

3R – 069

2015 AGWMR

01 / 04 / 2016



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Mr. Glenn von Gonten
New Mexico Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

January 4, 2016

Re: NMOCD Case No. 3R-069, 2015 Annual Groundwater Monitoring Report

Dear Mr. von Gonten:

Enclosed is the 2015 Annual Groundwater Monitoring Report for the Hampton No. 4M site. This report, prepared by GHD Services Inc., contains the results of groundwater monitoring from September 2015 at the referenced site.

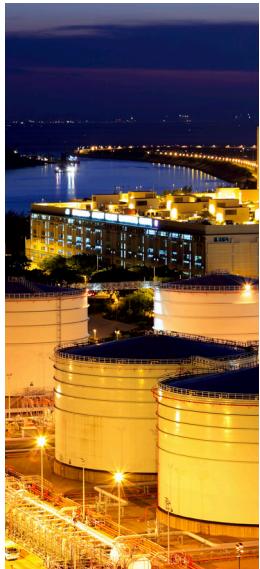
Please let me know if you have any questions.

Sincerely,

A handwritten signature in black ink, appearing to read "B. K. Coffman".

B. Keith Coffman

Enc



2015 Annual Groundwater Monitoring Report

ConocoPhillips Hampton No. 4M

San Juan County, New Mexico

API# 30-045-25810

NMOCD# 3R-069

ConocoPhillips Risk Management & Remediation

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1. Introduction

1.1 Introduction

This *2015 Annual Groundwater Monitoring Report* presents the results of groundwater monitoring conducted by GHD Services, Inc. (GHD) at the ConocoPhillips Company (ConocoPhillips) Hampton Number 4M Natural gas production wellsite (Site). The Site is situated on federal land approximately ¼ mile south of Hampton Arroyo, within Unit Letter N, Section 13, Township 30N, Range 11W of San Juan County, New Mexico (Figure 1). The Site consists of a natural gas production well and associated equipment. General features of the Site are depicted on Figure 2.

1.2 Background

The Hampton No. 4M gas well was spudded on November 22, 1983 by Southland Royalty Company (Southland). Burlington Resources, Inc. (Burlington) acquired Southland in January of 1996; Burlington was subsequently acquired by ConocoPhillips in March of 2006.

Public Service Company of New Mexico (PNM) operated a dehydration unit and an unlined earthen pit at the site from 1990 to 1996. Closure of the dehydrator pit in 1996 revealed impacted soil and groundwater. While drilling a monitor well upgradient of the former pit in January 1997, impacted groundwater was encountered adjacent to Burlington equipment. A groundwater seep was also discovered near the well pad in April 1997. PNM, Burlington, and the New Mexico Oil Conservation Division (NMOCD) agreed on the installation of a collection trench. In March 2000, the NMOCD named Burlington responsible party of impacts upgradient of the pit, while PNM was named responsible party of impacts downgradient of the pit. Burlington excavated approximately 120 cubic yards of impacted soil from the vicinity of MW-13 and MW-14 in mid-2000, destroying both monitor wells in the process. Maps outlining the excavation area for these activities, as well as a former excavation conducted by Burlington in December 1997 are provided in Appendix A.

The existing monitor well network consists of 8 wells: MW-1, MW-5, MW-9, MW-11, MW-12, MW-15, MW-16, and TMW-1. A mobile dual phase extraction (MDPE) event took place during August 2013. Monitor well MW-7 was damaged by heavy rains in September 2013, and plugged and abandoned in May 2014. A groundwater seep is also sampled as part of the current Site monitoring program, although the seep has been dry since 2011. A generalized geologic cross section for the Site is provided as Figure 3. Site history is summarized in Table 1.

2. Groundwater Monitoring Summary, Methodology, and Analytical Results

2.1 Groundwater Monitoring Summary

On September 23, 2015, groundwater elevation measurements were recorded from monitoring wells MW-1, MW-5, MW-9, MW-11, MW-12, MW-15, MW-16, and TMW-1 using an oil/water interface probe. Groundwater elevations for the Site are presented in Table 2.

September 2015 groundwater data indicates groundwater flow is to the north and is consistent with historical records. Groundwater gradient was estimated to be 0.006 ft/ft. A groundwater potentiometric surface map is presented as Figure 4.

2.2 Groundwater Monitoring Methodology

Monitoring well TMW-1 was dry and therefore not sampled. TMW-1 has consistently been dry since 2012. Monitoring well MW-16 contained approximately 2.44 feet of light non aqueous phase liquid (LNAPL) and was not sampled. An oil absorbent sock was placed in MW-16 to help recover LNAPL. The groundwater seep was dry and was not sampled. The location of the seep appeared to have been washed out or buried during recent heavy rainfall in the area.

Monitoring wells MW-1, MW-25, MW-9, MW-11, MW-12 and MW-15 were purged of at least three casing volumes of water using a dedicated polyethylene disposable bailer prior to sampling. Groundwater quality parameters including pH, temperature, oxidation reduction potential, total dissolved solids, and conductivity were collected using a calibrated YSI-556 Multi-Parameter Sonde and were recorded on GHD groundwater sampling field forms. Field parameters collected during sampling are included in Table 3.

Groundwater samples were placed in laboratory prepared bottles, packed on ice and shipped under chain-of-custody documentation to Pace Analytical Laboratories (Pace) located in Lenexa, Kansas. Groundwater samples were analyzed for benzene, toluene, ethylbenzene, and xylenes (BTEX) by EPA Method 8260, dissolved manganese by EPA Method 6010B, sulfate by EPA Method 300.0, and for total dissolved solids (TDS) by SM2540C.

2.3 Groundwater Monitoring Analytical Results

Groundwater collected from monitoring wells MW-1, MW-9, MW-11, and MW-15 were below the laboratory detection limit for BTEX constituents. Groundwater from monitoring wells MW-5 and MW-12 contained concentrations of benzene above the New Mexico Water Quality Control Commission (NMWQCC) groundwater quality standard of 0.01 milligrams per liter (mg/L).

Groundwater collected from all Site wells, including upgradient well MW-1, exceeded the NMWQCC standards for dissolved manganese, sulfate, and TDS. Groundwater concentrations are discussed below.

- *Benzene* – The NMWQCC standard for benzene is 0.01 milligrams per liter (mg/L). Groundwater collected from monitoring wells MW-5 and MW-12 contained benzene at concentrations of 0.015 and 0.246 mg/L, respectively.
- *Dissolved Manganese* – The NMWQCC standard for dissolved manganese is 0.2 mg/L. Dissolved manganese was found in excess of the NMWQCC standard in all Site wells. The concentration of dissolved manganese ranged from 4.2 mg/L (MW-11) to 10.2 mg/L (MW-12).
- *TDS* – The NMWQCC standard for TDS is 1,000 mg/L. TDS was found in excess of the NMWQCC standard in all Site wells. The concentration of TDS ranged from 2,550 mg/L (MW-11) to 4,340 mg/L (MW-5).
- *Sulfate* – The NMWQCC standard for sulfate is 600 mg/L. Sulfate was found in excess of the NMWQCC standard in all Site wells. The concentration of sulfate ranged from 1,740 mg/L (MW-11) to 2,550 mg/L (MW-15).

- A summary of groundwater laboratory analytical results is presented in Table 4. A groundwater concentration map is included as Figure 5. The September 2015 laboratory analytical report is included as Appendix B.

3. Conclusions and Recommendations

3.1 Conclusions

Based on the above referenced information, CRA makes the following conclusions are presented below:

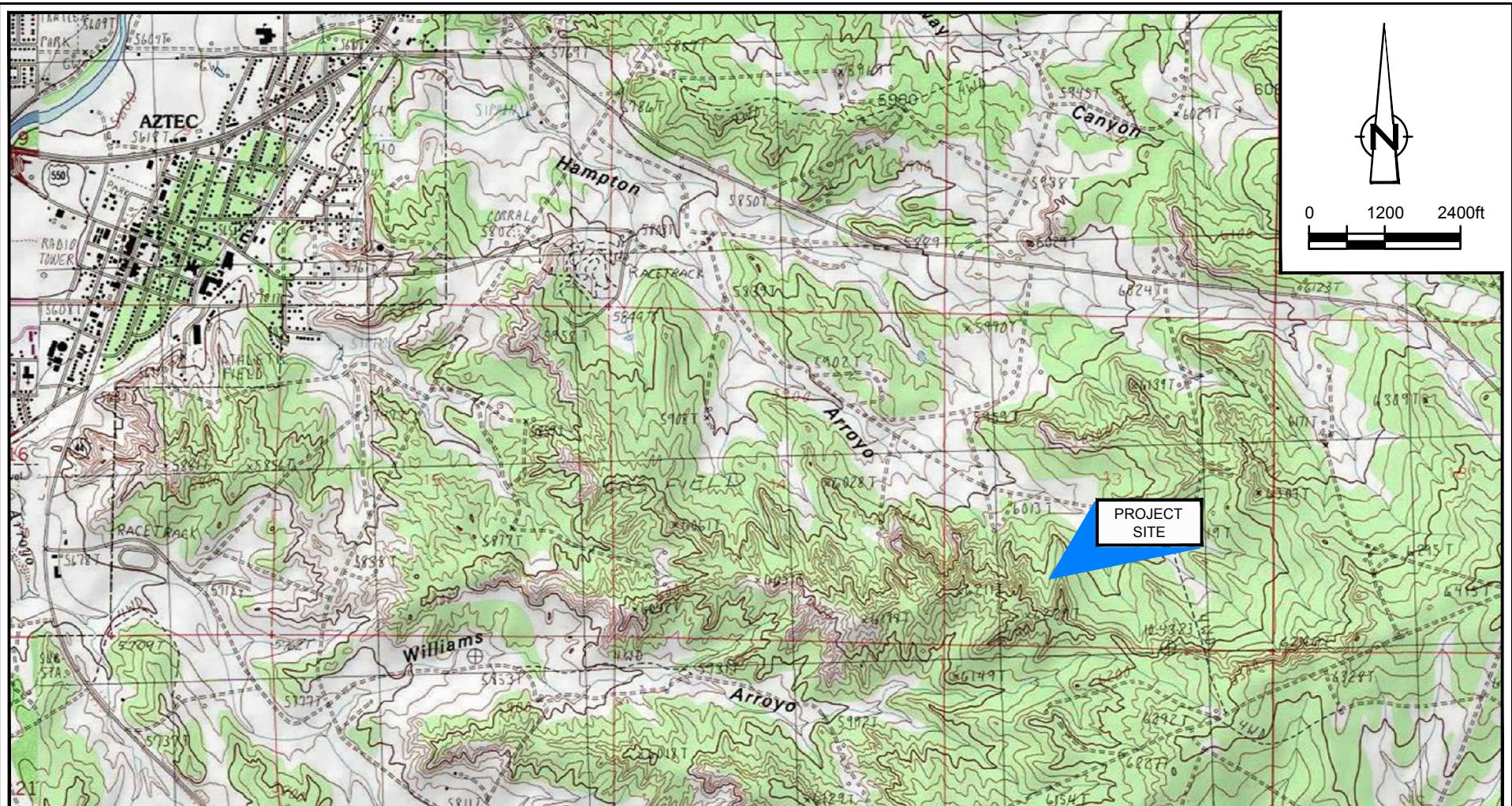
- Groundwater flow is towards the north and is consistent with historical records.
- The groundwater seep has been dry since 2011.
- TMW-1 has consistently been dry since 2012.
- Monitoring well MW-16 contained approximately 2.44 ft of LNAPL during the September 2015 groundwater sampling event. An oil absorbent sock was placed in MW-16 to recover LNAPL.
- Groundwater collected from monitoring wells MW-1, MW-9, MW-11 and MW-15 were below the laboratory detection limit for BTEX constituents. Groundwater from MW-5 and MW-12 contained concentrations of benzene above NMWQCC standard.
- Groundwater collected from all Site wells contained dissolved manganese, sulfate, and TDS above NMWQCC standards.

3.2 Recommendations

GHD recommends:

- Plugging and abandonment of TMW-1.
- Installation of a LNAPL recovery skimmer in monitoring well MW-16.
- Continuation of annual groundwater sampling of monitoring wells MW-5 and MW-12 for BTEX, dissolved manganese, sulfate, and TDS.
- Discontinuation of groundwater sampling and BTEX analyses for monitoring wells MW-1, MW-9, MW-11 and MW-15.

Figures



SOURCE: USGS 7.5 MINUTE QUAD
"AZTEC, NEW MEXICO"

LAT/LONG: 36.8089° NORTH, 107.9463° WEST
COORDINATE: NAD83 DATUM, U.S. FOOT
STATE PLANE ZONE - NEW MEXICO WEST

Figure 1

**SITE LOCATION MAP
HAMPTON No. 4M SITE
SECTION 13, T30N-R11W, SAN JUAN COUNTY, NEW MEXICO
*ConocoPhillips Company***



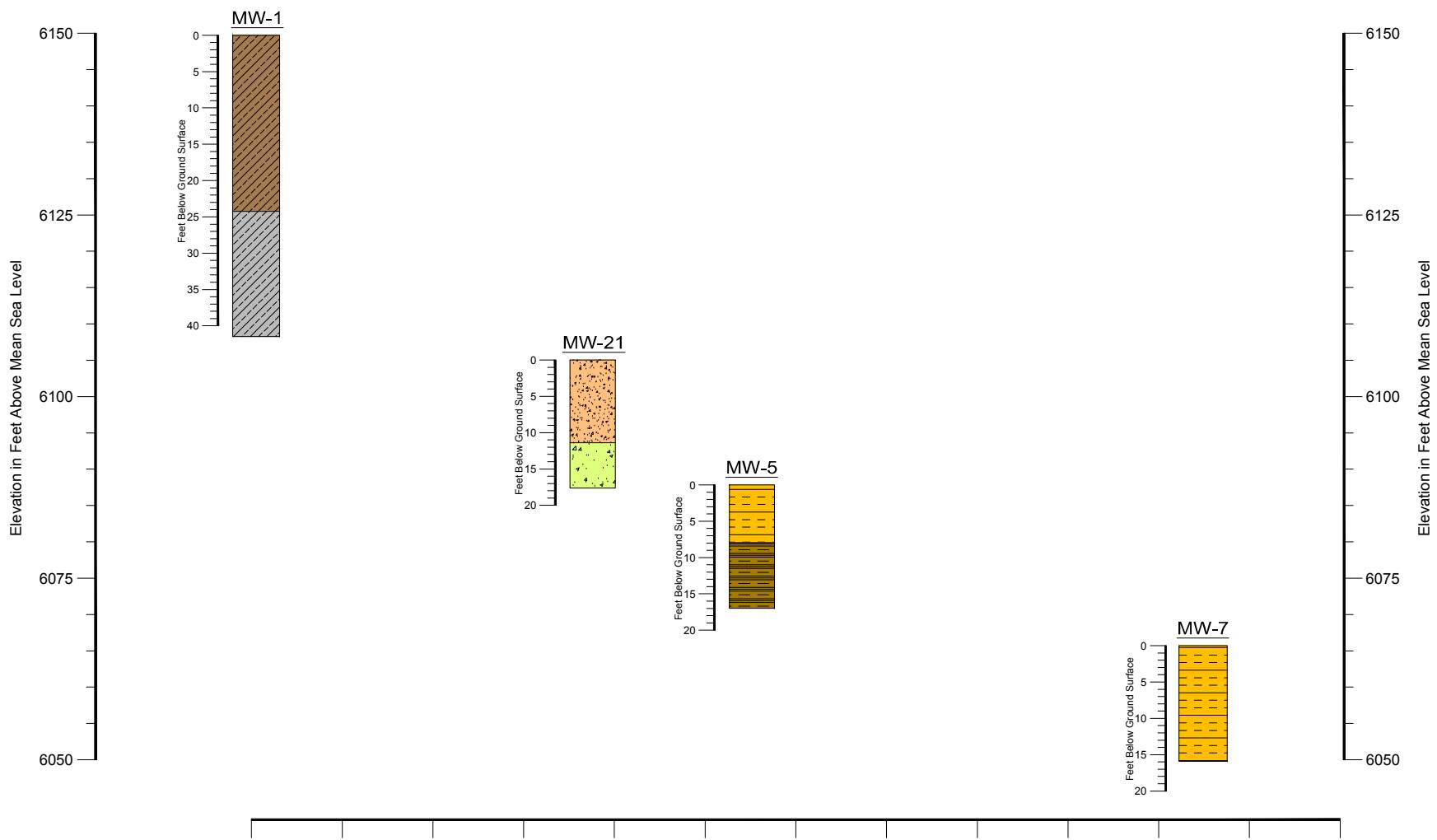


LEGEND

- Monitor Well Location
- Seep
- El Paso Gas Pipeline
- Plugged and Abandoned
- PnA

