No.: 60259884

QC Batch: 507212
QC Batch Method: EPA 8260
Analysis Method: EPA 8260
Analysis Description: 8260 MSV UST-WATER
Associated Lab Samples: 60259884003

METHOD BLANK: 2077907 Matrix: Water
Associated Lab Samples: 60259884003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Benzene	ug/L	ND	1.0	12/13/17 23:56	
1,2-Dichloroethane-d4 (S)	%	97	80-114	12/13/17 23:56	
4-Bromofluorobenzene (S)	%	108	80-113	12/13/17 23:56	
Toluene-d8 (S)	%	101	80-108	12/13/17 23:56	

LABORATORY CONTROL SAMPLE: 2077908

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L	20	21.8	109	82-115	
1,2-Dichloroethane-d4 (S)	%			94	80-114	
4-Bromofluorobenzene (S)	%			105	80-113	
Toluene-d8 (S)	%			102	80-108	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

QUALIFIERS

Project: 11146004 NEIL HALL
Pace Project No.: 60259884

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

LABORATORIES

PASI-K Pace Analytical Services - Kansas City

BATCH QUALIFIERS

Batch: 506955

[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

Batch: 507212

[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

Pace Analytical Services, LLC
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Lenexa, KS 66219
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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 11146004 NEIL HALL
Pace Project No.: 60259884

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60259884001	**GW-11146004-120517-SP-MW-4**	EPA 3010	507060	EPA 6010	507123
60259884002	**GW-11146004-120517-SP-MW-5**	EPA 3010	507060	EPA 6010	507123
60259884003	**GW-11146004-120517-SP-MW-6**	EPA 3010	507060	EPA 6010	507123
60259884004	**GW-11146004-120517-SP-MW-7**	EPA 3010	507060	EPA 6010	507123
60259884005	**GW-11146004-120517-SP-MW-8**	EPA 3010	507060	EPA 6010	507123
60259884001	**GW-11146004-120517-SP-MW-4**	EPA 8260	506955		
60259884002	**GW-11146004-120517-SP-MW-5**	EPA 8260	506955		
60259884003	**GW-11146004-120517-SP-MW-6**	EPA 8260	506955		
60259884003	**GW-11146004-120517-SP-MW-6**	EPA 8260	507212		
60259884004	**GW-11146004-120517-SP-MW-7**	EPA 8260	506955		
60259884005	**GW-11146004-120517-SP-MW-8**	EPA 8260	506955		
60259884006	**GW-11146004-120517-SP-DUP**	EPA 8260	506955		
60259884007	**TRIP BLANK**	EPA 8260	506955		

Pace Analytical® www.pacelabs.com

Sample Condition Upon Receipt

WO# : 60259884

60259884

Client Name: GHD NM

Courier: FedEx ☒ UPS ☐ VIA ☐ Clay ☐ PEX ☐ ECI ☐ Pace ☐ Xroads ☐ Client ☐ Other ☐

Tracking #: 7888 1801 3916 Pace Shipping Label Used? Yes ☐ No ☐

Custody Seal on Cooler/Box Present: Yes ☒ No ☐ Seals intact: Yes ☒ No ☐

Packing Material: Bubble Wrap ☐ Bubble Bags ☒ Foam ☐ None ☐ Other ☐

Thermometer Used: CF 0.0 T-266 / CF +0.2 T-239 **Type of Ice:** (Wet) Blue None

Cooler Temperature (°C): **As-read** 3.0 **Corr. Factor** CF 0.0 CF +0.2 **Corrected** 3.0

Date and initials of person examining contents: CK JB 12/8/17

Temperature should be above freezing to 6°C

Chain of Custody present:	☒Yes ☐No ☐N/A	
Chain of Custody relinquished:	☒Yes ☐No ☐N/A	
Samples arrived within holding time:	☒Yes ☐No ☐N/A	
Short Hold Time analyses (<72hr):	☐Yes ☒No ☐N/A	
Rush Turn Around Time requested:	☐Yes ☒No ☐N/A	
Sufficient volume:	☒Yes ☐No ☐N/A	
Correct containers used:	☒Yes ☐No ☐N/A	
Pace containers used:	☒Yes ☐No ☐N/A	
Containers intact:	☒Yes ☐No ☐N/A	
Unpreserved 5035A / TX1005/1006 soils frozen in 48hrs?	☐Yes ☐No ☒N/A	
Filtered volume received for dissolved tests?	☐Yes ☐No ☒N/A	
Sample labels match COC: Date / time / ID / analyses	☒Yes ☐No ☐N/A	
Samples contain multiple phases? Matrix: WT	☐Yes ☒No ☐N/A	
Containers requiring pH preservation in compliance? (HNO_3, H_2SO_4, HCl<2; NaOH>9 Sulfide, NaOH>10 Cyanide) (Exceptions: VOA, Micro, O&G, KS TPH, OK-DRO)	☒Yes ☐No ☐N/A	
Cyanide water sample checks: ☒ N/A Lead acetate strip turns dark? (Record only) Potassium iodide test strip turns blue/purple? (Preserve)	☐Yes ☐No ☐Yes ☐No	
Trip Blank present:	☒Yes ☐No ☐N/A	
Headspace in VOA vials (>6mm):	☐Yes ☒No ☐N/A	
Samples from USDA Regulated Area: State:	☐Yes ☐No ☒N/A	
Additional labels attached to 5035A / TX1005 vials in the field?	☐Yes ☐No ☒N/A	

Client Notification/ Resolution: Copy COC to Client? Y / N Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: _____ Date: _____

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page : 1 Of 1

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	GHD Services, New Mexico	Report To:	Jeff Walker	Attention:	
Address:	6121 indian School Rd	Copy To:		Company Name:	
Albuquerque, NM 87110				Address:	
Email:	jeff.walker@ghd.com	Purchase Order #:		Pace Quote:	
Phone:	505-884-0672 Fax:	Project Name:	11146004 Nell Hall	Pace Project Manager:	alice.spiller@pacelabs.com
Requested Due Date:		Project #:		Pace Profile #:	10540, line 1

Regulatory Agency: NM

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique)	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test Y/N	8260 BTEX	Dissolved Fe- field filtered	Residual Chlorine (Y/N)	
1	GW-11146004-120517-SP-MW-4	WT	G	12/5/17	1044				4			X	X						X	X		001
2	GW-11146004-120517-SP-MW-5				1105				4			X	X						X	X		002
3	GW-11146004-120517-SP-MW-6				1115				4			X	X						X	X		003
4	GW-11146004-120517-SP-MW-7				1140				4			X	X						X	X		004
5	GW-11146004-120517-SP-MW-8				1200				4			X	X						X	X		005
6	GW-11146004-120517-SP-DUP								3				X						X			006
7																						007
8																						
9																						
10																						
11																						
12																						

MATRIX CODE: Drinking Water DW; Water WT; Waste Water WW; Product P; Soil/Solid SL; Oil OL; Wipe WP; Air AR; Other OT; Tissue TS

60259884

(3) DGH BP3F 3.0

(2) DGH VG

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
	Steven Perez	12/7/17	1450		12/8/17	0910	3.0	Y	Y	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Steven Perez

SIGNATURE of SAMPLER: Steven Perez DATE Signed: 12/7/17

TEMP in C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)