LAT/LONG: 36.8089° NORTH, 107.9463° WEST
COORDINATE: NAD83 DATUM, U.S. FOOT
STATE PLANE ZONE - NEW MEXICO WEST

Figure 2
SITE MAP
HAMPTON No. 4M SITE
SECTION 13, T30N-R11W, SAN JUAN COUNTY, NEW MEXICO
ConocoPhillips Company

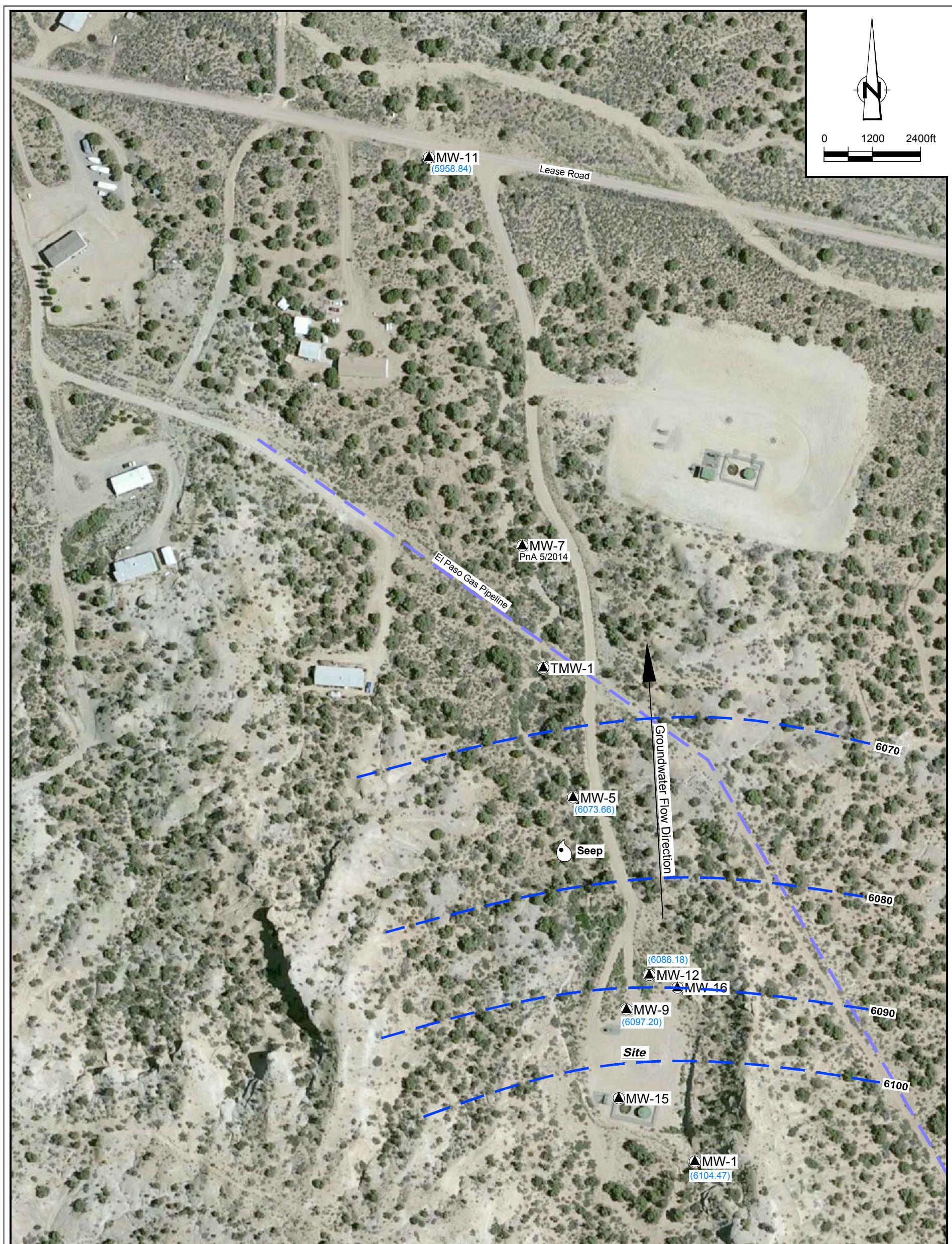


Lithology Index

	Brown Weathered Sandstone		Coarse Grained Sand
	Gray Weathered Sandstone		Silty Sand
	Very Coarse Grained Sand		Clayey Sand

Figure 3
GEOLOGICAL CROSS SECTION
HAMPTON No. 4M SITE
SECTION 13, T30N-R11W, SAN JUAN COUNTY, NEW MEXICO
ConocoPhillips Company





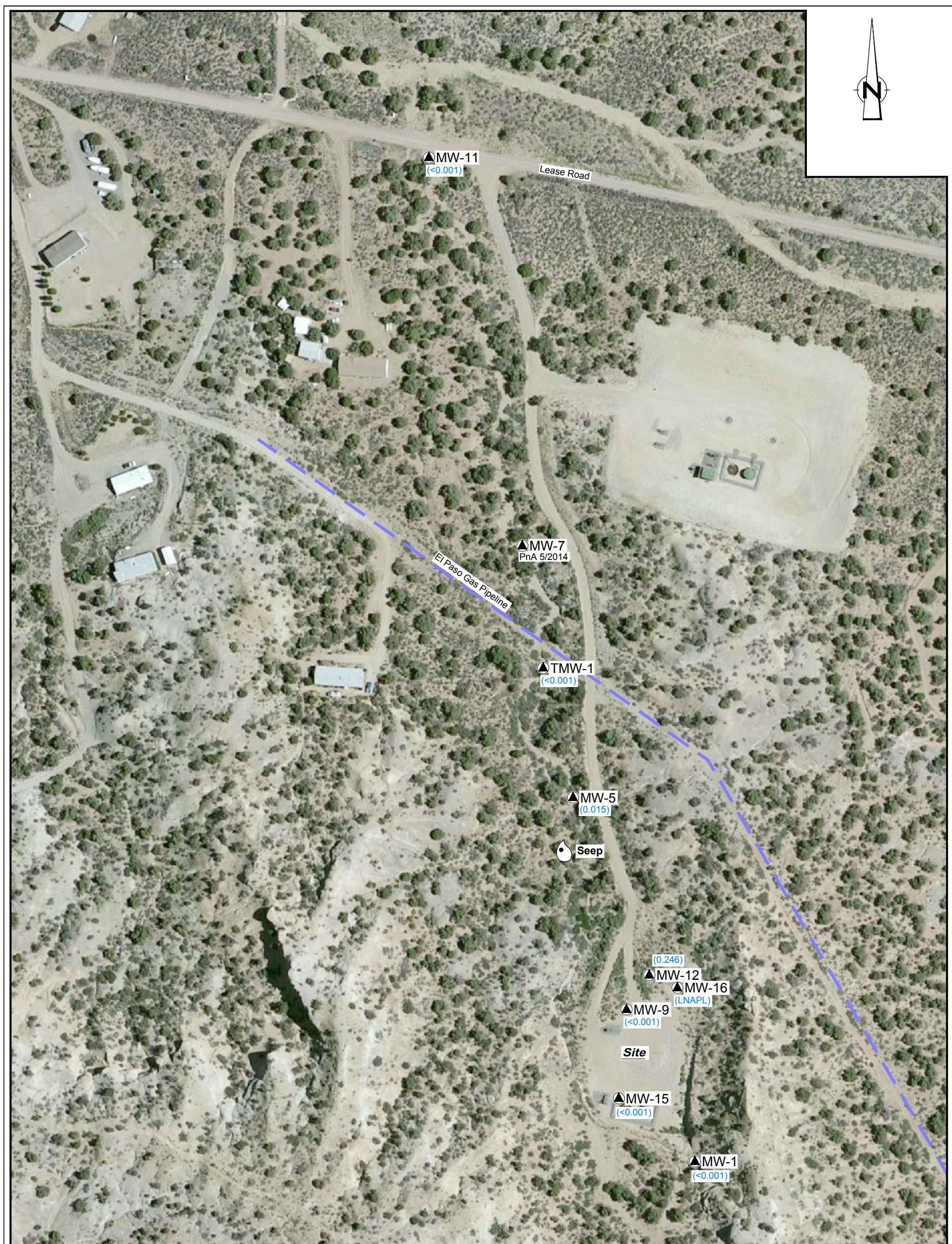
LEGEND

- ▲ Monitor Well Location
- Seep
- El Paso Gas Pipeline
- (6104.47) Groundwater Elevation, Ft
- 6100 Groundwater Elevation Contour, Ft
- Groundwater Flow Direction
- Plugged and Abandoned
- PnA

LAT/LONG: 36.8089° NORTH, 107.9463° WEST
COORDINATE: NAD83 DATUM, U.S. FOOT
STATE PLANE ZONE - NEW MEXICO WEST

Figure 4

SEPTEMBER 2015 GROUNDWATER POTENTIOMETRIC SURFACE MAP
HAMPTON No. 4M SITE
SECTION 13, T30N-R11W, SAN JUAN COUNTY, NEW MEXICO
ConocoPhillips Company



LEGEND

- Monitor Well Location
- Plugged and Abandoned Well
- Seep
- El Paso Gas Pipeline
- Benzene Concentration, mg/L
- Light Non-Aqueous Phase Liquids
- Plugged and Abandoned

LAT/LONG: 36.8089° NORTH, 107.9463° WEST
COORDINATE: NAD83 DATUM, U.S. FOOT
STATE PLANE ZONE - NEW MEXICO WEST

Figure 5
SEPTEMBER 2015 BENZENE CONCENTRATION MAP
HAMPTON No. 4M SITE
SECTION 13, T30N-R11W, SAN JUAN COUNTY, NEW MEXICO
ConocoPhillips Company

Tables

Table 1

Site History Timeline
ConocoPhillips Company
Hampton No. 4M
San Juan County, NM

Date	Event/Action	Description/Comments
11/22/1983	Well Spudded	Hampton No. 4M spudded by Southland Royalty Company (Southland Royalty).
3/1/1990	Operator Change	Southland Royalty entered into an agreement with Gas Company of New Mexico (predecessor to Public Service Company of New Mexico -- PNM) to sell production from the Hampton No. 4M well. PNM installed and operated dehydration equipment in the northern-most portion of the site as part of the contract.
6/30/1995	Transfer of Dehydration Equipment Ownership	Williams Field Services purchased the dehydration equipment from PNM.
1/2/1996	Transfer of Well Ownership	Burlington Resources completed the acquisition of Southland Royalty Company.
4/23/1996	Site Assessment	PNM discovered potential hydrocarbon contamination beneath PNM's dehydrator discharge pit during a site assessment. PNM subsequently began pit closure work.
12/16/1996	Site Assessment	PNM discovered hydrocarbon-impacted groundwater while drilling to determine the vertical extent of hydrocarbon contamination beneath a former unlined, earthen dehydrator discharge pit located on the north end of the Hampton No. 4M well pad. Total BTEX in groundwater was 20,620 parts per billion (ug/L) and benzene was 3,840 ug/l
1/13/1997	NMOCD Notified of Contamination	PNM notified NMOCD in writing of the discovery of groundwater contamination at the site.
1/28/1997	LNAPL Discovered	PNM gauged Monitor Well MW-2 and discovered approximately 4 feet of LNAPL.
1/31/1997	Monitor Well Installation	PNM installed two monitor wells upgradient from PNM's former pit. Impacted groundwater was discovered in the well adjacent to Burlington's equipment.
1/31/1997	Monitor Well Installation	PNM installed MW-3 and MW-4.
4/14/1997	Seep Discovered	During a site visit, Burlington discovered a surface seep north of the well pad with LNAPL discharging to a small drainage area. Burlington notified NMOCD and PNM on the same day.
4/16/1997	On-Site Meeting	Burlington hosted an on-site meeting with PNM and NMOCD to discuss the seep. NMOCD asked for immediate action to contain the seep. The group agreed to install a collection trench.
4/17/1997	Collection Trench Constructed	Burlington constructed a collection trench between the seep and the wellhead. A sandstone shelf was encountered 6 to 8 feet bgs. Black to grey saturated soil was found above the sandstone. Hydrocarbon vapors were monitored during construction of the trench with a photoionization detector (PID). PID readings were between 1,000 - 2,000 ppm
4/30/1997	Site Assessment	Burlington attempted to excavate the area of the former tank discharge pit. Sandstone was encountered at one foot below the bottom of the pit. The excavator could not penetrate the sandstone. There was no indication of hydrocarbon contamination in this area. Burlington subsequently excavated 9 to 10 test holes in the vicinity of the well pad. No hydrocarbon impacts were found in any of the test holes.
6/05/1997 through 6/6/1997	Monitor Well Installation	Burlington advanced 7 boreholes around the well pad. Each of the 7 boreholes was subsequently completed as a temporary monitor well.
8/1/1997	NMOCD Letter Issued	NMOCD issued a letter to PNM and Burlington. PNM was directed to assess contamination downgradient of its pit and Burlington was directed to submit an assessment plan for the portion of the site upgradient of the PNM disposal pit.
November 1997	Recovery Well System Installation	PNM installed an LNAPL recovery well system adjacent to PNM's former pit in November 1997 (exact dates unknown).

Table 1

Site History Timeline
ConocoPhillips Company
Hampton No. 4M
San Juan County, NM

December 1997 - 2000	Pit Excavations	Hydrocarbon impacted soil was excavated from December 1997 to 2000 at various locations to the depth of groundwater. Potassium permanganate was applied to the excavations.
January 1998	LNAPL Recovery Initiated	PNM initiated LNAPL recovery (exact date unknown).
2/23/1998	Letter From Downgradient Land Owner	Mr. J. Burton Everett, the owner of property downgradient of the Site, wrote a letter to the NMOCD, expressing concern over the migration of hydrocarbons onto his property.
3/13/1998	NMOCD Letter Issued	NMOCD sent a letter to PNM directing the removal, within 30 days, of the remaining source areas of LNAPL in the vicinity and immediately downgradient of PNM's former pit.
April/May 1998	Monitor Well Installation	LNAPL was discovered upgradient from the dehydration pit and Burlington installed two additional monitor wells.
10/28/1998	Burlington Responds to NMOCD Letter	Burlington responded to NMOCD's letter of September 1, 1998. The letter stated that if PNM did not begin remediation of PNM's former pit by October 30, 1998, Burlington would begin remediating the entire site, starting at PNM's former pit and working south to Burlington's former pit.
November 1998	LNAPL Recovery Efforts Terminated	PNM's LNAPL recovery efforts were terminated (exact date unknown) as a result of Burlington's removal of PNM's system during excavation activities.
4/14/1999	Seep Sampled	NMOCD sampled a groundwater seep to the northwest of the well pad. The analytical results revealed benzene in excess of NMWQCC groundwater quality standards.
3/24/2000	Order No. R-11134-A Issued to Burlington and PNM	NMOCD issued Order No. R-11134-A to Burlington and PNM. The Order: 1) denied the application by PNM for rescinding the prior directive, 2) declared Burlington the responsible party for any contamination south and upgradient to the PNM disposal pit, 3) declared PNM the responsible party for any soil contamination remaining below its former pit, 4) directed PNM and Burlington to share responsibility of remediation for any groundwater or soil contamination, other than soil contamination below the former PNM pit, remaining north and downgradient of the property for which Burlington is responsible, 5) directed PNM and Burlington to submit remediation plans to NMOCD, 6) directed both PNM and Burlington to begin remedial activities within 10 days of NMOCD approval of the plans, 7) directed PNM to have oversight and reporting responsibilities for GW remediation in the area north and downgradient of the property for which Burlington is responsible, and 8) retained jurisdiction for NMOCD for any further orders as may be necessary.
Second Quarter 2000	Pit Excavation	Burlington excavated approximately 120 cubic yards of hydrocarbon-impacted soil to groundwater depth in the vicinity of MW-13 and MW-14 in mid-2000 (exact dates unknown). Both wells were destroyed in the process. A shale confining layer was discovered at the bottom of the excavation. The excavated soil was landfarmed on a nearby wellpad lease.
Third Quarter 2001	Excavation Backfilled	Burlington backfilled the mid-2000 excavation area with clean fill.
3/31/2006	Operator Change	ConocoPhillips Company completed the acquisition of Burlington Resources.
11/8/2007 1/17/2008	Groundwater Monitoring Groundwater Monitoring	Tetra Tech conducted quarterly groundwater monitoring activities. Tetra Tech conducted quarterly groundwater monitoring activities.
3/19/2008	Groundwater Monitoring	Tetra Tech conducted quarterly groundwater monitoring activities.

Table 1

Site History Timeline
ConocoPhillips Company
Hampton No. 4M
San Juan County, NM

7/22/2008	Groundwater Monitoring	Tetra Tech conducted quarterly groundwater monitoring activities.
10/23/2008	Groundwater Monitoring	Tetra Tech conducted quarterly groundwater monitoring activities.
1/29/2009	Groundwater Monitoring	Tetra Tech conducted quarterly groundwater monitoring activities.
9/24/2009	Groundwater Monitoring	Tetra Tech completed annual groundwater monitoring activities.
9/28/2010	Groundwater Monitoring	Tetra Tech completed annual groundwater monitoring activities. LNAPL was encountered in MW-16. Tetra Tech purged LNAPL from the well and placed two absorbent socks in MW-16.
12/15/2010	Assessment of MW-16	Tetra Tech returned to the Site to check the status of the absorbent socks in MW-16. The socks were saturated. Tetra Tech purged approximately 3.5 gallons of LNAPL and water from the well and placed three additional absorbent socks in MW-16.
6/15/2011	Transfer of Site Consulting Responsibilities	Site consulting responsibilities were transferred from Tetra Tech to Conestoga-Rovers & Associates (CRA), Inc. of Albuquerque, NM.
10/4/2011 and 10/11/2011	Groundwater Monitoring	CRA completed annual groundwater monitoring activities. Oil absorbent socks in MW-16 were found saturated and were replaced on 10/4/11. The new socks were found to be saturated on 10/11/11, and were not replaced due to the rapidity of saturation. One gallon of LNAPL was recovered during the sampling event.
4/25/2012	Assessment of MW-16	CRA recovered approximately one half gallon of product from MW-16 and placed three oil absorbent socks in the well.
6/6/2012	Assessment of MW-16	CRA recovered approximately one quarter gallon of product from MW-16 and replaced oil absorbent socks.
9/25/2012 and 9/26/2012	Groundwater Monitoring	CRA completed annual groundwater monitoring activities. One half gallon of LNAPL was recovered from MW-16 during the sampling event and the oil absorbent socks were replaced.
8/26/2013	Mobile Dual Phase Extraction Event	Mobile dual phase extraction (MDPE) was attempted using Monitor Wells MW-16 and MW-12. Only a minimal amount of LNAPL was recovered; 0.92 gallons from MW-16 and only 0.07 gallons from MW-12. Vapor recovery rates indicated very little LNAPL present in soil surrounding MW-12 and MW-16.
9/18/2013	Groundwater Monitoring	CRA completed annual groundwater monitoring activities. One half gallon of LNAPL was recovered from MW-16 during the sampling event and the oil absorbent socks were replaced.
3/24/2014	Oxidant injection treatment study	CRA completed sampling of MW-1 and MW-12 for full-list VOC's and SVOC's, inorganics, and general chemistry analytes in order to conduct a oxidant injection treatment study.
5/9/2014	Monitor Well Plugging and Abandoning	CRA plugged and abandoned MW-7.
9/24/2014	Groundwater Monitoring	CRA completed annual groundwater monitoring activities. One half gallon of LNAPL was recovered from MW-16 during the sampling event and the oil absorbent socks were replaced.
9/23/2015	Groundwater Monitoring	GHD (formerly CRA) completed annual groundwater monitoring activities. Approximately 2.44 feet of LNAPL was measured in MW-16. Fresh oil absorbent socks were placed in MW-16.

Table 2

Monitor Well Specifications and Groundwater Elevations
ConocoPhillips Company
Hampton No. 4M
San Juan County

Monitor Well	TOC Elevation (ft AMSL)	Sample Date	Depth to LNAPL (ft)	Depth to Water (ft)	GW Elevation (ft AMSL)
MW-1	6149.42	11/8/2007		42.81	6106.61
		1/17/2008		42.96	6106.46
		3/19/2008		42.93	6106.49
		7/22/2008		42.74	6106.68
		10/23/2008		32.80	6116.62
		1/21/2009		42.90	6106.52
		9/24/2009		43.09	6106.33
		9/28/2010		43.19	6106.23
		10/11/2011		43.55	6105.87
		9/25/2012		43.88	6105.54
		9/18/2013		44.32	6105.10
		3/24/2014		44.10	6105.32
		9/24/2014		44.69	6104.73
		9/23/2015		44.95	6104.47
MW-5	6090.83	11/8/2007		16.52	6074.31
		1/17/2008		15.65	6075.18
		3/19/2008		13.64	6077.19
		7/22/2008		15.72	6075.11
		10/23/2008		16.53	6074.3
		1/21/2009		16.04	6074.79
		9/24/2009		16.89	6073.94
		9/28/2010		16.55	6074.28
		10/11/2011		17.39	6073.44
		9/25/2012		17.46	6073.37
		9/18/2013		16.78	6074.05
		9/24/2014		17.50	6073.33
		9/23/2015		17.17	6073.66
MW-7	6066.91	11/8/2007		20.22	6046.69
		1/17/2008		20.50	6046.41
		3/19/2008		20.02	6046.89
		7/22/2008		19.29	6047.62
		10/23/2008		19.95	6046.96
		1/21/2009		20.44	6046.47
		9/24/2009		20.55	6046.36
		9/28/2010		21.24	6045.67
		10/11/2011		DRY	--
		9/25/2012		DRY	--
		9/18/2013		DRY	--
		5/9/2014		Well plugged and abandoned	

Table 2

Monitor Well Specifications and Groundwater Elevations
ConocoPhillips Company
Hampton No. 4M
San Juan County

MW-9	6122.52	11/8/2007	22.91	6099.61
		1/17/2008	22.76	6099.76
		3/19/2008	22.38	6100.14
		7/22/2008	23.10	6099.42
		10/23/2008	23.02	6099.5
		1/21/2009	22.85	6099.67
		9/24/2009	23.64	6098.88
		9/28/2010	23.70	6098.82
		10/11/2011	24.03	6098.49
		9/25/2012	24.61	6097.91
		9/18/2013	24.61	6097.91
		9/24/2014	25.18	6097.34
		9/23/2015	25.32	6097.20
MW-11	6015.75	11/8/2007	56.00	5959.75
		1/17/2008	55.86	5959.89
		3/19/2008	55.88	5959.87
		7/22/2008	55.71	5960.04
		10/23/2008	55.91	5959.84
		1/21/2009	55.75	5960
		9/24/2009	56.02	5959.73
		9/28/2010	56.06	5959.69
		10/11/2011	56.21	5959.54
		9/25/2012	56.41	5959.34
		9/18/2013	56.73	5959.02
		9/24/2014	56.91	5958.84
		9/23/2015	57.20	5958.55
MW-12	6109.02	11/8/2007	20.46	6088.56
		1/17/2008	20.24	6088.78
		3/19/2008	19.85	6089.17
		7/22/2008	20.54	6088.48
		10/23/2008	20.61	6088.41
		1/21/2009	20.37	6088.65
		9/24/2009	21.23	6087.79
		9/28/2010	21.27	6087.75
		10/11/2011	21.58	6087.44
		9/25/2012	22.14	6086.88
		9/18/2013	22.17	6086.85
		3/24/2014	21.64	6087.38
		9/24/2014	22.70	6086.32
		9/23/2015	22.84	6086.18

Table 2

Monitor Well Specifications and Groundwater Elevations
ConocoPhillips Company
Hampton No. 4M
San Juan County

MW-15	No survey - DTW only	11/8/2007		18.03	NA
		1/17/2008		18.20	NA
		3/19/2008		17.60	NA
		7/22/2008		17.79	NA
		10/23/2008		18.01	NA
		1/21/2009		18.20	NA
		9/24/2009		18.33	NA
		9/28/2010		18.25	NA
		10/11/2011		18.65	NA
		9/25/2012		18.97	NA
		9/18/2013		19.23	NA
		9/24/2014		19.43	NA
		9/23/2015		19.58	NA
MW-16	No survey - Theoretical DTW only	11/8/2007		25.03	NA
		1/17/2008		24.88	NA
		3/19/2008		24.37	NA
		7/22/2008		25.00	NA
		10/23/2008		25.57	NA
		1/21/2009		24.97	NA
		9/24/2009		25.75	NA
		9/28/2010		25.41	NA
		10/11/2011		28.26	NA
		9/25/2012	26.57	27.38	NA
		9/18/2013	27.34	28.15	NA
		3/24/2014	25.96	28.20	NA
		9/24/2014	28.00	28.84	NA
TMW-1	No survey - DTW only	9/23/2015	26.83	29.27	NA
		11/8/2007		19.06	NA
		1/17/2008		19.37	NA
		3/19/2008		18.55	NA
		7/22/2008		18.10	NA
		10/23/2008		19.19	NA
		1/21/2009		19.25	NA
		9/24/2009		19.61	NA
		9/28/2010		19.11	NA
		10/11/2011		19.39	NA
		9/25/2012		DRY	NA
		9/18/2013		DRY	NA
		9/24/2014		DRY	NA
		9/23/2015		DRY	NA

Notes:

ft = feet

AMSL = Above mean sea level

DTW = Depth to water

NA = Not available

LNAPL = light non-aqueous phase liquid

TABLE 3
FIELD PARAMETERS SUMMARY
CONOCOPHILLIPS COMPANY
HAMPTON NO. 4M
SAN JUAN COUNTY, NEW MEXICO

Well ID	Sample Date	Temperature (°C)	pH	TDS (g/L)	Conductivity (µS/cm)	DO (mg/L)	ORP (mV)	Volume (gallons)
MW-1	9/23/2015	12.65	5.20	2.10	3226	2.75	-26.0	1.25
MW-5	9/23/2015	15.63	5.85	2.85	4377	3.10	-114.9	0.50
MW-9	9/23/2015	15.69	4.98	2.50	3838	2.85	-15.0	2.50
	9/23/2015	14.61	5.13	2.48	3817	2.25	-32.4	3.00
	9/23/2015	14.50	5.19	2.48	3819	2.15	-35.2	3.50
MW-11	9/23/2015	14.31	7.02	1.71	2636	11.84	-46.1	4.75
	9/23/2015	13.92	6.54	1.89	2906	2.16	-54.7	5.25
	9/23/2015	13.82	6.37	1.88	2895	1.71	-88.6	5.75
MW-12	9/23/2015	14.34	5.67	2.35	3620	9.92	-14.0	2.75
	9/23/2015	14.34	5.95	2.36	3631	3.13	-33.20	3.25
	9/23/2015	14.31	6.00	2.36	3630	1.65	-44.0	3.75
MW-15	9/23/2015	15.18	3.92	2.28	3503	4.10	-3.5	1.50
	9/23/2015	15.17	3.88	2.28	3505	3.80	0.2	2.00
	9/23/2015	15.05	3.84	2.28	3502	3.59	5.9	2.50
MW-16	9/23/2015	Well not sampled - LNAPL Present						
TMW-1	9/23/2015	Well not sampled - Dry						

Notes:

TDS = total dissolved solids

DO = dissolved oxygen

ORP = oxidation-reduction potential

Table 4

Groundwater Laboratory Analytical Results Summary
ConocoPhillips Company
Hampton No. 4M
San Juan County

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Well ID	Sample ID	Date	Sample Type	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Xylenes (total) (mg/L)	Dissolved Manganese (mg/L)	Total Dissolved Solid (mg/L)	Sulfate (mg/L)
NMWQCC Groundwater Quality Standards										
				0.01	0.75	0.75	0.62	0.2	1000	600
MW-1	MW-1	10/30/1997	(orig)	0.0024	0.0023	< 0.0002	0.0011	--	--	--
	MW-1	1/12/1998	(orig)	0.0043	0.0033	0.0002	0.001	--	--	--
	MW-1	4/14/1998	(orig)	0.001	0.0013	< 0.0005	< 0.0005	--	--	--
	MW-1	7/1/1998	(orig)	0.0013	0.001	< 0.0005	0.0037	--	--	--
	MW-1	10/5/1998	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	--	--	--
	MW-1	1/27/1999	(orig)	0.0008	0.0009	< 0.0005	< 0.0015	--	--	--
	MW-1	7/12/1999	(orig)	0.0011	0.0005	< 0.0005	< 0.0005	--	--	--
	MW-1	9/24/2003	(orig)	0.0009 J	0.001	ND	0.0004 J	--	--	--
	MW-1	12/15/2003	(orig)	0.0011	0.0009 J	ND	ND	--	--	--
	MW-1	3/15/2004	(orig)	ND	ND	ND	ND	--	--	--
	MW-1	6/21/2004	(orig)	ND	ND	ND	ND	--	--	--
	MW-1	9/29/2004	(orig)	ND	ND	ND	ND	--	--	--
	MW-1	12/31/2004	(orig)	ND	0.0009 J	ND	0.0033 J	--	--	--
	MW-1	3/22/2005	(orig)	ND	0.0003 J	ND	ND	--	--	--
	MW-1	10/24/2005	(orig)	ND	ND	ND	ND	--	--	--
	MW-1	12/12/2005	(orig)	ND	0.0007 J	ND	0.0006 J	--	--	--
	MW-1	3/20/2006	(orig)	0.0011	0.0009 J	ND	0.0006 J	--	--	--
	MW-1	6/21/2006	(orig)	0.0003 J	0.0014	0.0004 J	0.0018 J	--	--	--
	MW-1	10/18/2006	(orig)	ND	0.0002	0.0002	0.0013	--	--	--
	MW-1	12/12/2006	(orig)	ND	0.0002	0.0002	0.0014	--	--	--
	MW-1	3/26/2007	(orig)	< 0.0003	0.0003 J	0.0002 J	0.0004 J	--	--	--
	MW-1	6/26/2007	(orig)	< 0.0003	< 0.0002	< 0.0002	< 0.0006	--	--	--
	MW-1	11/8/2007	(orig)	< 0.0005	< 0.0007	< 0.0008	< 0.0008	--	--	--
	MW-1	1/15/2008	(orig)	< 0.0005	< 0.0007	< 0.0008	< 0.0008	--	--	--
	MW-1	3/19/2008	(orig)	< 0.005	< 0.005	< 0.005	< 0.005	--	--	--
	MW-1	7/22/2008	(orig)	< 0.005	< 0.005	< 0.005	< 0.005	--	--	--
	MW-1	10/23/2008	(orig)	< 0.005	< 0.005	< 0.005	< 0.005	--	--	--
	MW-1	1/21/2009	(orig)	< 0.005	< 0.005	< 0.005	< 0.005	--	--	--
	MW-1	9/24/2009	(orig)	< 0.001	< 0.001	< 0.001	< 0.001	--	--	--
	MW-1	9/28/2010	(orig)	< 0.001	< 0.001	< 0.001	< 0.001	--	--	--
	GW-074927-100411-CM-002	10/4/2011	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	--	--	--
	GW-074927-092612-CM-MW-1	9/26/2012	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	--	--	--
	GW-074927-091813-CM-MW-1	9/18/2013	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	--	--	--
	GW-074927-032414-CM-MW-1	3/24/2014	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	5.86	3060	2450
	GW-074927-092414-CM-MW-1	9/24/2014	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	5.3	3070	2570
	GW-074927-092315-CB-MW-1	9/23/2015	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	4.9	2590	2080

Table 4

Groundwater Laboratory Analytical Results Summary
ConocoPhillips Company
Hampton No. 4M
San Juan County

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Well ID	Sample ID	Date	Sample Type	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Xylenes (total) (mg/L)	Dissolved Manganese (mg/L)	Total Dissolved Solid (mg/L)	Sulfate (mg/L)
NMWQCC Groundwater Quality Standards										
MW-5	10/29/1997	(orig)	5.934	10.024	0.709	8.188	0.62	0.2	1000	600
MW-5	1/12/1998	(orig)	7.521	11.213	0.779	8.436	--	--	--	--
MW-5	4/14/1998	(orig)	7	11	0.72	7.8	--	--	--	--
MW-5	7/1/1998	(orig)	6.5	10	0.78	7.5	--	--	--	--
MW-5	10/5/1998	(orig)	6.8	8.4	0.74	6.9	--	--	--	--
MW-5	11/9/1998	(orig)	6.2	8.2	0.67	6.5	--	--	--	--
MW-5	1/27/1999	(orig)	6.4	8.9	0.66	6.7	--	--	--	--
MW-5	5/5/1999	(orig)	6.8	9.8	0.9	7.8	--	--	--	--
MW-5	5/26/1999	(orig)	6.6	10	0.65	8.1	--	--	--	--
MW-5	7/12/1999	(orig)	6.3	10	0.75	8.8	--	--	--	--
MW-5	8/17/1999	(orig)	5.4	9.8	0.67	7.5	--	--	--	--
MW-5	8/17/1999	(Duplicate)	5.9	8.9	0.5	6.2	--	--	--	--
MW-5	10/21/1999	(orig)	5.2	9.6	0.65	6.9	--	--	--	--
MW-5	1/27/2000	(orig)	4.7	10	0.68	7.4	--	--	--	--
MW-5	6/13/2000	(orig)	8.4	19	1.7	22	--	--	--	--
MW-5	3/29/2001	(orig)	3.89	9.6	0.64	7.73	--	--	--	--
MW-5	6/26/2001	(orig)	3.8	11	0.7	9	--	--	--	--
MW-5	9/18/2001	(orig)	4.1	11	0.76	10	--	--	--	--
MW-5	12/18/2001	(orig)	3.2	9.7	0.6	7.8	--	--	--	--
MW-5	3/22/2002	(orig)	3.5	10	0.83	8.5	--	--	--	--
MW-5	6/28/2002	(orig)	3.7	12	0.76	10	--	--	--	--
MW-5	9/23/2002	(orig)	3	9.8	0.64	8.3	--	--	--	--
MW-5	12/31/2002	(orig)	2.9	8.9	0.58	7.3	--	--	--	--
MW-5	3/27/2003	(orig)	1.22	4.87	0.487	6.01	--	--	--	--
MW-5	6/27/2003	(orig)	2.04	8.55	0.64	8.05	--	--	--	--
MW-5	9/24/2003	(orig)	2.11	9.09	0.7	9.2	--	--	--	--
MW-5	12/15/2003	(orig)	2.15	9.24	0.72	8.81	--	--	--	--
MW-5	6/21/2004	(orig)	1.61	8.74	0.64	8.22	--	--	--	--
MW-5	9/29/2004	(orig)	1.71	7.25	0.67	8.09	--	--	--	--
MW-5	12/31/2004	(orig)	1.82	9.15	0.73	9.03	--	--	--	--
MW-5	3/15/2005	(orig)	1.37	8.1	0.66	8.71	--	--	--	--
MW-5	3/22/2005	(orig)	0.42	1.42	0.11	1.16	--	--	--	--
MW-5	10/24/2005	(orig)	1.07	6.66	0.61	7.62	--	--	--	--
MW-5	12/12/2005	(orig)	0.9	5.93	0.52	6.28	--	--	--	--
MW-5	3/20/2006	(orig)	0.82	6.27	0.51	6.04	--	--	--	--
MW-5	6/21/2006	(orig)	0.93	6.11	0.58	6.69	--	--	--	--
MW-5	10/18/2006	(orig)	0.69	5.14	0.5	5.87	--	--	--	--
MW-5	12/18/2006	(orig)	0.64	5.09	0.5	5.61	--	--	--	--
MW-5	3/26/2007	(orig)	0.66	6.47	0.53	5.45	--	--	--	--
MW-5	6/26/2007	(orig)	0.74	8.07	0.64	7.32	--	--	--	--
MW-5	11/8/2007	(orig)	0.41	4.8	0.39	5	--	--	--	--
MW-5	1/17/2008	(orig)	0.44	6.4	0.51	6.1	--	--	--	--
MW-5	3/19/2008	(orig)	0.37	2.9	0.24	2.57	--	--	--	--
MW-5	7/22/2008	(orig)	0.34	6.1	0.55	6.4	--	--	--	--
MW-5	10/23/2008	(orig)	0.27	6.2	0.44	6.3	--	--	--	--
MW-5	1/21/2009	(orig)	0.25	3.8	0.51	5.2	--	--	--	--
MW-5	9/24/2009	(orig)	0.19	4.3	0.47	5.1	--	--	--	--
MW-5	9/28/2010	(orig)	0.13	2.4	0.6	5.2	--	--	--	--
GW-074927-100411-CM-006	10/12/2011	(orig)	0.0652	1.22	0.443	3.21	--	--	--	--
GW-074927-100411-CM-007	10/12/2011	(Duplicate)	0.0796	1.22	0.488	3.46	--	--	--	--
GW-074927-092612-CM-MW-5	9/26/2012	(orig)	0.0898	0.626	0.551	3.59	--	--	--	--
GW-074927-091813-CM-MW-5	9/18/2013	(orig)	0.0359	0.154	0.227	1.32	--	--	--	--
GW-074927-092414-CM-MW-5	9/24/2014	(orig)	0.0041	0.0052	0.0338	0.106	3.5	4030	2690	
GW-074927-092315-CB-MW-5	9/23/2015	(orig)	0.015	0.0072	0.154	0.138	7.8	4340	2480	

Table 4

Groundwater Laboratory Analytical Results Summary
ConocoPhillips Company
Hampton No. 4M
San Juan County

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Well ID	Sample ID	Date	Sample Type	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Xylenes (total) (mg/L)	Dissolved Manganese (mg/L)	Total Dissolved Solid (mg/L)	Sulfate (mg/L)	
	NMWQCC Groundwater Quality Standards				0.01	0.75	0.75	0.62	0.2	1000	600
MW-7	MW-7	1/12/1998	(orig)	0.78	0.246	0.258	3.942	--	--	--	
	MW-7	4/14/1998	(orig)	0.82	0.34	0.19	2.45	--	--	--	
	MW-7	7/1/1998	(orig)	0.95	0.44	0.2	3.02	--	--	--	
	MW-7	10/5/1998	(orig)	1.6	0.93	0.18	1.53	--	--	--	
	MW-7	11/9/1998	(orig)	1.8	1	0.16	1.24	--	--	--	
	MW-7	1/27/1999	(orig)	2.1	1	0.16	1.05	--	--	--	
	MW-7	5/5/1999	(orig)	0.21	0.0029	0.03	0.147	--	--	--	
	MW-7	5/26/1999	(orig)	0.19	0.0074	0.032	0.15	--	--	--	
	MW-7	7/12/1999	(orig)	0.13	0.0072	0.022	0.1013	--	--	--	
	MW-7	10/21/1999	(orig)	0.26	0.011	0.015	0.089	--	--	--	
	MW-7	1/27/2000	(orig)	0.67	0.58	0.054	0.68	--	--	--	
	MW-7	6/17/2000	(orig)	0.42	1.1	0.075	1.4	--	--	--	
	MW-7	3/29/2001	(orig)	0.83	0.15	0.32	1.79	--	--	--	
	MW-7	6/26/2001	(orig)	0.54	0.33	0.25	1.41	--	--	--	
	MW-7	9/18/2001	(orig)	0.87	0.56	0.32	2.02	--	--	--	
	MW-7	12/18/2001	(orig)	0.4	0.03	0.16	0.885	--	--	--	
	MW-7	3/22/2002	(orig)	0.18	ND	0.078	0.26	--	--	--	
	MW-7	6/28/2002	(orig)	0.089	0.001	0.041	0.079	--	--	--	
	MW-7	9/23/2002	(orig)	0.08	0.003	0.031	0.01889	--	--	--	
	MW-7	12/31/2002	(orig)	0.16	0.0022	0.074	0.0315	--	--	--	
	MW-7	3/27/2003	(orig)	0.195	0.0004	0.0442	0.109	--	--	--	
	MW-7	6/27/2003	(orig)	0.3	0.0014 J	0.117	0.4616	--	--	--	
	MW-7	9/24/2003	(orig)	0.09	0.012	0.002	0.694	--	--	--	
	MW-7	3/15/2004	(orig)	0.056	0.001 J	0.006	0.003	--	--	--	
	MW-7	6/21/2004	(orig)	0.18	ND	0.055	0.058 J	--	--	--	
	MW-7	9/29/2004	(orig)	0.163	0.0009 J	0.0545	0.0698	--	--	--	
	MW-7	12/15/2004	(orig)	0.15	0.004 J	0.115	0.549	--	--	--	
	MW-7	12/31/2004	(orig)	0.094	0.003 J	0.01	0.024 J	--	--	--	
	MW-7	3/22/2005	(orig)	0.0208	ND	0.0024	0.0048	--	--	--	
	MW-7	10/24/2005	(orig)	0.0652	0.0007 J	0.002	0.0027 J	--	--	--	
	MW-7	12/12/2005	(orig)	0.0662	0.001 J	0.0087	0.0085 J	--	--	--	
	MW-7	3/20/2006	(orig)	0.072	ND	0.0126	0.0169	--	--	--	
	MW-7	6/21/2006	(orig)	0.0899	0.0106	0.0048	0.0145	--	--	--	
	MW-7	10/18/2006	(orig)	0.0319	0.0004 J	0.0018	0.0041	--	--	--	
	MW-7	12/12/2006	(orig)	0.0294	0.0015	0.0031	0.0057	--	--	--	
	MW-7	3/26/2007	(orig)	0.0115	0.001	0.0006 J	0.0008 J	--	--	--	
	MW-7	6/26/2007	(orig)	0.056	0.0004 J	0.0177	0.0013	--	--	--	
	MW-7	11/8/2007	(orig)	0.044	< 0.0007	0.002	< 0.0008	--	--	--	
	MW-7	1/17/2008	(orig)	0.017	< 0.0007	0.003	< 0.0008	--	--	--	
	MW-7	3/19/2008	(orig)	0.005	< 0.005	< 0.005	< 0.005	--	--	--	
	MW-7	7/22/2008	(orig)	0.032	< 0.005	0.012	0.007	--	--	--	
	MW-7	10/23/2008	(orig)	0.017	< 0.005	< 0.005	< 0.005	--	--	--	
	MW-7	1/21/2009	(orig)	< 0.005	< 0.005	< 0.005	< 0.005	--	--	--	
	MW-7	9/24/2009	(orig)	0.0037	< 0.001	< 0.001	< 0.001	--	--	--	
	MW-7	9/28/2010	(orig)	0.0013	< 0.001	0.0023	< 0.001	--	--	--	
	MW-7	10/11/2011					No sample collected; well dry.				
	MW-7	9/26/2012					No sample collected; well dry.				
	MW-7	9/18/2013					No sample collected; well dry.				
	MW-7	5/9/2014					Well plugged and abandoned.				

Table 4

Groundwater Laboratory Analytical Results Summary
ConocoPhillips Company
Hampton No. 4M
San Juan County

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Well ID	Sample ID	Date	Sample Type	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Xylenes (total) (mg/L)	Dissolved Manganese (mg/L)	Total Dissolved Solid (mg/L)	Sulfate (mg/L)
NMWQCC Groundwater Quality Standards										
MW-9	7/1/1998	(orig)	0.012	< 0.001	< 0.001	< 0.003	0.62	0.2	1000	600
MW-9	10/5/1998	(orig)	0.0008	< 0.0005	< 0.0005	0.0022	--	--	--	--
MW-9	11/9/1998	(orig)	0.073	< 0.0005	0.0022	0.0016	--	--	--	--
MW-9	1/27/1999	(orig)	0.12	< 0.0005	0.0025	0.0018	--	--	--	--
MW-9	5/5/1999	(orig)	0.12	< 0.0005	0.0016	0.0008	--	--	--	--
MW-9	5/26/1999	(orig)	0.14	< 0.0005	0.0015	< 0.0005	--	--	--	--
MW-9	5/26/1999	(Duplicate)	0.29	< 0.0005	0.0006	< 0.0015	--	--	--	--
MW-9	7/12/1999	(orig)	0.32	< 0.0005	0.0006	< 0.0015	--	--	--	--
MW-9	8/17/1999	(orig)	0.13	ND	ND	ND	--	--	--	--
MW-9	10/21/1999	(orig)	< 0.0005	0.0019	< 0.0005	0.0025	--	--	--	--
MW-9	1/27/2000	(orig)	< 0.0002	< 0.0002	< 0.0002	< 0.0002	--	--	--	--
MW-9	6/13/2000	(orig)	< 0.0005	< 0.0005	< 0.0005	< 0.001	--	--	--	--
MW-9	3/29/2001	(orig)	< 0.0005	< 0.0005	< 0.0005	< 0.001	--	--	--	--
MW-9	6/26/2001	(orig)	< 0.0005	< 0.0005	< 0.0005	< 0.001	--	--	--	--
MW-9	9/18/2001	(orig)	ND	ND	ND	ND	--	--	--	--
MW-9	12/18/2001	(orig)	ND	ND	ND	ND	--	--	--	--
MW-9	3/22/2002	(orig)	ND	ND	ND	ND	--	--	--	--
MW-9	6/28/2002	(orig)	ND	ND	ND	ND	--	--	--	--
MW-9	9/23/2002	(orig)	0.0004 J	ND	ND	ND	--	--	--	--
MW-9	3/27/2003	(orig)	ND	ND	ND	ND	--	--	--	--
MW-9	6/27/2003	(orig)	0.0005 J	ND	ND	ND	--	--	--	--
MW-9	9/24/2003	(orig)	ND	ND	ND	ND	--	--	--	--
MW-9	12/15/2003	(orig)	ND	ND	ND	ND	--	--	--	--
MW-9	3/15/2004	(orig)	ND	ND	ND	ND	--	--	--	--
MW-9	6/21/2004	(orig)	ND	0.0004 J	ND	0.0007 J	--	--	--	--
MW-9	9/29/2004	(orig)	ND	ND	ND	ND	--	--	--	--
MW-9	3/22/2005	(orig)	ND	ND	ND	ND	--	--	--	--
MW-9	6/23/2005	(orig)	ND	0.0003 J	ND	ND	--	--	--	--
MW-9	3/20/2006	(orig)	ND	ND	ND	ND	--	--	--	--
MW-9	6/21/2006	(orig)	ND	ND	ND	ND	--	--	--	--
MW-9	10/18/2006	(orig)	ND	ND	ND	0.0003 J	--	--	--	--
MW-9	12/12/2006	(orig)	0.0003 J	0.0007 J	0.0003 J	0.0012 J	--	--	--	--
MW-9	3/26/2007	(orig)	< 0.0003	< 0.0002	< 0.0002	< 0.0006	--	--	--	--
MW-9	6/26/2007	(orig)	< 0.0003	< 0.0002	< 0.0002	< 0.0006	--	--	--	--
MW-9	11/8/2007	(orig)	< 0.0005	< 0.0007	< 0.0008	< 0.0008	--	--	--	--
MW-9	1/17/2008	(orig)	< 0.0005	< 0.0007	< 0.0008	< 0.0008	--	--	--	--
MW-9	3/19/2008	(orig)	< 0.005	< 0.005	< 0.005	< 0.005	--	--	--	--
MW-9	7/22/2008	(orig)	< 0.005	< 0.005	< 0.005	< 0.005	--	--	--	--
MW-9	10/23/2008	(orig)	< 0.005	< 0.005	< 0.005	< 0.005	--	--	--	--
MW-9	1/21/2009	(orig)	< 0.005	< 0.005	< 0.005	< 0.005	--	--	--	--
MW-9	9/24/2009	(orig)	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	--	--	--
MW-9	9/28/2010	(orig)	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	--	--	--
GW-074927-100411-CM-004	10/4/2011	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	--	--	--	--
GW-074927-092612-CM-MW-9	9/26/2012	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	--	--	--	--
GW-074927-091813-CM-MW-9	9/18/2013	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	--	--	--	--
GW-074927-092414-CM-MW-9	9/24/2014	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	6.6	3800	2430	
GW-074927-092315-CB-MW-9	9/23/2015	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	4.5	3880	2510	

Table 4

Groundwater Laboratory Analytical Results Summary
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Well ID	Sample ID	Date	Sample Type	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Xylenes (total) (mg/L)	Dissolved Manganese (mg/L)	Total Dissolved Solid (mg/L)	Sulfate (mg/L)
NMWQCC Groundwater Quality Standards										
MW-11	1/27/1999	(orig)	< 0.0005	0.0025	0.0007	0.0131	--	--	--	--
MW-11	5/5/1999	(orig)	< 0.0005	< 0.0005	< 0.0005	< 0.0015	--	--	--	--
MW-11	5/26/1999	(orig)	0.0008	0.0017	< 0.0005	0.0011	--	--	--	--
MW-11	10/21/1999	(orig)	< 0.0005	< 0.0005	< 0.0005	< 0.0015	--	--	--	--
MW-11	1/27/2000	(orig)	< 0.0005	< 0.0005	< 0.0005	< 0.0005	--	--	--	--
MW-11	6/13/2000	(orig)	< 0.0005	< 0.0005	< 0.0005	0.0009	--	--	--	--
MW-11	3/29/2001	(orig)	< 0.0002	< 0.0002	< 0.0002	< 0.0002	--	--	--	--
MW-11	6/26/2001	(orig)	< 0.0005	< 0.0005	< 0.0005	< 0.001	--	--	--	--
MW-11	9/18/2001	(orig)	< 0.0005	< 0.0005	< 0.0005	< 0.001	--	--	--	--
MW-11	12/18/2001	(orig)	< 0.0005	< 0.0005	< 0.0005	< 0.001	--	--	--	--
MW-11	12/19/2001	(orig)	ND	ND	ND	ND	--	--	--	--
MW-11	12/20/2001	(orig)	ND	ND	ND	ND	--	--	--	--
MW-11	12/21/2001	(orig)	ND	ND	ND	ND	--	--	--	--
MW-11	12/22/2001	(orig)	ND	ND	ND	ND	--	--	--	--
MW-11	5/24/2003	(orig)	ND	ND	ND	ND	--	--	--	--
MW-11	6/27/2003	(orig)	0.0004 J	0.0003 J	ND	0.0004 J	--	--	--	--
MW-11	9/24/2003	(orig)	ND	ND	ND	ND	--	--	--	--
MW-11	12/15/2003	(orig)	0.0005 J	ND	ND	ND	--	--	--	--
MW-11	3/15/2004	(orig)	ND	ND	ND	ND	--	--	--	--
MW-11	6/21/2004	(orig)	ND	ND	ND	0.0005 J	--	--	--	--
MW-11	9/29/2004	(orig)	ND	ND	ND	ND	--	--	--	--
MW-11	12/31/2004	(orig)	ND	ND	ND	ND	--	--	--	--
MW-11	3/22/2005	(orig)	ND	ND	ND	ND	--	--	--	--
MW-11	10/24/2005	(orig)	ND	ND	ND	ND	--	--	--	--
MW-11	12/12/2005	(orig)	ND	0.0003 J	ND	ND	--	--	--	--
MW-11	3/20/2006	(orig)	ND	ND	ND	ND	--	--	--	--
MW-11	6/21/2006	(orig)	ND	0.0003 J	ND	0.0008 J	--	--	--	--
MW-11	10/18/2006	(orig)	ND	0.0003 J	0.0004 J	0.0012 J	--	--	--	--
MW-11	12/12/2006	(orig)	ND	ND	0.0003 J	--	--	--	--	--
MW-11	3/26/2007	(orig)	< 0.0003	< 0.0002	< 0.0002	< 0.0006	--	--	--	--
MW-11	6/26/2007	(orig)	< 0.0003	< 0.0002	< 0.0002	< 0.0006	--	--	--	--
MW-11	11/8/2007	(orig)	< 0.0005	< 0.0007	< 0.0008	< 0.0008	--	--	--	--
MW-11	1/17/2008	(orig)	< 0.0005	< 0.0007	< 0.0008	< 0.0008	--	--	--	--
MW-11	3/19/2008	(orig)	< 0.005	< 0.005	< 0.005	< 0.005	--	--	--	--
MW-11	7/22/2008	(orig)	< 0.005	< 0.005	< 0.005	< 0.005	--	--	--	--
MW-11	10/23/2008	(orig)	< 0.005	< 0.005	< 0.005	< 0.005	--	--	--	--
MW-11	1/21/2009	(orig)	< 0.005	< 0.005	< 0.005	< 0.005	--	--	--	--
MW-11	9/24/2009	(orig)	< 0.001	< 0.001	< 0.001	< 0.001	--	--	--	--
MW-11	9/28/2010	(orig)	< 0.001	< 0.001	< 0.001	< 0.001	--	--	--	--
GW-074927-100411-CM-005	10/11/2011	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	--	--	--	--
GW-074927-092612-CM-MW-11	9/26/2012	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	--	--	--	--
GW-074927-091813-CM-MW-11	9/18/2013	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	--	--	--	--
GW-074927-092414-CM-MW-11	9/24/2014	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	4.2	2760	1810	
GW-074927-092315-CB-MW-11	9/23/2015	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	4.3	2550	1740	

Table 4

Groundwater Laboratory Analytical Results Summary
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Well ID	Sample ID	Date	Sample Type	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Xylenes (total) (mg/L)	Dissolved Manganese (mg/L)	Total Dissolved Solid (mg/L)	Sulfate (mg/L)
NMWQCC Groundwater Quality Standards										
MW-12	5/5/1999	(orig)	0.79	0.84	0.26	2.88	0.62	0.2	1000	600
MW-12	5/5/1999	(Duplicate)	1.2	13	5.1	68	--	--	--	--
MW-12	5/26/1999	(orig)	1.9	0.82	0.2	1.72	--	--	--	--
MW-12	5/26/1999	(Duplicate)	1.8	0.64	0.16	1.6	--	--	--	--
MW-12	7/12/1999	(orig)	4.5	0.76	0.4	3.1	--	--	--	--
MW-12	7/12/1999	(Duplicate)	4.6	0.73	0.39	3.08	--	--	--	--
MW-12	8/17/1999	(orig)	4.8	5	0.32	3.39	--	--	--	--
MW-12	8/17/1999	(Duplicate)	5.9	6.1	0.39	4.1	--	--	--	--
MW-12	10/21/1999	(orig)	5.6	0.65	0.54	2.89	--	--	--	--
MW-12	1/27/2000	(orig)	4.1	0.55	0.43	2.379	--	--	--	--
MW-12	6/13/2000	(orig)	5	1.3	0.49	2.7	--	--	--	--
MW-12	3/29/2001	(orig)	5.17	1.79	0.366	2.62	--	--	--	--
MW-12	6/26/2001	(orig)	4.8	1.9	0.39	2.56	--	--	--	--
MW-12	9/18/2001	(orig)	5.1	2.4	0.43	2.82	--	--	--	--
MW-12	12/18/2001	(orig)	4	1.5	0.32	1.88	--	--	--	--
MW-12	3/22/2002	(orig)	3.3	0.93	0.29	1.27	--	--	--	--
MW-12	6/28/2002	(orig)	4.2	1.8	0.41	1.94	--	--	--	--
MW-12	9/23/2002	(orig)	3.8	1.5	0.31	1.51	--	--	--	--
MW-12	12/31/2002	(orig)	3.6	0.84	0.28	1.01	--	--	--	--
MW-12	5/24/2003	(orig)	3.99	2.23	0.299	1.47	--	--	--	--
MW-12	6/27/2003	(orig)	5.29	2.75	0.36	1.6	--	--	--	--
MW-12	9/24/2003	(orig)	4.6	1.69	0.29	1.15	--	--	--	--
MW-12	12/15/2003	(orig)	4.2	1.36	0.24	1.15	--	--	--	--
MW-12	3/15/2004	(orig)	2.09	1.12	0.3	1.25	--	--	--	--
MW-12	6/21/2004	(orig)	3.87	1.82	0.28	1.5	--	--	--	--
MW-12	6/29/2004	(orig)	5.14	2.22	0.24	1.28	--	--	--	--
MW-12	12/31/2004	(orig)	4.16	1.22	0.25	1.15	--	--	--	--
MW-12	3/22/2005	(orig)	2.38	1.1	0.13	0.71	--	--	--	--
MW-12	10/24/2005	(orig)	1.35	0.15	0.08	0.33	--	--	--	--
MW-12	12/16/2005	(orig)	2.38	0.422	0.111	0.341	--	--	--	--
MW-12	3/20/2006	(orig)	2.1	0.21	0.071	0.225	--	--	--	--
MW-12	6/21/2006	(orig)	2.27	0.385	0.085	0.355	--	--	--	--
MW-12	10/18/2006	(orig)	1.74	0.477	0.112	0.399	--	--	--	--
MW-12	12/12/2006	(orig)	2.4	1.11	0.142	0.668	--	--	--	--
MW-12	3/26/2007	(orig)	4.13	1.68	0.34	1.18	--	--	--	--
MW-12	6/26/2007	(orig)	1.52	0.432	0.118	0.34	--	--	--	--
MW-12	11/8/2007	(orig)	0.78	0.31	0.043	0.17	--	--	--	--
MW-12	1/17/2008	(orig)	2	1.4	0.18	0.79	--	--	--	--
MW-12	3/19/2008	(orig)	1.6	0.56	0.16	0.53	--	--	--	--
MW-12	7/22/2008	(orig)	0.73	0.022	0.014	0.021	--	--	--	--
MW-12	10/23/2008	(orig)	0.5	0.03	0.022	0.04	--	--	--	--
MW-12	1/21/2009	(orig)	1.1	0.43	0.11	0.41	--	--	--	--
MW-12	9/24/2009	(orig)	0.61	0.0083	0.01	0.0195	--	--	--	--
MW-12	9/28/2010	(orig)	0.55	< 0.001	0.015	0.016	--	--	--	--
GW-074927-100411-CM-003	10/4/2011	(orig)	0.494	< 0.01	0.0235	< 0.03	--	--	--	--
GW-074927-092612-CM-MW-12	9/26/2012	(orig)	0.617	< 0.001	0.015	0.0207	--	--	--	--
GW-074927-091813-CM-MW-12	9/18/2013	(orig)	0.202	< 0.005	< 0.005	< 0.015	--	--	--	--
GW-074927-091813-CM-DUP	9/18/2013	(Duplicate)	0.210	< 0.005	< 0.005	< 0.015	--	--	--	--
GW-074927-032414-CM-MW-12	3/24/2014	(orig)	0.0559	0.0067	< 0.005	< 0.015	14.2	3390	2740	
GW-074927-032414-CM-DUP	3/24/2014	(Duplicate)	0.0508	0.0056	< 0.005	< 0.015	--	--	--	--
GW-074927-092414-CM-MW-12	9/24/2014	(orig)	0.830	0.0013	0.011	0.0171	9.7	3460	2330	
GW-074927-092414-CM-DUP	9/24/2014	(Duplicate)	0.882	0.0015	0.0121	0.0179	--	--	--	--
GW-074927-092315-CB-MW-12	9/23/2015	(orig)	0.246	< 0.001	< 0.001	< 0.003	10.2	3330	2310	
GW-074927-092315-CB-MW-12	9/23/2015	(Duplicate)	0.258	< 0.001	< 0.001	< 0.003	--	--	--	--

Table 4

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Well ID	Sample ID	Date	Sample Type	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Xylenes (total) (mg/L)	Dissolved Manganese (mg/L)	Total Dissolved Solid (mg/L)	Sulfate (mg/L)
	NMWQCC Groundwater Quality Standards			0.01	0.75	0.75	0.62	0.2	1000	600
MW-15	MW-15	10/21/1999	(orig)	< 0.0005	0.0012	< 0.0005	0.0015	--	--	--
	MW-15	1/27/2000	(orig)	< 0.0005	< 0.0005	< 0.0005	< 0.0005	--	--	--
	MW-15	6/13/2000	(orig)	< 0.0005	< 0.0005	< 0.0005	< 0.0005	--	--	--
	MW-15	3/29/2001	(orig)	< 0.0002	< 0.0002	< 0.0002	< 0.0002	--	--	--
	MW-15	6/26/2001	(orig)	< 0.0005	< 0.0005	< 0.0005	< 0.0005	--	--	--
	MW-15	9/18/2001	(orig)	< 0.0005	< 0.0005	< 0.0005	< 0.0005	--	--	--
	MW-15	12/18/2001	(orig)	< 0.0005	< 0.0005	< 0.0005	< 0.0005	--	--	--
	MW-15	3/22/2002	(orig)	ND	ND	ND	ND	--	--	--
	MW-15	6/28/2002	(orig)	ND	ND	ND	ND	--	--	--
	MW-15	9/23/2002	(orig)	ND	ND	ND	ND	--	--	--
	MW-15	12/31/2002	(orig)	ND	ND	ND	ND	--	--	--
	MW-15	3/27/2003	(orig)	ND	0.0003 J	ND	0.0009 J	--	--	--
	MW-15	6/27/2003	(orig)	0.0004 J	ND	ND	ND	--	--	--
	MW-15	9/24/2003	(orig)	ND	ND	ND	ND	--	--	--
	MW-15	3/15/2004	(orig)	ND	0.0003 J	ND	ND	--	--	--
	MW-15	6/21/2004	(orig)	ND	ND	ND	ND	--	--	--
	MW-15	9/29/2004	(orig)	ND	ND	ND	ND	--	--	--
	MW-15	12/15/2004	(orig)	0.0007 J	ND	ND	ND	--	--	--
	MW-15	12/31/2004	(orig)	ND	0.0009 J	0.0003 J	0.0014 J	--	--	--
	MW-15	3/22/2005	(orig)	ND	ND	ND	ND	--	--	--
	MW-15	10/24/2005	(orig)	ND	ND	ND	ND	--	--	--
	MW-15	12/12/2005	(orig)	ND	0.0003 J	ND	0.0004 J	--	--	--
	MW-15	3/20/2006	(orig)	ND	ND	ND	ND	--	--	--
	MW-15	6/21/2006	(orig)	0.0007 J	ND	0.0003 J	ND	--	--	--
	MW-15	10/18/2006	(orig)	ND	0.0003 J	ND	0.0002 J	--	--	--
	MW-15	12/12/2006	(orig)	ND	ND	ND	ND	--	--	--
	MW-15	3/26/2007	(orig)	< 0.0003	< 0.0002	< 0.0002	< 0.0006	--	--	--
	MW-15	6/26/2007	(orig)	< 0.0003	0.0005 J	< 0.0002	< 0.0006	--	--	--
	MW-15	11/8/2007	(orig)	< 0.0005	< 0.0007	< 0.0008	< 0.0008	--	--	--
	MW-15	1/17/2008	(orig)	< 0.0005	< 0.0007	< 0.0008	< 0.0008	--	--	--
	MW-15	3/19/2008	(orig)	< 0.005	< 0.005	< 0.005	< 0.005	--	--	--
	MW-15	7/22/2008	(orig)	< 0.005	< 0.005	< 0.005	< 0.005	--	--	--
	MW-15	10/23/2008	(orig)	< 0.005	< 0.005	< 0.005	< 0.005	--	--	--
	MW-15	1/21/2009	(orig)	< 0.005	< 0.005	< 0.005	< 0.005	--	--	--
	MW-15	9/24/2009	(orig)	< 0.001	< 0.001	< 0.001	< 0.001	--	--	--
	MW-15	9/28/2010	(orig)	< 0.001	< 0.001	< 0.001	< 0.001	--	--	--
GW-074927-100411-CM-001	10/4/2011	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	--	--	--	--
GW-074927-092612-CM-MW-15	9/26/2012	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	--	--	--	--
GW-074927-091813-CM-MW-15	9/18/2013	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	--	--	--	--
GW-074927-092414-CM-MW-15	9/24/2014	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	8.8	3390	2500	
GW-074927-092315-CB-MW-15	9/23/2015	(orig)	< 0.001	< 0.001	< 0.001	< 0.003	8.5	3020	2550	

Table 4

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Well ID	Sample ID	Date	Sample Type	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Xylenes (total) (mg/L)	Dissolved Manganese (mg/L)	Total Dissolved Solid (mg/L)	Sulfate (mg/L)
	NMWQCC Groundwater Quality Standards			0.01	0.75	0.75	0.62	0.2	1000	600
MW-16	MW-16	10/21/1999	(orig)	0.22	0.3	0.0054	0.142	--	--	--
	MW-16	10/21/1999	(Duplicate)	0.214	0.268	0.004	0.151	--	--	--
	MW-16	1/27/2000	(orig)	1.6	0.17	0.056	0.225	--	--	--
	MW-16	6/13/2000	(orig)	8.7	0.43	0.68	2.2	--	--	--
	MW-16	6/26/2001	(orig)	9.3	1.1	0.81	3.41	--	--	--
	MW-16	9/18/2001	(orig)	11	6.4	0.59	6.4	--	--	--
	MW-16	12/18/2001	(orig)	9.9	6.9	0.57	7.4	--	--	--
	MW-16	6/28/2002	(orig)	11	7	0.77	5.7	--	--	--
	MW-16	9/23/2002	(orig)	8.9	9.9	0.61	8.5	--	--	--
	MW-16	12/31/2002	(orig)	8.8	7.9	0.77	7.4	--	--	--
	MW-16	3/22/2003	(orig)	10	6.6	1.1	7.4	--	--	--
	MW-16	3/27/2003	(orig)	10.4	11.2	0.84	8.67	--	--	--
	MW-16	9/24/2003	(orig)	10.3	15.4	0.87	10.59	--	--	--
	MW-16	3/15/2004	(orig)	9.2	16	1.31	12	--	--	--
	MW-16	6/21/2004	(orig)	8.04	18.1	2.45	18.58	--	--	--
	MW-16	9/29/2004	(orig)	8.33	14	0.76	8.23	--	--	--
	MW-16	12/15/2004	(orig)	9.64	12.6	0.72	1.55	--	--	--
	MW-16	12/31/2004	(orig)	8.34	17.1	1.55	18.83	--	--	--
	MW-16	3/28/2005	(orig)	4.14	5.81	0.76	10.48	--	--	--
	MW-16	10/24/2005	(orig)	6.28	9.8	0.67	6.91	--	--	--
	MW-16	12/12/2005	(orig)	6.94	11.5	0.75	8.06	--	--	--
	MW-16	3/20/2006	(orig)	6.82	11.5	0.83	8.55	--	--	--
	MW-16	6/21/2006	(orig)	6.64	11.2	0.69	7.57	--	--	--
	MW-16	10/18/2006	(orig)	5.7	10.2	0.62	6.52	--	--	--
	MW-16	12/12/2006	(orig)	4.6	10	0.55	6.83	--	--	--
	MW-16	3/26/2007	(orig)	2.97	2.82	0.26	5.22	--	--	--
	MW-16	6/26/2007	(orig)	5.23	9.11	0.77	7.76	--	--	--
	MW-16	11/8/2007	(orig)	5.5	12	0.57	6.2	--	--	--
	MW-16	1/17/2008	(orig)	4.6	9.1	0.55	5.6	--	--	--
	MW-16	3/19/2008	(orig)	5.5	9.6	0.51	6.9	--	--	--
	MW-16	7/22/2008	(orig)	3.6	6.1	0.43	4.5	--	--	--
	MW-16	10/23/2008	(orig)	4.7	9.1	0.48	6.6	--	--	--
	MW-16	1/21/2009	(orig)	4.2	7.5	0.48 J	6.9	--	--	--
	MW-16	9/24/2009	(orig)	3.2	4.6	0.34	3.5	--	--	--
	MW-16	9/29/2010	(orig)	3	4.6	3.4	23.6	--	--	--
	MW-16	12/15/2010	(orig)	5.2	13	1.1	14.5	--	--	--
	MW-16	10/11/2011					No sample collected due to presence of LNAPL.			
	MW-16	9/26/2012					No sample collected due to presence of LNAPL.			
	MW-16	9/18/2013					No sample collected due to presence of LNAPL.			
	MW-16	9/24/2014					No sample collected due to presence of LNAPL.			
	MW-16	9/23/2015					No sample collected due to presence of LNAPL.			

Table 4

Groundwater Laboratory Analytical Results Summary
ConocoPhillips Company
Hampton No. 4M
San Juan County

Page 16 of 17

Well ID	Sample ID	Date	Sample Type	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Xylenes (total) (mg/L)	Dissolved Manganese (mg/L)	Total Dissolved Solid (mg/L)	Sulfate (mg/L)
	NMWQCC Groundwater Quality Standards			0.01	0.75	0.75	0.62	0.2	1000	600
Seep	Seep	7/1/1998	(orig)	0.0016	0.0007	0.0006	0.00036	--	--	--
	Seep	4/14/1999	(orig)	0.04	0.0022	0.0021	0.019	--	--	--
	Seep	10/21/1999	(orig)	0.065	0.23	0.011	0.434	--	--	--
	Seep	3/29/2001	(orig)	0.0116	< 0.0002	0.0007 J	0.0254	--	--	--
	Seep	6/26/2001	(orig)	< 0.0005	< 0.0005	< 0.0005	< 0.001	--	--	--
	Seep	9/18/2001	(orig)	< 0.0005	< 0.0005	< 0.0005	< 0.001	--	--	--
	Seep	12/18/2001	(orig)	< 0.0005	< 0.0005	< 0.0005	< 0.001	--	--	--
	Seep	3/22/2002	(orig)	0.0059	ND	0.0008	0.0034	--	--	--
	Seep	6/28/2002	(orig)	ND	ND	ND	ND	--	--	--
	Seep	9/23/2002	(orig)	ND	ND	ND	ND	--	--	--
	Seep	12/31/2002	(orig)	0.0007	ND	ND	ND	--	--	--
	Seep	3/27/2003	(orig)	0.0063	0.0002 J	0.0018	0.0101	--	--	--
	Seep	9/24/2003	(orig)	ND	0.0003 J	ND	ND	--	--	--
	Seep	12/15/2003	(orig)	0.0004 J	0.0003 J	ND	ND	--	--	--
	Seep	3/15/2004	(orig)	ND	ND	ND	ND	--	--	--
	Seep	6/21/2004	(orig)	ND	ND	ND	ND	--	--	--
	Seep	9/29/2004	(orig)	ND	ND	ND	ND	--	--	--
	Seep	12/31/2004	(orig)	ND	0.0002 J	ND	0.0004 J	--	--	--
	Seep	3/28/2005	(orig)	ND	ND	ND	ND	--	--	--
	Seep	10/24/2005	(orig)	ND	J	ND	ND	--	--	--
	Seep	12/12/2005	(orig)	ND	0.0005 J	0.0003 J	0.0009 J	--	--	--
	Seep	3/20/2006	(orig)	ND	ND	ND	ND	--	--	--
	Seep	6/21/2006	(orig)	0.004	0.0129	0.0008 J	0.015	--	--	--
	Seep	10/18/2006	(orig)	ND	0.0005 J	0.0003 J	0.0014 J	--	--	--
	Seep	12/12/2006	(orig)	ND	ND	ND	ND	--	--	--
	Seep	3/26/2007	(orig)	< 0.0003	0.0003 J	< 0.0002	< 0.0006	--	--	--
	Seep	6/26/2007	(orig)	< 0.0003	< 0.0002	< 0.0002	< 0.0006	--	--	--
	Seep	11/8/2007	(orig)	< 0.0005	< 0.0007	< 0.0008	< 0.0008	--	--	--
	Seep	3/19/2008	(orig)	< 0.005	< 0.005	< 0.005	< 0.005	--	--	--
	Seep	10/23/2008	(orig)	< 0.005	< 0.005	< 0.005	< 0.005	--	--	--
	Seep	1/21/2009	(orig)	< 0.005	< 0.005	< 0.005	< 0.005	--	--	--
	Seep	9/24/2009	(orig)	< 0.001	< 0.001	< 0.001	< 0.001	--	--	--
	Seep	9/28/2010	(orig)	< 0.001	< 0.001	< 0.001	< 0.001	--	--	--
	Seep	10/11/2011					No sample collected; seep dry.			
	Seep	9/26/2012					No sample collected; seep dry.			
	Seep	9/18/2013					No sample collected; seep dry.			
	Seep	9/24/2014					No sample collected; seep dry.			
	Seep	9/23/2015					No sample collected; seep dry.			

Table 4

Groundwater Laboratory Analytical Results Summary
ConocoPhillips Company
Hampton No. 4M
San Juan County

Page 17 of 17

Well ID	Sample ID	Date	Sample Type	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Xylenes (total) (mg/L)	Dissolved Manganese (mg/L)	Total Dissolved Solid (mg/L)	Sulfate (mg/L)
NMWQCC Groundwater Quality Standards				0.01	0.75	0.75	0.62	0.2	1000	600
TMW-1	TMW-1	1/27/2000	(orig)	0.93	1.4	0.35	6.7	--	--	--
	TMW-1	6/13/2000	(orig)	2.4	3.4	0.55	9.1	--	--	--
	TMW-1	6/26/2001	(orig)	1.1	3.5	0.33	5.5	--	--	--
	TMW-1	5/23/2003	(orig)	0.83	0.123	0.107	1.0047	--	--	--
	TMW-1	6/27/2003	(orig)	0.474	0.0366	0.0596	0.4907	--	--	--
	TMW-1	9/24/2003	(orig)	0.292	0.139	0.017	0.221	--	--	--
	TMW-1	12/15/2003	(orig)	0.0559	0.0013	0.0039	0.0425	--	--	--
	TMW-1	6/21/2004	(orig)	0.0406	ND	0.0141	0.0147	--	--	--
	TMW-1	9/29/2004	(orig)	0.41	0.0087	0.0596	0.4585	--	--	--
	TMW-1	12/31/2004	(orig)	0.003 J	0.005 J	0.001 J	0.011 J	--	--	--
	TMW-1	3/22/2005	(orig)	0.0678	0.0133	0.0081	0.1017	--	--	--
	TMW-1	10/24/2005	(orig)	0.483	0.705	0.045	0.328	--	--	--
	TMW-1	12/12/2005	(orig)	0.122	0.317	0.019	0.16	--	--	--
	TMW-1	3/20/2006	(orig)	0.071	0.082	0.016	0.151	--	--	--
	TMW-1	6/21/2006	(orig)	0.159	0.0657	0.0569	0.36	--	--	--
	TMW-1	10/18/2006	(orig)	0.0064	0.0016	0.0021	0.0138	--	--	--
	TMW-1	6/26/2007	(orig)	0.269	0.0026	0.0049	0.0157	--	--	--
	TMW-1	11/8/2007	(orig)	0.3	0.012	0.006	0.038	--	--	--
	TMW-1	1/17/2008	(orig)	0.0008	< 0.0007	< 0.0008	0.001	--	--	--
	TMW-1	3/19/2008	(orig)	< 0.005	< 0.005	< 0.005	< 0.005	--	--	--
	TMW-1	7/22/2008	(orig)	0.13	0.029	0.011	0.022	--	--	--
	TMW-1	1/21/2009	(orig)	0.013	< 0.005	< 0.005	< 0.005	--	--	--
	TMW-1	9/28/2010	(orig)	0.013	< 0.001	< 0.001	0.0032	--	--	--
	TMW-1	10/11/2011		No sample collected; insufficient water present in well.						
	TMW-1	9/26/2012		No sample collected; well dry.						
	TMW-1	9/18/2013		No sample collected; well dry.						
	TMW-1	9/24/2014		No sample collected; well dry.						
	TMW-1	9/23/2015		No sample collected; well dry.						

Notes:

J = Analyte concentration detected at a value between MDL and PQL

MDL = Method Detection Limit

PQL = Practical Quantitation Limit

NS = Not Sampled

NMWQCC = New Mexico Water Quality Control Commission

mg/L = milligrams per liter (parts per million)

< 0.001 = Below Laboratory Detection Limit of 0.001 mg/L

ND = Not Detected Above Laboratory Detection Limit

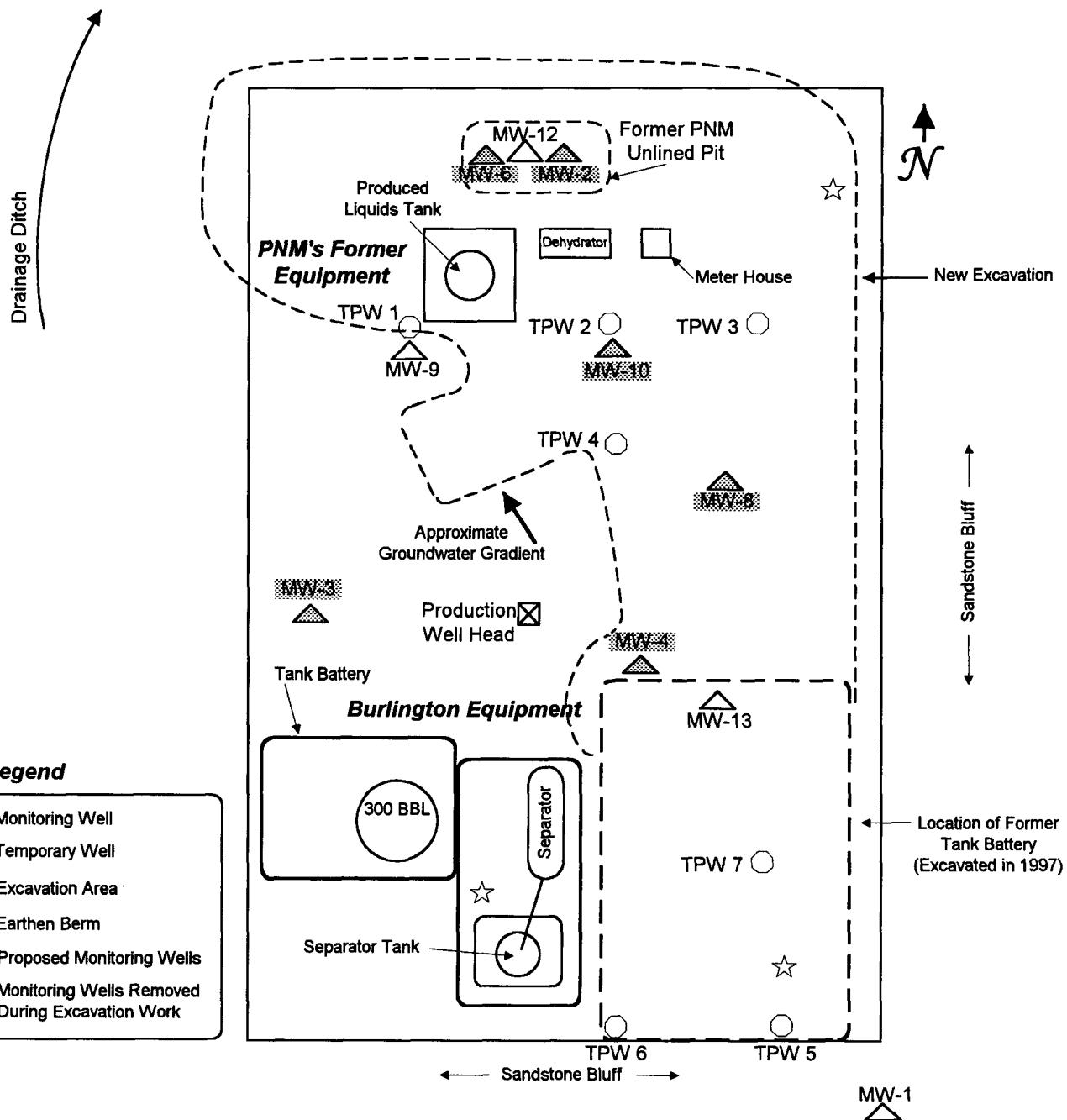
BOLD = Concentrations that exceed the NMWQCC groundwater quality standard

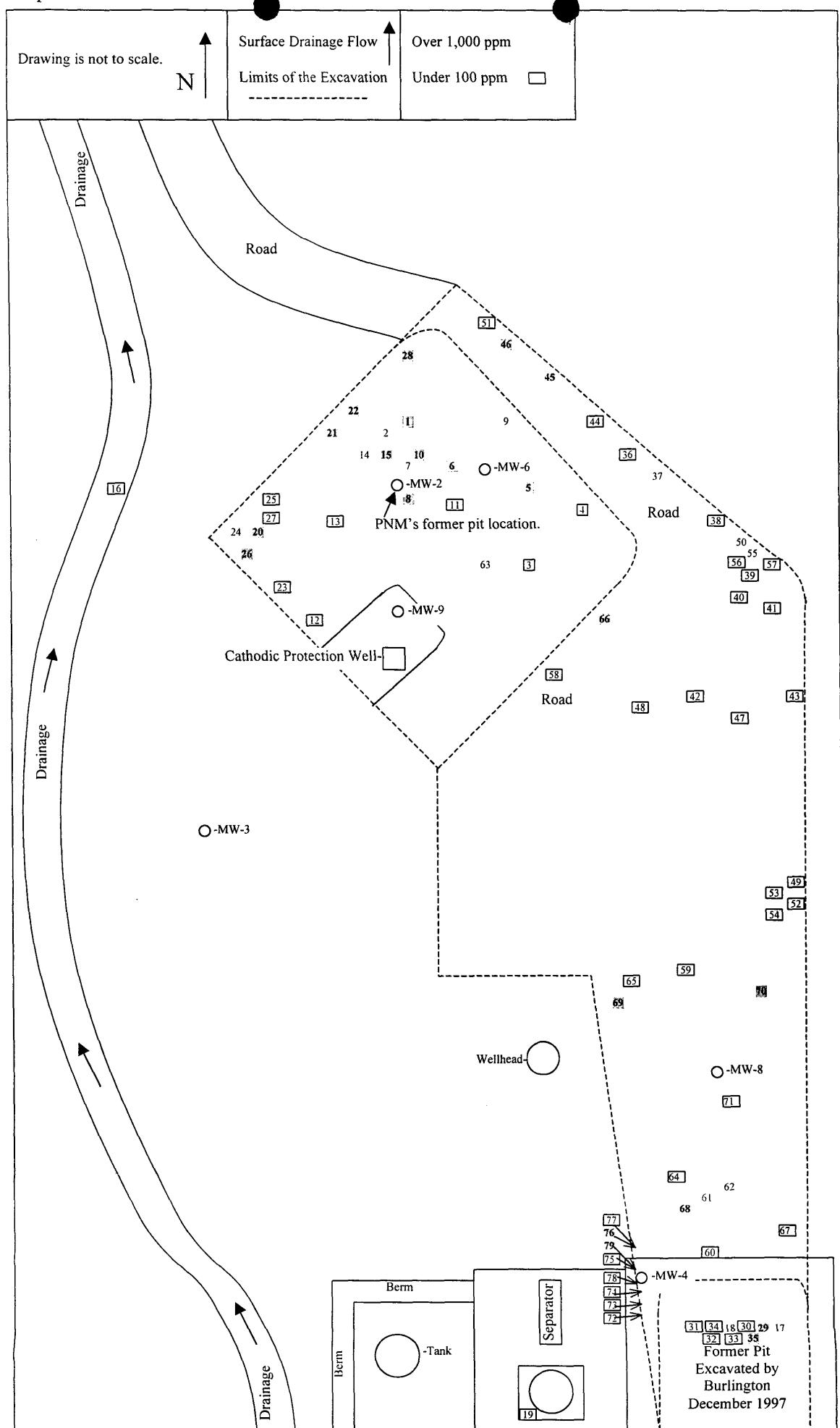
Appendices

Appendix A

Diagram of Former Excavation Area

Hampton #4M Site Diagram





Appendix B

September 2015 Groundwater Laboratory Analytical Results

October 06, 2015

Jeffrey Walker
GHD Services, Inc
6121 Indian School Rd NE
Ste 200
Albuquerque, NM 87110

RE: Project: 074927 HAMPTON NO 4M
Pace Project No.: 60203553

Dear Jeffrey Walker:

Enclosed are the analytical results for sample(s) received by the laboratory on September 24, 2015. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI 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 Flanagan
alice.flanagan@pacelabs.com
Project Manager

Enclosures

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



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CERTIFICATIONS

Project: 074927 HAMPTON NO 4M
Pace Project No.: 60203553

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

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SAMPLE SUMMARY

Project: 074927 HAMPTON NO 4M
 Pace Project No.: 60203553

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60203553001	GW 074927 092315 CB MW-1	Water	09/23/15 09:05	09/24/15 08:40
60203553002	GW 074927 092315 CB MW-15	Water	09/23/15 09:15	09/24/15 08:40
60203553003	GW 074927 092315 CB MW-9	Water	09/23/15 09:40	09/24/15 08:40
60203553004	GW 074927 092315 CB MW-12	Water	09/23/15 09:55	09/24/15 08:40
60203553005	GW 074927 092315 CB MW-5	Water	09/23/15 10:20	09/24/15 08:40
60203553006	GW 074927 092315 CB MW-11	Water	09/23/15 11:15	09/24/15 08:40
60203553007	GW 074927 092315 CB DUP	Water	09/23/15 08:00	09/24/15 08:40
60203553008	TB 074927 092315 CB TRIP BLANK	Water	09/23/15 12:00	09/24/15 08:40

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SAMPLE ANALYTE COUNT

Project: 074927 HAMPTON NO 4M
Pace Project No.: 60203553

Lab ID	Sample ID	Method	Analysts	Analytes Reported
60203553001	GW 074927 092315 CB MW-1	EPA 6010	JGP	1
		EPA 5030B/8260	PGH	8
		SM 2540C	CRS	1
		EPA 300.0	AJM	1
60203553002	GW 074927 092315 CB MW-15	EPA 6010	JGP	1
		EPA 5030B/8260	PGH	8
		SM 2540C	CRS	1
		EPA 300.0	AJM	1
60203553003	GW 074927 092315 CB MW-9	EPA 6010	JGP	1
		EPA 5030B/8260	PGH	8
		SM 2540C	CRS	1
		EPA 300.0	AJM	1
60203553004	GW 074927 092315 CB MW-12	EPA 6010	JGP	1
		EPA 5030B/8260	PGH	8
		SM 2540C	CRS	1
		EPA 300.0	AJM	1
60203553005	GW 074927 092315 CB MW-5	EPA 6010	JGP	1
		EPA 5030B/8260	PGH	8
		SM 2540C	CRS	1
		EPA 300.0	AJM	1
60203553006	GW 074927 092315 CB MW-11	EPA 6010	JGP	1
		EPA 5030B/8260	PGH	8
		SM 2540C	CRS	1
		EPA 300.0	AJM	1
60203553007	GW 074927 092315 CB DUP	EPA 5030B/8260	PGH	8
60203553008	TB 074927 092315 CB TRIP BLANK	EPA 5030B/8260	PGH	8

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PROJECT NARRATIVE

Project: 074927 HAMPTON NO 4M
Pace Project No.: 60203553

Method: **EPA 6010**
Description: 6010 MET ICP, Dissolved
Client: GHD Services_COP NM
Date: October 06, 2015

General Information:

6 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: 074927 HAMPTON NO 4M

Pace Project No.: 60203553

Method: EPA 5030B/8260

Description: 8260 MSV

Client: GHD Services_COP NM

Date: October 06, 2015

General Information:

8 samples were analyzed for EPA 5030B/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: MSV/71963

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

QC Batch: MSV/72039

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

Additional Comments:

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PROJECT NARRATIVE

Project: 074927 HAMPTON NO 4M
Pace Project No.: 60203553

Method: **SM 2540C**

Description: 2540C Total Dissolved Solids

Client: GHD Services_COP NM

Date: October 06, 2015

General Information:

6 samples were analyzed for SM 2540C. 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.

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.

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: 074927 HAMPTON NO 4M

Pace Project No.: 60203553

Method: **EPA 300.0**

Description: 300.0 IC Anions 28 Days

Client: GHD Services_COP NM

Date: October 06, 2015

General Information:

6 samples were analyzed for EPA 300.0. 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.

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: WETA/36194

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60203550001,60203556001

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 1644216)
 - Sulfate
- MSD (Lab ID: 1644217)
 - Sulfate

Additional Comments:

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

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ANALYTICAL RESULTS

Project: 074927 HAMPTON NO 4M
Pace Project No.: 60203553

Sample: GW 074927 092315 CB **Lab ID: 60203553001** Collected: 09/23/15 09:05 Received: 09/24/15 08:40 Matrix: Water
MW-1

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Manganese, Dissolved	4.9	mg/L	0.0050	1	09/28/15 16:45	09/29/15 18:13	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260							
Benzene	ND	ug/L	1.0	1		09/30/15 05:40	71-43-2	
Ethylbenzene	ND	ug/L	1.0	1		09/30/15 05:40	100-41-4	
Toluene	ND	ug/L	1.0	1		09/30/15 05:40	108-88-3	
Xylene (Total)	ND	ug/L	3.0	1		09/30/15 05:40	1330-20-7	
Surrogates								
4-Bromofluorobenzene (S)	99	%	80-120	1		09/30/15 05:40	460-00-4	
1,2-Dichloroethane-d4 (S)	106	%	80-120	1		09/30/15 05:40	17060-07-0	
Toluene-d8 (S)	100	%	80-120	1		09/30/15 05:40	2037-26-5	
Preservation pH	1.0		0.10	1		09/30/15 05:40		
2540C Total Dissolved Solids	Analytical Method: SM 2540C							
Total Dissolved Solids	2590	mg/L	5.0	1		09/25/15 11:06		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0							
Sulfate	2080	mg/L	200	200		10/05/15 11:45	14808-79-8	

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ANALYTICAL RESULTS

Project: 074927 HAMPTON NO 4M
Pace Project No.: 60203553

Sample: GW 074927 092315 CB **Lab ID: 60203553002** Collected: 09/23/15 09:15 Received: 09/24/15 08:40 Matrix: Water
MW-15

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Manganese, Dissolved	8.5	mg/L	0.0050	1	09/28/15 16:45	09/29/15 18:17	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260							
Benzene	ND	ug/L	1.0	1		09/30/15 05:54	71-43-2	
Ethylbenzene	ND	ug/L	1.0	1		09/30/15 05:54	100-41-4	
Toluene	ND	ug/L	1.0	1		09/30/15 05:54	108-88-3	
Xylene (Total)	ND	ug/L	3.0	1		09/30/15 05:54	1330-20-7	
Surrogates								
4-Bromofluorobenzene (S)	102	%	80-120	1		09/30/15 05:54	460-00-4	
1,2-Dichloroethane-d4 (S)	108	%	80-120	1		09/30/15 05:54	17060-07-0	
Toluene-d8 (S)	96	%	80-120	1		09/30/15 05:54	2037-26-5	
Preservation pH	1.0		0.10	1		09/30/15 05:54		
2540C Total Dissolved Solids	Analytical Method: SM 2540C							
Total Dissolved Solids	3020	mg/L	5.0	1		09/25/15 11:06		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0							
Sulfate	2550	mg/L	200	200		10/05/15 11:59	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 074927 HAMPTON NO 4M
Pace Project No.: 60203553

Sample: GW 074927 092315 CB **Lab ID: 60203553003** Collected: 09/23/15 09:40 Received: 09/24/15 08:40 Matrix: Water
MW-9

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Manganese, Dissolved	4.5	mg/L	0.0050	1	09/28/15 16:45	09/29/15 18:21	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260							
Benzene	ND	ug/L	1.0	1		09/30/15 06:09	71-43-2	
Ethylbenzene	ND	ug/L	1.0	1		09/30/15 06:09	100-41-4	
Toluene	ND	ug/L	1.0	1		09/30/15 06:09	108-88-3	
Xylene (Total)	ND	ug/L	3.0	1		09/30/15 06:09	1330-20-7	
Surrogates								
4-Bromofluorobenzene (S)	98	%	80-120	1		09/30/15 06:09	460-00-4	
1,2-Dichloroethane-d4 (S)	105	%	80-120	1		09/30/15 06:09	17060-07-0	
Toluene-d8 (S)	95	%	80-120	1		09/30/15 06:09	2037-26-5	
Preservation pH	1.0		0.10	1		09/30/15 06:09		
2540C Total Dissolved Solids	Analytical Method: SM 2540C							
Total Dissolved Solids	3880	mg/L	5.0	1		09/25/15 11:06		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0							
Sulfate	2510	mg/L	200	200		10/05/15 12:13	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 074927 HAMPTON NO 4M
Pace Project No.: 60203553

Sample: GW 074927 092315 CB **Lab ID:** 60203553004 Collected: 09/23/15 09:55 Received: 09/24/15 08:40 Matrix: Water
MW-12

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Manganese, Dissolved	10.2	mg/L	0.0050	1	09/28/15 16:45	09/29/15 18:25	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260							
Benzene	246	ug/L	5.0	5		10/02/15 13:59	71-43-2	
Ethylbenzene	ND	ug/L	1.0	1		09/30/15 06:52	100-41-4	
Toluene	ND	ug/L	1.0	1		09/30/15 06:52	108-88-3	
Xylene (Total)	ND	ug/L	3.0	1		09/30/15 06:52	1330-20-7	
Surrogates								
4-Bromofluorobenzene (S)	106	%	80-120	1		09/30/15 06:52	460-00-4	
1,2-Dichloroethane-d4 (S)	108	%	80-120	1		09/30/15 06:52	17060-07-0	
Toluene-d8 (S)	97	%	80-120	1		09/30/15 06:52	2037-26-5	
Preservation pH	1.0		0.10	1		09/30/15 06:52		
2540C Total Dissolved Solids	Analytical Method: SM 2540C							
Total Dissolved Solids	3330	mg/L	5.0	1		09/25/15 11:07		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0							
Sulfate	2310	mg/L	200	200		10/05/15 12:26	14808-79-8	

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ANALYTICAL RESULTS

Project: 074927 HAMPTON NO 4M
Pace Project No.: 60203553

Sample: GW 074927 092315 CB **Lab ID: 60203553005** Collected: 09/23/15 10:20 Received: 09/24/15 08:40 Matrix: Water
MW-5

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Manganese, Dissolved	7.8	mg/L	0.0050	1	09/28/15 16:45	09/29/15 18:29	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260							
Benzene	15.0	ug/L	1.0	1		09/30/15 07:06	71-43-2	
Ethylbenzene	154	ug/L	1.0	1		09/30/15 07:06	100-41-4	
Toluene	7.2	ug/L	1.0	1		09/30/15 07:06	108-88-3	
Xylene (Total)	138	ug/L	3.0	1		09/30/15 07:06	1330-20-7	
Surrogates								
4-Bromofluorobenzene (S)	112	%	80-120	1		09/30/15 07:06	460-00-4	
1,2-Dichloroethane-d4 (S)	113	%	80-120	1		09/30/15 07:06	17060-07-0	
Toluene-d8 (S)	99	%	80-120	1		09/30/15 07:06	2037-26-5	
Preservation pH	1.0		0.10	1		09/30/15 07:06		
2540C Total Dissolved Solids	Analytical Method: SM 2540C							
Total Dissolved Solids	4340	mg/L	5.0	1		09/25/15 11:07		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0							
Sulfate	2480	mg/L	200	200		10/05/15 12:40	14808-79-8	

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ANALYTICAL RESULTS

Project: 074927 HAMPTON NO 4M
Pace Project No.: 60203553

Sample: GW 074927 092315 CB **Lab ID:** 60203553006 Collected: 09/23/15 11:15 Received: 09/24/15 08:40 Matrix: Water
MW-11

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Manganese, Dissolved	4.3	mg/L	0.0050	1	09/28/15 16:45	09/29/15 18:33	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260							
Benzene	ND	ug/L	1.0	1		09/30/15 06:23	71-43-2	
Ethylbenzene	ND	ug/L	1.0	1		09/30/15 06:23	100-41-4	
Toluene	ND	ug/L	1.0	1		09/30/15 06:23	108-88-3	
Xylene (Total)	ND	ug/L	3.0	1		09/30/15 06:23	1330-20-7	
Surrogates								
4-Bromofluorobenzene (S)	102	%	80-120	1		09/30/15 06:23	460-00-4	
1,2-Dichloroethane-d4 (S)	108	%	80-120	1		09/30/15 06:23	17060-07-0	
Toluene-d8 (S)	96	%	80-120	1		09/30/15 06:23	2037-26-5	
Preservation pH	1.0		0.10	1		09/30/15 06:23		
2540C Total Dissolved Solids	Analytical Method: SM 2540C							
Total Dissolved Solids	2550	mg/L	5.0	1		09/25/15 11:07		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0							
Sulfate	1740	mg/L	100	100		10/05/15 13:22	14808-79-8	

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ANALYTICAL RESULTS

Project: 074927 HAMPTON NO 4M

Pace Project No.: 60203553

Sample: **GW 074927 092315 CB DUP** Lab ID: **60203553007** Collected: 09/23/15 08:00 Received: 09/24/15 08:40 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260							
Benzene	258	ug/L	5.0	5		10/02/15 14:14	71-43-2	
Ethylbenzene	ND	ug/L	1.0	1		09/30/15 06:38	100-41-4	
Toluene	ND	ug/L	1.0	1		09/30/15 06:38	108-88-3	
Xylene (Total)	ND	ug/L	3.0	1		09/30/15 06:38	1330-20-7	
Surrogates								
4-Bromofluorobenzene (S)	104	%	80-120	1		09/30/15 06:38	460-00-4	
1,2-Dichloroethane-d4 (S)	109	%	80-120	1		09/30/15 06:38	17060-07-0	
Toluene-d8 (S)	97	%	80-120	1		09/30/15 06:38	2037-26-5	
Preservation pH	1.0		0.10	1		09/30/15 06:38		

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ANALYTICAL RESULTS

Project: 074927 HAMPTON NO 4M
Pace Project No.: 60203553

Sample: TB 074927 092315 CB TRIP Lab ID: 60203553008 Collected: 09/23/15 12:00 Received: 09/24/15 08:40 Matrix: Water
BLANK

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260							
Benzene	ND	ug/L	1.0	1		09/30/15 02:32	71-43-2	
Ethylbenzene	ND	ug/L	1.0	1		09/30/15 02:32	100-41-4	
Toluene	ND	ug/L	1.0	1		09/30/15 02:32	108-88-3	
Xylene (Total)	ND	ug/L	3.0	1		09/30/15 02:32	1330-20-7	
Surrogates								
4-Bromofluorobenzene (S)	104	%	80-120	1		09/30/15 02:32	460-00-4	
1,2-Dichloroethane-d4 (S)	104	%	80-120	1		09/30/15 02:32	17060-07-0	
Toluene-d8 (S)	97	%	80-120	1		09/30/15 02:32	2037-26-5	
Preservation pH	1.0		0.10	1		09/30/15 02:32		

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QUALITY CONTROL DATA

Project: 074927 HAMPTON NO 4M

Pace Project No.: 60203553

QC Batch: MPRP/33317 Analysis Method: EPA 6010

QC Batch Method: EPA 3010 Analysis Description: 6010 MET Dissolved

Associated Lab Samples: 60203553001, 60203553002, 60203553003, 60203553004, 60203553005, 60203553006

METHOD BLANK: 1640723 Matrix: Water

Associated Lab Samples: 60203553001, 60203553002, 60203553003, 60203553004, 60203553005, 60203553006

Parameter	Units	Blank	Reporting	Analyzed	Qualifiers
		Result	Limit		
Manganese, Dissolved	mg/L	ND	0.0050	09/29/15 17:36	

LABORATORY CONTROL SAMPLE: 1640724

Parameter	Units	Spike	LCS	LCS	% Rec	Qualifiers
		Conc.	Result	% Rec	Limits	
Manganese, Dissolved	mg/L	1	0.96	96	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1640725 1640726

Parameter	Units	MS	MSD	MS	MSD	MS	MSD	% Rec	% Rec	Max	RPD	RPD	Qual
		60203550001	Spike										
Manganese, Dissolved	mg/L	0.30	1	1	1.2	1.2	95	94	75-125	1	20		

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QUALITY CONTROL DATA

Project: 074927 HAMPTON NO 4M

Pace Project No.: 60203553

QC Batch:	MSV/71963	Analysis Method:	EPA 5030B/8260
QC Batch Method:	EPA 5030B/8260	Analysis Description:	8260 MSV Water 10 mL Purge
Associated Lab Samples:	60203553001, 60203553002, 60203553003, 60203553004, 60203553005, 60203553006, 60203553007, 60203553008		

METHOD BLANK: 1641271 Matrix: Water

Associated Lab Samples: 60203553001, 60203553002, 60203553003, 60203553004, 60203553005, 60203553006, 60203553007, 60203553008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Benzene	ug/L	ND	1.0	09/30/15 02:18	
Ethylbenzene	ug/L	ND	1.0	09/30/15 02:18	
Toluene	ug/L	ND	1.0	09/30/15 02:18	
Xylene (Total)	ug/L	ND	3.0	09/30/15 02:18	
1,2-Dichloroethane-d4 (S)	%	105	80-120	09/30/15 02:18	
4-Bromofluorobenzene (S)	%	102	80-120	09/30/15 02:18	
Toluene-d8 (S)	%	96	80-120	09/30/15 02:18	

LABORATORY CONTROL SAMPLE: 1641272

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L	20	20.3	102	80-120	
Ethylbenzene	ug/L	20	18.7	94	80-120	
Toluene	ug/L	20	19.4	97	80-120	
Xylene (Total)	ug/L	60	55.7	93	80-120	
1,2-Dichloroethane-d4 (S)	%			107	80-120	
4-Bromofluorobenzene (S)	%			101	80-120	
Toluene-d8 (S)	%			99	80-120	

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QUALITY CONTROL DATA

Project: 074927 HAMPTON NO 4M

Pace Project No.: 60203553

QC Batch:	MSV/72039	Analysis Method:	EPA 5030B/8260
QC Batch Method:	EPA 5030B/8260	Analysis Description:	8260 MSV Water 10 mL Purge
Associated Lab Samples:	60203553004, 60203553007		

METHOD BLANK: 1643076 Matrix: Water

Associated Lab Samples: 60203553004, 60203553007

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Benzene	ug/L	ND	1.0	10/02/15 09:25	
1,2-Dichloroethane-d4 (S)	%	119	80-120	10/02/15 09:25	
4-Bromofluorobenzene (S)	%	102	80-120	10/02/15 09:25	
Toluene-d8 (S)	%	99	80-120	10/02/15 09:25	

LABORATORY CONTROL SAMPLE: 1643077

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L	20	19.6	98	80-120	
1,2-Dichloroethane-d4 (S)	%			112	80-120	
4-Bromofluorobenzene (S)	%			102	80-120	
Toluene-d8 (S)	%			97	80-120	

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QUALITY CONTROL DATA

Project: 074927 HAMPTON NO 4M

Pace Project No.: 60203553

QC Batch:	WET/57426	Analysis Method:	SM 2540C
QC Batch Method:	SM 2540C	Analysis Description:	2540C Total Dissolved Solids
Associated Lab Samples:	60203553001, 60203553002, 60203553003, 60203553004, 60203553005, 60203553006		

METHOD BLANK: 1639353 Matrix: Water

Associated Lab Samples: 60203553001, 60203553002, 60203553003, 60203553004, 60203553005, 60203553006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	5.0	09/25/15 11:03	

LABORATORY CONTROL SAMPLE: 1639354

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	1000	1040	104	80-120	

SAMPLE DUPLICATE: 1639355

Parameter	Units	60203550001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	2180	2210	1	10	

SAMPLE DUPLICATE: 1639356

Parameter	Units	60203553004 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	3330	3360	1	10	

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: 074927 HAMPTON NO 4M

Pace Project No.: 60203553

QC Batch: WETA/36194

Analysis Method: EPA 300.0

QC Batch Method: EPA 300.0

Analysis Description: 300.0 IC Anions

Associated Lab Samples: 60203553001, 60203553002, 60203553003, 60203553004, 60203553005, 60203553006

METHOD BLANK: 1644213

Matrix: Water

Associated Lab Samples: 60203553001, 60203553002, 60203553003, 60203553004, 60203553005, 60203553006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Sulfate	mg/L	ND	1.0	10/05/15 08:48	

LABORATORY CONTROL SAMPLE: 1644214

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfate	mg/L	5	4.8	95	90-110	

MATRIX SPIKE SAMPLE: 1644215

Parameter	Units	60203550001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Sulfate	mg/L	1370	500	1790	85	80-120	

MATRIX SPIKE SAMPLE: 1644216

Parameter	Units	60203556001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Sulfate	mg/L	1370	500	1680	61	80-120	M1

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QUALIFIERS

Project: 074927 HAMPTON NO 4M

Pace Project No.: 60203553

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.

BATCH QUALIFIERS

Batch: MSV/71963

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

Batch: MSV/72039

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

ANALYTE QUALIFIERS

M1 Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 074927 HAMPTON NO 4M

Pace Project No.: 60203553

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60203553001	GW 074927 092315 CB MW-1	EPA 3010	MPRP/33317	EPA 6010	ICP/24560
60203553002	GW 074927 092315 CB MW-15	EPA 3010	MPRP/33317	EPA 6010	ICP/24560
60203553003	GW 074927 092315 CB MW-9	EPA 3010	MPRP/33317	EPA 6010	ICP/24560
60203553004	GW 074927 092315 CB MW-12	EPA 3010	MPRP/33317	EPA 6010	ICP/24560
60203553005	GW 074927 092315 CB MW-5	EPA 3010	MPRP/33317	EPA 6010	ICP/24560
60203553006	GW 074927 092315 CB MW-11	EPA 3010	MPRP/33317	EPA 6010	ICP/24560
60203553001	GW 074927 092315 CB MW-1	EPA 5030B/8260	MSV/71963		
60203553002	GW 074927 092315 CB MW-15	EPA 5030B/8260	MSV/71963		
60203553003	GW 074927 092315 CB MW-9	EPA 5030B/8260	MSV/71963		
60203553004	GW 074927 092315 CB MW-12	EPA 5030B/8260	MSV/71963		
60203553004	GW 074927 092315 CB MW-12	EPA 5030B/8260	MSV/72039		
60203553005	GW 074927 092315 CB MW-5	EPA 5030B/8260	MSV/71963		
60203553006	GW 074927 092315 CB MW-11	EPA 5030B/8260	MSV/71963		
60203553007	GW 074927 092315 CB DUP	EPA 5030B/8260	MSV/71963		
60203553007	GW 074927 092315 CB DUP	EPA 5030B/8260	MSV/72039		
60203553008	TB 074927 092315 CB TRIP BLANK	EPA 5030B/8260	MSV/71963		
60203553001	GW 074927 092315 CB MW-1	SM 2540C	WET/57426		
60203553002	GW 074927 092315 CB MW-15	SM 2540C	WET/57426		
60203553003	GW 074927 092315 CB MW-9	SM 2540C	WET/57426		
60203553004	GW 074927 092315 CB MW-12	SM 2540C	WET/57426		
60203553005	GW 074927 092315 CB MW-5	SM 2540C	WET/57426		
60203553006	GW 074927 092315 CB MW-11	SM 2540C	WET/57426		
60203553001	GW 074927 092315 CB MW-1	EPA 300.0	WETA/36194		
60203553002	GW 074927 092315 CB MW-15	EPA 300.0	WETA/36194		
60203553003	GW 074927 092315 CB MW-9	EPA 300.0	WETA/36194		
60203553004	GW 074927 092315 CB MW-12	EPA 300.0	WETA/36194		
60203553005	GW 074927 092315 CB MW-5	EPA 300.0	WETA/36194		
60203553006	GW 074927 092315 CB MW-11	EPA 300.0	WETA/36194		

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Sample Condition Upon Receipt
ESI Tech Spec Client

WO# : 60203553



60203553

Client Name: GHD CoP NM

Courier: FedEx UPS VIA Clay PEX ECI Pace Other Client

Tracking #: 6508 B158 4404

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 +0.6 CF +0.6
T-239 / T-262

Type of Ice: Not Blue None Samples received on ice, cooling process has begun.
(circle one)

Cooler Temperature: 0.7

Temperature should be above freezing to 6°C

Chain of Custody present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Chain of Custody filled out:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Chain of Custody relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.
Sampler name & signature on COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.
Samples arrived within holding time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.
Short Hold Time analyses (<72hr):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	6.
Rush Turn Around Time requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	7.
Sufficient volume:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	8.
Correct containers used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Pace containers used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.
Containers intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	10.
Unpreserved 5035A soils frozen w/in 48hrs?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.
Filtered volume received for dissolved tests?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	12.
Sample labels match COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Includes date/time/ID/analyses	Matrix: <u>water</u>	13.
All containers needing preservation have been checked.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
All containers needing preservation are found to be in compliance with EPA recommendation.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	14.
Exceptions: VOA, Coliform, O&G, WI-DRO (water)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Initial when completed <u>105</u> Lot # of added preservative
Trip Blank present:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Pace Trip Blank lot # (if purchased): <u>MK</u>		15.
Headspace in VOA vials (>6mm):	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	16.
Project sampled in USDA Regulated Area:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	17. List State:
Additional labels attached to 5035A vials in the field?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	18.

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

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

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

Start: 105 Start:

End: 115 End:

Temp: Temp:

Project Manager Review: AAF

Date: 09/24/15



CHAIN-OF-CUSTODY / Analytical Request Document

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